



# JRC TECHNICAL REPORTS

## Revision of the EU GPP criteria for Food procurement and Catering services

*2<sup>nd</sup> Technical Report*

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## 1 Introduction

Public authorities' expenditures in the purchase of goods, services and works (excluding utilities and defence) constitute approximately 14% of the overall Gross Domestic Product (GDP) in Europe, accounting for roughly EUR 1.8 trillion annually (Buying green, 2016)

Thus, public procurement has the potential to provide significant leverage in seeking to influence the market and to achieve environmental improvements in the public sector. This effect can be particularly significant for goods, services and works (referred to collectively as products) that account for a high share of public purchasing combined with the substantial improvement potential for environmental performance. The European Commission has identified **Food and Catering services** as one such product group.

Green Public Procurement (GPP) is defined in the Commission's Communication "*COM (2008) 400 - Public procurement for a better environment*" as "*...a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured*".

Therefore, by choosing to purchase products with lower environmental impacts, public authorities can make an important contribution to reduce the direct environmental impact resulting from their activities. Moreover, by promoting and using GPP, public authorities can provide industry with real incentives for developing green technologies and products. In some sectors, public purchasers command a large share of the market (e.g. public transport and construction, health services and education) and so their decisions have considerable impact. In fact, in the above mentioned Commission's communication the capability that public procurement has to shape production and consumption trends, increase demand for "greener" products and services and provide incentives for companies to develop environmental friendly technologies is clearly emphasised.

GPP is a voluntary instrument, meaning that Member States and public authorities can determine the extent to which they implement it.

The development of EU GPP criteria aims to help public authorities ensure that the goods, services and works they require are procured and executed in a way that reduces their associated environmental impacts. The criteria are thus formulated in such a way that they can be integrated, if deemed appropriate by the individual authority, into its tender documents with minimal editing.

GPP criteria are to be understood as being part of the procurement process and must conform to its standard format and rules as laid out by Public Procurement Directive 2014/24/EU (public works, supply and service contracts). Hence, EU GPP criteria must comply with the guiding principles of: Free movement of goods and services and freedom of establishment; Non-discrimination and equal treatment; Transparency; Proportionality and Mutual recognition. GPP criteria must be verifiable and it should be formulated either as Selection criteria, Technical specifications, Award criteria or Contract performance clauses, which can be understood as follows:

**Selection Criteria (SC):** Selection criteria refer to the tenderer, *i.e.*, the company tendering for the contract, and not to the product being procured. It may relate to suitability to pursue the professional activity, economic and financial standing and technical and professional ability and may- for services and works contracts - ask specifically about their ability to apply environmental management measures when carrying out the contract.

**Technical Specifications (TS):** Technical specifications constitute minimum compliance requirements that must be met by all tenders. It must be linked to the contract's subject matter (the 'subject matter' of a contract is about what good, service or work is intended to be procured. It can consist in a description of the product, but can also take the form of a functional or performance based definition.) and must not concern general corporate practices but only characteristics specific to the product being procured. Link to the subject matter can concern any stage of the product's life-cycle, including its supply-chain, even if not obvious in the final product, *i.e.*, not part of the material substance of the product. Offers not complying with the technical specifications must be rejected. Technical specifications are not scored for award purposes; they are strictly pass/fail requirements.

**Award Criteria (AC):** At the award stage, the contracting authority evaluates the quality of the tenders and compares costs. Contracts are awarded on the basis of most economically advantageous tender (MEAT). MEAT

includes a cost element and a wide range of other factors that may influence the value of a tender from the point of view of the contracting authority including environmental aspects (refer to the Buying Green 2016). Everything that is evaluated and scored for award purposes is an award criterion. These may refer to characteristics of goods or to the way in which services or works will be performed (in this case they cannot be verified at the award stage since they refer to future events. Therefore, in this case, the criteria are to be understood as commitments to carry out services or works in a specific way and should be monitored/verified during the execution of the contract via a contract performance clause). As technical specifications, also award criteria must be linked to the contract's subject matter and must not concern general corporate practices but only characteristics specific to the product being procured. Link to the subject matter can concern any stage of the product's life-cycle, including its supply-chain, even if not obvious in the final product, *i.e.*, not part of the material substance of the product. Award criteria can be used to stimulate additional environmental performance without being mandatory and, therefore, without foreclosing the market for products not reaching the proposed level of performance.

**Contract Performance Clauses (CPC):** Contract performance clauses are used to specify how a contract must be carried out. As technical specifications and award criteria, also contract performance clauses must be linked to the contract's subject matter and must not concern general corporate practices but only those specific to the product being procured. Link to the subject matter can concern any stage of the product's life-cycle, including its supply-chain, even if not obvious in the final product, *i.e.*, not part of the material substance of the product. The economic operator may not be requested to prove compliance with the contract performance clauses during the procurement procedure. Contract performance clauses are not scored for award purposes. Compliance with contract performance clauses should be monitored during the execution of the contract, therefore after it has been awarded. It may be linked to penalties or bonuses under the contract in order to ensure compliance.

For each criterion there is a choice between two levels of environmental ambition, which the contracting authority can choose from according to its particular goals and/or constraints:

The **Core criteria** are designed to allow easy application of GPP, focussing on the key areas of environmental performance of a product and aimed at keeping administrative costs for companies to a minimum.

The **Comprehensive criteria** take into account more aspects or higher levels of environmental performance, for use by authorities that want to go further in supporting environmental and innovation goals.

As said before, the development of EU GPP criteria aims to help public authorities ensure that the goods, services and works they require are procured and executed in a way that reduces their associated environmental impacts and is focused on the products' most significant improvement areas, resulting from the cross-check between the key environmental hot-spots and market analysis. This development also requires an understanding of commonly used procurement practices and processes and the taking on board of learnings from the actors involved in successfully fulfilling contracts.

For this reason, the European Commission has developed a process aimed at bringing together both technical and procurement experts to collate a broad body of evidence and to develop, in a consensus oriented manner, a proposal for precise and verifiable criteria that can be used to procure products with a reduced environmental impact.

This report presents the findings resulting from that process up to the second version of the Technical Report.

A detailed environmental and market analysis, as well as an assessment of potential improvement areas, was conducted within the framework of this project and was presented in the Preliminary Report on EU Green Public Procurement Criteria for Food and Catering Services. This report can be publicly accessed at the JRC website for Food and Catering Services ([http://susproc.jrc.ec.europa.eu/Food\\_Catering/](http://susproc.jrc.ec.europa.eu/Food_Catering/)). The main findings presented in the Preliminary Report are summarised in the next chapter.

## 1.1 Summary of the preliminary report

### **Scope**

Food service supply chains are extremely complex and diverse ranging from the traditional 'cook from scratch' model while others buy the food 'ready to serve' and some use a hybrid of the two. Detailed information on the stages of the supply chain can be found in the Preliminary Report (JRC 2016a).

Similarly, the food categories, catering services and food service segments that were revised regarding the market analysis and environmental hotspots identification. The food categories included in the current EU GPP (EU GPP 2008) were further enlarged to categories such as bread and cereals, oils and fat and sugar, jam, honey, chocolate and confectionery.

The scope identified for food and catering services reads:

*The direct procurement of food by public authorities and the procurement of catering services, either using in-house resources or facilities or out-sourced in full or in-part through contract catering firms. Food can be procured directly from producers, manufacturers, wholesalers or importers or can form part of the service provided by the contract catering firms.*

In the EU market, there is a common legal framework that sets the food safety requirements that ensure that only safe food and feed is placed on the EU market or fed to food-producing animals. The main pieces of legislation are the Regulation (EC) No 178/2002 that requires food and feed business operators to be able to identify any person from whom they have been supplied with a food, a feed, a food-producing animal, or any substance intended to be, or expected to be, incorporated into a food or feed. Food or feed which is placed on the market shall be adequately labelled or identified to facilitate its traceability, through relevant documentation or information in accordance with the relevant requirements of more specific provisions. The requirements on traceability are mandatory for all food operators including retail and distribution activities, i.e. catering services.

The Regulation (EC) No 852/2004 establishes the obligation of food business operators, including retail and distribution activities, to put in place, implement and maintain a permanent procedure or procedures based on the HACCP (Hazard analysis and critical control points) principles. This regulation sets requirements on staff training for food hygiene matters and compliance with any requirements of national law concerning training programmes for persons working in certain food sectors.

Apart from the EU legislation which sets mandatory requirements, the ISO 22000 standard sets requirements on food safety management systems, to be third-party certified. This standard covers all the food supply chain, although it is more commonly applied to only one step of the chain. Other private schemes focused on food safety, as GlobalGap are limited to the primary production (FAO, 2008). Additional food safety standards are Global Food Safety Initiative (GFSI) recognised includes: IFS Food, BRC-global standard food, FSSC and SQF.

In the view of the EU legislation and controls already in force in the European market, it seems unnecessary to set specific food safety criteria within the EU GPP. In case any environmental criterion might jeopardize the food safety principles, the precautionary approach to secure the food safety should rule on the decision making. In conclusion, the inclusion of food safety issues is considered to be out of the scope of this EU GPP revision

### **Definitions**

The following definitions for scope and for food service have been amended by stakeholder consultation feedback. The list of definitions considered relevant for the revision of the EU GPP criteria is as follows:

- **Catering service:** The preparation, storage and, where appropriate, delivery of food and drinks for consumption by the consumer/client/patient at the place of preparation, at a satellite unit or at the premises/venue of the client.
- **Contract catering firm:** A business engaged in (amongst other activities or services) providing a meals service (for example by running a staff restaurant or providing school meals) or providing drinks, snacks or vending.

- Conventional kitchen: A kitchen (at the place of consumption) where all, or a significant part of, food is prepared from raw ingredients.
- Centralised production unit: Central kitchens or central food factories that send out completed dishes or pre-processed ingredients/meals to satellites. It can include both ready-prepared services and assembly-serve services.
- Ready-prepared: Preparation on site or at a central facility of large batches of items for consumption that are then adequately stored frozen or chilled until required.
- Assembly-serve: The food is delivered pre-processed and cooked. Then the food is reheated (if necessary) and assembled on site.
- Vending and hot drink machines: Machines that are available at all times with snacks, fruit, drinks and/or sandwiches etc. that are ready to eat/drink or that can be reheated.
- Water dispensers: A device specifically for dispensing drinking water, which might have the possibility of heating and/or cooling the drinking water.

A more extensive definitions list can be found at the end of this document.

### 1.1.1 Market analysis

Key findings from the market analysis include:

- The total expenditure on food and catering services in Europe for the 28 Member States is 206.3 euro billion (2011 data from Eurostat). The sector (in total) includes 1.5 million enterprises, has a turnover of 354 euro billion, and employs 8 million people (2012 data from Eurostat).
- The turnover of the total EU contract catering industry in 2008 was 24.6 euro billion and around 600000 people were employed (EIRO, 2010).
- Self-operating public bodies and contract caterers on average share the food and catering market around 50/50, but the difference is large between Member States (FERCO, 2012). The market penetration of contract catering organisations varies significantly across Member States and across public sector segments. For example, in Ireland contract caterers account for 61.9% of the market and in Sweden they account for only 15%
- The most important sectors (in terms of purchase volume and value) in Europe that procure food and catering services are: health/welfare (42.7% of the total meals served), education (31.4% of the total meals served) and business & industry (17.8% of the total meals served)
- The EU-28 is a large producer of dairy, cereals (e.g. wheat), fruit and vegetables, meat, potatoes, bread and cold beverages. But the EU is also dependent on imports of fish, fruit, vegetables, animal feed, coffee, tea and cocoa (Eurostat Statistics in focus, 2011).

The consumption of organic production in the EU has been steadily rising since 2004 (FiBL and IFOAM, 2014). Germany (31%), France (18%), UK (8%) and Italy (8%) are the countries that buy most organic products. Combined these four countries accounted for nearly two thirds (65%) of the overall EU organic food sales in 2012. Conversely, countries such as Bulgaria, Cyprus, Estonia, Greece, Hungary, Latvia, Lithuania and Slovakia represent very underdeveloped markets (Thünen Institute of Farm Economics, 2013). In 2013 only 5.7% of the arable land in the EU-28 was used for organic production.

- The most popular organic food products that are bought by consumers are: eggs, dairy, fruit, vegetables, hot beverages, meat (mainly in Northern Europe) and bread and bakery.
- There is a rising demand for healthy food and drink products both from private consumers and governments, especially in the education and health sectors.
- Labour cost and food purchase cost, are the two most important factors that influences the price per meal



- In terms of corporate engagement in sustainability issues there is a significant focus in the catering industry on energy savings, packaging reduction and food waste prevention.

### 1.1.2 Technical analysis

The key environmental hotspots and their relation to the proposed criteria are explained here in detail. The majority of the environmental impacts from food products (including catering service activities) arise at the primary production stage and in some cases also at the processing stage. At the catering service stage in the foodservice supply chain, energy and water use are important contributors to environmental impact, as well as waste generation and management.

Table 1 summarises the main impacts and causes identified from the review of LCA studies (Preliminary Report, JRC 2016a) and shows the link to the proposed GPP criteria.

**Table 1: Main environmental hotspots and causes from food procurement (the name of the criteria are the ones proposed in the present report)**

Product category		Environmental hotspot or potential improvement areas	Criteria (improvements)
Food procurement	Fish and seafood	Depleting fish stocks Production of feed for fish and the use of antifouling treatment in fish cages Combustion of fossil fuels and the use of antifouling treatments in fishing vessels for wild caught species and equipment for aquaculture	<u>Marine and aquaculture food products:</u> - Avoid pressure on depleting fish stocks - Lower environmental impact feed used in aquaculture
	Meat Milk and cheese Eggs	Land use and land change (e.g. destruction of natural habitats and CO <sub>2</sub> emissions associated to feed) Production and use of pesticides Misuse of overuse of antimicrobials Methane emissions from ruminants Ammonia/nitrate emissions from rearing houses and manure storage Water use and water pollution Energy use (heating and cooling birdhouses) Energy use in slaughtering (not for daily products and eggs)	<u>Organic production</u> - Higher animal welfare standards <u>Animal welfare</u> - Some evidence was found on better meat quality - Ethical consideration
	Fruit and vegetables Bread and cereals	Production and use of chemical fertilisers and pesticides Soil degradation and potential run-off of excessive nitrogen in monoculture Energy and water use for irrigation Energy use when cultivating in GHG	<u>Integration production</u> - Restricted use of pesticides and synthetic fertilisers - Greater resource efficiency <u>Organic production</u> - Lower eco-toxicity and lower GWP (in some cases) - Healthier (in some aspects as containing more oxidants, less pesticides and heavy metals) - Natural resources should be targeted, better protected under organic production: air, biodiversity, soil and water <u>Promotion of vegetarian menus</u> - Shifting away from red meat.

Product category	Environmental hotspot or potential improvement areas	Criteria (improvements)
		<ul style="list-style-type: none"> <li>- Weekly vegetarian day(s).</li> <li>- Plant-based sourced proteins</li> </ul>
Oils and fats	Land use and land change Production and use of chemical fertilisers and pesticides Energy use in field work Methane release (anaerobic digestion of effluent in open pounds) Disposal of empty fruit bunch in landfills lead to GHG emissions	<u>Integration production</u> See above <u>Organic production</u> See above <u>Environmentally responsible palm oil</u> <ul style="list-style-type: none"> <li>- Better management systems used in the palm oil production and extraction:</li> <li>- Use of fertilisers</li> <li>- Lower emissions in oil mills</li> </ul>
Hot drinks	Production and use of chemical fertilisers and pesticides Drying of tea leaves Energy use for water boiling	<u>Integration production</u> See above <u>Organic production</u> See above
Cold drinks	Production and use of chemical fertilisers and pesticides Energy and water use for irrigation Energy use in the bottling process Water use	<u>Integration production</u> See above <u>Organic production</u> See above
Transportation	Long transport emissions	

**Table 2: Main environmental hotspots and causes from catering services**

Product category	Environmental hotspot or potential improvement areas	Criteria
Food procurement	See above	
Catering services	Operational support	<u>Competence of the tenderer and Staff Training</u> <ul style="list-style-type: none"> <li>- Use of products and consumables with lower environmental impact</li> <li>- Energy use in catering services</li> </ul> <u>Chemical products and consumable goods</u> -Use of lower environmental impact consumable goods, including: <ul style="list-style-type: none"> <li>- Paper products</li> <li>- Tableware</li> <li>- Cleaning products (as hand soaps, cleaning products and dishwasher detergents)</li> </ul>
	Food storage and food preparation	Energy and water consumption in kitchens see below <u>Environmental management measures and practices</u> <ul style="list-style-type: none"> <li>- Use of products and consumable goods with lower environmental impact</li> <li>- Water and energy use in catering services</li> <li>- Solid waste management</li> </ul> <u>Avoidable food waste: prevention and redistribution</u> <ul style="list-style-type: none"> <li>- Lower generation of food waste</li> <li>- Better food stock management, portion size of meals and adequacy to of meals</li> </ul>

		<p>consumer tastes</p> <p><u>Promotion of vegetarian menus</u></p> <ul style="list-style-type: none"> <li>- Shifting away from red meat.</li> <li>- Weekly vegetarian day(s).</li> <li>- Plant-based sourced proteins</li> </ul>
Solid waste management	<p>Production and disposal of organic waste</p> <p>Use and disposal of packaging (e.g. landfill)</p>	<p><u>Other waste: prevention, sorting and disposal</u></p> <ul style="list-style-type: none"> <li>- Liquid and solid waste management</li> </ul>
Transportation	<p>Long distances imply larger amounts of transport emissions</p>	<p><u>Food transportation</u></p> <ul style="list-style-type: none"> <li>- Lower combustion emissions from the vehicle fleet</li> <li>- Better planning the transportation of food (raw and ready prepared meals)</li> </ul>
Processing of products	<p>Energy use in processing</p> <p>Wastewater treatment</p> <p>Energy and refrigerants used for cold storage</p>	<p><u>Energy and water consumption in kitchens</u></p> <ul style="list-style-type: none"> <li>- Use of energy efficient kitchen equipment</li> </ul>

## 1.2 Changes from Technical Report v1 to v2

### a) Criteria Format in the FOOD procurement criteria set

The wording and the structure of all the criteria have been modified. The new format of the wording include recommended values. An "x" value is followed by explanatory notes where the ranges of the recommended values for that criterion are included. The highest value could be considered as the "*best practice*" value while the lowest could be considered as a feasible value to be applied across EU-28.

In this way the criteria aim at providing an example on the types of requirements to be included but giving flexibility to the procurers to adapt these requirements to the specific situations they are facing (e.g. local situation, characteristics of the clients to be served such as students, employees, patients, clerical staff, etc.).

### b) Removal / addition of criteria

The *criterion on "seasonal produce"* has been removed from the Food procurement criteria. Eating more seasonal food is only one element of a sustainable diet. However, it should be kept in mind that seasonal produce could also be referred to the production place and therefore little changes in the diet can be observed. It should not overshadow some of the potentially more difficult-to-change dietary behaviours that could have greater environmental and health benefits (e.g. reducing overconsumption or meat consumption).

Packaging is another criterion that has been removed in the present technical report. Several reasons were considered for this proposal such as the difficulties to assess the distance for returning the reusable packaging (eg to wash and refill the bottles), the lack of infrastructure for sorting, collecting and composting biodegradable and compostable packaging or the trade-offs in the use of single unit packaging.

### c) Changes in the Catering services criteria set

Several changes have been introduced in the catering service criteria set especially concerning the reclassification of the criteria as either technical specification criteria, award criteria or selection criteria and the content of the criteria. The newly proposed criteria are mostly focused on the promotion of vegetables and the prevention and management of the food waste and other waste.

More in detail, the criterion proposed as *menu planning* in the TR1.0 has been removed and a criterion aiming to increase the consumption of vegetables has been introduced. This criterion includes several measures that the tender can implement depending on the type of food services offered.

Two important criteria have been significantly modified in this report. The first one is the inclusion of a criterion concentrated on the *prevention of food waste and its redistribution* once generated. The food waste has negative effects on the economy and the environment and it is not justifiable from an ethical point of view. The second one focuses on other waste and includes the prevention and management of the generated waste, apart from avoidable food waste.

The *selection criteria* have also been revised. Only aspects related to the *competences of the tenderer* have been included in this area. The competences required should be focused on aspects such as the training provided to the staff, the ability to prepare tasty vegetarian dishes or the implementation of policies and procedures that aim to reduce the environmental impact caused by the activity.

Finally, those criteria proposed as *contractual performance clause* have been modified. Four criteria are proposed dealing with aspects such as the provision of tap drinking water, purchase of high energy efficient kitchen equipment, environmental management measures and practices or the training of the staff. In those criteria the tender shall demonstrate s/he performance in the contracts held during the last 5 years.

Annex 2 includes the feedback received after the 1<sup>st</sup> AHWG meeting on sections such as the scope and definitions and environmental hotspots. The comments accepted have been already integrated in this report.

#### Consultation questions

- Which are the advantages and disadvantages of the proposed criteria wording in comparison to a criteria wording that focuses on the type of food products? Which option would you consider to fit better in GPP?

For example:

Criterion on Marine and aquaculture food products

Option A: (on the basis of the total procurement)

*"At least Y%<sup>2)</sup> of the amount of aquaculture food products purchases not complying with the organic food products criterion shall have been produced through efficient and environmentally responsible practices"*

Option B: (on the basis of aquaculture food products)

*"At least Y%<sup>2)</sup> of the amount of aquaculture food products shall comply with the organic food products standards and at least X% of the amount of aquaculture food products shall have been produced through efficient and environmentally responsible practices"*

## 2 Draft EU GPP Criteria proposal for Food

Table 3 indicates the criteria included in the Food procurement criteria set

**Table 3. Criteria set for Food procurement Award Criteria (AC) and Technical Specification (TS). Thresholds in TS are included as minimum values (i.e. *at least x%*) and thresholds in AC are included as the starting point to get points awarded (i.e. *points awarded from x%*).**

Criteria	Type of criteria	Level of ambition	
		Core	Comprehensive
Organic food products	TS1	<i>Option A</i> 20-60% in mass 10-30% in value  <i>Option B</i> Products included: fruit, vegetables, legumes, rice and pasta	<i>Option A</i> 50% in mass 20-40% in value  <i>Option B</i> Products included: fruit, vegetables, legumes, rice, pasta, bread and bakery products, eggs, daily products, etc
	AC1	<i>Option A</i> 20-60% in mass 10-30% in value  <i>Option B</i> Products apart from those included in TS1	<i>Option A</i> >50% in mass >20-40% in value  <i>Option B</i> Products apart from those included in TS1
Marine and aquaculture food products	TS2	List to avoid	20-50% in mass 10-40% in value
	AC2	>0-10% in mass >0-20% in value	>20-50% in mass >10-40% in value
Integrated production	TS3	-	10-30% in mass
	AC3	0-10% in mass	>10-30% in mass
Animal welfare	TS4	80% of the eggs in shells code 1	100% of the eggs in shells code 1
	AC4	0-25% of the meat in mass/value	25-50% of the meat in mass/value
Fairly trade products	AC5	<i>Option A</i> 10-30% in mass/value  <i>Option B</i> List of products	<i>Option A</i> 30-70% in mass/value  <i>Option B</i> List of products
		See section 2.1.8	See section 2.1.8
Environmentally responsible palm oil	AC6	20% items pre-packed food 20 % in mass	50% items pre-packed food 50 % in mass

Annex 1 provides an example of a FOOD PROCUREMENT criteria set and how they can be verified.

## 2.1 Technical Specifications (TS) and Award Criteria (AC)

### 2.1.2 Organic food products

Core criteria	Comprehensive criteria
<b>Technical Specification</b>	
<p><b>TS1. Organic food products</b></p> <p><i>Option A</i> At least X%<sup>1)</sup> of the total purchases of food and drink products shall comply with the organic products standards.</p> <p><b>Verification:</b> The tenderer shall provide data (name and amount) of food and drink products planned to be supplied in the execution of the contract indicating specifically the products that comply with organic requirements. Organic products that have been third party certified in accordance with Regulation (EC) No 834/2007 on organic production and labelling of organic products will be deemed to comply.</p> <p><i>Option B</i> The following food and drink products [<i>list of food and drink products in the explanatory notes</i>] shall comply with the organic products standards</p> <p><b>Verification:</b> See TS1 option A</p>	
Core criteria	Comprehensive criteria
<b>Award Criteria</b>	
<p><b>AC1. Additional organic food products</b></p> <p><i>Option A</i> Points shall be proportionally awarded to tenders in which more than X%<sup>1)</sup> of the total purchases of food and drink products have been produced in accordance with Regulation (EC) No 834/2007.</p> <p><b>Verification:</b> See above TS1 option A</p> <p><i>Option B</i> Points shall be proportionally awarded to tenders that exceed the list of food and drinks products [<i>listed in TS1 option B</i>] and comply with the organic products standards</p> <p><b>Verification:</b> See TS1 option A</p>	
<b>Explanatory notes</b>	
Core criteria	Comprehensive criteria
<b>Technical Specification and Award Criteria</b>	
<p><b>Organic food products</b></p> <p>The contracting authority will have to specify how the percentage of purchase will be calculated, either in volume, weight or value</p> <p><u>Recommended values for core criteria:</u> 20-60% in mass of the total purchases of food and drinks products or 10-30% in value of the total purchases of food and drinks products List of products can include: fruit, vegetables, legumes, rice and pasta</p> <p><u>Recommended values for comprehensive criteria:</u></p>	

>50% in mass of the total purchases of food and drinks products or  
20-40% in value of the total purchases of food and drinks products  
List of products can include: fruit, vegetables, legumes, rice, pasta, bread and bakery products, eggs, daily products, etc

<sup>1)</sup> X is the threshold to be defined by the procurer for the comprehensive and core levels (TS and AC). Recommendations for its value are given in explanatory notes above.

### **Rationale of the proposed criteria wording**

The inclusion of a criterion on organic produce is proposed based on studies that demonstrate that the possibility of achieving some environmental benefits can be brought under certain conditions, for example benefits regarding biodiversity or the quality of soil. However, it is not yet possible to draw a general conclusion on the environmental benefits for all the conditions that are currently present across Europe.

Several studies compare organic and conventional food products from the environmental perspective with diverse conclusions as commented in the previous technical report TR1.0 (JRC 2016b) and the preliminary report. Differences stem in the methodologies, and inventories used. The use of different methods, system boundaries, functional units and environmental indicators among other aspects lead to different conclusions. Therefore comparisons between those kinds of products should be carefully done. In particular, those studies based on conventional LCA methodologies do not comprehensively capture aspects related to the biodiversity and therefore, they are not fully capturing certain environmental benefits of organic production.

For example, per unit of area, organic farming has lower impact for most impact areas compared to conventional systems. However, per product unit organic systems have lower energy use, but larger land use and hence higher eutrophication potential and acidification potential. LCA methods are more product-efficiency driven, which usually favours intensive (high input agricultural) systems, even though other types of measures show that those systems are environmentally unsustainable. In this sense, for an LCA-based comparison of farming systems, there is a need to use distinct functional units to acknowledge multifunctional outputs or to allocate environmental impacts to the whole set of agricultural outputs.

When looking at the more health-related aspects, organic crops (i.e. cereals, fruit and vegetables) contain more antioxidants, less pesticides and less heavy metals (such as cadmium that accumulates in the body) than do conventional crops. In addition, from an animal welfare perspective, organic production has higher standards (Barański, 2014).

With respect to the market availability the EU organic food market has been continuously growing in the last years. Organic products were first introduced in the retail sector but nowadays producers are available to offer their products in bulk and bigger formats as well as processed organic products to industries and catering services. This fact is reflected in the inclusion of organic food products in tenders. Requirements on organic produce in European tenders vary significantly ranging from 10 to 100% of organic meals. Some organic products such as eggs, dairy, fruit, vegetables, hot beverages, meat (mainly in Northern Europe) and bread and bakery (in some Member States) are more dominant than others (FiBL and IFOAM, 2014). Organic products are often more expensive than conventional products, although the premium to pay depends on the type of product, country and season, ranging from 10% to 200%.

The proposed criterion on organic products is set up as a technical specification and as an award criterion, reflecting the wide-spread inclusion of this criterion in GPP tenders across EU-28 and the high requirements set in some Member States. However, in other Member States the organic product market is not well developed and strict requirements could create market distortions and difficulties of supplying. Both proposals are drafted giving freedom to the procurers to set thresholds based on mass, volume or monetary value. The suitability of each accounting system will depend on the type of service, preparation chain, etc. The proposed thresholds are based on the information received as well as the benchmarks for excellence for GPP of food and drink products (section 4.1.1.1 in TR1.0) (JRC 2016b).

In brief, it is observed that the growth in the EU organic food market continued at a steady rate between 2004 and 2012 (from 2011 to 2012 increased in 6%) although the highest increase was observed in the retail sector.

Some organic products are more dominant than others in the EU organic market (i.e. eggs, dairy, fruit, vegetables, bakery, etc.), but their availability and also the price could depend on some factors such as location or season. Therefore, the proposed criterion does not point out the type of organic product to be purchased but only the recommended minimum quantity or value. Stating the type of product to be purchased as organic certified would lead to a further consolidation of already established markets of organic products such as pasta, rice, fruits and vegetables, legumes, etc. and even, in the short term, the demand may exceed the offer. On the other hand, the proposed formulation of the organic produce criterion without stating the types of products can be an opportunity to boost the market of certain organic products that are not widely offered.

The explanatory notes includes ranges of values that can be applied to set up the minimum requirements for the core and comprehensive levels. The values were estimated based on the information provided by the stakeholders and included in Annex 3.1. Among this information, several examples of existing GPP in tender were provided. The uptake and levels of ambition vary significantly ranging from 10% to 100% of organic meals.

The proposed values are in line with the benchmarks of excellence for GPP of Food and drink products in the tourism sector. The reference document (BEMP 2012) states that at least 40% in value of food and drink products are certified according to high environmental standards or criteria.

Extensive discussions were held during the EU GPP criteria revision process on both points. Stakeholders provided feedback on these points and the possible effects on the organic market and the offers to be received. Depending on the situation, the thresholds might favour the purchase of those types of organic products that are mostly available on the market. In this way, the cost of the total purchase will not be drastically affected whereas the total amount of organic products served/procured can reach significant values (e.g. 30-60% in mass of the total).

Further information can be found in Annex 3.1

### **Rationale of the proposed verification**

The verification of the proposed criterion is based on the Regulation (EC) No 834/2007 on organic production and labelling of organic products and an accounting document of the expected annual purchases.

In accordance with Regulation (EC) No 834/2007, organic produce food can be certified and labelled as such being easily recognised and making feasible the verification of this criterion. Certification bodies are appointed in each Member State in a different way but all of them have to award the organic products with the same label and registration number.

Procurers can also verify the purchases of organic food and drink products throughout detailed invoices. Invoices of the food and drink products purchased should be detailed enough and include the name of the product, the quantity in mass or volume and the costs (as requested by the contracting authorities and specified in the Contract performance clause, section 3.3).



### 2.1.3 Marine and aquaculture food products required.

Core criteria	Comprehensive criteria
<b>Technical Specification</b>	
<b>TS2. Marine and aquaculture food products</b>	
<p>1. All fish and fish products must not contain species and stocks identified in a 'fish to avoid' list that reflects the local varieties of fish.<sup>1)</sup></p> <p><b>Verification:</b> The tenderer shall provide data (name and the amount) of marine and aquaculture food products, planned to be supplied in the execution of the contract indicating specifically the marine and aquaculture products that comply with the requirements.</p>	
	<p>2. At least Y%<sup>2)</sup> of the amount of marine food products purchases not complying with the organic food products criterion shall have been produced meeting the requirements of a certification scheme for sustainable production that is based on multi-stakeholder organizations with a broad membership and addresses environmental impacts including over-fishing or depletion, biodiversity and responsible and sustainable use of the resources<sup>3)</sup>.</p> <p>3. At least Y%<sup>2)</sup> of the amount of aquaculture food products purchases not complying with the organic food products criterion shall have been produced meeting the requirements of a certification scheme for sustainable production that is based on multi-stakeholder organizations with a broad membership and addresses environmental impacts including biodiversity and responsible and sustainable use of the resources<sup>3)</sup>.</p> <p><b>Verification:</b> The tenderer shall provide data (name and the amount) of marine and aquaculture food products planned to be supplied in the execution of the contract indicating specifically the products that comply with the requirements.</p>
<b>Core criteria</b>	<b>Comprehensive criteria</b>
<b>Award Criteria</b>	
<b>AC2. Additional marine and aquaculture food products</b>	
<p>1. Points shall be awarded proportionally to tenders in which more than X%<sup>2)</sup> of the amount of marine food products purchases not complying with the organic produce criterion have been produced meeting the requirements of a certification scheme for sustainable production that is based on multi-stakeholder organizations with a broad membership and addresses environmental impacts including over-fishing or depletion, biodiversity and responsible and sustainable use of the resources<sup>3)</sup>.</p> <p>2. Points shall be awarded proportionally to tenders in which more than X%<sup>2)</sup> of the amount of aquaculture food products purchases not complying with the organic produce criterion have been produced meeting the requirements of a certification scheme for sustainable production that is based on multi-stakeholder organizations with a broad membership and addresses environmental impacts including biodiversity and</p>	

responsible and sustainable use of the resources<sup>3)</sup>.

**Verification:**

See above TS2

**Explanatory notes**

**Core criteria**

**Comprehensive criteria**

**Technical Specification and Award Criteria**

**Marine and aquaculture food products**

The contracting authority will have to specify how the percentage will be calculated, either in volume, weight or value.

Recommended values for core criteria: (X%)

0-20% in mass of total purchases of fish products not complying with the organic food products requirements

0-10% in value of total purchases of fish products not complying with the organic food products requirements

Recommended values for comprehensive criteria: (Y% or X%)

20-50% in mass of total purchases of fish products not complying with the organic food products requirements

10-40% in value of total purchases of fish products not complying with the organic food products requirements

<sup>1)</sup> The selection of only one list is recommended, such as: Marine Conservation Society "fish to avoid" list available on:

<http://www.fishonline.org/fishfinder?min=5&max=5&fish=&avoid=1>. Equivalent lists can be found from: WWF's Sustainable Seafood guides, IUCN, Seaweb Europe, CITES, FAO, NOAA, Monterey Bay Aquarium Seafood Watch, Greenpeace, etc.

<sup>2)</sup> X and Y are the threshold to be defined by the procurer for the core and comprehensive levels (TS and AC). Recommendations for its value are given in explanatory notes below.

<sup>3)</sup> Such as, e.g., the Marine Stewardship Council (MSC) for marine food products and the Aquaculture Stewardship Council (ASC) or Globalgap for aquaculture food products, provided they cover the environmental principles mentioned above. Other schemes at country level can be considered as equivalent as far as they comply with the environmental principles mentioned above.

**Rationale of the proposed criteria wording**

One of the chief consequences of industrial fishing is that some species have been overfished to the point of near extinction. This criterion aims at reducing the biodiversity loss environmental impacts by purchasing more sustainable fish from stocks that are not overfished. Responsible procurement should then avoid the purchase of threatened or endangered species and fish from damaging fisheries or farming systems included in red lists such as the Marine Conservation Society red list (MCS, 2015a). The Marine Conservation Society provides an up-to-date guideline on what fish stocks can be responsibly fished or farmed for wild caught fish and aquaculture respectively. Other lists have been included as commented below. The fuel use when catching fish and the soy feed used in fish farming systems are the main environmental impacts associated to the consumption of fish and seafood products. This environmental impact is addressed by requiring a responsible and sustainable use of the resources.

The marine and aquaculture criterion addresses separately marine and aquaculture fish and seafood, since they have different production methods and therefore cause different environmental impacts. Despite the uptake of EU GPP criteria on fish by public procurers is low up to now (2 out of 7 respondents use it within their public tendering), in the 1<sup>st</sup> AHWG meeting the stakeholders showed a growing awareness to use them.

There are differences among the Member States as regards the availability and number of suppliers of certified sustainable seafood products. In general, there was consensus on the ambition levels proposed in the 1<sup>st</sup> AHWG meeting, although some stakeholders thought it lacked ambition. Therefore, the wording of the criterion has been changed providing freedom to the contracting authorities to set up the most appropriate thresholds that better suit the diversity of the region or country. The recommended values are given in the explanatory notes. A minimum up to 20% in mass has been proposed for the core level, while for the comprehensive level a figure between 20% and 50% has been proposed of those fish and seafood products that do not comply with the requirements of organic food products.

Further information can be found in Annex 3.2.

### **Rationale of the proposed verification**

When procurement includes the purchase of fish and seafood products, first of all s/he shall make sure that the species are not included in the Red List. There are several recognised red lists that are regularly updated and give information about the fish stocks that can be responsibly fished or farmed for fish and aquaculture respectively. The Marine Conservation Society provides one (MCS, 2015b). Other lists have been included in this revision, upon stakeholders comments, such as those of WWF sustainable seafood, IUCN, Seaweb Europe, CITES, FAO, NOAA, Monterey Bay Aquarium Seafood Watch and Greenpeace.

Secondly, when the procurement includes the purchase of fish of popular (and often overfished) species such as tuna or cod, and fish from aquaculture (e.g. salmon), the means of verifying responsible sourcing can be achieved through the use of third party certified schemes such as the Marine Stewardship Council (MSC) label for wild caught fish and the Aquaculture Stewardship Council (ASC) (ASC, 2015) label for fish from aquaculture. Up to now, there is no EU regulation on this topic.

Products with the MSC and ASC labels are widely available on the market in all Member States, as commented by the stakeholders. However, some stakeholders expressed their concern for SMEs to get products since the chain of custody certification can be costly.

The wording of the criteria has been edited. The MSC and ASC are not the unique labels that public bodies should accept. GlobalGap (GLOBAL GAP 2017a) certified production standards for farmed species (aquaculture but also other animal species) are amongst other certification schemes proposed for verification. National schemes can also be used. Further information on the EU-28 third party environmental certification schemes has been revised and gathered for consultation in Annex 3.2

These schemes should address a number of issues of environmental concern associated with the production of fish including: habitat alteration (e.g. over-fishing, depletion, loss of biodiversity, etc.), freshwater impacts (e.g. due to the use of nutrients that increase the organic pollution), escapes and impacts on associated dependent and ecologically related species), interactions with local wildlife, effective management of the resources that is in accordance with and enforces of local, national and international regulations.

Procurers can also verify the purchases of sustainable fish products via detailed invoices. Invoices of the food and drink products purchased should be detailed enough and include the name of the product, the quantity in mass or volume and the costs (as requested by the contracting authorities and specified in the Contract performance clause, section 3.3).

#### **2.1.4 Seasonal produce REMOVAL**

NOTE: The criterion on seasonal produce has been removed from the Food procurement criteria

##### **Rationale for the proposed criteria removal**

Eating more seasonal food might be one proposal for moving towards more sustainable consumption patterns. Seasonality can be defined as either globally seasonal (i.e. produced in the natural production season but consumed anywhere in the world) or locally seasonal (i.e. produced in the natural production season and consumed within the same climatic zone) (Mac Diarmid et al 2014). The environmental, health, economic and societal impact varies by the definition used. Global seasonality has the nutritional benefit of providing a more varied and consistent supply of fresh produce year round, but this increases demand for foods that in turn can have a high environmental burden in the country of production (e.g. water stress, land use change with loss of biodiversity, etc.). Greenhouse gas (GHG) emissions of globally seasonal food are not necessarily higher than food produced locally as it depends more on the production system used than transportation.

Eating more seasonal food is only one element of a sustainable diet. However, it should not overshadow with some of the potentially more difficult dietary behaviours to change that could have greater environmental and health benefits (e.g. reducing overconsumption or meat consumption).

## 2.1.5 Integrated production

Core criteria	Comprehensive criteria
<b>Technical Specification</b>	
<p><i>Note: Each Member State has its own regulations and IP guidelines can vary substantially in methods and measures. Consequently, any requirement on IP recommended in EU GPP criteria may conflict with specific Member State legislation.</i></p>	
	<p><b>TS3. Integrated production</b>            At least Y%<sup>1)</sup> of the purchases not complying with the organic food products criterion shall be compliant with the integrated production standards and/or guidelines of a certification scheme for integrated production that is based on multi-stakeholder organizations with a broad membership, including producers and retailers, and addresses environmental impacts including pest, crop and waste management and conservation<sup>2)</sup></p> <p><b>Verification:</b>            The tenderer shall provide data (name and amount) of all food products planned to be supplied in the execution of the contract indicating specifically the ones compliant with the requirements.</p>
Core criteria	Comprehensive criteria
<b>Award Criteria</b>	
<p><b>AC3. Additional Integrated production</b>            Points shall be awarded proportionally to tenders in which more than X%<sup>1)</sup> of the purchases not complying with the organic food products criterion have been produced in accordance with integrated production standards and/or guidelines of a certification scheme for integrated production that is based on multi-stakeholder organizations with a broad membership, including producers and retailers, and addresses environmental impacts including pest, crop and waste management and conservation<sup>2)</sup></p> <p><b>Verification:</b>            See above TS3</p>	
<b>Explanatory notes</b>	
Core criteria	Comprehensive criteria
<b>Technical Specification and Award Criteria</b>	
<p><b>Integrated production</b>            The contracting authority will have to specify how the percentage will be calculated, either in volume, weight or value.</p> <p><u>Recommended values for core criteria (X%):</u>            0-10% in mass of the total purchases not complying with organic food products criterion</p> <p><u>Recommended values for comprehensive criteria (Y% or X%):</u>            20-40% in mass of the total purchases not complying with organic food products criterion</p>	
<p><sup>1)</sup> X and Y are the threshold to be defined by the procurer for the core and comprehensive levels (TS and AC). Recommendations for its value are given in explanatory notes below</p> <p><sup>2)</sup> Food products that have been certified in accordance with integrated production national or regional regulation will be deemed to comply. Other schemes such as Global GAP, IOBC, FSA with at least bronze equivalence, etc can show compliance with the criterion provided they cover the environmental principles mentioned above. Other schemes at country level can be considered as equivalent as far as they comply with the environmental</p>	

### **Rationale for the proposed criteria wording**

Scientific evidence suggests that integrated production (IP) could be a way to achieve lower environmental impacts from agriculture at no or little additional cost, as it is based on the good practices. IP can provide significant environmental benefits compared to conventional farming because of, among other good practices, the restricted use of pesticides and synthetic fertilisers.

However, and regarding the introduction of IP in the GPP criteria for food procurement, two major points have been worked out:

1. The majority of stakeholders requested a definition of "*integrated production*". At present, at EU level there is no a unique definition of IP and most of the Member States that developed regulation on IP chose its own definition. However, it should be noted that most of the IP definitions are pretty close in the concept. From the point of view of the environment, negligible differences between definitions and regulations are not relevant enough to prevent procurers from taking advantage of the benefits of this production method.

Definitions provided by the existing national and regional regulations are also close to the definition provided by International organization of biological and integrated control (IOBIC 2017) that reads "*integrated production is a farming system that produces high quality feed and other products by using natural resources and regulating mechanisms to replace pollution inputs to secure sustainable farming*". Additionally, the IOBC provides the principles of the integrated production which are listed in the Annex 3.3.

It should be noted, that best practices to be applied to crops are detailed in the guidelines that come along with the regional and national regulations or the private schemes. These IP guidelines transfer the IP concept into methods and measures that can be implemented on farm-level. The IP guidelines consist of crop-specific measures that have been thoroughly tested in practise. For example, there are IP guidelines specific for each region for stone fruits, soft fruits, citrus, arable crops, each type of vegetables, etc

2. The second point concerns the verification procedure. There is no common EU certification scheme and national and regional schemes are not present in all countries. Further research presented in Annex 3.3 of this report lists all the Member States where the IP is regulated at national or regional level and shows that the majority of countries where agriculture is an important share of their economies took care of. In these countries, the verification procedure should be based on the regulation in place. In the remaining countries where IP regulation is still lacking the verification can be done through international private schemes, as described in the rationale of the assessment and verification below. Checking the state-of-the-art of the IP across Europe in year 2013 (Table 36 of Annex 3.3), it seems that in most of the Member States without regulation on IP (i.e. Denmark or UK) the uptake of organic food production is quite notable, what can be regarded as an step forward in demanding sustainable techniques for producing food products.

Stakeholders proposed that IP is likely to be more suited as an award criterion due to lack of schemes in some Member States and the lack of labels in others. When analysing the recently launched GPP calls across EU-28, this criterion has often been integrated within the requirement for organic food products (no distinction was made between requirements on organic produce and IP). However, both concepts are essentially different. The criterion for organic food production is proposed as a minimum technical specification due to widespread availability in the EU whereas the criterion for IP is set as a technical specification at the comprehensive level and as an award criterion due to the lack of an EU regulation.

The ambition level of the criterion was revised. The present proposal here includes minimum threshold of 10% of total purchases of those products that are not complying with the organic food product criterion from the account. This threshold seems to be too low for those countries where the IP is regulated, especially considering the potential environmental benefits that this production method can bring.

Further information can be found in Annex 3.3.

### **Rationale for the proposed verification**

This criterion awards points to tenderers that provide third party certified food products produced under integrated production standards. It is important to support the development of IP (and accompanied labels) across the EU due to the associated cost savings from good environmental practices such as reduced fertiliser and pesticide use.

The proposed verification is mainly based on the existence of national or regional regulation on integrated production in many Member States where the primary sector is notable in their economies. The existing regulation on integrated production, does however not guarantee that the food products will be labelled accordingly. There are countries such as Spain, Italy or France where the certification of the IP comes along the use of a label that simplify the verification procedures. There are other countries where the labels on IP are not used even if this production technique is regulated (i.e. Germany). This makes the verification procedure not so straight forward but still possible. In those cases, the verification procedure should be based on the same principles that are included in the respective national or regional regulation.

Finally there are some Member States that did not develop any regulation on IP neither at national nor at regional level. In those countries, farmers can still produce applying this method and get a third party certification and label that ensures that the food products were produced respecting some standards. Currently there are international certification schemes that are widely recognised and can provide a certification on crops that demonstrate the good practices put in place, such as Global GAP

There are other systems such as Sustainable Agriculture Initiative Platform (SAI 2017), a platform farm sustainability assessment (FSA) that follows a benchmarking system. The benchmarking carried out by SAI involved a detailed analysis process, in which the score reflects the overall equivalence between the FSA and the alternative program at the question level. FSA is general so far and can be applied to most crops and all regions, and covers a wide range of issues. A producer that follows the FSA can show compliance with this criterion if the equivalence between the FSA and a national or well-recognised scheme proposed for verification achieves at least a bronze level.

Procurers can also verify the purchases of products under integrated production standards throughout the detailed invoices. Invoices of the food and drink products purchased should be detailed enough and include the name of the product, the quantity in mass or volume and the costs (as requested by the contracting authorities and specified in the Contract performance clause, section 3.3).

## 2.1.6 Animal welfare

Core criteria	Comprehensive criteria
<b>Technical Specification criteria</b>	
<p><b>TS4. Animal welfare</b> None of the eggs in shell coming from conventional farming are labelled code 3 of Regulation (EC) No 589/2008 or equivalent.</p> <p><b>Verification:</b> The tenderer shall provide the amount of the eggs in shell planned to be supplied in the execution of the contract indicating specifically the ones compliant with code 1 or 2 of Annex I part A to Regulation (EC) No 589/2008.</p>	
<b>Award criteria</b>	
<p><b>AC4. Animal welfare</b> AC 4.1. Points shall be proportionally awarded to tenders in which more than X%<sup>1)</sup> of the eggs in shell not complying with the organic food products criterion are labelled code 1 of Regulation (EC) No 589/2008.</p> <p>AC 4.2. Points shall be proportionally awarded to tenders in which more than Y%<sup>1)</sup> of the total purchases of meat not complying with the organic food products criterion have been produced meeting the requirements of a certification scheme for animal welfare that is based on multi-stakeholder organizations with a broad membership and addresses general aspects including less stress, rational use of antibiotics, stunned slaughter, transportation times, and particular aspects as grazing season for milk cows or no tail docking on pigs<sup>2)</sup>.</p> <p><b>Verification:</b> AC 4.1. See above TS4 AC 4.2. The tenderer shall provide data (name and amount) of the meat products planned to be supplied in the execution of the contract indicating specifically the ones that comply with the requirements</p>	
<b>Explanatory notes</b>	
<b>Core criteria</b>	<b>Comprehensive criteria</b>
<b>Award Criteria</b>	
<p>The contracting authority will have to specify how the percentage will be calculated, either in volume, weight, units or value.</p> <p><u>Recommended values for core criteria:</u> X = 80% of the eggs in shells not complying with organic food products criterion are labelled with code 1 Y = 0-25% of meat products not complying with organic food products criterion</p> <p><u>Recommended values for comprehensive criteria:</u> X = 100% of the eggs in shells not complying with organic food products criterion are labelled with code 1 Y = 25-50% of meat products not complying with organic food products criterion</p>	
<p><sup>1)</sup> X and Y are the threshold to be defined by the procurer for the comprehensive and core levels (AC). Recommendations for its value are given in explanatory notes below.</p> <p><sup>2)</sup> Products that have been third party certified by widely accepted and recognised standards such as e.g. Label Rouge, GlobalGAP with the add-on of Animal welfare, RSPCA Assured, Red Tractor Farm Assurance are deemed to comply, provided they cover the environmental principles mentioned above.</p>	

### **Rationale for the proposed criteria wording**

Meat products have been pointed out as one of the food categories with the highest environmental impacts. Some measures can be implemented to reduce the environmental impacts due to this consumption such as a reduction of the overall demand of meat products or the consumption of meat produced under certain conditions. Even if the first measure will be the most effective one, the consumption of meat will still remain. Thus, it is important to



consider animal welfare since it is a measure to reduce the impacts on the livestock. Additionally, this criterion addresses an important consumer's demand and is linked with animal health and well-being.

Eggs and other products coming from livestock are food categories with an important attributed overall environmental impact and impacts on the life standards of the animals. Eggs are widely consumed across EU-28 and therefore it was considered to be included in this criterion as a technical specification criterion. The Regulation (EC) No 589/2008, sets minimum requirements for systems of production for the various egg farming methods, and distinguishes three types of methods according mainly to the open air access and the stocking density the hens have. Eggs with code 1 are free-range eggs while eggs coded 3 are coming from caged hens.

LCA studies have often excluded aspects such as social, economic or ethical matters. This fact makes difficult to value the importance of this criterion from an environmental perspective. Scientific evidence shows that higher animal welfare standards have pros and cons in the respect to achievable environmental benefits. The longer lives and more space (reduced stocking density) would require more resources (per unit of production), hence, from an LCA perspective it will increase the total burden of meat production. It is not clear whether better animal welfare practices lead to better food quality, but there are evidences that free-range pigs have lower stress level and therefore at EU level better meat quality than pigs kept indoors on slatted floors.

The low uptake in the recently launched GPP schemes across EU-28 made that in the TR1.0 (JRC 2016b) only the category of eggs was included at the core level. However, voluntary welfare labelling schemes are available and a number of the national GPP schemes include animal welfare standards as an ethical criterion. This experience demonstrates that the scope of the present criterion on *Animal Welfare* could be wider, entailing all animal based food products on top of free range eggs, in agreement with many stakeholders opinion.

This revision does not point out thresholds or units to measure the amount of products complying with animal welfare standards to be procured. The common stakeholder's opinion about the ambition levels for the criterion was that a minimum 25% or 50% of the total purchases of animal products shall be produced respecting high welfare standards, for the core level or the comprehensive, respectively. Since these thresholds may seem stringent and not affordable by all Member States, this criterion is here proposed as an award criterion. Additionally, procurers are given recommended values in the explanatory notes, having the freedom to fix the most appropriate value attending to the specificity of the place where the tender is launched.

Further information can be found in Annex 3.4

### **Rationale for the proposed verification**

The verification of the proposed criterion for cage-free eggs is based on the Regulation (EC) No 589/2008, laying down detailed rules for implementing Regulation (EC) No 1234/2007 on marketing standards for eggs, plus an accounting document of the expected annual purchases.

For the second requirement on meat products there is EU Regulation although there has been an uneven implementation level in the different EU countries. In 1998, Directive 98/58/EC on the protection of animals kept for farming purposes, gave general rules for animals of all species kept for the production of food, wool, skin or fur or for other farming purposes, including fish, reptiles or amphibians. These rules are based on the European Convention for the Protection of Animals (Council of Europe, 1976) kept for Farming Purposes. Legislation has been further developed since that time to progressively improve the welfare status of farmed animals and to set standards on the farm, for their transport and conditions at the time of stunning and slaughter.

Due to the low and unequal implementation of the Regulation (EC) No 589/2008, the verification for this criterion has to rely on third party certification schemes. The certification schemes considered as valid for verification of this criterion on animal welfare standards should cover the following aspects to ensure the equivalency among the standards: stocking density, cleanliness conditions, responsible use of antibiotics and transport conditions among others. Examples are given such as GlobalGap (GLOBAL GAP 2017b) with the add-on Animal welfare. Organic labels can only be considered to verify the organic produce criterion and cannot be used to be awarded on the animal welfare criterion

The market availability in EU-28 of these certification schemes has been revised in the EU campaign and gathered for consultation in the Annex 3.4.

## 2.1.7 Fairly traded products

Core criteria	Comprehensive criteria
<b>Award Criteria</b>	
<b>ACS. Fairly traded products</b>	
<p>Option A</p> <p>Points shall be awarded proportionally to tenders in which more than X%<sup>1)</sup> of the total purchases of each of the following products: coffee, tea, chocolate (cocoa), sugar and bananas, have been produced and traded meeting the requirements of a certification scheme for fair trade that requires a minimum content of certified product of 90% and that is based on multi-stakeholder organizations with a broad membership and addresses international fairtrade standards including working conditions for production in accordance with ILO, sustainable trade and pricing<sup>2)</sup>.</p> <p><b>Verification:</b></p> <p>The tenderer shall provide data (name and amount) of all coffee, tea, chocolate (cocoa), sugar and bananas planned to be supplied in the execution of the contract indicating specifically the ones compliant with the criterion.</p> <p>Option B</p> <p>Points shall be awarded proportionally to tenders in which food and drink products have been produced and traded meeting the requirements of a certification scheme for fair trade that requires a minimum content of certified product of 90% and that is based on multi-stakeholder organizations with a broad membership and addresses international fairtrade standards including working conditions for production in accordance with ILO, sustainable trade and pricing<sup>2)</sup>.</p> <p><b>Verification:</b></p> <p>The tenderer shall provide the list of products planned to be supplied in the execution of the contract that comply with the criterion.</p>	
<b>Explanatory notes</b>	
Core criteria	Comprehensive criteria
<b>Award Criteria</b>	
<p>The contracting authority will have to specify how the percentage will be calculated, either in volume, weight or value spent.</p> <p>Option A</p> <p><u>Recommended values for core criteria:</u> X=10-30% of total purchases of each product: coffee, tea, chocolate (cocoa), sugar and bananas.</p> <p><u>Recommended values for comprehensive criteria:</u> X=30-70% of total purchases of each product: coffee, tea, chocolate (cocoa), sugar and bananas.</p> <p>Option B</p> <p>The list of products can include: coffee, tea, chocolate (cocoa), sugar, bananas, tertiary products such as other fruits, etc</p>	
<p><sup>1)</sup> X is the thresholds to be defined by the procurer for the comprehensive and core levels (AC). Recommendations for its value are given in explanatory notes below.</p> <p><sup>2)</sup> Schemes such as Fairtrade®, UTZ, Bonsucro, etc. can show compliance with the criterion provided they cover the environmental principles mentioned above. Other schemes at country level can be considered as equivalent as far as they comply with the environmental principles mentioned above.</p>	

### **Rationale for the proposed criteria wording**

Products originating from developing countries can have lower social/labour standards than the EU minimum accepted level. The most common products imported to the EU from developing countries that are covered by responsible or ethical labels, are: coffee, tea, sugar, chocolate and bananas. From an ethical perspective it is

proposed that these products should be covered by a certification scheme that ensures better trading conditions and promotes sustainability.

These fairly traded certification schemes and/or labels usually also include minimum environmental considerations, such as avoiding unsustainable deforestation and/or to restrict the use of hazardous pesticides. Additionally, as part of these certification schemes farmers are often taught good farming practice which results in lower environmental impacts, compared to farmers that are not part of such a scheme. This is an additional reason to include this criterion in this revision.

The name for this criterion has been slightly modified from the TR1.0 (JRC 2016b), due to the similarity with a registered trademark, as pointed by stakeholders. A suggested alternative was '*fairly traded products*', which is accepted in this second revision.

The uptake of this kind of criterion has also been revised. Some stakeholders argued that a lack of market availability would impede the consecution of high thresholds, while others stated that the limits should be more ambitious and include more types of products. The uptake/inclusion of this criterion in the recently launched GPP schemes across Europe was approx. 30%, which allows the proposal to include fairly traded product requirement as an award criterion.

Regarding the level of ambition, stakeholder opinions were very split. Therefore, procurers are given a range of recommended values in the explanatory notes (10-30% for the core and 30-70% for the comprehensive level), having the freedom to fix the most appropriate value attending to the specificity of the place where the tender is launched.

Further information can be found in Annex 3.5

### **Rationale for the proposed verification**

No EU Regulation exists for this criterion but there are a number of third party certified fair trade schemes for all mentioned products available in Europe. The State of Sustainability Initiatives Review (IISD & IIED, 2014) gathers the description of the most relevant schemes of sustainable production, together with the market information of the penetration of these schemes within some product categories.

In terms of market availability, the Fairtrade® label is available across all of EU-28. The Fair Trade Labelling Organisations International (FLO, 2017) serves also as a coordinating organisation for national labelling initiatives and producer networks as well as a certification body. The use of any scheme under FLO indicates that a product has been certified by independent auditors to ensure that it respects environmental, labour and development standards. Apart from the schemes identified above, the SSI report (SSI, 2014) also includes others as ProTerra Foundation (ProTerra, 2014).

Some of the third party certification schemes proposed to show compliance within the requirements of the criterion have been analysed in more detail. It was found that the amount of certified product required by each certification scheme varies widely and that the labels and messages communicated to the consumers are also significantly different. Therefore a minimum threshold in the certified content that should be required by the scheme has been set up in this revision. This limit will exclude those certification schemes that provide a label to products with lower content of certified ingredient in the overall product.

This criterion does not exclude those products that are complying with the organic food product requirements for two main reasons: there is a wide availability of products that are double labelled (in accordance to organic produce and fairly trade) and both criteria address aspects completely different. Therefore both criteria cannot be considered as alternatives but they should be considered as complementary aspects of those products produced in developing countries.

Procurers can also verify the purchases of fairly traded products throughout the detailed invoices. Invoices of the food and drink products purchased should be detailed enough and include the name of the product, the quantity in mass or volume and the costs (as requested by the contracting authorities and specified in the Contract performance clause, section 3.3).

## **2.1.8 Packaging (removal)**

### **Rationale for the proposed criteria**

Packaging is a complex subject area. The use of packaging has, from the environmental point of view, pros and cons. Among the advantages are: the extension for the product life or the improvement of the overall integrity of products (e.g. modified atmosphere packaging and skin packaging). Among the disadvantages are the environmental impacts due to the use of materials and resources such as the embedded impacts in materials from their manufacture, unnecessary transport emission from too heavy or bulky packaging and the environmental impacts associated with the end of life waste management.

The TR1.0 (JRC 2016b) proposed a criterion that partially tackled (at least partially the first and second impacts (not the end of life phase impacts), including criteria on reusability, recycled material content, no single units, materials coming from sustainable sources or packaging that could be compostable or biodegradable.

Prior to the writing of this report, stakeholders stressed the greater emphasis should be placed on the benefits of packaging in terms of improved food safety and reducing food losses. Even the inclusion of a packaging criterion as a separate criterion was challenged as packaging could be considered as an integral part of the product and hence cannot be assessed in isolation.

Stakeholders stated that there are too many trade-offs and different situations that should be analysed case by case to estimate the environmental benefits of using packaging. Additionally, it was suggested that the GPP should not favour/penalise the choice of packaging material since this is dependent on the situation in which they are being used. For example, the use of compostable/biodegradable packaging represents the most contentious issue since the associated environmental benefits are heavily dependent on the local recycling infrastructure. Another example is the restriction on the single unit use that received large amounts of comments. The single unit packaging can reduce food/drink waste and indirectly improve water and energy efficiency at the preparation stage. The use of reusable packaging such as returnable bottles only brings environmental benefits if the distance between the cleaning and re-filling facilities and the catering facilities does not exceed 100km

Finally, several challenges were identified related to the verification of the proposed requirements such as the difficulties to assess the need of single unit packaging, the need to rely on private schemes or self-declarations. For example, it was commented that it is difficult to assess if single unit packaging is beneficial without knowing the details of the catering service where they are used.

For all these reasons, the packaging criterion is proposed to be removed in this report.

## 2.1.9 Environmentally responsible palm oil

Core criteria	Comprehensive criteria
<b>Award Criteria</b>	
<p><b>AC6. Environmentally responsible palm oil</b></p> <p>AC 6.1. Points shall be awarded proportionally to tenders in which more than X%<sup>1)</sup> of the units/items of pre-packed food products containing palm oil have been sourced from plantations that meet the requirements of a certification scheme for sustainable production that is based on multi-stakeholder organizations that has a broad membership, including NGOs, industry and government and that addresses environmental impacts including on soil, biodiversity, organic carbon stocks and conservation of natural resources<sup>2)</sup>.</p> <p>AC 6.2. Points shall be awarded proportionally to tenders in which more than Y%<sup>1)</sup> of the palm oil purchased as raw ingredient have been sourced from plantations that meet the requirements of a certification scheme for sustainable production that is based on multi-stakeholder organizations that has a broad membership, including NGOs, industry and government and that addresses environmental impacts including on soil, biodiversity, organic carbon stocks and conservation of natural resources<sup>2)</sup>.</p> <p><b>Verification:</b></p> <p>AC 6.1. The tenderer shall provide data (name and amount) of all food products containing palm oil (as units) planned to be supplied in the execution of the contract indicating specifically the ones compliant with the criterion.</p> <p>AC 6.2. The tenderer shall provide data (name and amount) of all palm oil (as raw ingredient) planned to be supplied in the execution of the contract indicating specifically the purchases compliant with the criterion.</p>	
<b>Explanatory notes</b>	
Core criteria	Comprehensive criteria
<b>Award Criteria</b>	
<p><b>AC6. Environmentally responsible palm oil</b></p> <p>The contracting authority will have to specify how the percentage will be calculated, either in volume, weight or value</p> <p><u>Recommended values for the core criteria:</u>  X=10-30% of the units/items of pre-packed food products  Y=10-30% in mass of the total vegetable oil or margarine (bought as raw ingredient)</p> <p><u>Recommended values for the comprehensive criteria:</u>  X=30-50% of the units/items of pre-packed food products  Y=30-50% in mass of the total vegetable oil or margarine (bought as raw ingredient)</p>	
<p><sup>1)</sup> X and Y are the thresholds to be defined by the procurer for the core and comprehensive levels (AC). Recommendations for its value are given in explanatory notes below</p> <p><sup>2)</sup> Schemes such as RSPO, ICCTS plus or RSB can show compliance with the criterion provided they cover the environmental principles mentioned above. Other schemes at country level can be considered as equivalent as far as they comply with the environmental principles mentioned above.</p>	

### **Rationale for the proposed criteria wording**

Palm oil is used extensively in food manufacture and food preparation in Europe. The extensive review of LCA studies summarized in the preliminary report (JRC 2016a), found that palm oil has a large environmental impact due to its production and extraction, which can be reduced if the palm oil is grown, collected and treated in a sustainable manner (i.e. implementing practices on better management of the resources and the lower and better use of fertilisers).

The criterion is addressing only palm oil and the food products containing palm oil. There are other oils that are also used as raw ingredient or in the preparation of food such as rapeseed and sunflower oils. However, it was found that these oils have lower impact than the palm oil (as well as lower impact than soy bean and peanut oil). The substitution of palm oil by other vegetable oils was also proposed by several stakeholders, but it should be noted that palm oil is relatively cheap due to the much higher yield rates than the main alternatives.

Certified palm oil is available on the international market. The exact availability of certified palm oil depends on the traceability system used. The availability of palm oil certified through the most demanding traceability systems is currently widely available in Italy, Latvia and UK, and progressing in France, Austria, Spain and Belgium. However, there are other traceability systems (unbundled ones) that work internationally through an on-line platform being available in any Member State without restrictions.

The criterion on palm oil has been split into two parts. The first part deals with the pre-packed food products that contain palm oil and the second one with the purchases of palm oil as raw ingredient. This separation was requested by several stakeholders to make easier the accounting of the certified palm oil used and the verification process (see below for further details).

The criterion was kept as an award criterion due to the little use of palm oil in some Member States. The review made of the current GPP schemes also shows that there are some schemes that specified the procurement of sustainable palm oil (2 out of 31).

The criterion requires the provision of palm oil coming from certified sources, including some schemes that could be considered as a proof of compliance. There are several schemes on the market that aim at certificate the responsible management of the areas where the palm oil comes from. Among all those schemes the Roundtable Sustainable Palm Oil (RSPO 2015, RSPO 2015b), the International sustainability and carbon certification (ISCC plus 2017) and the RSB (RSB 2017) have the largest market shares.

All these schemes are independent multi-stakeholders organizations that provide a globally applicable certification system for the sustainability of raw materials and products and traceability through the supply chain. Responsible management requirements are part of those schemes. The Annex 3.7 compares these requirements included in each of the three mentioned schemes

Further information can be found in Annex 3.7.

### **Rationale for the proposed verification**

As commented before, the criterion was split into two clauses in this revision. The first one deals with the palm oil as ingredient in the pre-packed food products and the second one deals with the palm oil as raw ingredient. Stakeholders commented the difficulties that they would face to comply and verify this criterion in case the threshold is considered as a unique percentage in mass. Palm oil is a typical ingredient of prepared or pre-packed food products such as biscuits or chocolate bars that the tenders buy and provide to the clients without further processing. Estimating the amount of palm oil used in the pre-packed products is rather difficult since most of the times the exact information about the palm oil content in the pre-packed food products is missing. Therefore, two separated thresholds have been proposed, on percentage of commodity in mass and on percentage of units of pre-packed food containing palm oil.

Currently, there is no regulation at EU-28 level on the environmentally responsible of palm oil but there are several international and national certification schemes that ensure that palm oil is grown and dealt in accordance with several sustainability principles, which include environmental, social and economic criteria. Examples of those certification schemes are RSPO, ISCC plus or RSB (provided they fulfil all the requirements listed in the criterion). Certified RSPO products are available in most of the European countries (20% of all palm oil produced for the global market is RSPO certified), being one of the recommended schemes to be used to show compliance with the requirements of this criterion.

### 3 Draft EU GPP Criteria proposal for Catering Services

Table 4 indicates the criteria included in the Catering service criteria set

**Table 4. Criteria set for Catering services Selection Criteria (SC), Technical Specification (TS), Award Criteria (AC) and Contract Performance Clauses (C). Thresholds in TS are included as minimum values (i.e. *at least x%*) and thresholds in AC are included as the starting point to get points awarded (i.e. *points awarded from x%*).**

Criteria	Type of criteria	Level of ambition	
		Core	Comprehensive
Competences of the tenderer	SC 1	See section 3.1.2	
Food procurement	TS 1	See section 3.2.2	
Promotion of vegetarian menus	TS 2	See section 3.2.3	
Avoidable food waste: prevention and redistribution	TS 3	See section 3.2.4	
Other waste: prevention, sorting and disposal	TS 4	See section 3.2.5	
Chemical products and consumable goods	TS 5	No disposable items	No disposable items 100% of the purchases of chemical products or paper products
	AC 1	0-50% of the purchases of chemical products, paper products Automatic dosing systems Paper dispensers	Automatic dosing systems Paper dispensers
Energy and water consumption in kitchens	TS 6	See section 3.2.7	
	AC 2	0-50% of the plug-in cabinets and storage cabinets, 0-50% of chest freezers and wine storage appliances with one or multi-zones 0-50% of the equipment using refrigerants with a GWP below 150 Cooking appliances: 0-50% of the cooking appliances Professional dishwashers 0-50% of the professional dishwashers	51-100% of the plug-in cabinets and storage cabinets 51-100% of the chest freezers and wine storage appliances with one or multi-zones 51-100% of the equipment using refrigerants with a GWP below 150 Cooking appliances: 51-100% of the cooking appliances Professional dishwashers 51-100% of the professional dishwashers
Food transportation	TS 7	See section 3.2.8	
	AC 3	See section 3.2.8	
Environmental management measures and practices	TS 8	See section 3.2.8	
	C 3	See section 3.3.3	
Tap water for drinking	C 1	See section 3.3.1	
Purchase of new kitchen equipment	C 2	See section 3.3.2	
Staff training	C 4	See section 3.3.4	

### 3.1 Selection criteria (SC)

#### 3.1.2 Competences of the tenderer

Core criteria	Comprehensive criteria
<b>Selection Criteria</b>	
<b>SC1. Competences of the tenderer</b>	
<p>The tenderer shall have relevant competences and experience in each of the following areas for which s/he would be responsible under the contract [<i>select as relevant to the specific contract</i>]:</p> <ul style="list-style-type: none"><li>- method statements for:<ul style="list-style-type: none"><li>• menu planning and the promotion of vegetables</li><li>• the prevention of avoidable food waste and redistribution</li><li>• the prevention of other waste, its sorting and disposal</li><li>• water and energy saving in equipment and operation and maintenance of the equipment (for staff responsible thereof)</li><li>• appropriate dosage and handling of cleaning products and cleaning procedures, and</li><li>• environmentally-conscious driving on a regular basis to increase fuel efficiency for the staff involved in food delivery.</li></ul></li><li>- method statement for the preparation of tasty vegetarian dishes</li><li>- policies and supporting management systems to minimise food waste and other waste, maximise the redistribution of food and valorisation of food, the reuse or recycling of packaging and other waste and to ensure their safe disposal when needed.</li></ul>	
<b>Verification:</b>	
<p>Evidence in the form of information and references related to the relevant contracts in the previous 5 years in which the above elements have been carried out. This shall be supported by records of training activities.</p>	

#### **Rationale for the proposed criteria wording**

The competences of the tenderer has been demonstrated to be the most efficient way of reducing environmental impacts in kitchens as long as it includes aspects related to the training staff and the implementation of environmental policies. The best environmental management practices (BEMP 2012) for Tourism sector also includes staff training in its criteria, as a mean to implement energy saving routines and standards.

Regarding the requirements related to the staff training, a revision of the uptake of EU GPP criteria across Member States shows that 20% of the schemes include staff training for environmental purposes as a criterion. The general consensus from stakeholders indicated that a more detailed wording was needed but that, at the same time, it should not be too prescriptive leaving room for businesses to customise staff training.

The currently valid EU GPP scheme includes staff training as a contract performance clause (that remains in this proposal for those members of the staff that are new or still inadequately skilled to correctly performed their job), but includes other environmental aspects than just waste issues. In this revision, the staff training criterion has been developed to complement the other proposed criteria and it is proposed to be also part for the selection criterion focused on the competences of the tenderer. Including competence of the tenderer as a selection criterion will allow procurers to be sure that tenderers are experienced in this field and that provide a staff with appropriate skills to deliver more environmentally conscious catering services.

Due to the high turnover of staff in the foodservice sector, staff training has to be an on-going activity. The training of employees is country-, sector- and company-specific and hence the criterion scope aims to cover these specificities by being flexible in nature but clear for the purpose of verification. The criterion proposed in this revision is designed to cover the different activities of catering services. Additionally the contract performance



clause criterion that deals with staff training will ensure that those new members of the staff also become skilled in a short period of time.

The staff training is a cost-effective measure. The training cost is not significant in comparison to the savings that can be achieved. Economic benefits due to the reduced avoidable food waste, reduced energy consumption and water usage among other issues outweigh the training costs in most of the catering services.

Other competences required to the tenderer are the ability to prepare vegetarian dishes and the implementation of environmental policies and supporting management systems. The ability to prepare vegetarian dishes is of key importance in this criteria set because a promotion of vegetarian dishes is required. Certainly, under this criteria set the consumption of vegetables will be higher than in other circumstances being needed that the staff is skilled enough to prepare attractive vegetarian menus.

Finally the implementation of policies and supporting management systems is important to minimise the food waste generation and generation of other waste. The waste generated can be considered as an indicator of underperformance of the catering services.

### **Rationale for the proposed verification**

There is no standardized verification system to prove the competences of the tenderers. Therefore the proposed verification relies on information and references of previous contracts where the requirements were carried out. This evidence shall be complemented by the training records. In the records the tenderer will provide the duration of the training, the status of the staff (permanent or temporal) and will indicate the duration of the contract as well as the content of the training given.

<b>Consultation questions</b>
<ul style="list-style-type: none"><li>○ Shall the staff training programs be part of the selection criteria?</li></ul>

## 3.2 Technical Specifications (TS) and Award Criteria (AC)

### 3.2.2 Food procurement

Core criteria	Comprehensive criteria
<b>Technical Specification</b>	
<b>TS1. Food purchases</b> The food used to fulfil the catering contract has to be purchased according to the EU Food Procurement criteria.	
<b>Verification:</b> See above EU Food procurement criteria:	
<ul style="list-style-type: none"><li>- Organic food products (TS1, AC1)</li><li>- Marine and aquaculture food products (TS2 and AC2)</li><li>- Integrated production (TS3, AC3)</li><li>- Animal welfare (AC4)</li><li>- Fairly traded products (AC5)</li><li>- Environmentally responsible palm oil (AC6)</li></ul>	

From the life cycle perspective, the primary production of food stands for the major environmental impact (Baldwin et al., 2011; Calderón et al., 2010). Also from the economic point of view the food purchase and the labour costs account, in general, for the highest costs of the catering service.

For these reasons, all the TS and AC proposed for the EU Food procurement shall be considered as an essential part of the EU Catering service procurement.

The criteria set includes:

- Organic food products (TS1, AC1)
- Marine and aquaculture food products (TS2 and AC2)
- Integrated production (TS3, AC3)
- Animal welfare (AC4)
- Fairly traded products (AC5)
- Environmentally responsible palm oil (AC6)

### 3.2.3 Promotion of vegetarian menus (BEFORE: Menu planning)

Core criteria	Comprehensive criteria
<b>Technical Specification</b>	
<b>TS2. Promotion of vegetarian menus</b>	
<p><i>Note: The contracting authority could have already set minimum requirements in this area, e.g. that one or several vegetarian dishes have to be offered every day, one or several veggie days, cheaper prices for vegetarian menus/dishes, increase the number of daily vegetarian dishes/options, limiting meat portions, etc.</i></p> <p>Menus offered shall include choices with the goal to promote vegetarian consumption whilst maintaining the nutritional composition recommended for the clients, including [<i>to be selected</i>].</p> <ul style="list-style-type: none"> <li>- Weekly vegetarian day(s).</li> <li>- Plant-based or vegetarian sourced proteins.</li> <li>- Limiting the serving of meat per week, especially red meat</li> <li>- Bulk up meat dishes with beans, grains or vegetables.</li> </ul> <p><b>Verification:</b> The tenderer shall provide the menu planning with alternatives that promote the vegetarian consumption clearly specified.</p>	

#### **Rationale for the proposed criteria wording**

Meat is responsible for the largest emissions of GHG of all food products. Meat accounts for almost one fifth of the world's total GHG emissions. Moreover, meat is the largest contributor to the total environmental impact of all food categories and of all impact categories (mainly eutrophication, acidification, global warming and ecotoxicity). Red meat in particular was found to have the largest impact on the environment in the current production systems due to methane emissions that largely contribute to GWP (15-40 kg of CO<sub>2</sub>eq/ kg), followed by pork and chicken having lower environmental impact (respectively, approximately 5 and 2 kg of CO<sub>2</sub>eq/ kg).

Hence, reducing meat content or shifting protein sources away of the menu is the most effective measure to minimise environmental impact. A shift from meat products towards more vegetables will likely have a positive impact in the budget as well as in the consumer's health. However, it is perhaps one of the potentially more difficult dietary behaviours to change. However, this measure is getting momentum as demonstrates the one third of the recently launched public purchases schemes surveyed where a reduced meat consumption criterion is used.

The products here considered under the meat category are:

- fresh, chilled or frozen meat from animal origin (bovine and cattle, ovine, porcine, horse, poultry, exotic animals etc.),
- dried, salted or smoked meat (sausages, salami, bacon, ham, pâté, etc.);
- other preserved or processed meat and meat-based preparations (canned meat, meat extracts, meat juices, meat pies, etc.).

The category excludes: land and sea snails, lard and other edible animal fats, soups, broths and stocks containing meat.

In the current proposal, the focus is on alternatives offered in the menu that promote other source for proteins different from meat. It consists of a technical specification criterion to ensure either a complete avoidance or a much substitution of meat. Some recommendations in agreement with stakeholder's proposals on how to achieve this goal are included in the criterion wording. Examples are: vegetarian day(s) a week, the increase of vegetarian sourced or plant-based proteins, limiting the serving of meat per week or bulk up the meat dishes with vegetables (i.e. substituting part of the meat composition in the dish with vegetables).

Further information can be found in Annex 4.3.

**Rationale for the proposed verification**

This criterion has no standard or procedure available to measure the promotion or higher consumption of vegetables and/or the reduction of meat.

However, it is proposed an indicator of (g of vegetable/meal) or (g of meat/meal) as part of the environmental management measures and practices. The monitoring and recording of this indicator will show the continuous improvement of the tenderer on the promotion of vegetables.

Additionally, for the verification of this criterion, the tenderer shall provide the menu planning with the alternatives that promote the consumption of vegetables clearly specified.

### 3.2.4 Avoidable food waste: prevention and redistribution

Core criteria	Comprehensive criteria
<b>Technical Specification</b>	
<p><b>TS3. Avoidable food waste prevention</b></p> <p><b>TS3.1 Avoidable food waste prevention</b></p> <p>The tenderer shall have written procedures describing best practices for preventing the generation of avoidable food waste, including <i>[to be selected]</i>:</p> <ul style="list-style-type: none"> <li>- Establishment of an accurate stock inventory and ordering system to avoid over-ordering and spoilage of stock.</li> <li>- Operate a back-to-front (first-in first-out) policy in the storage of food products and periodic control of date of expiry.</li> <li>- direct use of food near date of expiry (flexible meal planning)</li> <li>- Ensure that the food is stored under the proper conditions.</li> <li>- Avoid over-trimming of bulk meat, fish or whole vegetables or reuse the over-trimmings.</li> <li>- Long-term analysis of meals sold in order to adapt food orders (with regard to weekday, season, and external factors such as holidays or major events) and on the use of leftover food or food that is approaching to its use-by date.</li> <li>- Development of strategies against overproduction (e.g. freezing)</li> <li>- Control of preparation losses and training of employees</li> <li>- fast cooling down of food to avoid growth of microorganism</li> <li>- no meals for presentation purposes only (use of photographs)</li> <li>- Adjust the meal portions and accommodate the quantities depending on the customers or provide more than one size portion.</li> <li>- Allow routines for doggy bags and/or internal routines for eating not sold food by the staff.</li> <li>- Not requiring the full range of menu options to be available from the start to the end of the service,</li> <li>- Sensitisation of customers to the field of food waste and the causes of food waste (eg using posters)</li> <li>- Increasing tolerance of customers towards sustainability measures through communication</li> <li>- Survey the reasons of plate waste using feedback sheets (and subsequent implementation of appropriate actions)</li> </ul> <p>The tenderer shall communicate to the guests the food waste prevention policy.</p> <p><b>Verification:</b></p> <p>The tenderer shall provide evidence in the form of standard operating procedures for purchasing, storage, cooking, menu planning and serving. The evidence shall be completed by a description of channels through which the food waste prevention policy will be communicated to the guests.</p> <p><b>TS3.2 Avoidable food waste redistribution</b></p> <p>In those locations where it is under national regulation possible, the tenderer shall have written procedures describing best practices for redistribution of the food, including <i>[to be selected]</i>:</p> <ul style="list-style-type: none"> <li>- Contacting the organizations that recover food products that are donated to charitable organizations and distribute food aid to the needy</li> <li>- Implement the procedures for the recovery of chilled and cooked food products that the organization establish with the catering providers</li> <li>- Monitoring and maintaining the cold chain of cooked products at a constant temperature of 4C until it is collected by the organization</li> </ul> <p><b>Verification:</b></p> <p>The tenderer shall provide evidence in the form of the standard operating procedure for making food available to be donated.</p>	

The type of recovered food products are

- canteens, restaurants, hotels, hospitals and barracks donate surplus meals (entrée, first course, main course, vegetables, sauces, desserts)
- schools donate bread, fruit and desserts with a long-term expiry date
- bakeries, rotisseries and fruit and vegetables markets donate chiller surplus food

### **Rationale for the proposed criteria wording**

Reducing avoidable food waste will reduce the associated costs and environmental impacts of the whole catering services. The food, food products or parts thereof that are thrown away are a waste of valuable resources. Food has a high carbon footprint due to the energy used for grow the food, harvest, transport, process, package, retail and prepare it. In addition, food which is wasted in the later stages of the value added chain has a greater negative effect than food which is wasted in the agricultural stage, because additional resources (e.g. staff, transport and packaging) have been employed to prepare the food stuff for consumption (Betz et al, 2015). This is one main reason why the reduction of food waste at the end of the value added chain is of major importance.

Several studies reported that around 18% of the food purchased will become avoidable food waste of which 10%, is lost during the manufacturing, 4% in storage and preparation and 4% in serving process. The Annex 4.4 provides also a summary of root causes of avoidable food waste in the foodservice sector.

The importance of this criterion to be considered as a technical specification is supported by the European Commission (2015c) in which the Commission asked Member States for a goal of reducing food waste by 30 % (as a minimum) by 2025 (based on the food waste levels in 2017). Additionally, some of the recently launched GPP schemes made use of this requirement. Therefore, a specific criterion on avoidable food waste is thus proposed in this revision to increase the visibility of this issue, instead of being a part of the criterion on menu planning.

Several routines have been considered as relevant for preventing the food waste generation along the life cycle of the catering services. The suggested routines in the explanatory notes cover all the steps such as purchases, storage, preparation, cooking, and menu planning and serving. More in detail some suggested measures are: avoid inflexible portion sizes, an assortment that match requests, the control of the expiration date for food products and/or potential use of leftovers. Once the food waste is generated, the waste sorting and disposal criterion will try to minimize its environmental impacts.

Improvements of the tender performance would require separating food waste from other waste streams as well as measuring and recording the food waste generated. This would be part of the selection criterion which requires the implementation of *Environmental management measures and practices* criterion.

In order to overcome these barriers Italy and France have recently modified their legislation<sup>1</sup>. In Italy in 2016 new regulation came into force that aimed to drastically reduce the amount of food wasted in the country and that makes easier for farms and supermarkets to donate unsold food and reward businesses that cut waste. The measures also encourage Italians to take restaurant leftovers home in doggy bags regulated in the good Samaritan law. Thanks to this law (the good Samaritan law, 2016), today in Italy it is possible that:

- catering companies can propose it to their new customers, as an added value to their services
- public calls for tender can request food donation as it is the case of public calls for contracting catering services in hospitals, schools, etc
- private calls for tender organized by companies. Catering companies may present project that implement the law with the recovery of food products.

The procedures for the recovery of chilled and cooked food products are establishes with the donors, thanks to the competence and expertise of the voluntary organizations (e.g. Siticibo in Italy). This procedure has obtained the authorization of the national health care system and has two fundamental criteria:

- characteristics of food products recovered (very perishable)

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- characteristics of beneficiaries (people with a low immune defence system)

Chilled and cooked food products are monitored to maintain the cold chain: cooked products are maintained at a constant temperature of 4C (blast chiller) thanks to the refrigerated vans or thermo box that the volunteers have. For this, the recovery and delivery forms as well as the weights of the food products are limited.

This movement to cut food waste is growing across Europe. The European parliament members voted in favours of introducing legislation that would stop grocery giants from using unfair trading practices that often lead to overproduction and food waste. In France, the government banned supermarkets from throwing away edible food. It imposed harsh penalties on businesses that fail to comply.

Regarding the existence of this national legislation in Italy, a rewording of the criterion to encourage the food donation whenever and wherever possible was introduced. The approval of the Italian law allows non-profit and recognized organizations to increase the sources of supply by introducing a new possibility of food aid: to recover surplus food from the catering (collective and organized catering, canteens, schools, hospitals, hotels, etc) and the distribution sectors.

Further information can be found in Annex 4.4

### **Rationale for the proposed verification**

This criterion has no standard or procedure available to measure the reduction of avoidable food waste.

However, it is proposed an indicator of amount of food waste/meal as part of the environmental management measures and practices. The monitoring and recording of this indicator will show the continuous improvement of the tenderer on this aspect.

Additionally, for the verification of this criterion, the tenderer shall provide the routines to be in place for each life cycle stage of the catering service.

<b>Consultation questions</b>
<ul style="list-style-type: none"><li>○ Which Member States underwent changes in its Regulation to facilitate the redistribution of food?</li></ul>

### 3.2.5 Other waste: prevention, sorting and disposal (BEFORE: Waste sorting and disposal)

Core criteria	Comprehensive criteria
<b>Technical Specification</b>	
<b>TS 4. Other waste: prevention, sorting and disposal</b>	
<b>TS 4.1. Waste prevention</b>	
<p>The tenderer shall implement a plan for reducing the generation of waste. The plan shall at least include <i>[to be selected]</i>:</p> <ul style="list-style-type: none"> <li>– Develop a waste inventory: survey all areas and processes to identify types and sources of on-site waste generation</li> <li>– Procurement of food and consumables <ul style="list-style-type: none"> <li>• Efficient ordering and storage: order perishable products frequently in quantities required.</li> <li>• Store perishable products in appropriate conditions (e.g. correctly adjusted refrigeration units).</li> <li>• Order non-perishable products in bulk.</li> <li>• Packaging return: return packaging for reuse when possible</li> <li>• Select low packaging products: select products with less packaging where possible (e.g. purchase routine cleaning products in concentrate form)</li> </ul> </li> <li>– Catering <ul style="list-style-type: none"> <li>• Avoid single-portion as far as possible within hygiene constraints and cook to order.</li> <li>• Avoid items with unnecessary or excessive packaging</li> <li>• Put condiments and food servings in refillable containers</li> <li>• Identify reuse possibilities</li> </ul> </li> </ul>	
<b>TS 4.2. Waste sorting and disposal</b>	
<p>Waste generated at the premises where the catering service is provided shall be sorted into at least X<sup>1)</sup> waste stream categories and be treated in an authorised treatment process either:</p> <ul style="list-style-type: none"> <li>– on-site</li> <li>– by an authorised collector (e.g. hazardous waste) or</li> <li>– brought by the tenderer to an authorised facility.</li> </ul> <p>Fats, oils and greasers (FOGs) shall not be discharged to sewage. If a collection system is not in place, the tenderer shall put FOGs into a suitable container and dispose in the residual waste</p> <p>A dry clean-up system shall be used for the first clean of a greasy or oily area/equipment and prior to washing of equipment.</p> <p>If guests sort waste themselves, clear sorting instructions shall be provided.</p>	
<b>Verification</b>	
<b>TS 4.1.</b> The tenderer shall supply the waste reduction plan.	
<b>TS 4.2.</b> The tenderer shall supply a description of the waste stream categories to be sorted and the disposal procedures to be followed during the execution of the contract.	
If the guests will sort waste themselves, a sample of the sorting instructions shall be provided.	
<b>Explanatory notes</b>	
Core criteria	Comprehensive criteria
<b>Technical Specification and award criterion</b>	
<b>TS 4.2. Waste sorting and disposal</b>	
If the collection by an authorised collector is the preferred option, the tenderer shall sort into the fractions	



stipulated by the collector (e.g. municipality). At least 4 fractions must be used: paper/cupboard, glass, plastic/cans and residual waste (in addition to the sorting of any environmentally dangerous waste).

If the collection by an authorised collector allows for more waste stream categories such as glass, porcelain, paper and cardboard, liquid packaging board, plastics, metal, textiles, organic material, grease/cooking oil and combustible waste, points may be awarded.

FOGs when a collection system is in place, the tenderer shall separate the wasted fats and oils and dispose them into the authorised collection and recycling systems.

Dry clean-up methods include scrape as much of the leftovers on the dish into a food waste container, use rubber scrapers and squeegees and paper towels to remove fats, oils and grease from cookware utensils or work areas, use brooms or vacuum to sweep up spills of the dry ingredients.

<sup>4)</sup> X is the number of waste stream categories to be defined by the procurer for the core and comprehensive levels (TS and AC). Recommendations for its value are given in explanatory notes below.

### **Rationale for the proposed criteria wording**

The most sustainable waste is the one not generated in first place. But once the waste is generated, if properly managed, its environmental impacts can be reduced. Therefore this criterion aims at:

- reducing the amount of waste generated
- encouraging tenderers to properly manage the waste generated.

The preliminary report shows that the end-of-life of the waste can be more or less relevant depending on the way it is carried out. Landfilling of organic waste is responsible for large GHG emissions and the non-organic waste for other environmental impacts (eg leaching). This can be avoided, or partially avoided, by more adequate procedures for waste management.

### **Other Waste prevention plan**

An aspect that is covered in the technical specification part is a waste reduction plan. This plan should include information and objectives on actions to be taken to minimise waste at all stages of the catering service. This includes aspects such as the: specific tasks to be undertaken, allocation of responsibilities, best practices to be implemented, etc.

The waste prevention plan should focus on those streams that have been identified as important and that have the potential to be reduced. In the catering services packaging alone can account for a large part of the waste stream. Avoiding single-use and individually wrapped items can prevent a considerable quantity of waste. The quantity of packaging is a relevant criterion for green procurement decisions, and it may be possible to return packaging to local suppliers for reuse – such practices may be negotiated with suppliers where they are not already offered. Procurement of concentrated products (eg chemicals) can also reduce packaging requirements, as can buying in bulk where appropriate, and avoiding over-ordering of perishable products. Similarly, there is often scope to reduce waste by installing tap-water dispensers (with filtration and bottling systems where necessary) to reduce the purchase of bottle water as included in the clause performance criteria (BEMP 2012).

The total quantity of waste generated per client or meal served is the most appropriate indicator of the intensity of waste generation, and the effectiveness of management measurements to reduce it. Even if the discussion of the indicators is provided in more detail in the section 3.2.9, it is worth mentioning that to specifically reflect waste avoidance, sorted fractions sent for recycling should also be included in the total waste generation. The density of waste varies considerably depending on the type and the degree of compaction. Therefore, the weight of waste generated is a more reliable indicator of performance in waste avoidance than the volume of waste generated, and one aspect of best practice is to monitor and record all waste generation by weighting waste fractions. In the absence of weighting, waste quantities may be expressed by volume, easily estimated from the number of waste receptacles (eg bins, skips) filled every day, week or month. The weight of waste may be estimated from (non-compacted) volumes according to estimated densities.

A specific level of ambition of this technical specification criterion has not been introduced. This criterion and its improvement along the time could be measured by means of the indicators. Suitable indicators could be, as commented below and in the section 3.2.9, the amount of waste generated per meal (as total amount of waste or as the amount of each waste streams sorted out). The improvement progression should part of the reduction waste plan.

### **Waste sorting and disposal**

As the correct sorting and disposal of solid waste represents high potential improvement for environmental impact reduction at very reduced cost, it was proposed to be covered here as a Technical Specification. This is also important if it is kept in mind that waste disposal costs are likely to increase steadily in the future due to diminishing landfill space and increasing collection and disposal costs. Poor waste management has implications for hygiene and health, environmental quality, resource and economic sustainability.

Experience in the inclusion of this criterion can be found in the recently launched GPP schemes across Europe. A criterion dealing with waste management is applied in approximately half of the revised schemes at both core and comprehensive level.

It is important to notice that to some extent tenders are limited by the waste management infrastructure in their locality, often owned and operated by the local authority, especially if they are not able to find other takers for waste fractions that the local system does not accept (BEMP 2012). In some catering services available floor space may constrain the storage of multiple bins for separated waste fractions. However, experience shows that there are many innovative means of sorting and recycling waste in the processes reducing disposal costs. Among them are:

- identify waste recycling and packaging return options available locally
- select products and packaging made from recycled and recyclable material
- install separated waste collection bins in all the rooms/spaces
- separate waste during room cleaning into fractions collected separately from catering premises
- separate waste arising in public areas, maintenance of outdoor and indoor facilities, and other back-of-house areas into appropriate fractions for recycling and correct disposal
- Consider packaging volume, production impact and recyclability when assessing products for procurement
- Install and train staff to use conveniently located bins for separate collection of glass, plastics and paper and cardboard in kitchen and dining areas

The details of the wording of the criteria as well as the revised ambition levels are discussed here:

- *Categories of waste to be collected separately:* Several categories of waste are proposed to be collected separately. These include paper/cupboard, glass, plastic, cans and general waste and others if possible such as biowaste or used FOGs. The separation and appropriate disposal of other types of waste is also encouraged. In this regard, it should be ensured that catering services companies separate and dispose of solid waste into the correct streams as required by the local or national waste facilities or an appropriate waste collector.
- *Fats, oils and greasers:* Especial attention should be paid to the treatment of fatty, oily or greasy waste due to the large environmental impacts that it causes. Therefore, a new requirement has been included in this criterion that requires at least the collection into a suitable container and its disposal in the residual waste and the use of a dry cleaning of the fat, oil or greasy for the first cleaning. This measure shall prevent that a large amount of the fatty, oily or greasy waste generated reaches the wastewater treatment plants or the rivers.
- *Responsibility for sorting out the waste:* It has been identified that waste is generated at different stages of the catering service, being the responsibility of different actors to sort it out. The criterion on staff training ensures that these persons received the appropriate information to sort out and correctly dispose the waste that is generated during their work. Once the food is served, there are catering services where the guests are responsible for disposing the waste. If so, in this type of services clear information should be given to the guests to help them to sort out and correctly dispose the generated waste.

### **Rationale for the proposed verification**

This criterion has no standard or procedure available to measure the reduction of waste, its sorting and disposal.

However, it is proposed an indicator of amount of waste/meal as part of the environmental management measures and practices. The monitoring and recording of this indicator will show the continuous improvement of the tenderer on this aspect.

Additionally, for the verification of this criterion, the tenderer shall provide the routines to be in place for each life cycle stage of the catering service included in the waste reduction plan, as well as the description of the waste stream categories to be sorted and the disposal procedures.

<b>Consultation questions</b>
<ul style="list-style-type: none"><li>○ Which other measures can be included in the waste prevention plan?</li></ul>

### 3.2.6 Chemical products and consumable goods (BEFORE: consumable goods)

Core criteria	Comprehensive criteria
<b>Technical specifications</b>	
<p><b>TS 5. Chemical products and consumable goods</b>  <b>TS 5.1 Disposable items</b>            Non-disposable items<sup>1)</sup> shall be used. Exceptions:            - take-away and fast-food catering            - paper tablecloths which can be wiped and used for extended periods (disposable tablecloths used for only one sitting are not allowed)</p> <p><b>Verification:</b>  <b>TS 5.1.</b> The tender shall supply a list of disposable and non-disposable items that will be used in the execution of the contract, indicating specifically if those that are disposable items.</p>	<p><b>TS 5. Chemical products and consumable goods</b>  <b>TS 5.1 Disposable items</b>            Non-disposable items<sup>1)</sup> shall be used. Exceptions:            - take-away and fast-food catering            - paper tablecloths which can be wiped and used for extended periods (disposable tablecloths used for only one sitting are not allowed)</p> <p><b>TS 5.2. Chemical products for hand washing, dishwashing and routine cleaning<sup>3)</sup></b>            All products to be used for hand washing, dishwashing and routine cleaning products shall meet the requirements of an EU Ecolabel for the specific product or equivalent.</p> <p><b>TS 5.3. Kitchen roll and kitchen paper</b>            All kitchen rolls and kitchen paper shall meet the requirements of an EU Ecolabel for the specific product or equivalent.</p> <p><b>Verification:</b>  <b>TS 5.1.</b> The tender shall supply a list of disposable and non-disposable items that will be used in the execution of the contract, indicating specifically if those that are disposable items.</p> <p><b>TS 5.2.</b> The tender shall supply a list of chemical products for hand dishwashing, dishwashing and routine cleaning that will be used in the execution of the contract, indicating specifically the ones which comply with the criterion.</p> <p><b>TS 5.3.</b> The tender shall supply a list of paper products that will be used in the execution of the contract, indicating specifically the ones which comply with the criterion.</p>
<b>Core criteria</b>	
<b>Award criteria</b>	
<p><b>AC2. Chemical products and consumable goods</b></p> <p><b>AC2.1. Chemical products for hand washing, dishwashing and routine cleaning</b>            Points shall be awarded proportionally to tenders in which more than X%<sup>2)</sup> of the purchases for hand washing, dishwashing and cleaning have met the requirements of an EU Ecolabel for the specific product or equivalent</p>	<p><b>AC2. Chemical products and consumable goods</b></p> <p><b>AC2.1. Chemical products for hand washing, dishwashing and routine cleaning</b>            Additional points shall be awarded to tenders in which:            - an automatic dosage on professional dishwashers is offered and the maintenance of the dosage system is done at least quarterly</p>

<p>Additional points shall be awarded to tenders in which:</p> <ul style="list-style-type: none"> <li>- an automatic dosage on professional dishwashers is offered and the maintenance of the dosage system is done at least quarterly</li> <li>- cleaning agents and hand soaps are dispensed accurately by an automating dispenser or dosage pump</li> <li>- other actions are taken to reduce significantly the consumption of chemical products, such as steam cleaning.</li> </ul> <p><b>AC2.2. Kitchen roll, kitchen paper</b></p> <p>Points shall be awarded proportionally to tenders in which more than Y%<sup>2)</sup> of kitchen rolls and kitchen paper have met the requirements of an EU Ecolabel for the specific product or equivalent</p> <p>Additional points shall be awarded to tenders in which the kitchen is equipped with dispensers that dispense paper towels or fabric hand towel rolls.</p> <p><b>Verification:</b></p> <p><b>AC2.1.</b> See TS 5.2. The tender shall supply information about the dosing systems to be used and their maintenance (if needed) in the execution of the contract.</p> <p><b>AC2.2.</b> See TS 5.3 The tender shall supply information about the dispensers to be used in the execution of the contract.</p>	<ul style="list-style-type: none"> <li>- cleaning agents and hand soaps are dispensed accurately by an automating dispenser or dosage pump</li> <li>- other actions are taken to reduce significantly the consumption of chemical products, such as steam cleaning.</li> </ul> <p><b>AC2.2. Kitchen roll, kitchen paper</b></p> <p>Additional points shall be awarded to tenders in which the kitchen is equipped with dispensers that dispense paper towels or fabric hand towel rolls.</p> <p><b>Verification:</b></p> <p><b>AC2.1.</b> The tender shall supply information about the dosing systems to be used and their maintenance (if needed) in the execution of the contract.</p> <p><b>AC2.2.</b> The tender shall supply information about the dispensers to be used in the execution of the contract.</p>
<b>Explanatory notes</b>	
<b>Core criteria</b>	<b>Comprehensive criteria</b>
<b>Technical specifications and Award criteria</b>	
<p>The contracting authority will have to specify how the percentage will be judged, either in volume, weight or value spent.</p> <p><b>TS 5.2 and AC2.1. Chemical products for hand washing, dishwashing and routine cleaning</b></p> <p>Exception can be made if the authorities have especial requirements for cleaning. Exemption from the requirement may be granted on the condition that there are no ecolabelled products available on the market.</p> <p><u>Recommended values for core criteria (X%)</u></p> <p>0-50% in volume of the purchases of the hand washing, dishwashing or routine cleaning products are awarded by an EU Ecolabel for the specific product or equivalent</p> <p><b>TS 5.3 and AC2.2. Kitchen roll, kitchen paper</b></p> <p>Exemption from the requirement may be granted on the condition that there are no ecolabelled products available on the market.</p> <p><u>Recommended values for core criteria (Y%)</u></p> <p>0-50% in volume of the purchases of the kitchen rolls and kitchen paper are awarded by an EU Ecolabel for the specific product or equivalent</p>	

<sup>1)</sup> Disposable items includes tableware items such as plates, mugs, glasses, cutlery, tablecloths, napkins, etc and other items such as gloves, bin bags, etc  
<sup>2)</sup> U and Y are the thresholds to be defined by the procurer for the core levels (AC). Recommendations for its value are given in explanatory notes below  
<sup>3)</sup> Routine refers to regular activities that are performed at least once a month. With regard to the present project, any cleaning activity, with the exception of window cleaning, that is performed less frequently than once a month is considered to be out of scope.

## **Rationale for the proposed criteria wording**

This criterion aims at:

- reducing the use of chemical products and consumable goods and
- reducing the environmental impacts of both chemical products and consumable goods whenever used.

Regarding the first purpose, requirements on non-use of the products or requirements on dosing systems, that avoid overdosing, have been included. This requirement is also linked to other criteria such as *Other waste: prevention, sorting and disposal*. Regarding the second purpose of the criterion (reducing the environmental impacts of the products whenever needed) several alternatives have been included that are commented below.

The production, use and end-of-life of the chemical products for washing and routine cleaning cause several environmental impacts such as aquatoxicity, eutrophication or acidification of the water streams. The magnitude of the environmental impacts largely depends on the formulation of the chemical products as well as the dosing. More information can be found at (Boyano et al 2016)

(Packer 2009) carried out an impact analysis of the consumable goods used in the catering service sector. One of the major findings was that overall environmental impacts are context specific. Each product feature has different weightings of importance to different users.

The inclusion of these requirements are observed in other policy tools such as the Nordic Swan for several types of detergents and cleaners, for disposable goods, for restaurants or for coffee services and the EU Ecolabel for several types of detergents and for Tourist and accommodation services. The inclusion of these requirements in the recently launched GPP schemes is not very popular, only some of them include some requirements on these points.

This criterion is relevant for those catering services that procure consumables. Therefore it is proposed to be included as an awarded criterion. The non-use of disposable items has been considered of key importance and left as a technical specification criterion. The use of cleaning products and paper products are widely used, being a reason the inclusion of these requirements as a technical specification at comprehensive level as well as award criterion and for the modification of the name of the criterion.

Three main areas have been identified to be included in the criteria:

- *Chemical products* for hand washing, dishwashing and routine cleaning products. This section includes several types of the chemical products such as hand soaps, dishwasher detergents, flooring cleaners, window cleaners, kitchen cleaner or sanitary cleaners. The feedback provided by the stakeholders pointed out the need of including requirements to reduce the consumption of this kind of products as well as to increase the level of ambition of the thresholds. Stakeholders confirmed the large availability of ecolabelled products on most markets at an affordable price.
- *Paper products* but specifically kitchen rolls and kitchen paper have also been identified as widely used products in the catering services. Like the feedback for previous sub-criterion, stakeholders suggested the need of facilitating a lower consumption of these products and to increase the amount of environmentally friendlier purchases (eg products covered by a type I ecolabel). Ecolabel paper products are also widely available on the market at reasonable prices. Even so, an exemption can be granted wherever a lack of availability is identified.  
 Another exception is granted to the use of tablecloths made of paper that can be reused. This type of tablecloths has shown to be environmental-friendlier than the only one use.
- *Disposable items and consumable goods* are the third type of products included in this criterion. The sub-criterion focuses on the non-use of these consumables with the only exception of take away catering,. Further explanations can be found in Annex 4.6

The comments on the ambition levels were in general split with problems in the market availability being cited as an issue in some Member States and the large availability at affordable prices in other Member States. Therefore, the recommended values have been increased in comparison to values previously proposed, but an exemption has been considered for inclusion if needed. Wherever a lack of availability of these types of products is identified, the criterion must not be introduced.

### **Rationale for the proposed verification**

- Paper and wooden products: The current criteria states that paper products, such as, kitchen paper or paper napkins must be made from recycled or sustainably managed virgin fibre. This is to avoid (in particular) the negative impacts from deforestation. However, this requirement is only a part of the requirements included in an Ecolabel scheme. The ecolabel scheme is a comprehensive tool that informs about the best environmental performing products. Therefore, it can be said that the old requirement has been kept but that the verification of paper products throughout a type I ecolabel allows the simultaneous verification of some other requirements.
- Chemical products requirements should be verified based on the award of a Type I ecolabel. Type I ecolabels ensure that the best environmental products on the market are being used. The proper dosage of these products is proved by a description of the dosing systems.

### 3.2.7 Energy and water consumption in kitchens (BEFORE: Equipment)

Core criteria	Comprehensive criteria
<b>Technical specifications</b>	
<p><b>TS6 Energy and water consumption in the kitchens</b></p> <p><b>TS6.1. Best practices to minimise energy and water consumption</b></p> <p>The tenderer shall have written procedures describing best practices for the use of kitchen equipment to minimise energy and water consumption, including <i>[to be selected]</i>:</p> <p><u>Ovens:</u></p> <ul style="list-style-type: none"> <li>- Switch on only the ovens required to match the demand.</li> <li>- Switch ovens off when not in use for over 20 minutes</li> <li>- Use spare oven capacity to perform other cooking operations and avoid switching on other equipment, or allow it to be switched off.</li> <li>- Avoid using electric ovens for holding, use a well-insulated hot cupboard instead and switch the ovens off as soon as possible.</li> </ul> <p><u>Hobs:</u></p> <ul style="list-style-type: none"> <li>- Switch on hob rings when needed, switch off after use.</li> <li>- Avoid leaving pilot lights on over night</li> <li>- Where possible use open hobs in preference to flat-tops.</li> <li>- Avoid extended cooking times on hobs, use them intensively for shorter periods and switch off.</li> <li>- Use spare oven capacity to perform some hob operations (e.g. cooking pasta).</li> </ul> <p>Other cookers:</p> <ul style="list-style-type: none"> <li>- Switch on equipment when needed; switch off after use, e.g. Grills, Fryers.</li> <li>- Reduced settings to reduce warm-up times: grills, fryers.</li> <li>- Use spare oven capacity to perform some grill and fryer operations (roasting, browning, frying).</li> </ul> <p><u>Extraction</u></p> <ul style="list-style-type: none"> <li>- Where extraction is manually controlled ensure a staff member has responsibility for switching it off.</li> <li>- Where extraction is timer/BMS controlled ensure the settings match the operating hours of the kitchen.</li> <li>- Where the operating hours are variable put control measures in place to vary the extraction hours accordingly.</li> <li>- Where the extractor/air supply has variable speed control determine the setting that gives adequate air flow and use that setting. Use a reduced setting at times of lower activity. <ul style="list-style-type: none"> <li>- Ensure filters and vents are cleaned regularly to reduce system resistance.</li> </ul> </li> </ul> <p><u>Dishwasher</u></p> <ul style="list-style-type: none"> <li>- Ensure dishwashers are switched off whenever possible, in order to minimise standby energy consumption</li> <li>- Wherever possible ensure that racks are full in order to minimise the amount of energy used per plate.</li> <li>- Use cold-water for pre-rinse to minimise the use of hot water.</li> <li>- Don't rinse the place settings and kitchenware</li> </ul> <p><u>Refrigeration</u></p> <ul style="list-style-type: none"> <li>- Efficient use – least amount of door-openings possible.</li> <li>- Maintenance – Ensure seals are maintained and heat exchangers cleaned.</li> <li>- Ensure refrigerators have sufficient ventilation for their heat exchangers.</li> <li>- Right capacity – decommission units if poorly utilised.</li> </ul> <p>The best practices are aimed at the staff working in the kitchen/s providing the contracted catering service.</p> <p><b>Verification</b></p> <p>The tenderer shall provide the written procedures describing the best practices for using of kitchen equipment.</p>	



Award criteria																																					
Core criteria	Comprehensive criteria																																				
<p><b>AC3. Energy and water consumption in the kitchens</b>  <i>This criterion is applicable only where the caterer is responsible for providing the equipment</i></p> <p><b>AC3.1a. Refrigeration</b>            Points shall be awarded proportionally to tenders in which more than A%<sup>1)</sup> of the plug-in cabinets* and storage cabinets have lower energy efficiency index (EEI) than the values in the following table:</p> <table border="1"> <thead> <tr> <th>Category</th> <th>EEI</th> <th>Min. energy class</th> </tr> </thead> <tbody> <tr> <td>Storage counter refrig</td> <td>&lt;35</td> <td>B</td> </tr> <tr> <td>Storage refrig 1-door</td> <td>&lt;35</td> <td>B</td> </tr> <tr> <td>Storage refrig 2-doors</td> <td>&lt;75</td> <td>D</td> </tr> <tr> <td>Storage counter freezers</td> <td>&lt;35</td> <td>B</td> </tr> <tr> <td>Storage freezers 1-door</td> <td>&lt;50</td> <td>C</td> </tr> <tr> <td>Storage freezers 2-doors</td> <td>&lt;75</td> <td>D</td> </tr> <tr> <td>Storage refrig-freezers</td> <td>&lt;75</td> <td>D</td> </tr> </tbody> </table> <p><b>AC3.1b. Refrigeration</b>            Points shall be awarded proportionally to tenders in which more than C%<sup>1)</sup> of the household appliances have lower energy efficiency index (EEI) than the values in the following table:</p> <table border="1"> <thead> <tr> <th>Category</th> <th>EEI</th> <th>Min. energy class</th> </tr> </thead> <tbody> <tr> <td>Storage chest freezers</td> <td>&lt; 22</td> <td>A+++</td> </tr> <tr> <td>Wine storage appliances with one temperature zone</td> <td>&lt; 42</td> <td>A+</td> </tr> <tr> <td>Wine storage appliances with multi temperature zones</td> <td>&lt; 55</td> <td>A</td> </tr> </tbody> </table> <p><b>AC3.1c. Refrigeration</b>            Points shall be awarded proportionally to tenders in which more than E%<sup>1)</sup> of the equipment using refrigerants with a GWP below 150.</p>	Category	EEI	Min. energy class	Storage counter refrig	<35	B	Storage refrig 1-door	<35	B	Storage refrig 2-doors	<75	D	Storage counter freezers	<35	B	Storage freezers 1-door	<50	C	Storage freezers 2-doors	<75	D	Storage refrig-freezers	<75	D	Category	EEI	Min. energy class	Storage chest freezers	< 22	A+++	Wine storage appliances with one temperature zone	< 42	A+	Wine storage appliances with multi temperature zones	< 55	A	<p><b>AC3. Energy and water consumption in the kitchens</b>  <i>This criterion is applicable only where the caterer is responsible for providing the equipment</i></p> <p><b>AC3.1a. Refrigeration</b>            Points shall be awarded proportionally to tenders in which more than B%<sup>1)</sup> the plug-in cabinets* and storage cabinets have an energy efficiency index (EEI) lower than 25 (Energy Class A).</p> <p><b>AC3.1b. Refrigeration</b>            Points shall be awarded proportionally to tenders in which more than D%<sup>1)</sup> of the household refrigerating appliances have an Energy efficiency index (EEI) of lower than 22 (Energy Class A+++).</p> <p><b>AC3.1c. Refrigeration</b>            Points shall be awarded proportionally to tenders in which more than F%<sup>1)</sup> of the equipment using refrigerants with a GWP below 5.</p>
Category	EEI	Min. energy class																																			
Storage counter refrig	<35	B																																			
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<p><b>AC3.2 Cooking appliances</b>            Points shall be awarded proportionally to tenders in which more than G%<sup>1)</sup> of the cooking appliances are equipped with:</p> <ul style="list-style-type: none"> <li>- Induction hob or gas hob with optimised burners and controlled by pot sensors.</li> <li>- Insulated food heating or</li> <li>- Convection oven, combi oven or pressure cooker.</li> </ul> <p><b>AC3.3. Professional dishwashers</b>            Points will be awarded proportionally to tenders in which more than H%<sup>1)</sup> of the dishwashers are equipped with:</p> <ul style="list-style-type: none"> <li>- Heat recovery systems from exhaust air heat, waste water heat recovery or dried dishes.</li> <li>- Double wall.</li> <li>- Optimised filter systems: centrifugal systems (cyclone filter) or integrated pre-scouring system.</li> </ul>																																					

- Multi-zone rinsing.

**Verification:**

AC3.1. The tender shall supply a list of the equipment that will be used in the execution of the contract, indicating specifically the ones which comply with this criterion.

The tender shall supply information about the EEI in accordance with Regulation (EC) No 2015/1094<sup>2)</sup> on energy labelling of professional refrigerated storage cabinets or Regulation (EC) No 1060/2010 on energy labelling of household refrigerating appliances and the refrigerants of the equipment<sup>2)</sup>.

In case of new acquisitions the tenderer shall provide a signed commitment to purchase the equipment over the first 6 months of the contract.

AC3.2. The tender shall supply a list of the equipment that will be used in the execution of the contract, indicating specifically the ones which comply with this criterion.

The tender shall supply information about the technology of the equipment<sup>3)</sup>.

In case of new acquisitions the tenderer shall provide a signed commitment to purchase the equipment over the first 6 months of the contract.

AC3.3. The tender shall supply a list of the equipment that will be used in the execution of the contract, indicating specifically the ones which comply with this criterion.

The tender shall supply information about the technology of the equipment<sup>3)</sup>.

In case of new acquisitions the tenderer shall provide a signed commitment to purchase the equipment over the first 6 months of the contract.

**Explanatory notes**

**Core criteria**

**Comprehensive criteria**

**Award criteria**

**AC3 Energy and water consumption in the kitchens**

**AC3.1 Refrigeration**

Recommended values for core criteria:

A = 0-50% of the plug-in cabinets (remote cabinets are not considered) and storage cabinets

C = 0-50% of the storage chest freezers and wine storage appliances with one or multi temperature zones.

E= 100% of the equipment using refrigerants with a GWP below 150.

Recommended values for comprehensive criteria:

B = 0-50% of the plug-in cabinets (remote cabinets are not considered) and storage cabinets

D = 0-50% of the storage chest freezers and wine storage appliances with one or multi temperature zones.

F = 100% of the equipment using refrigerants with a GWP below 5

**AC3.2. Cooking appliances**

Recommended values for core criteria:

G=0-50% of the cooking appliances are equipped with the listed technologies

Recommended values for comprehensive criteria:

G=51-100% of the cooking appliances are equipped with the listed technologies

**AC3.3. Professional Dishwashers**

Recommended values for core criteria:

H=0-50% of the dishwashers are equipped with the listed technologies

Recommended values for comprehensive criteria:

H=51-100% of the dishwashers are equipped with the listed technologies

**Recommendation for scaling up the percentages from small to large number of kitchen appliances of each type**

The following table is recommended for kitchens with few appliances of each type:

Number of kitchen appliances of each type	Minimum number of compliant appliances
1 - 3	1
4 - 6	2
7 - 9	3
≥ 10	50%

E.g. In a kitchen with 2 ovens and 3 refrigerators, 1 of the ovens and 1 of the refrigerators have to comply with the criteria set above to be awarded with the points.

\* remote cabinets are not considered  
<sup>1)</sup> A,...I are the thresholds to be defined by the procurer for the core and comprehensive levels (AC). Recommendations for its value are given in explanatory notes below  
<sup>2)</sup> Energy label of the appliances, test reports or any other technical documentation), and if applicable a signed commitment to purchase the equipment over the first 6 months of the contract  
<sup>3)</sup> Technical sheet or Technical documentation of the equipment, and if applicable a signed commitment to purchase the equipment over the first 6 months of the contract.

### **Rationale for the proposed criteria wording**

The energy use in kitchen operations has an impact on fossil fuels, carcinogens and eco-toxicity, and it plays an important part once the catering service is analysed isolated from the primary production of food. The study carried out by IEEA (2012) showed that almost 40% of the energy consumption of the kitchen is used for cooking, 28% for refrigeration, 17% at extraction and dishwashing at 5%. In carbon terms, cooking accounts for 27% and refrigeration for 34%. This is due to the lower carbon impact of gas which accounts for 68% of cooking energy.

The measures proposed in this criterion are cost-effective. The requirement of this criterion are especially important to reduce the environmental impacts of the kitchen if it is noted that in many occasions, the caterer does not pay the energy bill and s/he does not have not economic incentives to reduce the energy consumption. Hence, this criterion is proposed as a technical specification including the best practices for using the equipment. The study by IEEA (2012) also showed that there is considerable potential for improvements based on how staff uses the kitchen equipment. The study estimated that the energy savings could reach 40% in cooking and 25% in dishwashing, with very affordable investments. Therefore, it is proposed that the GPP criteria include a technical specification requiring the implementation of best practices for the use of kitchen equipment, aimed at the staff working in the kitchen/s providing the contracted catering service. Recommendations from the study by IEEA (2012) are provided in the criteria text as a guidance for the caterers to include in their procedures.

An award criterion including the use of kitchen equipment with best available technologies (BAT). Further information about the current BATs can be found in Annex 4.7. The requirements of the performance of the appliances are based on

- There is a lack regulation on the performance of cooking equipment and professional dishwashers. There requirements for this type of appliances could have been based on the US Energy Star, those requirements are not representative for the EU market. The BATs for cooking equipment and dishwashers are proposed as requirements in this criterion
- Energy Label regulations for professional and household refrigeration are considered. The thresholds for these requirements is based on Topten report (Topten 2016a, Topten 2016b)  
Another policy ruling the refrigeration appliances in Europe is the so called F-Gas Regulation (Regulation (EU) No 517/2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006). This regulation aims at the phase out of HFC refrigerants with high GWP, particularly for commercial and professional refrigeration; it sets deadlines to ban high and medium GWP refrigerants.
- In the case of extraction, the main parameters affecting the energy consumption are related to the type of cooking appliances and dishwashers. Other parameters, as the speed variable fans, are usually part of the kitchen design which is out of the control of the catering service operator. Therefore, no requirements on the energy performance have been included.

The percentages proposed are set taking into account the number of appliances of each type in the kitchen. It is recommended to progressively scale up the percentages from small to large number of kitchen appliances of each type. This is meant to balance the burden that these award criteria might entail for SMEs.

### **Rationale for the proposed verification**

In the case of the technical specification there is not a standard or procedure available to measure the reduction of energy and water consumption in the kitchens. However, indicators such as KWh/meal or l/meal are proposed as part of the *Environmental management measures and practices*. The monitoring and recording of this indicator will show the continuous improvement of the tenderer on this aspect.

Additionally, for the verification of this criterion, the tenderer shall provide the written procedures describing the best practices for using of kitchen equipment.

For refrigeration appliances, the energy label of the appliances and the technical sheets indicating the GWP of the refrigerants would act as proof of compliance. For the rest of appliances, the technical information describing the technologies requested would constitute the documentation for verification.

In case that new acquisitions are needed, there is a provision to allow tenderers to provide a signed commitment to purchase the compliant equipment over the first 6 months of the contract (see also section 3.3.2). The aim of this clause is to avoid tenderers investments prior to the award of the contract. For some companies, the incoming cash-flows from the contract may be crucial to ensure reasonable payback periods for those investments.

### 3.2.8 Food transportation (BEFORE: Vehicle fleet and planning of food delivery)

Core criteria	Comprehensive criteria
<b>Technical Specification</b>	
<p><b>TS.7 Food transportation</b>  <i>These criteria only apply where the food delivery is part of the service contracted and the fleet is under the control of the tenderer. 'Food delivery' covers the transportation of food to and from service kitchen, and to the place where the service is provided, if it is elsewhere.</i></p> <p><b>TS7.1. Reduction of fuel consumption</b>            The tenderer shall implement a reduction plan to minimise GHG and air pollutant emissions of the vehicles used in the service, taking into account routes optimisation, the load transported, the last mile issues, and, if economically feasible, the technologies enumerated in the AC4.2, AC4.3 and AC4.4 award criteria.</p> <p><b>Verification:</b>            The tenderer shall supply the transport plan to minimise GHG and air pollutant emissions.</p> <p><b>TS7.2. Air pollutant emissions</b>            All heavy duty vehicles (HDV) used in carrying out the service shall meet at least EURO V.            All light commercial vehicles (LCV) used in carrying out the service shall meet at least EURO 5.</p> <p><b>Verification:</b>            The tenderer shall provide the technical sheets of the vehicles to be used to provide the service where the compliance with EURO standard is stated.            In case of new acquisitions the tenderer shall provide a signed commitment to purchase the vehicles over the first 6 months of the contract</p>	
Core criteria	Comprehensive criteria
<b>Award criteria</b>	
<p><b>AC.4 Food transportation</b>  <i>Note: These criteria only apply where the food delivery is part of the service contracted and the fleet is under the control of the tenderer. 'Food delivery' covers the transportation of food to and from service kitchen, and to the place where the service is provided, if it is elsewhere.</i></p> <p><b>AC.4.1. Air pollutant emissions</b>            Points will be awarded to tenderers offering a service delivery fleet totally composed by EURO 6/VI vehicles</p> <p><b>Verification:</b>            AC.4.1. The tenderer shall provide the technical sheets of the vehicles to be used to provide the service where the compliance with EURO 6/VI standard is stated.            In case of new acquisitions the tenderer shall provide a signed commitment to purchase the vehicles over the first 6 months of the contract.</p>	
	<p><b>AC.4.2. GHG emissions</b>            Points will be awarded to tenderers offering a service delivery fleet totally composed by:            - LCV performing <math>\leq 50</math> g CO<sub>2</sub>/km (type approval value)            - Hybrid, plug-in hybrid or electric HDVs            - Electric L-category vehicles.</p> <p><b>AC.4.3. Refrigerants</b>            Points will be awarded to tenderers offering a service</p>

	<p>delivery fleet totally composed by HDVs using refrigerants with a GWP lower than 150</p> <p><b>Verification:</b>  AC.4.2. The tenderer shall provide the technical sheets of the vehicles to be used to provide the service where the type approval CO<sub>2</sub> emissions per km is stated  In case of new acquisitions the tenderer shall provide a signed commitment to purchase the vehicles over the first 6 months of the contract.</p> <p>AC.4.3. The tenderer shall provide the technical sheets of the vehicles to be used to provide the service where the GWP of the refrigerant used in the HDVs is stated  In case of new acquisitions the tenderer shall provide a signed commitment to purchase the vehicles over the first 6 months of the contract.</p> <p><b>AC.4.4. Cyclelogistics</b>  <i>Note: In those cities where the topography and the urban infrastructure are suitable, and for services that consists of small volumes of food delivery, e.g. services for small meetings.</i></p> <p>Points will be awarded to tenderers offering a service delivery fleet totally composed by cycles and cycle trailers, which may include electrically power assisted cycles.</p> <p><b>Verification:</b>  The tenderer shall provide the technical sheets and serial numbers of the cycles to be used to provide the service.  In case of new acquisitions the tenderer shall provide a signed commitment to purchase the equipment over the first 6 months of the contract.</p>
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**Rationale for the proposed criteria wording**

Cerutti et al. (2016) found that the GHG emission share of urban food distribution in the carbon footprint (CF) of the school catering service is relevant (24–28% of the total CF) and highlighted the possibilities for GHG emission reductions. The grade of contribution of transport activities on the overall environmental impacts of the catering services depends on food category and on situation.

The use of fossil fuels leads to global warming, abiotic resource depletion, ozone depletion and acidification. By requesting vehicles to be more fuel efficient or have lower emissions will also minimise the burdens on the other impact categories.

Three main actions have been identified as mostly effective to reduce these environmental impacts:

- *Reduction plan for fuel consumption:* this is the most cost-effective measure to reduce the emissions and other environmental impacts coming from the food delivery. The BEMP for Food and Beverage Manufacturing (European Commission, 2015b) had recommendations on logistics and route optimisation such as to avoid empty loads or to use back-haul. The reviewed GPP schemes also apply these

requirements as for example: deliveries to be made once a week and on a more regular basis when needed and a contractual delivery that stops on orders with a value below EUR 100

Eco-driving has also an important potential of fuel reduction, which could be reinforced by additional measures other than the training, for example, the drivers could receive regularly information on their fuel efficiency performance, so they could improve their driving behaviour continuously.

- *Air pollutants emissions*: In the view of the set of improvements that EURO VI/6 standards introduce (see annex 4.7 for more details), new vehicles on the market need to make important efforts to comply with their requirements, and therefore, it is proposed these new standards to be promoted within the EU GPP criteria. The total replacement of a fleet to EURO VI/6 may entail significant costs, therefore it is proposed an award criterion for fleets totally composed by EURO VI/6 vehicles. However, it is also proposed a technical specification requiring a minimum EURO standard of the fleet, in order to exclude low performance vehicles. The technical specification sets EURO V/5 as minimum requirement, which would exclude vehicles older than 9 years for heavy duty vehicles and 7 years for light commercial vehicles.
- *CO<sub>2</sub> emissions*: the most fuel efficient internal combustion engine vehicles are cost-effective. The additional cost of the vehicle is outweighed by the fuel saving over its lifetime. Conversely, electric and semi-electric vehicles are still at a lower production scale which makes their prices not as competitive as ICEVs. For this reason, the comprehensive award criterion is meant to promote the use of plug-in hybrids and electric vehicles, which are the only ones able to perform 50 g CO<sub>2</sub>/km (type approval CO<sub>2</sub> value)
- *Cycle logistics* has demonstrated its capability to operate in urban deliveries, which makes it suitable for deliveries within catering services for small volumes of food transported. According to CIVITAS (CIVITAS, 2012) 42% of all motorized trips in urban areas could be shifted to logistics by bicycle (this corresponds to 25% of all trips).
- *HFC refrigerants*: From 2017 onwards the GWP of air conditioning gases used in cars and vans should be below 150, according to the European directive on mobile air conditioning systems (MACs Directive) (Directive 2006/40/EC). The only currently available alternatives to meet the legal limit already perform very low GWP (1- 4), therefore an award criterion for lower GWP beyond that limit would be easily complied by all the vehicles and wouldn't bring any added value. Trucks are excluded from the MAC Directive, however, the HFCs used in these systems are affected by the phase-down put in place by the F-gas Regulation (EU) No 517/2014, which will exert a strong pressure on prices of these gases as the supply will become more restricted. Therefore, there is a strong regulatory driver in place that favours the use of low GWP in this sector. It is proposed to set an award criterion for those refrigerants with GWP below 150 at comprehensive level.

### **Rationale for the proposed verification**

In the case of the technical specification there is not a standard or procedure available to measure the reduction of fuel consumption in food delivery. However, an indicator of fuel consumption per meal is proposed as part of the environmental management measures and practices. The monitoring and recording of this indicator will show the continuous improvement of the tenderer on this aspect.

For the award criteria, the technical sheets of the vehicles would suffice to verify the criteria on air pollutant emissions, CO<sub>2</sub> type approval and GWP of refrigerants. For cyclelogistics, the serial numbers of cycles to be used in the service are also requested.

In case that new acquisitions are needed, there is provision to allow tenderers to provide a signed commitment to purchase the compliant equipment the over the first 6 months of the contract. This is to avoid that tenderers have to invest in new vehicles before the contract is awarded. For some companies, the incoming cash-flows from the contract may be crucial to ensure reasonable payback periods for those investments.

### 3.2.9 Environmental management measures and practices

Core criteria	Comprehensive criteria
<b>Technical Specification</b>	
<p><b>TS8. Environmental management measures and practices</b></p> <p>Over the contract period, the tender shall:</p> <ol style="list-style-type: none"> <li>monitor and record at least twice a year for representative weeks* the following indicators: <ul style="list-style-type: none"> <li>increase of the vegetable consumption (g/meal)</li> <li>If food waste is sorted out, food waste (g/meal) measured as: kitchen food waste, serving food waste and plate food waste</li> <li>Other waste (g/meal) at least sorted out into : paper/cupboard, glass, plastic/cans and residual waste</li> <li>Energy consumption (kWh/meal)</li> <li>Water consumption (l/meal)</li> <li>In case the service includes the delivery of food and the fleet is under the tenderer's control, the fuel consumption of the vehicles used for the food delivery (l/meal)</li> </ul> </li> <li>implement operational procedures to minimise** the environmental indicators monitored and recorded in 1. The procedures shall be at least the ones covered by the following criteria: <ul style="list-style-type: none"> <li>Staff training</li> <li>Promotion of vegetarian dishes</li> <li>Avoidable food waste prevention</li> <li>Waste prevention, sorting and disposal</li> <li>Energy and water consumption in kitchens</li> <li>In case the service includes the delivery of food and the fleet is under the tenderer's control, food transportation.</li> </ul> </li> </ol> <p>The service staff shall be aware of the operational procedures.</p> <ol style="list-style-type: none"> <li>evaluate the deployment of the operational procedures, by tracking the evolution of the environmental indicators and the implementation of the procedures in real practice.</li> <li>in case of deviations from the operational procedures or of increase of the environmental indicators, implement the necessary actions to correct those deviations, and if possible prevent them in the future.</li> </ol> <p><b>Verification:</b></p> <p>The tenderer shall provide:</p> <ol style="list-style-type: none"> <li>the procedure for monitoring and recording the indicators pointed out in section 1) at least twice yearly</li> <li>the operational procedures describing the measures to be deployed to minimise the environmental indicators listed in point 1) and in accordance with the criteria listed in 2),</li> <li>the evaluation procedures to ensure the implementation of the operational procedures</li> <li>the correction procedures to correct the deviations found in the evaluation, and if possible prevent them in the future.</li> </ol> <p>Environmental management systems certified against ISO 14001 or EMAS, and services holding a Type 1 ecolabel are deemed to comply, if they cover the environmental objectives: increase of the vegetable consumption, minimisation of avoidable food waste, other waste, energy and water and if applicable, fuel consumption. The tenderer shall provide the environmental policy showing the commitment to achieve these objectives, together with the certificate issued by the certification body.</p> <p>* a representative week means a week where the level of business / activity is approximately the average over a year (a week where there are a higher number of functions, higher number of bank holidays or special occasions eg Valentine's day or Christmas is not representative)  ** meaning reduce or keep at the minimum feasible level</p>	



### **Rationale for the proposed criteria wording**

An Environmental Management System (EMS) is a systematic and documented mean of demonstrating an organisation's commitment to managing and reducing its environmental impacts. It is particularly helpful to ensure the environmental performance of services, where an important part of the criteria must rely on best practices, staff training and other operational requirements.

This criterion is included within the current EU GPP (EU GPP 2008) criteria as a selection criterion at comprehensive level. Even if EMS is a very useful tool to develop systematic improvement processes, the leeway offered by the ISO standards may hinder their application in real practice. Their requirements are so general that their interpretation may be difficult for the non-expert users. In addition, EMSs are not very common among the catering service operators and particularly difficult to be achieved by SMEs which may lead to their exclusion of the tender process. For these reasons, under this revision a full and comprehensive EMS is not required. The present revision proposes a technical specification criterion that is inspired on the plan-do-check-act (PDCA) principles which constitute the basis of the management systems

The criterion is structured on the pillars of the PDCA applied to EMS:

- *Monitoring the environmental issues by means of environmental indicators:* The set of indicators proposed to be monitored is based on the environmental hotspots identified for this sector: energy consumption (including fuel if food delivery is included in the service), water consumption and waste generation, particularly food waste, relative to the number of meals which is the functional unit of the service.
- *Implementation of the operational procedures to minimise the environmental aspects:* The operational procedures are aimed at minimising the environmental indicators and should gather at least the ones required by the criteria proposed in this revision. In this way, the environmental management is not an isolated criterion but encompasses the rest of the GPP criteria.
- *Evaluation of the implementation of the procedures and correction of the deviations found:* There must be a systematic way to ensure the proper implementation of the operational procedures and the minimisation of indicators. For this purpose, it is necessary to carry out a regular evaluation of both indicators and procedures, and to set corrective and preventive actions where needed. This is proposed to be done by tracking the evolution of the indicators over the contract duration, and checking how the procedures function in real practice.

### **Rationale for the proposed verification**

Stakeholder consultation brought up an obstacle for the inclusion of certified environmental management systems as proof of verification of this criterion. They are not very common among the catering service operators and particularly difficult to be achieved by SMEs which may lead to their exclusion of the tender process. The requirement on certified systems is considered unaffordable for most catering service operators.

For these reasons, the verification is now proposed to be based on the provision of the following written documents:

- 1) the procedure for monitoring and recording the indicators
- 2) the operational procedures describing the measures to be deployed to minimise the environmental indicators
- 3) the evaluation procedures to ensure the implementation of the operational procedures
- 4) the correction procedures to correct the deviations and to prevent them in the future

However, if the catering service operator has a certified environmental management system, EMAS or the service holds a type 1 ecolabel that cover the environmental objectives listed in the criterion, this will deem to comply

### 3.3 Contract performance clauses (C)

#### 3.3.1 Tap water for drinking

Core criteria	Comprehensive criteria
<b>Contract Performance Clause</b>	
<b>C1. Provision of low impact drinking water</b>	
<i>Note: This criterion only applies to those cases where it is possible to supply or get access to tap drinking water</i>	
Bought-in bottled water shall be avoided where possible.	
The tenderer shall supply tap water for drinking at the premises of the catering service (may be bottled tap water or direct access to the water tap), and provide reusable glasses for drinking.	
The tenderer shall inform the customers about the provision of tap drinking water at the premises	
The contracting authority may set rules for penalties for non-compliance.	

#### **Rationale for the proposed criteria wording**

The long-term environmental impacts of bottling and transporting water across countries have severe implications. Carting water from one country to another for drinking purposes incurs in food miles and generates enormous waste at the end of their short lives (mainly plastic and glass). Plastic waste continues to rise, because global production and consumption of plastics is growing. In 2013, 299 million tons of plastics were produced, a 4% increase from the previous year.

At 30 litres per person per year, bottled water is the second most popular liquid refreshment after carbonated drinks (Canadean, 2015). Mineral water sold in the EU represented in 2012 half of the total volume of soft drink cold beverages in EU-28 (41881 million litres in accordance with Eurostat – PRODCOM NACE Rev. 2).

Drinking water directly from the tap hold is safe in the vast majority of EU-28 as ensured by the Drinking Water Directive (Council Directive 98/83/EC of 3 November 1998 on the quality of water intended for human consumption). The Commission published last October 2016 the Synthesis Report on the quality of drinking water in the Union. A complete list national drinking water portals across the EU is offered by European Environmental Agency (EEA 2016).

Although industry's big players are all pursuing efforts to increase recycled content in polyethylene terephthalate (PET) bottles, progress is slow and the environmental impact associated still remains. Several public initiatives are being promoted recently in cities and municipalities to ban bottled water.

Ecolabels have requirements for the reusability of drink bottles, and US Standard green seal (US green seal, 2014) has three levels of compliance

<b>BRONZE</b>	<b>SILVER: Meet the bronze requirements plus:</b>	<b>GOLD: Meet the silver requirements plus:</b>
The operation shall have tap water available for customers, as an alternative to bottled water.	No bottled water shall be sold, unless it was packaged on-site or locally packaged.	The operation shall have purified water available for customers and employees

The aim of this Contract Performance Clause is to avoid or diminish bottled water in the catering services, and the on-going compliance should be susceptible to monitor. This requirement is newly proposed under this revision.

### 3.3.2 Purchase of new kitchen equipment

Core criteria	Comprehensive criteria
<b>Contract Performance Clause</b>	
<b>C2. Purchase of new kitchen equipment</b> In case new kitchen equipment shall be purchased partially or wholly for the purpose of providing the contracted service by the tender, the tender shall purchase equipment complying with the requirements set by the core AC3. The tender shall report the purchase of new equipment to the contractor authority The contracting authority may set rules for penalties for non-compliance.	

#### **Rationale for the proposed criteria wording**

The Energy Efficiency Directive (Directive 2012/27/EU) sets energy efficiency requirements for purchasing products, services and buildings by central government. It specifically sets that central governments shall require in their tenders for service contracts that the new products purchased for the purpose of providing the service in question shall comply with:

- (a). where a product is covered by a delegated act adopted under Directive 2010/30/EU or by a related Commission implementing directive (Energy Labelling Directive), products shall comply with the criterion of belonging to the highest energy efficiency class possible;
- (b). where a product not covered under point (a), but by an implementing measure under Directive 2009/125/EC (Ecodesign Directive) adopted after the entry into force of this Directive, purchase only products that comply with energy efficiency benchmarks specified in that implementing measure;

Therefore, this contract performance clause is proposed to harmonise the GPP criteria with the provisions of the Energy Efficiency Directive.

### 3.3.3 Environmental management measures and practices

Core criteria	Comprehensive criteria
<b>Contract Performance Clause</b>	
<b>C3. Environmental management measures and practices</b> The service provider shall document and report, over the contract duration. <ul style="list-style-type: none"><li>– the results of the monitoring of indicators and</li><li>– the results of the evaluation and the correction and prevention actions, where applicable,</li></ul> according to the written procedures provided for the verification of the TS8 Environmental management measures and practices These reports shall be made available to the contracting authority for verification purposes. The contracting authority may set rules for penalties for non-compliance.	

#### **Rationale for the proposed criteria wording**

The aim of this Contract Performance Clause is to ensure the correct implementation of the technical specification of technical specification criterion *Environmental management measures and practices*. The contractor shall commit to carry out the written procedures provided for the verification of technical specification over the contract duration.

This requirement is newly proposed under this revision.

### 3.3.4 Staff training

Core criteria	Comprehensive criteria
<b>Contract Performance Clause</b>	
<b>C4. Staff training</b>	
<p>In the case of new staff in function, the tenderer shall provide staff training on the method statements listed in the selection criteria (SC1)</p> <p>For permanent and temporary staff with contract duration above one year, the tenderer shall provide update training on the method statements listed in the selection criteria (SC1) at least once per year.</p> <p>The tender shall report the training provided to the contractor authority.</p> <p>The contracting authority may set rules for penalties for non-compliance.</p>	
<b>Explanatory notes</b>	
Core criteria	Comprehensive criteria
<b>Contract Performance Clause</b>	
<p><u>Recommended values</u></p> <p>For permanent staff and temporary staff with contract duration above one year, 16h per year is a recommended value for the duration of the formation while for other temporary and short term staff shall be proportional to the duration of the contract.</p>	

#### **Rationale for the proposed criteria wording**

The contract performance clause criterion focuses on the new members of the staff or those that have been relocated. Even if the tenderer have the method statements, staff should be aware of the techniques and methods that can make their activity environmentally-friendlier.

Due to the importance of the role of the personnel in the outcome of the activity and the high turn-over rate of the sector, this clause is of remarkable importance.

The duration of the training is a debated issue among stakeholders, being too short for some and too ambitious for others. Here it is proposed a middle ground: the duration of the training proposed is 16 hours per year for permanent staff while for temporary and short term personnel duration shall be proportional to the contract period.

#### 4 Draft EU GPP Criteria proposal for Vending machines

**Error! Reference source not found.** indicates the criteria included in the Vending machines criteria set

**Table 5. Criteria set for Vending machines Award Criteria (AC) and Technical Specification (TS). Thresholds in TS are included as minimum values (i.e. *at least x%*) and thresholds in AC are included as the starting point to get points awarded (i.e. *points awarded from x%*).**

Criteria	Type of criteria	Level of ambition	
		Core	Comprehensive
Organic food products	TS 1	Option A 20-50% of the items to be supplied	Option A 50% of the items to be supplied
		Option B List of items	Option B List of items
	AC 1	Option A >20-50% of the items to be supplied	Option A >50% of the items to be supplied
		Option B List of items	Option B List of items
Fairly traded products	AC 2	Option A 10-30% of the coffee, tea, chocolate (cocoa), sugar and bananas items	Option A 30-70% of the coffee, tea, chocolate (cocoa), sugar and bananas items
		Option B List of items	Option B List of items
Environmentally responsible palm oil	AC 3	>10-30% of the items of pre-packed food products	> 30-50% of the items of pre-packed food products
Smart controls	TS 2	See section 4.1.5	
Annual energy consumption	AC 4	See section 4.1.5	
GWP of refrigerants	AC 5	See section 4.1.5	
Reusable cups	TS 3.	See section 4.1.6	

#### 4.1 Technical Specifications (TS) and Award Criteria (AC)

##### 4.1.2 Organic food products

Core criteria	Comprehensive criteria
<b>Technical Specification</b>	
<p><b>TS1. Organic food products</b></p> <p><i>Option A</i> At least X%<sup>1)</sup> of the food and/or drink items to be supplied in the vending machine shall comply with the organic products standards.</p> <p><b>Verification:</b> The tenderer shall provide data (name and amount) of food and/or drink items planned to be supplied in the vending machine in the execution of the contract, indicating specifically the products that comply with organic requirements. Organic products that have been third party certified in accordance with Regulation (EC) No 834/2007 on organic production and labelling of organic products will be deemed to comply.</p> <p><i>Option B</i> The following food and drink items to be supplied in the vending machine shall comply with the organic products standards [<i>list of food and drink products</i>]</p> <p><b>Verification:</b> See TS1 option A</p>	
Core criteria	Comprehensive criteria
<b>Award Criteria</b>	
<p><b>AC1. Additional organic food products</b></p> <p>Points shall be proportionally awarded to tenders in which more than X%<sup>1)</sup> of the food and/or drink items to be supplied in the vending machine have been produced in accordance with Regulation (EC) No 834/2007.</p> <p><b>Verification:</b> See above TS1</p> <p><i>Option A</i> Points shall be proportionally awarded to tenders in which more than X%<sup>1)</sup> of the food and/or drink items to be supplied in the vending machine have been produced in accordance with Regulation (EC) No 834/2007.</p> <p><b>Verification:</b> See above TS1 option A</p> <p><i>Option B</i> Points shall be proportionally awarded to tenders that exceed the list of food and drink items to be supplied in the vending machine [<i>listed in TS1 option B</i>] and that comply with the organic products standards</p> <p><b>Verification:</b> See TS1 option A</p>	
<b>Explanatory notes</b>	
Core criteria	Comprehensive criteria
<b>Technical Specification and Award Criteria</b>	
<p><b>Organic food products</b> The contracting authority will have to specify how the percentage of purchase will be calculated, either in volume,</p>	

weight or value

Recommended values for core criteria:

20-50% of the food and/or drink items to be supplied in the vending machines

Recommended values for comprehensive criteria:

>50% of the food and/or drink items to be supplied in the vending machines

<sup>1)</sup> X is the threshold to be defined by the procurer for the comprehensive and core levels (TS and AC). Recommendations for its value are given in explanatory notes above.

**Rationale for the proposed criteria wording and verification**

See section 2.12 for the rationale of the criterion on Organic food products in the Food procurement criteria set.



### 4.1.3 Fairly traded products

Core criteria	Comprehensive criteria
<b>Award Criteria</b>	
<b>TS2. Fairly traded products</b>	
<p>Option A Points shall be awarded proportionally to tenders in which more than X%<sup>1)</sup> of the total items of each of the following products: coffee, tea, chocolate (cocoa), sugar and bananas, have been produced and traded meeting the requirements of a certification scheme for fair trade that requires a minimum content of certified product of 90% and that is based on multi-stakeholder organizations with a broad membership and addresses international fairtrade standards including working conditions for production in accordance with ILO, sustainable trade and pricing<sup>2)</sup>.</p> <p><b>Verification:</b> The tenderer shall provide data (name and amount) of all coffee, tea, chocolate (cocoa), sugar and bananas planned to be supplied in the vending machines in the execution of the contract indicating specifically the ones compliant with the criterion.</p> <p>Option B Points shall be awarded proportionally to tenders in which food and drink items to be supplied in the vending machines have been produced and traded meeting the requirements of a certification scheme for fair trade that requires a minimum content of certified product of 90% and that is based on multi-stakeholder organizations with a broad membership and addresses international fairtrade standards including working conditions for production in accordance with ILO, sustainable trade and pricing<sup>2)</sup>.</p> <p><b>Verification:</b> The tenderer shall provide the list of items planned to be supplied in the vending machines in the execution of the contract that comply with the criterion.</p>	
<b>Explanatory notes</b>	
Core criteria	Comprehensive criteria
<b>Award Criteria</b>	
<p>The contracting authority will have to specify how the percentage will be calculated, either in volume, weight or value spent.</p> <p>Option A <u>Recommended values for core criteria:</u> X=10-30% of total purchases of each product: coffee, tea, chocolate (cocoa), sugar and bananas. <u>Recommended values for comprehensive criteria:</u> X=30-70% of total purchases of each product: coffee, tea, chocolate (cocoa), sugar and bananas.</p> <p>Option B List of items that can include: bananas, coffee, tea, chocolate (cocoa), sugar, ananas, etc</p>	
<p><sup>1)</sup> X is the thresholds to be defined by the procurer for the comprehensive and core levels (AC). Recommendations for its value are given in explanatory notes below.</p> <p><sup>2)</sup> Schemes such as Fairtrade®, UTZ, Bonsucro, etc. can show compliance with the criterion provided they cover the environmental principles mentioned above. Other schemes at country level can be considered as equivalent as far as they comply with the environmental principles mentioned above.</p>	

#### **Rationale for the proposed criteria wording and verification**

See section 2.1.7 for the rationale of the criterion on Fairly traded products in the Food procurement criteria set



#### 4.1.4 Environmentally responsible palm oil

Core criteria	Comprehensive criteria
<b>Award Criteria</b>	
<p><b>TS3. Environmentally responsible palm oil</b></p> <p>Points shall be awarded proportionally to tenders in which more than X%<sup>1)</sup> of the units/items of pre-packed food products containing palm oil have been sourced from plantations that meet the requirements of a certification scheme for sustainable production that is based on multi-stakeholder organizations that has a broad membership, including NGOs, industry and government and that addresses environmental impacts including on soil, biodiversity, organic carbon stocks and conservation of natural resources.</p> <p><b>Verification:</b> The tenderer shall provide data (name and amount) of all food products containing palm oil (as units) planned to be supplied in the vending machine in the execution of the contract indicating specifically the ones compliant with the criterion.</p>	
<b>Explanatory notes</b>	
Core criteria	Comprehensive criteria
<b>Award Criteria</b>	
<p><b>AC6. Environmentally responsible palm oil</b></p> <p>The contracting authority will have to specify how the percentage will be calculated, either in volume, weight or value</p> <p><u>Recommended values for the core criteria:</u> X=10-30% of the units/items of pre-packed food products</p> <p><u>Recommended values for the comprehensive criteria:</u> X=30-50% of the units/items of pre-packed food products</p>	
<p><sup>1)</sup> X is the threshold to be defined by the procurer for the core and comprehensive levels (AC). Recommendations for its value are given in explanatory notes below</p> <p><sup>2)</sup> Schemes such as RSPO, ICCTS plus or RSB can show compliance with the criterion provided they cover the environmental principles mentioned above. Other schemes at country level can be considered as equivalent as far as they comply with the environmental principles mentioned above.</p>	

#### **Rationale for the proposed criteria wording and verification**

See section 2.1.9 for the rationale of the criterion on sustainable palm oil in the Food procurement criteria set.

#### 4.1.5 Energy consumption and GWP of refrigerants

Core Criteria	Comprehensive Criteria
<b>Technical specification</b>	
<p><b>TS2. Smart controls</b></p> <p><i>This criterion covers the following types of vending machines:</i></p> <ol style="list-style-type: none"> <li>1) Refrigerated closed fronted can and bottle machines where the products are held in stacks</li> <li>2) Refrigerated glass fronted can and bottle, confectionery and snack machines</li> <li>3) Refrigerated multi-temperature glass fronted machines</li> </ol> <p><i>Provided they don't contain perishable food that require the temperature not to rise above 10°C for more than half an hour</i></p> <p>The tender shall provide vending machines equipped with integrated smart controls, also called energy management systems or devices, which are programmed to work during the operating hours of the place where they are located and put the cabinet into sleep-mode in the off-hours.</p> <p><b>Verification</b></p> <p>The tenderer shall provide the technical sheet of the vending machine to be used to provide the service where the compliance with this requirement is stated.</p>	
Core Criteria	Comprehensive Criteria
<b>Award criteria</b>	
<p><b>AC1. Annual energy consumption</b></p> <p><i>This criterion covers the following types of vending machines:</i></p> <ol style="list-style-type: none"> <li>1) Refrigerated closed fronted can and bottle machines where the products are held in stacks</li> <li>2) Refrigerated glass fronted can and bottle, confectionery and snack machines</li> <li>3) Refrigerated glass fronted machines entirely for perishable foodstuffs</li> <li>4) Refrigerated multi-temperature glass fronted machines</li> <li>5) Drink machines dispensing hot and/or cold drinks;</li> </ol> <p><i>The call for tender will specify the type of vending machine to be supplied and its volume. This award criterion shall be only used to compare vending machines of the same type and volume.</i></p> <p>Points will be awarded to tenders of vending machine/s in a proportionally inversed manner to the annual energy consumption of the machines.</p> <p><b>Verification:</b></p> <p>The tender shall provide a list of the vending machines that will be used in the execution of the contract, together with the copies of the test reports of the vending machines according to the EN 50597, for vending machines from 1 to 4, and according to the Energy Measurement Protocol Part B developed by the European Vending Association, for drink machines dispensing hot and/or cold drinks.</p>	
	<p><b>AC2. GWP of refrigerants</b></p> <p><i>This criterion covers the following vending machines:</i></p> <ol style="list-style-type: none"> <li>1) Refrigerated closed fronted can and bottle machines where the products are held in stacks</li> <li>2) Refrigerated glass fronted can and bottle, confectionery and snack machines</li> <li>3) Refrigerated glass fronted machines entirely for perishable foodstuffs</li> <li>4) Refrigerated multi-temperature glass fronted</li> </ol>

	<p style="text-align: center;"><i>machines</i></p> <p><i>The call for tender will specify the type of vending machine to be purchased. This award criterion shall be only used to compare vending machines of the same type.</i></p> <p>Points will be awarded to tenders proportionally to the number of refrigerated vending machines using refrigerant gases with a GWP lower than 150.</p> <p><b>Verification:</b></p> <p>The tender shall provide a list of the vending machines that will be used in the execution of the contract, indicating specifically the ones which comply with this criterion.</p> <p>The tender shall supply copies of the technical sheets where the GWP of the refrigerant is stated.</p>
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**Rationale for the proposed criteria wording**

The energy consumption of the vending machines has been recognized as an important environmental aspect. Proof of this is the development of regulation such as Ecodesign and Energy label at EU level. In addition and according to Innocat (Innocat, 2015) there are over 10 000 companies across Europe, providing circa 3.7 million vending machines. The inclusion of this criterion is also important since the majority of vending services suppliers does not manufacture their own vending machines, being a lack of stimulus to improve their energy consumption.

According to the Preparatory study for the Ecodesign of Commercial Refrigeration (JRC, 2014b), smart sensors/energy management devices are currently available. They can reduce the energy consumption by allowing the temperature inside the cooler to rise (between 7°C to 14°C) during periods when the machine is rarely used, and by maintaining the working temperature (between 0°C and 7°C) during the active hours. It is therefore proposed to require smart sensors/energy management devices as technical specification for vending machines that do not contain perishable food that require the temperature not to rise above 10°C for more than half an hour.

Vending machines have different energy consumption depending on the type and volume. Refrigerated closed fronted machines consume less energy than refrigerated glass fronted, but their functions are also different. For this reason, the award criterion proposal includes a provision setting that only vending machines of the same type and volume can be compared.

For the time being, there is no EU Regulation on these machines, being difficult to set up a maximum threshold of energy consumption. The contract authority shall award the points by comparing the energy consumption of the vending machines provided that they are of the same type and volume.

Another policy ruling the refrigeration appliances in Europe is the so called F-Gas which aims at the phase out of HFC refrigerants with high GWP. Particularly for commercial refrigeration; it sets the deadlines to ban high and medium GWP refrigerants In line with this phase-out timeline, it is proposed an award criterion to promote the use of refrigerants with GWP below 150 in vending machines. The use of hydrocarbons raises some safety issues due to the sources of ignition coming from the moving parts of the glass fronted machines. Carbon dioxide is being used in closed fronted machines, but it is not so spread in glass fronted machines. In the case of unsaturated HFCs (HFOs), the industry is concerned about their cost and availability. For these reasons, the award criterion on low GWP refrigerants is proposed to be set at comprehensive level.

**Rationale for the proposed verification**

Ecodesign and Energy Labelling regulations have not reached a common position on energy consumption thresholds and energy classes yet. However, the standard developed for the measurement of the energy

consumption of vending machines (EN 50597), is almost finalised, and its publication is expected by 2017. Therefore, this standard is proposed for verification purposes. .

There is not an EN standard to measure the energy consumption of drink machines dispensing hot and/or cold drinks, but it is part of the Energy Measurement Protocol developed by the European Vending Association. This protocol is proposed to be used for verification

The tests are not requested to be carried out by an accredited or independent laboratory, to be aligned with the Ecodesign and Energy Labelling regulations which allow the manufacturers to declare the performance of the appliance based on in-house testing.

For refrigeration gases, the technical sheets indicating the GWP of the refrigerants would act as proof of compliance.

<b>Consultation questions</b>
<ul style="list-style-type: none"><li>○ How does the energy management of the vending machines work? Are they programmed to be switched off during weekends or holiday periods? Would that be risky from the healthy point of view?</li><li>○ Are vending machines rented or are owned by the tenders? Would it be possible to require the highest energy performance on the market at any time?</li></ul>

#### 4.1.6 Reusable cups

Core Criteria	Comprehensive Criteria
<b>Technical specification</b>	
<p><b>TS3. Reusable cups</b> <i>This criterion covers drink machines dispensing hot and/or cold drinks.</i></p> <p>The tender shall provide drink machines dispensing hot and/or cold drinks that enable the use of reusable cups instead of disposable cups.</p> <p><b>Verification</b> The tenderer shall provide the technical sheet of the vending machine to be used to provide the service where the compliance with this requirement is stated.</p>	

#### **Rationale for the proposed criteria wording**

The use of disposable cups in drink machines dispensing hot and/or cold drinks entails the generation of plastic and paper waste, which can be minimised replacing them by reusable cups. There are machines available in the market equipped with a device that enables the user to choose between disposable or reusable cups. It is therefore proposed to set a technical specification to require drink machines dispensing hot and/or cold drinks to enable the use of reusable cups instead of disposable.

#### **Rationale for the proposed verification**

The technical sheet of the machine where this device is described would suffice to verify this criterion.

## 5 Life cycle cost considerations

### 5.1 Introduction to the Life cycle cost

Life cycle cost (LCC) is a method for assessing the total costs of the product group or service under study. It takes into account all cost of purchasing, preparation and cooking, serving and disposing the generated waste. The purpose of the LCC is to estimate the overall costs of project alternatives and to select the option that ensures the purchase or the service or both that will provide the lowest overall costs consistent with its quality and function. The LCC should be performed early in the purchase process.

The LCC use in GPP procedures can determine the lowest costs in evaluating offers. By using LCC in GPP, in fact, the authorities are able to consider not only the acquisition costs of a product or service (e.g. they include the raw materials and the manufacturing costs), but also other costs that usually have to be identified and calculated by the purchaser (e.g. maintenance costs, running costs, disposal recycling costs, etc.). These kinds of costs should be added to the selling price to have a comprehensive estimation of the LCC of the product or service.

In addition, the LCC can consider the environmental externalities of a product or a service during its life cycle, when it is possible to determine a monetary value.

The Directive 2014/24/EU on Public procurement identifies the costs to be considered in an economic analysis of the purchase to be performed. Some of these costs are:

*"- costs, borne by the contracting authority or other users, such as:*

*i. costs relating to the acquisition*

*ii. costs of use, such as consumption of energy and other resources,*

*iii. maintenance costs*

*iv. end of life costs, such as collection and recycling costs*

*- costs imputed to environmental externalities linked to the product, service or works during its life cycle provided their monetary value can be determined and verified; such costs may include the cost of emission of GHGs and of other pollutant emissions and other climate change mitigation costs"*

The directive indicates that both direct costs and indirect costs shall be included in LCC calculation, however, this can raise some methodological problems since direct costs can be calculated by applying LCC from user perspectives, whereas externalities effect the entire humanity and can be assessed only if LCC is applied from the society perspective. These costs are e.g. all the costs induced by the consumption of the product related to the ecosystem conservation, to human health, to social aspects and so on.

Although the directive provides the definition of the LCC and the list of cost items to be included, it does not provide a clear explanation on how to do it (no methods are mentioned). Several methods have been developed to account for the internal and external costs, but all of them account for methodological problems, uncertainties and heterogeneities of the monetisation factors used, connected with the application of LCC being identified as the main barriers to its application by the public authorities

In this section, firstly a base case is presented. The aim of this example is to present a possible breakdown of the costs that catering services could face out and to weight the additional costs or benefits that the proposed EU GPP criteria can bring. The main conclusion section summaries all the economic benefits and drawbacks triggered by the EU GPP criterion whenever possible.

### 5.2 GPP of FOOD and CATERING SERVICES

Food and catering services are procured by a range of public sector bodies. There is a large range of types of food procured as well as a large range of catering services contracted. However, in most of the food purchases, and from the purchase perspective, the costs usually fall into the following categories:

- *purchase cost or cost of the raw materials:* it is the purchase of items that went into inventory regardless of whether they are sold during the year or not.
- *delivery cost* is the amount of money it takes for a company to manufacture and deliver a product.
- *inventory and storage cost:* Inventory costs are the costs related to storing and maintaining its inventory over a certain period of time. Typically, inventory costs are described as a percentage of the inventory



value on an annualized basis. They vary strongly depending on the business field, but they are always quite high. It is commonly accepted that the carrying costs alone represent generally 25% of inventory value on hand.

- *end-of-life costs* are the attributed costs of handling with the waste generated.

The catering services are even more spread. This means that there are more categories in which the catering services costs may fall into. Some examples are;

- *purchase costs of raw materials (food purchase)* and other purchases (eg consumable goods, chemicals, other products): see above
- *Inventory and storage costs*: see above
- *Labour cost* is the total expenditure borne by employers in order to employ workers. The cost of labor is the sum of all wages paid to employees, as well as the cost of employee benefits and payroll taxes paid by an employer. The cost of labour is broken into direct (wages for the employees that produce a product) and indirect costs (overheads or wages of staff associated with support labor).
- *Utilities cost* is the cost of usage of utilities such as lighting, water, and heat.
- *Maintenance and insurance costs*. the insurance costs is optional and could be defined as the specified amount of payment required periodically by an insurer to provide coverage under a given insurance plan for a defined period of time. The premium compensates the insurer for bearing the risk of a pay out should an event occur that triggers coverage.
- *Taxes*: A fee charged ("levied") by a government on a product, income, or activity. If tax is levied directly on personal or corporate income, then it is a direct tax. If tax is levied on the price of a good or service, then it is called an indirect tax.
- *Financial cost* is the cost and interest and other charges involved in the borrowing of money to build or purchase assets. This cost is optional and depends on the financial structure of the company
- *End of life costs* are the attributed costs of handling with the waste generated.

### 5.3 Findings from an LCC analysis of case-studies

Studies on life cycle cost assessments carried out for food procurement and especially for catering services demonstrated that it is important not to consider the purchase costs in isolation, but instead the LCC including the operation, maintenance and even financial charges that can be involved in providing the service. In this way, the LCC approach allows public bodies to explore the costs and benefits of different catering services not just according to their investment costs but also their operational cost.

The following example shows some of the costs that a catering service, such as a restaurant, can face during its duration. The calculations below show that food purchase and labour costs are the most important ones.

**Table 6. Breakdown of the costs per serving of a catering service (example)**

Costs		Value		Percentage	
<b>Direct</b>	Served raw material	3.18 euro	3.66 euro	28.9 %	33.2 %
	Security margin	0.48 euro		4.3 %	
<b>Indirect</b>	Labour	6.39 euro	7.36 euro	58.0 %	66.8 %
	Utilities	0.12 euro		1.1 %	
	Amortizations	0.60 euro		5.5 %	
	Purchases	0.13 euro		1.2 %	
	Marketing	0.03 euro		0.3 %	
	Insurance	0.04 euro		0.4 %	
	Taxes	0.04 euro		0.3 %	
	Financial costs	0.02 euro		0.2 %	
<b>Total</b>		<b>11.02 euro</b>		<b>100 %</b>	

Another stakeholder sent a breakdown of the costs per serving of a catering service in a school in Madrid (Spain). The average total cost of the menu without organic products reaches 4.88euros.

**Table 7. Breakdown of the costs per serving of a catering service (example)**

Costs	% of the total
Labour cost of the kitchen staff	31,39%
Labour cost of the monitors and children carers	28,24%
Served raw material and security margin	26,53%
Utilities and insurances	4,44%
Logistics	2,13%
Amortizations	1,70%
Profits	1,77%
Utilities (energy)	1,90%
Purchases of tableware and kitchenware	1,90%
TOTAL	100,00%

The breakdown of this example is in line with the information published by PwC 2009 about the breakdown of the costs in the catering services of 7 Member States, as shown in Table 8

**Table 8. Cost structure for catering services in 7 Member states**

LCC relevant costs (%)	AT	DK	FI	DE	NE	SE	UK	Average
Labour costs	43	39	44	43	50	44	47	44.1 %
Food procurement costs	48	50	47	47	40	47	44	46.1 %
Other costs	6	6	6	6	6	6	5	5.9 %
Management fees	4	4	4	4	4	4	4	4 %

The breakdown of the costs provided in Table 6 can be modified if some of the criteria considered and presented in this revision are taken into board.

### 5.3.2 Food procurement

The breakdown of the costs showed in Table 6, Table 7 or Table 8 would remain unchanged for most of the categories when comparing the LCC associated with food products complying with the EU Food procurement criteria and the conventional food products. Only the cost of procuring the food in Table 6 and Table 7 (or the served raw material cost in Table 8) can be subject of change.

#### Organic food products

The literature reports that the differences in cost of organic and conventional products are large and that they depend on multiple factors such as the type of product, the location, the season, etc. Certified organic food products are in general more expensive than their conventional counterparts. Some of the reasons stated are that the organic food supply is limited as compared to demand, that the production costs are typically higher because of greater labour inputs per unit of output and because greater diversity of enterprises means economies of scales cannot be achieved, that post-harvest handling of relatively small quantities of organic food results in higher costs because of the mandatory segregation of organic and conventional produce, especially for processing and transportation and that the marketing and the distribution chain of organic products is relatively inefficient due to the smaller volumes.

The increase in the prices of organic foods claims that it does not only include the costs of production itself, but also a range of other factors that are not captured in the prices of conventional food. In this sense, it can be understood as a way to already account for possible externalities of the food production. Some of these issues are the environmental aspects related to the biodiversity and land use (as the organic production needs rotational periods which are necessary to build soil fertility), higher standards for animal welfare, avoidance of health risks to farmers due to inappropriate handling of pesticides, rural development by generating additional farm employment, etc.

Some studies quantify the cost difference in purchasing organic food products vs non-organic food products. The difference found by PwC 2009 for the 7 Member states are shown in Table 9

**Table 9. Cost structure for catering services in 7 Member states**

LCC relevant costs (%)	AT	DK	FI	DE	NE	SE	UK
Increase in procurement costs if organic food products are bought	1.03	1.02	0.11	3.80	1.13	0.41	2.55

This shows that the impact in the overall LCC of the catering services varies from a very modest 0.11% increase in Finland to a more significant 3.80% increase in Germany. Other studies report differences in prices per kg of food purchase of different product groups, as showed in Table 10

**Table 10. Wholesale increase in price of organic products in comparison to conventional products of different products in different member states.**

% increase of euro/kg	FI	DE	ES	CR	UK
<b>Coffee</b>	166	60	66	40	
<b>Tomatoes</b>	80	80	54.4	151	122
<b>Potatoes</b>	113	113	254	46	
<b>Chicken</b>	15	139	230	--	

Finally, a case study details the cost impacts of applying GPP criterion for 20% organic food products in school catering services in Lens, France. Organic menus proposed by the winning bidder were priced at 1.5 euro/meal, 8% higher than the 1.40 euro/meal for the equivalent non-organic option.

#### *Marine and aquaculture food products*

Economists expect a continuing strong growth in fisheries that will result both in higher supply and higher prices. World per capita consumption (round weight) is expected to increase 8% over the next decade, from 19 kg to 20.6 kg / person. Most of this growth will be supplied by aquaculture (by 2022 aquaculture is expected to increase by 35%) (undercurrentnews, 2013) surpassing capture fisheries and becoming the main source for human consumption by 2015.

In the latter half of the next decade, increases in fish and seafood prices are expected and consequently a slower growth rate of in seafood consumption. Fish product prices are projected to rise strongly over the coming decade as a result of strong demand, rising production costs and slowing production growth.

Today, and according to the study (Agrifoods 2014), the cost of certified frozen cod fillets are in average 12% more expensive than the non-certified products, i.e. 4.20 euros vs 3.75 euros per fillet (in SE). Due to the above described tendencies this difference is expected to be even higher in the coming future.

Some other sources of information provided an estimation of the price increase due to the certification that is approximately in line with the example reported some lines above. The certification considered in the Table 11 is MSC.

**Table 11. Cost differences per 1kg of white wild caught fish as standard product or certified product.**

Country	UK	FR	NO	DK	SE	DE	BE
<b>% difference</b>	1-2%	0-20%	10%	13%	23%	15%	20-30%

The influence that an increase in price in the aquaculture and marine food products have in the catering services in general depends on the amount of fish provided. According to information provided by some stakeholders, for example in a school menu, the amount of fish and meat served accounts for approximately 37% of the total cost of the meal (noted that meat products are in general more expensive than fish products). The overall influence of certified fish products is thus expected to be lower very low

#### *Animal welfare*

The prices of the food commodities are not expected to increase in constant prices. Exceptions to this forecast are the prices of beef (3%), pork (2%) and fish products (1%). Additionally, it has been shown that the cost of the meat and fish products in comparison to other ingredients is quite relevant and that this share can reach 37% of the total cost for a school menu. This means that the cost of the meat products is significant in the overall cost of the food procurement.

A study published in "A compassion in world farming" (2011) provides a breakdown of the additional farm-level production costs associated with higher welfare standards. The examples given pointed out that producing a free range egg cost 0.023 euro/egg more than a battery egg, adding straw and additional space for fattening pigs costs approximately an extra of 0.058 euro/kg of pork produced and that housing sows in groups rather than in sow stalls adds at most 0.022 euro/kg of pork produced.

Other sources of information reported that the costs differences between standard eggs and free range eggs depends on the location and the type of eggs provided. Some ranges are showed in Table 12.

**Table 12. Costs differences between standard eggs and free range eggs**

<b>Country</b>	<b>% difference per egg in shell</b>	<b>% difference per egg in liquid</b>
Belgium	30-50%	
Spain	54%	
UK	35%	35%
France	50% - 100%	35%
Norway	32%	
Denmark	57%	12%
Sweden	76%	64%
Germany	21%	245%
Hungary	173%	

These examples suggest that only the case of the eggs, the criterion will raise the overall food procurement expenses of a catering service. Indeed the prices of the meat products are expected to increase due to mainly other reasons. It should also be noted that the share of expenses in eggs is in most of the cases no very relevant.

Additionally, the percentage of difference between 1kg of meat of chicken and/or pork when a certification scheme is provided was also reported as showed in Table 13. The information provided by this source suggests that the certification of meat products have a higher impact of the food procurement than the previous estimation.

**Table 13. Costs differences between standard chicken or pork and certified one**

<b>Country</b>	<b>% difference per kg of chicken</b>	<b>% difference per kg of pork</b>
Belgium	30-40%	20-30%
Spain	120%	
UK	3%	3%
France	50%-150%	10%
Norway		
Denmark	104%	20%
Sweden	18%	18%
Germany	30%	30%
Italy	133%	
Hungary		143%

#### *Fairly trade*

The fairly trade minimum prices act as safety net if the prices of the commodity fall below the costs of sustainable production. In light of high production costs and the depreciation of its value in real terms, the fairly trade minimum price needed to be adjusted.

Some of the products under the fairly trade schemes are also organic products. These products require an organic differential to account for the higher costs of organic production and to provide an incentive for converting to and maintaining certified organic production. As prices for many commodities have risen, fewer farmers see value in seeking and maintaining organic certification even as demand is increasing. Therefore, most of the fairly trade schemes also include an organic differential

Finally the fairly trade premium is additional money above the selling price paid to organizations for use in social and business development projects that benefit the entire communities. To strengthen producer organizations and provide greater value to the members, the fairly trade premium was introduced.

As an example the additional fairly trade prices or premiums of the Fairtrade for coffee are shown in Table 14

**Table 14. Fairtrade minimum prices or premium for coffee (Fairtrade, 2011)**

Fairtrade minimum price	+ 1.40 USD/lb to provide a stronger safety net and increase access to pre-financing
Fairtrade organic price	+ 0.30 USD/lb to incentivize increased organic production
Fairtrade premium	+ 0.20 USD/lb including a 0.05USD/lb earmark for productivity/quality improvements

Considering the prices of conventional coffee in some member states in Europe in 2009 and the conversion factors between USD/lb to Euro/kg the percentage of increase due to these schemes can be estimated.

The results are shown in Table 15. These differences would have an impact in the vending machine services and especially in those that are focused in vending coffee. The prices increase is expected between 25 and 75% of the price of the conventional coffee and between 30 and 85% if the product is not only fairly trade but also organic certified.

**Table 15. Surplus in the prices of conventional coffee due to the fairly trade (FT) schemes certifications (USD/lb to euro/kg factor = 2.11). All the units in euro/kg of coffee**

Member state	Price coffee	FT minimum price	FT premium	% increase FT schemes	FT organic addition	% increase FT organic
Finland	13.80	2.96	0.63	26%	0.42	29%
Germany	10.36			35%		38%
Spain	9.36			38%		43%
Czech Republic	4.72			76%		85%

Other sources of information provide the additional increase in costs depending on the country where the products are traded and the kind of products. Some examples are given in Table 16

**Table 16. Costs differences between standard and fairly trade products**

Country	% difference/ kg coffee	% difference/ kg banana	% difference/ kg other products
Belgium			30-35%
Spain	20%		20%
UK		2%	
France		35%	
Norway	25%	44%	
Denmark	2%	15%	
Sweden	81%	16%	
Germany	22%	57%	
Hungary	139%	128%	

#### *Integrated production*

The European Commission (2014b) undertook a study on precision agriculture which reported that the potential benefits mainly focus on crop yield improvements, optimisation of inputs and improvement of the management and quality of the work. For example, the economic benefit of guiding systems in the UK to minimise the level of overlapping for a 500ha farm were at least 2.24 euro/ha. Benefits grow if more complex systems are adopted, which would lead to additional returns of 18-45euro/ha. In Germany, the economic savings of nitrogen fertilisation were calculated in the range of 10-25euro/ha.

From the context of the GPP criteria, the question is whether these savings are passed on to the foodservice sector but it can be concluded that integrated production is more likely to reduce food procurement costs rather than add costs.

#### *Conclusions*

The results of the analysis presented here shows that in general the organic products are more expensive than the non-organic products. This difference is also observed when an LCC approach is used to compare organic products vs conventional products since a higher expenditure in food procurement costs (or served raw materials) have an effect on the overall expenditure of the service. For some products the absolute price differences per cup or per serving are quite low and the share of the purchasing costs of the raw product at the total costs or selling prices

of the end product (cup or serving) are far below 10%, for the organic and the non-organic versions. It should also be noted that some externality costs of non-organic products are already included in the higher price of the organic food products.

The increase in the prices of fairly trade certified food products can be significant. It depends on the member state where the service is provided and the surplus suggested by the scheme. In a catering service for a canteen or restaurant, the increase due to the provision of fairly trade products does not seem to be relevant as the products covered by the criterion are not an essential part of the menu. In vending machines services, however, this criterion would have serious implications.

### 5.3.3 Promotion of vegetarian menus

The expenditure on meat represents an average of 28% of the food basket in EU-28 (SafeFood, 2015), being by far the category with the largest contribution to the expenditure. Therefore the potential saving is high when implementing a reduction of meat consumption.

A study conducted by Tukker et al. in 2009, compared the environmental impact and the expenditure on food for four diets (scenarios). Scenario 0 represents the status quo in 2003 in EU-27. In the other scenarios, the food basket has been slightly changed. From scenario 1 to 3 they enhance fruit and vegetables intake, and reduce progressively the intake of meat and animal fat; being the scenario 3 the most stringent in these reductions.

The expenditure for meat can be reduced about 3.5% if the scenario 2 is implemented. When implementing a total reduction of all meat from the diet, the savings can reach up to 10%.

**Table 17. Food expenditures on food products for 3 scenarios studied.**

E3IOT categories	'Scenario 0 — Food'	'Scenario 1 — Food'	'Scenario 2 — Food'	'Scenario 3 — Food'
	Final consumer expenditure			
Dairy farm products	0.29	0.29	0.29	0.26
Poultry and eggs	6.87	6.87	6.87	6.46
Miscellaneous livestock	3.79	3.79	1.59	1.56
Feed grains	0.43	0.43	0.43	0.43
Fruit	9.96	12.53	12.53	11.82
Tree nuts	0.95	0.95	2.39	1.54
Vegetables	18.00	21.14	21.14	21.97
Miscellaneous crops	0.002	0.002	0.002	0.002
Oil bearing crops	0.17	0.17	0.17	0.22
Greenhouse and nursery products	12.30	14.44	14.44	15.01
Commercial fishing	5.90	7.01	7.01	11.53
Beef packing plants	24.30	22.09	14.51	10.02
Sausages and other prepared beef products	10.20	9.27	0.00 (*)	4.20
Pork packing plants	25.60	23.76	15.56	10.55
Sausages and other prepared pork products	10.70	9.93	0.00 (*)	4.41
Poultry slaughtering and processing	41.00	41.00	50.84	52.84
Creamery butter	2.06	1.20	1.20	1.08
Natural, processed and imitation cheese	21.80	21.80	21.80	19.78
Dry, condensed and evaporated dairy products	8.27	8.27	8.27	7.50
Ice cream and frozen desserts	2.11	1.82	1.82	1.62

Fluid milk	27.40	27.40	27.40	24.86
Canned and cured fish and seafood	6.85	8.14	8.14	13.39
Canned specialties	1.89	1.89	1.89	1.89
Canned fruit, vegetables, preserves, jams and jellies	7.61	6.57	6.57	5.84
Dehydrated fruit, vegetables and soups	2.45	3.08	3.08	2.91
Pickles, sauces and salad dressings	1.84	1.84	1.84	1.84
Prepared fresh or frozen fish and seafood	9.22	10.96	10.96	18.02
Frozen fruit, fruit juices and vegetables	12.00	14.65	14.65	14.24
Frozen specialties, n.e.c.	3.70	3.70	3.70	3.70
Flour and other grain mill products	1.23	1.29	1.36	1.41
Cereal breakfast foods	9.21	9.69	10.19	10.55
Prepared flour mixes and doughs	6.12	6.44	6.77	7.01
Bread, cake and related products	27.40	28.82	30.31	31.39
Cookies and crackers	10.70	10.70	10.70	12.26
Frozen bakery products, except bread	3.61	3.80	3.99	4.14
Sugar	1.65	1.42	1.42	1.27
Chocolate and cocoa products	0.54	0.47	0.47	0.42
Salted and roasted nuts and seeds	0.78	0.78	1.71	1.21
Candy and other confectionery products	10.50	9.06	9.06	8.05
Malt beverages	9.99	9.99	9.99	9.20
Wines, brandy and brandy spirits	15.60	15.60	15.60	14.37
Distilled and blended liquors	3.93	3.93	3.93	3.62
Bottled and canned soft drinks	18.40	15.88	15.88	14.11
Flavouring extracts and flavouring syrups, n.e.c.	3.03	2.62	2.62	2.32
Roasted coffee	11.20	11.20	11.20	11.20
Edible fats and oils, n.e.c.	16.30	19.27	19.59	22.92
Manufactured ice	0.19	0.16	0.16	0.14
Macaroni, spaghetti, vermicelli and noodles	1.30	1.37	1.44	1.49
Potato chips and similar snacks	12.70	12.70	12.70	12.16
Food preparations, n.e.c.	5.27	5.27	5.27	5.27
Sum food products	447	455	433	444

Food prices in real terms are projected to rise strongly over the coming decade as a result of strong demand. Beef price will do an average of 13% higher, pork 16% higher and poultry meat 21% higher in 2013-22. When making the comparison with the average level of prices in a base period (2010-12), real price increases over the next decade will be 3% for beef, 2% for pork and 11% for poultry. Therefore, the savings before calculated could be higher if a reduction of meat consumption is implemented.

### 5.3.4 Avoidable food waste

The production of food waste occurs in all the stages of the food production and catering services. There are several studies reporting data on the amount of food waste, avoidable food waste and their costs. However, most of the studies remark the high uncertainties they are working with.

According to the study called "*Estimates of EU food waste levels*" (Stenmarck 2016) and their data provided at EU-28 level, the amount produced in each of the stages of a catering service including the food procurement and therefore its production is approximately that of showed in Table 18.

This study also estimates the cost of the food waste produced. The costs associated with food waste for EU-28 in 2012 are estimated at around 143 billion euros. Two-thirds of the costs are associated with food waste from households (around 98 billion euros) and then approximately 45 billion euros are associated with the food waste generated in the food production, distribution and service.

**Table 18. Estimated food waste (in mass and cost) at EU-28 level.**

Sector	Food waste (mTon/year)*	Food waste (kg/pers year)*	% food waste excl households	Cost edible food waste
Primary production	9.1 ± 1.5	18 ± 3	22.2 %	0.399 €/kg

Processing	16.9 ± 12.7	33 ± 25	41 %	1.490 €/kg
Wholesale and retail	4.6 ± 1.2	9 ± 2	11 %	2.738 €/kg
Food service	10.5 ± 1.5	21 ± 3	26 %	3.148 €/kg
Total food waste excl household			100 %	
Household	46.5 ± 4.4	92 ± 9		3.529 €/kg
Total food waste	87.6 ± 13.7	173 ± 27		

\*with 95%CI

Other studies also provide data and estimations on both the amount and the cost of food waste. For example the Credon et al (2010) associates the quantity and importance of each of the costs of the food waste generated with the policy and the type of service that the caterer wants to follow. If the caterer seeks the total and immediate satisfaction of the customers, the tenderer will have a tendency to over-buying, to increase the security margins of the stock, to overcooking and to serve larger quantities per portion and with a large variety. This strategic decision implies that the quantities of food products treated will be higher and consequently the associated costs. The only benefit from the economic point of view is that it triggers a lower price per food product unit thanks to a better position in the negotiations with the suppliers due to the scale economy.

This study provides a comparison of two catering services that have different policies. The first one does not have a food waste prevention policy while the second one does. If the first catering service is generating more than 3000 kg of food waste, a prevention policy will trigger a reduction of the amount of food waste generated. This reduction will have a positive effect in the total reduction of the food waste cost. The difference between both catering services is the approximately 4200 euro/year.

**Table 19. Possible savings if a food waste prevention policy is applied**

Costs	Without food waste prevention policy			With a food waste prevention policy		
	Kg waste	Euro/kg	Total euro	Kg waste	Euro/kg	Total euro
Direct	3014	3.06	9223	2162	3.06	6615
Indirect		6.15	18548		7.83	16928
Total		9.21	<b>27771</b>		10.90	<b>23577</b>

Some local governments estimated the costs of food waste as the Ministerio de Agricultura in Spain did. According to these data the average cost of the solid food in Spain is close to 3.06 euro/kg. If a catering service provides 800 g/meal, it needs to buy approximately 1200 g of food/meal. From this purchase, and as average 84 g will become avoidable food waste and 316 g will become unavoidable losses during the preparation, cooking and serving processes.

Therefore, it can be estimated that under the conditions of this example, if the catering service has a capacity of 120 meal/day, around 10 kg/day will become food waste at a cost of 31 euro/day. This means that the catering service generates approximately 3000 kg/year at a cost of 9200 euros/year.

From the social point of view, the food that is going to be wasted could be donated to collectives that cannot afford buying it. To do so, it is needed that the food is preserved from the preparation steps. The 'aprovecha la comida' (Universidad de Barcelona 2013) estimated the costs associated with the management of the food donation. This cost was calculated based on the costs incur by charitable organizations. They reported that the food waste due to the societal aspects could be considered as 0.13 euro/kg or 0.30 euro/kg. The first one is reported when the food is provided directly by the companies and the second one when the food provides from a European programme.

From the environmental point of view, the food waste triggers also additional costs. This cost could be estimated based on the emissions to the air and water that are produced when preparing, storing, serving and finally managing the waste of 1 kg of food. The study reports that as an average 1.98 t CO<sub>2</sub> equivalent is produced per ton of food. If an average ETS price of 13.9 euro / tCO<sub>2</sub>eq is considered, the food waste generation of 3000 kg will generate an extra environmental cost of approx. 83 euro/year (the extra environmental cost per kg will be 0.03 euro).

Table 20 shows the total costs of the food waste generation according to the example showed in Table 6 and Table 8. The figures of the example indicate the importance of the food waste. The cost of food waste (as raw material) is lower than half of the indirect costs and does not reach one third of the total processing costs.



**Table 20. Total estimated cost of food waste generation**

<b>Internal</b>	Direct	3.06 euro	9.21 euro
	Indirect	6.15 euro	
<b>External</b>	Societal	0.13 euro	0.16 euro
	Environmental	0.03 euro	
<b>Total</b>			<b>9.37euro</b>

Finally, a study undertaken by WRAP (2013) provided a breakdown of the total waste and highlighted the fact that many catering business simply focus on the cost of waste disposal when assessing the cost of the food waste being generated.

Table 21 provides a summary of the findings from the study and highlights that, when an LCC approach is taken, it is the costs associated with food purchase and labour that are the most significant and the costs associated with waste management are quite modest in comparison; equating circa 4% of the total cost of avoidable food waste.

**Table 21: The cost of avoidable waste in the UK foodservice sector (Source: WRAP 2013)**

<b>(€ cents /meal) in 2012</b>	<b>Private staff catering</b>	<b>Healthcare</b>	<b>Education</b>	<b>Services</b>
Food purchase	3.12	12.58	11.17	24.91
Energy	0.36	0.30	0.44	4.14
Water	0.01	0.04	0.06	0.97
Labour	2.58	12.49	14.19	18.86
Transport	0.01	0.07	0.04	0.02
Administration	0.11	0.46	0.41	0.90
Waste management	0.28	1.48	1.23	3.17
Consumable	0.01	0.04	0.05	0.02
<b>Total</b>	<b>6.47c€/meal</b>	<b>27.45c€/meal</b>	<b>27.60c€/meal</b>	<b>52.99c€/meal</b>

2012 £ to € av exch: 1.233263 (Ref: UKForex)

### Conclusions

There is a large variation in the estimated food waste production and food waste costs across Europe. Not only does it depend on the country but also in the type of catering service provided (e.g. size, intended guests, etc).

The estimation of the benefits of the Avoidable food waste prevention criterion included in this revision is therefore challenging. Summarizing the data collected and reported in this section, the following conclusion can be drawn: a reduction of food waste generation will always bring economic benefits to the catering provider. The amount of these economic benefits depends on the costs that are attributed to the food waste, in particular to the avoidable food waste. In all the cases, the cost of the food waste is significant when a LCC approach is used, going well beyond the waste management costs which in most cases are very modest when compared with the food purchase and the labour costs associated with the generation of the food waste.

### 5.3.5 Energy and water consumption in the kitchen

There are several studies in the literature that confirm that significant opportunities for energy efficiency exist in the contract catering sector. Defra (2013) identifies potential for energy savings of 43% from the behaviour change in cooking, 27% for behaviour change in dishwashing and 55% from improving control of extraction, 42% cost saving from replacing electric combis with gas combis, 19% from purchasing more efficient ovens, and 25% from purchasing more efficient refrigeration cabinets. Taken together these measures could reduce carbon emissions by around 33% and save the industry approximately 32% of the current energy costs.

Typically the catering tenderer pays for the equipment and invests in new equipment. This means that the caterer obtains no financial benefit from improved energy efficiency. Therefore either a new business model or additional incentives are needed for the sector that provides caterers with incentives to specify and use equipment efficiently, while providing clients with incentives to invest in the most efficient equipment.

Even if the biggest saving identified above is from the behaviour change, implementing widespread behaviour change in contract catering will be a challenge due to the large number of staff, the turnover of staff members, the focus on the core business of cooking and the indirect link to energy bills. As the behavioural measures are difficult to implement, the full potential of these measures is dismissed and the saving costs due to the replacement of the equipment becomes more relevant.

Table 22 provides the results of the Defra (2013) about the cost and benefits of implemented different measures in the catering services.

**Table 22. Summary of the cost-effective business cases for an average site in the catering sector**

<b>Measure (average site)</b>	<b>Implementation cost</b>	<b>Cost Reduction per annum</b>	<b>Payback time</b>
Behaviour change for cooking	600	1800	4 months
Behaviour change for dishwashing	200	300	8 months
Good practice – gas combi's ovens as preplacement for electric ovens	3000	1000	3 years
Good practice - more efficient ovens	2000	500	4 years
Good practice – improving control of extractors, with existing control	0	1300	immediate
Good practice – improving control of extractors without existing contro;	4500	2400	2 years
Good practice – refrigerator replacement with ETL standard	1100	700	1.5 years
Innovation – installation of sub-metering /transfer energy costs to caterer	3000	3500	1 year

Regarding the saving potentials due to the behavioural changes the following measures are named depending on the kitchen equipment under study:

- cooking equipment:

- equipment choices that could reduce energy use include: correct sizing of capacity, operational flexibility, low idle energy, high food energy efficiency and design features that facilitate good energy behaviour.

- aspects that drive energy use include: avoiding switching on equipment that is not immediately required, ensuring equipment is switched off when not immediately required, ensuring that equipment that is on is effectively utilised, especially ovens and the choice of cooking method.

- extractors

- the key factors driving the specified power of the extraction system include the choice of cooking fuel, the layout of the appliances, the fan efficiency and the system resistance to the overcome including any filtration requirements

- dishwashers

- optimize the time the dishwasher is on compared to the time it is operational. Long idle periods lead to increased electricity consumption by the electric heater.

- the impact of water quality on dishwashing energy consumption is also to be considered. Units performing in hard water areas might be proved to increase energy consumption through the fouling of the heater, as well as increased chemicals consumption

- refrigeration

- some points are reduce as much as possible the number of times that the door is opened, ensuring seals are maintained and heat exchangers cleaned, ensuring refrigerators have sufficient ventilation for their heat exchangers and decommissioning units if poorly utilised.

In more detail, the Defra (2013) provides comparisons and LCC for specific equipment used in the kitchen.

### Cooking equipment: ovens

Cooking accounts for 40% of the energy use. The study showed that the cooking equipment is not closely matched to the number of meals served. Most of the caterers have spare capacity for occasional large functions. Improving this aspect can save significant energy.

The study also provides the LCC for Combi steamers (a particular type of oven widely used in the catering sector). Table 23 shows the comparative costs over a 10 year life cycle for electric and gas combi ovens taken from the EuP study on ovens. The energy cost for an electric combi equals the purchase price over 10 years, while the energy costs for the gas combi are 42% lower. Based on this table, the additional purchase and install cost of the gas combi is paid back in lower running costs in less than 3 years, being significantly lower than the lifetime expected for the machines. This indicates that the investment is worth doing.

**Table 23. LCC for combi-steamers**

<b>EuP study: LCC over 10 years</b>	<b>Commercial electric combi-steamer</b>	<b>Commercial gas combi- steamer</b>
Product price	48 %	62%
Installation/acquisition costs	1 %	1%
Gas	0 %	24%
Electricity	17 %	8%
Water	2 %	2%
Repair and maintenance costs	2 %	3%

### Cooking equipment: hobs

The ovens associated with the hobs were generally not used, the kitchen having adequate combi oven capacity. The number of hour's use and duty cycle for the hobs is very variable, with most of them very lightly used. Therefore, the analysis of this equipment is not detailed in this section.

### Dishwashers

The information provided about the LCC of professional dishwashers is scarce. The EuP preparatory study identifies potential energy savings of 12-36% for dishwashers with the LLCC compared to the base case.

### Refrigeration

An average site has 70% of its refrigerated volume as fridges and 30% as freezers. The EuP preparatory study identifies potential energy savings of 52-62% fir refrigeration units with the LLCC compared to the base case. Advanced technologies such as magnetic refrigeration are probably some way from market.

## **5.4 Main conclusions and remarks**

The data should be carefully considered due to the likely high uncertainties of the data sources and differences in the sources they are coming from. Additionally, the implementations of different policy tools such as the reduction of meat consumption in the Italian schools to a minimum or the additional cost for preparing the food left-overs for distribution might distort the estimations in the Table. Therefore, the savings and additional costs cannot be added at the catering level column. Moreover, there are other potential cost savings that rely on the proper implementation of the energy and water consumption criterion (TS), the staff training criterion and the environmental management measures and practices.

Table 24 provides a summary of the LCC analysis and shows the level of trade-offs between the criteria that result in a reduction in LCC, such as meat reduction, food waste prevention or energy and water consumption in the kitchens and those that could incur in additional cost, such as those related to the food purchase. There are some criteria which effects could not be estimated due to the lack of data.

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implementation of the energy and water consumption criterion (TS), the staff training criterion and the environmental management measures and practices.

**Table 24: Concluding summary table.**

<b>Newly proposed GPP criteria</b>	<b>% difference applying criteria vs standard</b>	<b>Estimated significance at LCC level</b>		<b>% difference at catering level</b>
Organic food products	+ 2% to +200%	61% of the food procurement	33.2% of the overall catering cost due to food procurement	+ 0.4% to + 40%
Integrated production				
Marine and aquaculture food products	+5% to +20%	15% of the food procurement		+ 0.2% to + 0.9%
Animal welfare	+15% to + 50%	22% of the food procurement		+ 1.0% to + 3.6%
Fairly traded products	+2% to + 120%	--		
Promotion of vegetarian menus	0 to -10%			+ 0% to - 1.3%
Avoidable food waste				Approx.. - 5.9%
Energy and water consumption in the kitchen	- 42% replacing combi -19% efficient ovens - 25% efficient refriger.	1.1% of the overall catering cost	due to utilities cost	- 0.01% better equipment*
		5.5% of the overall catering cost	due to amortizations	

**Note:**

**This estimation is based on the data that the authors collected. The robustness and most of the particular details of the data sources are unknown. Therefore the uncertainty of this estimation is also unknown but it is expected to be very high and relevant.**

**The data collected have been used without making difference of the type of catering services they are coming from. There are catering services that have a similar distribution of the costs as presented here but there might be others that do not. These differences can be even more relevant if the catering service is provided under other conditions/assumptions.**

Most of the criteria proposed have a component that falls under staff training or environmental management measures and practices. Two particular cases are the criteria of energy and water consumption in the kitchens and the avoidable food waste criteria. A proper implementation of both the staff training and the environmental management measures and practices can bring additional economic benefits (even exceeding the cost of the training itself). Especially in the energy and water consumption criterion, a behavioural change of the staff can bring a cost reduction of up to 43% in cooking, 27% in dishwashing and 55% in the control of the extraction.

The fourth column has been calculated by multiplying the column 2 by the column 3 (contribution of that specific cost to the overall catering cost)

\* in some cases there is no central food production and the fresh food is cooked on the client's premises.

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## Annexes

### Annex 1. Example of the GPP for FOOD PROCUREMENT: criteria and verification documents

This section provides several examples of GPP food procurement tenders and of accounting documents or similar ones that the tenderers shall provide to demonstrate the compliance with the proposed criteria.

#### 1.1. Food procurement criteria

The Table 25 includes some of the proposed GPP criteria that can be included into a call for tender for purchasing FOOD. This exercise does not aim at providing a comprehensive call for tender for any particular collective. Indeed, the quantities and *list of food and drink products are not nutritionally balanced*. The only purpose of this section is to show how the compliance within the minimum percentages of each criterion can be calculated.

**Table 25 Example of GPP criteria that could be included in a comprehensive call for tender for FOOD procurement**

Criteria	Threshold	Verification
<b>Technical specifications</b>		
<b>Organic food products</b>	At least 30% in mass of the total purchases of food and drink products shall comply with the organic products standards	The tenderer shall provide data (name and amount) of food and drink products planned to be supplied in the execution of the contract indicating specifically the products that comply with organic requirements. Organic products that have been third party certified in accordance with Regulation (EC) No 834/2007 on organic production and labelling of organic products will be deemed to comply.
<b>Marine and aquaculture food products</b>	All fish and fish products must not contain species and stocks identified in Marine Conservation Society: a 'fish to avoid' list that reflects the local varieties of fish.	The tenderer shall provide data (name and the amount) of marine and aquaculture food products planned to be supplied in the execution of the contract indicating specifically the products that comply with the requirements.
	2. At least 20% in mass of the amount of marine food products purchases not complying with the organic food products criterion shall have been produced meeting the requirements of a certification scheme for sustainable production that is based on multi-stakeholder organizations with a broad membership and addresses environmental impacts including over-fishing or depletion, biodiversity and responsible and sustainable use of the resources <sup>2)</sup> .	
	3. At least 10% in mass of the amount of aquaculture food products purchases not complying with the organic food products criterion shall have been produced meeting the requirements of a certification scheme for sustainable production that is based on multi-stakeholder organizations with a broad membership and addresses environmental impacts including over-fishing or depletion,	

	biodiversity and responsible and sustainable use of the resources <sup>2)</sup>	
<b>Integrated production</b>	At least 30% in mass of the purchases not complying with the organic food products criterion shall be compliant with the integrated production standards and/or guidelines of a certification scheme for integrated production that is based on multi-stakeholder organizations with a broad membership, including producers and retailers and that addresses environmental impacts including pest, crop and waste management and conservation <sup>3)</sup>	The tenderer shall provide data (name and amount) of all food products planned to be supplied in the execution of the contract indicating specifically the ones compliant with the requirements.
<b>Animal welfare</b>	None of the eggs in shell are labelled code 3 of Regulation (EC) No 589/2008 or equivalent.	The tenderer shall provide the amount of the eggs in shell planned to be supplied in the execution of the contract indicating specifically the ones compliant with code 1 or 2 of Annex I part A to Regulation (EC) No 589/2008.
<b>Awarded criteria</b>		
<b>Organic food products TP: 25</b>	Points shall be proportionally awarded to tenders in which more than 30% in mass of the total purchases of food and drink products have been produced in accordance with Regulation (EC) No 834/2007.	See verification above
<b>Marine and aquaculture food products TP: 10</b>	Points shall be awarded proportionally to tenders in which more than 20% in mass of the amount of marine food products purchases not complying with the organic produce criterion have been produced meeting the requirements of a certification scheme for sustainable production that is based on multi-stakeholder organizations with a broad membership and addresses environmental impacts including biodiversity and responsible and sustainable use of the resources <sup>2)</sup> .	See verification above
	Points shall be awarded proportionally to tenders in which more than 10% in mass of the amount of aquaculture food products purchases not complying with the organic produce criterion have been produced meeting the requirements of a certification scheme for sustainable production that is based on multi-stakeholder organizations with a broad membership and addresses environmental impacts including biodiversity and responsible and sustainable use of the resources <sup>2)</sup> .	See verification above
<b>Integrated production TP: 25</b>	Points shall be awarded proportionally to tenders in which more than 30% in mass of the purchases not complying with the organic food products criterion have been produced in accordance with integrated production standards and/or guidelines of a certification scheme for integrated production that is based on multi-stakeholder organizations with a broad membership, including producers and retailers and that addresses environmental impacts including pest, crop and waste management and conservation <sup>3)</sup>	See verification above
<b>Animal welfare</b>	Points shall be proportionally awarded to tenders in which more than 80% of the eggs in shell not	See verification above

<b>TP: 5 (part 1) and 13 (part 2)</b>	complying with the organic food products criterion are labelled code 1 of Regulation (EC) No 589/2008.	
	Points shall be proportionally awarded to tenders in which more than 25% in mass of the total purchases of meat not complying with the organic food products criterion have been produced meeting the requirements of a certification scheme for animal welfare that is based on multi-stakeholder organizations with a broad membership and addresses aspects including the use of antibiotics, stunned slaughter, transportation times, grazing season for milk cows or no tail docking on pigs <sup>4)</sup> .	The tenderer shall provide data (name and amount) of the meat products planned to be supplied in the execution of the contract indicating specifically the ones that comply with the requirements
<b>Fairly traded products</b> <b>TP: 2</b>	Points shall be awarded proportionally to tenders in which more than 80% in mass of the total purchases of each of the following products: coffee, tea, chocolate (cocoa), sugar and bananas, have been produced and traded meeting the requirements of a certification scheme for fair trade that requires a minimum content of certified product of 90% and that is based on multi-stakeholder organizations and addresses international fairtrade standards including working conditions for production in accordance with ILO, sustainable trade and pricing <sup>5)</sup> .	The tenderer shall provide data (name and amount) of all coffee, tea, chocolate (cocoa), sugar and bananas planned to be supplied in the execution of the contract indicating specifically the ones compliant with the criterion.
<b>Environmentally responsible palm oil</b> <b>TP: 1 (each part)</b>	Points shall be awarded proportionally to tenders in which more than 30% of the units/items of pre-packed food products containing palm oil have been sourced from plantations that meet the requirements of a certification scheme for sustainable production that is based on multi-stakeholder organizations that has a broad membership, including NGOs, industry and government and that addresses environmental impacts including on soil, biodiversity, organic carbon stocks and conservation of natural resources <sup>6)</sup> .	The tenderer shall provide data (name and amount) of all food products containing palm oil (as units) planned to be supplied in the execution of the contract indicating specifically the ones compliant with the criterion.
	Points shall be awarded proportionally to tenders in which more than 50% in mass of the palm oil purchased as raw ingredient have been sourced from plantations that meet the requirements of a certification scheme for sustainable production that is based on multi-stakeholder organizations that has a broad membership, including NGOs, industry and government and that addresses environmental impacts including on soil, biodiversity, organic carbon stocks and conservation of natural resources <sup>6)</sup> .	The tenderer shall provide data (name and amount) of all palm oil (as raw ingredient) planned to be supplied in the execution of the contract indicating specifically the purchases compliant with the criterion.
<p><sup>1)</sup> The "fish to avoid" list is available on the MCS website: <a href="http://www.fishonline.org/fishfinder?min=5&amp;max=5&amp;fish=&amp;avoid=1">http://www.fishonline.org/fishfinder?min=5&amp;max=5&amp;fish=&amp;avoid=1</a>. Equivalent lists could be found from: WWF's Sustainable Seafood guides, IUCN, Seaweb Europe, CITES, FAO, NOAA, Monterey Bay Aquarium Seafood Watch, Greenpeace, etc.</p> <p><sup>2)</sup> Such as, e.g., the Marine Stewardship Council (MSC) for marine food products and the Aquaculture Stewardship Council (ASC) or Globalgap for aquaculture food products, provided they cover the environmental principles mentioned above. Other schemes at country level can be considered as equivalent as far as they comply with the environmental principles mentioned above.</p> <p><sup>3)</sup> Food products that have been certified in accordance with integrated production national or regional regulation will be deemed to comply. Other schemes such as Global GAP, IOBC, FSA with at least bronze equivalence, etc can show compliance with the criterion provided they cover the environmental principles mentioned above. Other schemes at country level can be considered as equivalent as far as they comply with the environmental principles mentioned above.</p> <p><sup>4)</sup> Products that have been third party certified by widely accepted and recognised standards such as e.g. Label Rouge, GlobalGAP with the add-on of Animal welfare, RSPCA Assured, Red Tractor Farm Assurance are deemed to comply.</p> <p><sup>5)</sup> Schemes such as Fairtrade®, UTZ, Bonsucro, etc. can show compliance with the criterion provided they cover the environmental principles mentioned above. Other schemes at country level can be considered as equivalent as far as they comply with the environmental principles mentioned above.</p> <p><sup>6)</sup> Schemes such as RSPO, ICCTS plus or RSB can show compliance with the criterion provided they cover the environmental principles mentioned above. Other schemes at country level can be considered as equivalent as far as they comply with the environmental principles mentioned above.</p>		

### 1.1.1. Accounting documents and compliance with the required criteria

An example of the accounting documents are shown in Table 26 and Table 27. Table 26 includes the list of food products that the tender expects to purchase during one year. Information about the expected number of kg and expected costs is also provided in the columns 6 and 7. Table 28 shows the minimum thresholds required in this call for tender as well as the percentages expected to be provided by the tenderer. Points have been distributed among the criteria based on possible costs and points awarded have been given proportionally.

**Table 26. Example of the expected purchases indicating those products that are expected to comply with some of the above criteria**

Name	Classification	Units/ kg	total units	Euro/unit	Total kg	Total cost	Organic food products kg	Other products
								label
COD FILLETS (24)	Fish	kg	200	10	200	2000		MSC
GOLDEN TIDDLERS	Fish	kg	200	6	200	1200		
SALMON FILLET SKINLESS (30)	Fish	kg	500	9	500	4500		ASC
SCAMPI	Fish	kg	100	15	100	1500		
BACON UNSMOKED BACK	Meat	kg	200	5	200	1000		GlobalGAP
BURGERS 4OZ	Meat	kg	400	5	400	2000		Label Rouge
CHICKEN DOUBLE BREAST	Meat	kg	100	3	100	300		
HAM SLICED	Meat	kg	200	4	200	800		GlobalGAP
LAMB LEG STEAK	Meat	kg	100	6	100	600		
LAMB CUTLET	Meat	kg	100	7	100	700		Label Rouge
SAUSAGE BREAKFAST	Meat	kg	100	5	100	500		
SAUSAGE IRISH	Meat	kg	100	5	100	500		GlobalGAP
SAUSAGE MINI PORK	Meat	kg	100	5	100	500		
STEAK GAMMON	Meat	kg	200	8	200	1600		Label Rouge
STEAK RUM	Meat	kg	200	8	200	1600		GlobalGAP
STEAK SIRLOIN	Meat	kg	200	8	200	1600		
APPLE&BLACKBERRY (12)	Sweets & Desserts	kg	200	10	200	2000		

Name	Classification	Units/ kg	total units	Euro/unit	Total kg	Total cost	Organic food products kg	Other products
								label
BAKED CHEESECAKE (12)	Sweets & Desserts	kg	50	10	50	500		
CHOCOLATE (cocoa)	Sweets & Desserts	kg	200	12	200	2400		Fair trade
ICE CREAM MOVEN ALL	Sweets & Desserts	kg	50	12	50	600		
PROFITEROLES 1X5	Sweets & Desserts	kg	200	6	200	1200		
STICKY TOFFEE PUDDING (12)	Sweets & Desserts	kg	200	5	200	1000		
WAFFLES BELGIAN	Sweets & Desserts	kg	400	4	400	1600		
X MANS PUDDING 1X12	Sweets & Desserts	kg	50	4	50	200		
APPLES GREEN	Fruit & Veg	kg	500	1.5	500	750	500	
BANANAS	Fruit & Veg	kg	500	1.2	500	600	500	Fair trade
BROCCOLI 2KG	Fruit & Veg	kg	300	1	300	300	300	
CARROT 2KG	Fruit & Veg	kg	1000	0.4	1000	400		produccion integrada andalucia
CAULIFLOWER	Fruit & Veg	kg	300	1.2	300	360	300	
CUCUMBER	Fruit & Veg	kg	200	1	200	200		produccion integrada andalucia
FZ MUSHROOMS	Fruit & Veg	kg	300	1.6	300	480	300	
FZ PEAS GARDEN (6)	Fruit & Veg	kg	500	1.3	500	650	500	
FZ POTATO MASHED	Fruit & Veg	kg	800	0.6	800	480	800	
FZ POTATO ROAST	Fruit & Veg	kg	800	0.6	800	480	800	
FZ POTATO SMILES	Fruit & Veg	kg	800	0.7	800	560		
MUSHROOMS BUTTON (2)	Fruit & Veg	kg	200	1	200	200		produca integrada
MUSHROOMS FLAT FIELD	Fruit & Veg	kg	200	1	200	200		produca integrada
ONIONS	Fruit & Veg	kg	600	0.8	600	480	600	
PEARS	Fruit & Veg	kg	500	1.5	500	750		produccion integrada andalucia
POTATOES NEW	Fruit & Veg	kg	800	1	800	800		produccion integrada andalucia
SALAD MIX (12)	Fruit & Veg	kg	2000	1	2000	2000	2000	
TOMATOES	Fruit & Veg	kg	1000	1.5	1000	1500	1500	
BUTTER PORTION (100)	Dairy	unit	500	0.1	5	50		see justification

Name	Classification	Units/ kg	total units	Euro/unit	Total kg	Total cost	Organic food products kg	Other products
								label
CHEESE BRIE (4)	Dairy	kg	150	12	150	1800		
CHEESE CHEDAR	Dairy	kg	150	12	150	1800		global Gap
CHEESE MOZ (10)	Dairy	kg	150	12	150	1800		
CHEESE STILTON	Dairy	kg	150	12	150	1800		
CREAM AEROSOL SPRAY	Dairy	kg	100	5	100	500		
EGGS (15)	Dairy	unit	500	0.12	40	60		code 1
EGGS LIQUID (12)	Dairy	kg	200	0.8	200	160		
MILK SEMI SKIMMED/FULL	Dairy	kg	1000	0.8	1000	800		global gap
YOGHURT ALL	Dairy	unit	3000	0.2	360	600		see justification
BAGUETTE TEAR	Bakery	kg	400	1	400	400	400	
BLOOMER BREAD (6)	Bakery	kg	400	1	400	400		
BREAD LOAF	Bakery	kg	400	1	400	400	400	
CROISSANTS (32)	Bakery	kg	200	1.2	200	240		
MINI MUFFINS	Bakery	kg	200	1.2	200	240		
TORTILLAS 6INCH	Bakery	kg	400	0.9	400	360		
GARLIC GRANULES	Herbs & Spices	kg	200	1	200	200	200	
MOROCCAN SEASONING	Herbs & Spices	kg	50	1	50	50		
PEPPER GROUNDS BLACK	Herbs & Spices	kg	20	1	20	20	20	
PEPPER GROUNDS WHITE	Herbs & Spices	kg	20	1	20	20	20	
PEPPERCORNS WHOLE	Herbs & Spices	kg	20	1	20	20	20	
SALT TABLE	Herbs & Spices	kg	300	0.1	300	30		
AMB. MAYONNAISE (2)	Sauces & Dressings	kg	50	10	50	500		
OLIVE OIL	Sauces & Dressings	kg	300	3	300	900		produccion integrada andalucia
TOMATO SAUCE	Sauces & Dressings	kg	1500	0.6	1500	900		produca integrada

Name	Classification	Units/ kg	total units	Euro/unit	Total kg	Total cost	Organic food products kg	Other products
								label
AMD. TARTARE SAUCE	Sauces & Dressings	kg	20	10	20	200		
SACHET BROWN SAUCE	Sauces & Dressings	unit	500	0.2	7.5	100		see justification
SACHET MUSTARD	Sauces & Dressings	unit	500	0.2	7.5	100		see justification
SACHET TOMATO KETCHUP	Sauces & Dressings	unit	500	0.2	7.5	100		see justification
BEV COSTA MOCHA ITALIAN	Dry Food	kg	1000	6	1000	6000		Fair trade
BEV COFFEE TI BLEND	Dry Food	kg	1000	6	1000	6000		Fair trade
BEV CON GOLD SACHETS	Dry Food	kg	1000	6	1000	6000		Fair trade
BEV. DOUWE EGGBERTS	Dry Food	kg	1000	6	1000	6000		Fair trade
BEV. TEA BAGS	Dry Food	kg	2000	3	2000	6000		Rain forest alliance
BISCUITS FOR CHEESE	Dry Food	kg	100	4	100	400		
BISTO GRANULES	Dry Food	kg	100	4	100	400	100	
CEREAL KELLOGS (32)	Dry Food	kg	300	4	300	1200		
CEREAL MUSELI (50)	Dry Food	kg	300	3	300	900	300	
CEREAL WEETABIX (50)	Dry Food	kg	100	1	100	100		
HONEY PORTION (100)	Dry Food	unit	1000	0.3	15	300		see justification
JAM PORTION (100)	Dry Food	unit	1000	0.3	15	300		see justification
JUICE APPLE	Dry Food	kg	2000	10	2000	20000	2000	
JUICE ORANGE	Dry Food	kg	2000	10	2000	20000	2000	
MARMALADE (100)	Dry Food	kg	100	5	100	500		
OIL SUMMER HARVEST	Dry Food	kg	200	1	200	200		
OIL PALM	Dry Food	kg	100	0.8	100	80		RSPO
PASTA RIGATONI	Dry Food	kg	1500	0.8	1500	1200	1500	
PASTA SPAGHETTI	Dry Food	kg	1500	0.4	1500	600		
RICE COCONUT	Dry Food	kg	1500	0.5	1500	750		produccion integrada com

Name	Classification	Units/ kg	total units	Euro/unit	Total kg	Total cost	Organic food products kg	Other products
								label
								valenciana
RICE GOLDEN	Dry Food	kg	1500	1	1500	1500	1500	
RICE TILDA	Dry Food	kg	1500	0.5	1500	750		produccion integrada com valenciana
SUGAR (15)	Dry Food	kg	500	1	500	500	500	Fair trade
SUGAR ICING	Dry Food	kg	100	1.2	100	120		
TIN PINEAPPLE RINGS	Dry Food	kg	300	0.8	300	240		
VINEGAR BALSAMIC	Dry Food	kg	50	1	50	50		
VINEGAR MALT	Dry Food	kg	50	1	50	50		
W NUTS DRY ROASTED	Dry Food	kg	300	3	300	900		produccion integrada com valenciana
W NUTS SALTED	Dry Food	kg	300	5	300	1500	300	
<b>TOTAL</b>					<b>43430</b>	<b>138680</b>	<b>17360</b>	

**Table 27. Calculations to demonstrate compliance with the technical specification criteria**

Criteria	Threshold	Total kg within compliance	Total kg in that category	tender proposal	compliance
Organic food products	30%	17360	43430	40%	YES
M&A Red list	100%	-	-	-	YES
M&A maritime	20%	200	1000	20%	YES
M%A aquaculture	10%	500	1000	50%	YES
Integrated production	30%	8000	12060	66%	YES

**Table 28. Calculation related to the awarded points of the awarded criteria**

Awarded criteria	Threshold	Total kg within compliance	Total kg in that category	Tender proposal	Total points	Points awarded
Organic food products	30%	17360	43430	40%	25	3.56
M&A maritime	20%	200	1000	20%	5	0.00
M%A aquaculture	10%	500	1000	50%	5	2.22
Integrated production	30%	8000	12060	66%	25	12.98
Animal welfare (eggs)	80%	400	500	80%	5	0.00



Animal welfare (meat)	25%	1300	2000	65%	13	6.93
Fairly trade products- chocolate	80%	200	200	100%	2	1.18
Fairly trade products- coffee	80%	4000	4000	100%		
Fairly trade products- tea	80%	40	40	100%		
Fairly trade products- sugar	80%	500	600	83%		
Fairly trade products- bananas	80%	500	500	100%		
Palm oil (units)	80%				1	0.00
Palm oil (ingredient)	80%	100	100	100%	1	1.00
<b>Total points</b>					<b>82</b>	<b>27.87</b>

As shown in the previous tables, the tenderer fulfils all the technical specifications criteria and achieves a score of 27.82 points out of 82. If the selection criteria requirements and the contractual performance criteria are met, the offer of this tenderer can be considered as a candidate.

**Annex 2. Table of stakeholder's comments on the scope and definitions, environmental hotspots**

This section presents the comments received through BATIS and personal communication from the 1<sup>st</sup> AHWG meeting to the 2<sup>nd</sup> AHWG meeting.

**Table 29. Feedback from the stakeholders on the TR1.0:**

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	As stated also in the previous position paper, ETL considers it important that the progress made on the knowledge on food sector and environmental impacts since the first GPP criteria set for food was established should be better taken into account while setting the stage for the new criteria. ETL believes that a constructive way forward with remarkable improvement and impacts is to create criteria that take into account all kinds of products and production methods.	<b>Acknowledged</b>
Reflection of environmental impact in the criteria	There is a detailed analysis on the key sustainability aspects related to foodstuffs included in the report. However, the results of this analysis are not properly reflected to the chosen set of criteria presented in the report.	<b>Acknowledged</b> It would be appreciated if the specific aspects would have been pointed out
	In all, the criteria should be based on objective and scientific basis that takes into account the whole life cycle of the product(s) in question. In this respect, also the difficulties related to the assessment of environmental impacts of foodstuffs should be recognized.	<b>Acknowledged</b> It was the intention of this revision.
GPP as a working tool	The criteria definition should be based on the principles of relevance and impact, i.e. what are the most useful criteria in order to reach the overall goal (improved environmental performance). If the focus is on marginal solutions, they rule the majority of food chain players and the corresponding volumes – as well as the related environmental improvement potential – out.	<b>Comment rejected</b> The scope of the GPP revision is to update the criteria that can be used by the procurer when drafting the specific calls for tenders. Procurers have the last word on which criteria should be included or should not and how many points should be awarded to each award criteria
Criteria drafting and scientific and other grounds	Discrepancy between the proposed criteria and the scientific analysis they should be based on. In the Preliminary and Technical report, the JRC conducts a thorough scientific analysis of sustainability hotspots in the lifecycles of food and drink products. Surprisingly, this analysis is only weakly reflected in the new GPP-criteria the JRC proposes. For example, despite scientific evidence indicating advantages and disadvantages to both organic and conventional agriculture, thereby underlining the importance of industry and science backed sustainable agriculture standards, GPP-criteria point to organic production as the best option because of availability and the fact that it is central to existing GPP-schemes. While it is possible that other considerations may be of relevance in the drafting of GPP-criteria in addition to scientific analysis, such as market availability, feasibility and societal demands, the main foundation of GPP-criteria should be objective and factual. We call upon the JRC to focus on the science, and leave societal or political considerations to governments	<b>Acknowledged</b> The aim of the GPP revision is to propose GPP criteria based on the scientific analyses of the sustainability hotspots in the lifecycles of food and drink products. However, several additional aspects should be considered when proposing the final wording of the criteria. some of these aspects are: - the criteria should be verified by the procurers, that sometimes lack the expertise for carrying out self-evaluation. Therefore, the proposed criteria should rely on third party certifications that ensure the compliance

	implementing the GPP-criteria.	with the criterion. - the procurers should assess the most suitable the limits/thresholds for each of the proposed criteria that are selected to be included in their call for tender. Therefore the information included in the explanatory notes should be considered as a guidance - the revision of the GPP takes into account other EC policy tools. Criteria are suggesting trying to enhance the harmonization among policy tools but especially trying to avoid contradictions among them.
Nutritional and sustainability aspects	Besides environmental impacts, nutrition and other broader sustainability issues are of relevance when talking about foodstuffs. A wider sustainability approach than limited focus on environmental aspects might serve this product group better. In that case, a clear definition on which dimensions of sustainability are addressed and when is needed.	<b>Comment rejected</b> The aim of the GPP policy tool is to focus on the environmental aspects. Other aspects related to the sustainability can be considered in the criteria whenever possible.
Verification	The GPP criteria should provide guidance more on the ends than a limited set of means. The overall goal of decreased environmental burden can be achieved in various ways, which should be reflected also in the chosen criteria. This approach would also encourage various actors to innovate new ways to improve the sustainability of food chain rather than adhering to a fairly narrow set of recognized means.	<b>Comment accepted</b> Several means of compliance have been suggested whenever possible.
Private sustainable schemes	Private sustainability schemes are overlooked in both criteria and verification. Since the first design of GPP policy and criteria, many private, public, public-private, national, European and international initiatives have been taken for sustainable food production and consumption. Some major initiatives are completely overlooked in both the Preliminary and the Technical report, such as the SAI Platform Farm Sustainability Assessment. This scheme is backed by major food manufacturers and retailers, builds upon the Integrated Production principles included in the GPP-criteria, and aligns with strong international sustainability standards. These and other privately-owned initiatives should be Acknowledged in addition to public IP-schemes, as means to operationalise the sustainable agriculture principles central to GPP, as it is within these initiatives real sustainability impact is made within international supply chains.	<b>Comment rejected</b> Major initiatives are considered as long as they fulfil the needed requirements to be used in this policy tool. To be included in the GPP schemes, the initiatives should, among other aspects count for: - thresholds that clearly address the environmental aspects identified as hotspots in this revision - means of verification that rely on third party schemes or that can be easily performed by the procurers even if they are lacking of expertise in the field.
Private sustainable schemes and SME	Product certification can be a bottleneck for both SMEs and large-scale production. A large number of Dutch food and drink companies are SMEs. When developing the new GPP requirements it is essential to consider the SME perspective. In the proposed GPP-criteria, the JRC focuses exclusively on product certification as verification means, which can be very challenging for SMEs. This also	<b>Comment accepted</b> There are several criteria which verification has been enlarged including private schemes in addition to the national regulations. This is the case of the criterion on

	goes for companies operating in large-scale and high-volume supply chains, in which certification of individual products is simply not feasible or adequate sustainable agriculture certification schemes are lacking. In order to allow for and encourage continuous improvement throughout the mainstream food and drink sector, credible industry-owned standards and verification methods other than product certification should be permitted to prove compliance with GPP-criteria, such as system verification or process certification.	integrated production. Additionally, most of the criteria that are proposed to be verify throughout a third party certification scheme include the wording "or equivalent", so that procurers feel free to include other schemes that they consider are suitable for this purpose.
Continuous improvement of GPP criteria	Green Public Procurement should spur continuous improvement. The sustainable production of food is a process of continuous improvement of environmental performance, social/ethical circumstances and economic welfare, throughout the food manufacturing process and throughout the food supply chain. GPP-criteria should reflect this improvement-driven approach and take into account overall environmental performance rather than prescribing specific techniques or labels. Moreover, the criteria setting should address improvements in the main environmental, welfare and social issues relevant to each product category.	<b>Comment rejected</b> The goal for continuous improvement of the companies is not part of the scope of the GPP tool. This is included in other policy tools such as EMAS.
	We welcome the breadth of the proposals and the broader range of products and services covered by the draft criteria.	<b>Acknowledged</b>
	It would be useful to align the ambition of certain categories such as vehicles and cleaning products with the relevant criteria sets for those products. There is no reason why they should be less ambitious here.	<b>Acknowledged</b>
Ambition levels	It would be useful if the ambition levels could be rationalised (e.g. why is the ambition level for integrated farming lower than that for organic farming? why is long distance transport included for fruit and not vegetables or fruit?)	<b>Comment rejected</b> Proposed thresholds are based on the available information.
Ambition levels	The supporting technical document needs to be completely reviewed to be any use in formulating GPP principles. We have already seen how "ambitious" public procurement managers in cities like Hamburg strictly apply the GPP rules and although well intentioned, effectively significantly increase the city's environmental impact AND reduce consumer choice. Please see the comments in the Technical report in attachments. I am also happy to supply LCA studies to substantiate the comments made.	<b>Comment accepted</b> The shape of the criteria has been significantly modified. The last proposal let procurers make the decision on the most suitable threshold for their area or service. Recommended values are included in the explanatory notes of each criterion but they are not mandatory to be applied.
Other	This needs to be more specific by identifying products with a lower environmental impact. Please add to the first bullet of the potential improvement area: "...including more plant-based foods."	<b>Acknowledged</b>
Ambition levels Links between criteria	In the public sector, catering services can be contracted to external providers (contract caterers) or can be provided in-house. Green public procurement (GPP) criteria should be applied equally among in-house catering and out-sourced contract catering providers to ensure a level playing field. Setting GPP criteria will not be environmentally beneficial unless there is adequate market	<b>Comment accepted</b> - See above concerning the thresholds included in each criterion - Some criteria have been included in the Catering

	<p>availability of the products specified at a price that is affordable within the budget of the tender. Many of the sourcing requirements proposed will create a price premium because these are niche products for which there is limited market availability. The reliance on third-party certified products to prove verification is another factor that contributes to the price premium since producers must pay third-parties for certification.</p> <p>When establishing GPP criteria, it must be borne in mind that while the EU states that GPP is voluntary for public authorities, it has been made mandatory for public authorities in at least one EU Member State. When a public authority includes GPP criteria in the tender, it is mandatory for the contract caterer to comply and contract caterers can face fines if they are not able to fulfil the criteria in the contract. Such fines are perceived as being disproportionate when non-compliance is due to a lack of market availability. Setting criteria for which the ambition is beyond the market availability and affordability only results in non-compliance, and there is no environmental benefit. We urge the Commission to set criteria that is realistic and achievable for all EU countries.</p>	<p>service that allow for balancing the premium price to be paid for the compliance of some other criteria. For example, the purchase of organic products or fairly traded products can be balanced by a reduction of red meat, substitution of animal proteins by bop-based proteins, etc...</p>
	<p>Question: How much do public authorities spend on procurement of food?</p>	<p>Not known</p>
<p>TS vs AC</p>	<p>The EEB has consulted the draft criteria set for food and catering services together with its member organisations and other environmental NGOs. We recommend that the proposal should be improved with regard to the following points of concerns which are outlined in further detail in the attached position paper.</p> <p>Although in general the EEB welcomes the scope and contents of the proposed GPP criteria set for food and catering services, we would like to point out that there is a need to highlight those criteria with the biggest potential to reduce the environmental impact and to avoid trade-offs with less relevant requirements for the procurement process. Environmental NGOs clearly prioritize ambitious criteria on food procurement, menu planning and training for catering services, including measures to reduce food waste.</p> <p>Additional requirements e.g. on environmental management measures and practices, equipment and vehicle fleets should be considered in general only as award criteria. This should be done in a balanced way that does not penalize or even discriminate against small and medium size companies (SMEs) that have an outstanding performance on the above mentioned key criteria for food and catering services but cannot afford certain investments, monitoring and certification procedures to fulfil the tender specifications.</p> <p>Finally, the EEB would like to request clarification on a possible gap between the two criteria sets proposed. We need to ensure that a public procurer for food products who does not contract a catering service (but e.g. runs an in-house canteen or cafeteria) also has to meet certain requirements that are only listed for catering services such as menu planning and prevention of food waste for example. If this topic has not been addressed yet e.g. in the scope definitions, the JRC</p>	<p><b>Comment partially accepted</b></p> <p>The selection of the criteria and ambition levels to be included in the call for tenders is eventually in the hands of the procurers.</p> <p>The classification of a criterion as TS or AC is based on several aspects in addition to the effectiveness of the criterion to address the corresponding hotspot. These aspects can be found in the guidance for developing GPP schemes.</p> <p>Not only have procurers the freedom to choose those criteria and ambition levels that fit their purposes but they should be also award of the type of service that they want to purchase. It is not the same the purchase of the food products than the purchase of catering services. It should be also kept in mind that there are multiple types of catering services.</p>

	should definitely consider it for the updated version of the technical report.	
LCA, scientific evidence	To be sure that the defined criteria EFFECTIVELY helps public authorities to reduce their environmental impacts, the criteria must be designed based on robust scientific assessment (i.e life cycle assessment) and not on beliefs/assumptions/perceptions. Indeed a product might have higher environmental impacts during its production stage, but designed in a way to reduce the impacts occurring during the use phase, including avoiding food wastage	<b>Comment partially accepted</b> Wording of the criteria has been modified.
Green vs sustainable	Using the term Sustainable Production Policy (SPP) and SPP criteria would allow for a more comprehensive and complete approach for the establishment of criteria aimed at improving the sustainability performance of procured food and drink products. We would therefore recommend the European Commission to facilitate the relevant process for an eventual modification of the term green for sustainable when addressing public procurement of food and drink products.	<b>Comment rejected</b> The scope of the GPP is stated in the corresponding regulation. This policy tool addresses mainly the environmental aspects will the SPP is another tool with a broader scope.
	Although the scope of GPP is focused primarily on reducing environmental impacts, it is important to acknowledge that the sustainability concept is much broader and includes economic, socio-cultural and ecological impacts.	
Voluntary vs mandatory tools	Proposed criteria should not be considered voluntary for providers of food as once it is adopted by a public authority it becomes mandatory for the tenderer.	<b>Comment rejected</b> GPP is set as a voluntary tool and like so should be considered.
Selection criteria	The selection criteria for the procurement of catering services referring to environmental management measures and practices should include GMOs-free production practices	<b>Comment rejected</b> No criterion is included requesting the purchase of GMO-free products. reasons for that are - most of the GMO products that are consumed in the EU market are feed for the animals, only soya can be considered as a relevant food product - the environmental risk assessment is carried out by EFSA in accordance with the Guidance Document on the ERA of GM plants and Directive 2001/18/EC. The studies are carried out in a case-by-case base and only those considered as safe are allowed to enter into the EU market.
GMO	Please add GMOs-free products both animal and plant based	
	In Vienna´s ÖkoKauf food procurement programme, TS for food products from conventional origin, GMO-free products are mandatory prescribed. In organic production, GMO-free is automatically set by EC Reg. 834/2007. We will add another criterion referred to GMOs-free, both for animal and plant-based products.	
Environmental hotspots	Under name categories please add: Local food products – support diversity in food system and economic growth for farming communities.	<b>Comment rejected</b> Local food products are not considered any longer in the criteria set.
	please add no antibiotics use	
	Please add soil degradation and potential run-off of excessive nitrogen into near-by waterways in	

	monoculture	
	please add another point: preservation and economic stability of local fishing communities	
	<p>Various policy instruments and industry-led voluntary initiatives have been introduced or are under development (see examples in the paragraphs below). Therefore we suggest that a thorough update of the proposed TR is conducted in order to understand the current state of play.</p> <p><i>The sustainable production of food is a process of continuous improvement of environmental performance, social/ethical circumstances and economic welfare, throughout the food manufacturing process and throughout the food supply chain.</i> We believe therefore that the setting of GPP criteria should reflect this improvement-driven approach and take into account overall environmental performance rather than prescribing specific techniques (e.g. organic production). Moreover, the criteria setting should address improvements in the main environmental, welfare and social issues relevant to each product category. <i>Criteria should be set on an objective, scientific basis and take a whole life-cycle approach.</i> The availability of a robust and science-based environmental assessment methodology applicable to food and drink products should be an essential pre-condition for the development of these criteria. In this regard the review should take into account the learnings from current food sustainable consumption and production initiatives such as the ongoing Environmental Footprint Pilots [1] and the deliverables of the European Food Sustainable Consumption and Production Round Table [2] on : Environmental assessment methodologies: The ENVIFOOD Protocol [3]; Communication tools: Guiding Principles on the voluntary provision of environmental information along the food chain [4]; Continuous environmental improvement: European Food SCP Round Table Working Group 3 report [5]; ‘Non-Environmental Aspects of Sustainability’: European Food SCP Round Table Working Group 4 report [6]</p> <p>[1]<a href="http://ec.europa.eu/environment/eussd/smgp/pef_pilots.htm">http://ec.europa.eu/environment/eussd/smgp/pef_pilots.htm</a>  [2]<a href="http://www.food-scp.eu/">http://www.food-scp.eu/</a>  [3]<a href="http://www.food-scp.eu/files/ENVIFOOD_Protocol_Vers_1.0.pdf">http://www.food-scp.eu/files/ENVIFOOD_Protocol_Vers_1.0.pdf</a>  [4]<a href="http://www.food-scp.eu/files/Guiding_Principles.pdf">http://www.food-scp.eu/files/Guiding_Principles.pdf</a>  [5]<a href="http://www.food-scp.eu/files/Continuous_Environmental_Improvement_FINAL_21_November_2012.pdf">http://www.food-scp.eu/files/Continuous_Environmental_Improvement_FINAL_21_November_2012.pdf</a>  [6]<a href="http://www.food-scp.eu/files/Non-Environmental_Aspects_of_Sustainability.pdf">http://www.food-scp.eu/files/Non-Environmental_Aspects_of_Sustainability.pdf</a></p>	<p><b>Comment partially accepted</b></p> <p>The criteria proposed are based on the information collected that combines the economic and environmental performance of the different food products.</p> <p>The suggestion of setting the objectives in the criteria wording instead of setting the methods to be applied makes extremely difficult the verification process. This limitation is so significant that prevent us to go in that direction.</p>
	Product quality should not be a factor in GPP	<b>Acknowledged</b>
Product group categories	<p>Food categories: mineral water and soft drinks are mentioned. In school catering we avoid soft drinks as much as possible because of health reasons. Mineral water is not purchased because it is a policy to let everybody use tap water.</p> <p>Foodservice segments:</p> <p>Caring homes: be careful with elderly people and disabled people because of the habits they have. In the elderly homes of the city fair trade, organic, vegetarian, etc. isn't that popular because the elderly are not use to it. They focus on making rich food that tastes good. The elderly stay</p>	<b>Acknowledged</b>

	<p>approximately 2 years in the homes. The elderly homes will probably need more time before GPP will be possible. The likeliness of GPP being possible will increase over time as future elderly are expected to be more accustomed to vegetarian food, fair trade products, etc.</p> <p>Armed forces: does that include police and fire brigades? For example our professional fire brigade cooks themselves a meal every day, so GPP can be interesting for them.</p> <p>Ready prepared: the food can also be reheated (if necessary). For example: for school catering the meals are ready prepared, but they are stored chilled so we have to reheat before use.</p> <p>Assembly-serve: the food is reheated (if necessary) -&gt; for example: a dish with puff pastry can't be reheated - you have to bake it in the oven. If you serve steak, then you can't reheat it - you have to cook it. Maybe it is better to write that the food has to be cooked/reheated (if necessary)?</p> <p>Besides ready-prepared there should also be a category for further preparation schemes like (Cook-and-serve; cook-and-chill) since there are significant environmental impacts regarding these different schemes.</p>	
	<p>All the food categories relevant for the foodservice segments are relevant for the procurement. There should additionally be category for processed products. To get offers also from local producers there must be possibility to provide products for example into one food category instead of whole food group.</p> <p>In all these food categories there is possible to tender organic products. To get good quality and local products you must compile quality requirements for all products.</p>	<p><b>Acknowledged</b></p> <p>Processed food is made of ingredients that should comply with the criterion proposed. It does not seem to be needed to set up criteria for each product category as they will fall in one or more of the proposed criterion.</p>
	<p>The "Food service" or "End user/consumer" category should include how food is advertised to the customer base, e.g. plant-based options, to promote sustainable consumption choices. Without this, a major opportunity to help shift procurement practices will be overlooked.</p>	<p><b>Comment rejected</b></p> <p>The scope of GPP does not cover the marketing logos to be used or information to be provided to the consumers on nutritional aspects</p>
Product group categories	<p>The food categories should be expanded to recognise new innovations that do not necessarily fit in traditional categories but that offer significant potential for sustainability improvements. One example would be a category for plant-based meat alternatives.</p>	<p><b>Comment rejected</b></p> <p>The food categories proposed as based on the traditional classifications. Alternative classifications could be used as long as they are large accepted.</p>
Product group categories	<p>Why wine was not included? Why separate schools from kindergartens (I think this is the correct designation instead of kinder gardens?) and nurseries. It seems to me the same type of food service.</p>	
Food procurement vs catering service purchased.	<p>Criteria for direct procurement of food and procurement of catering should be approached differently.</p> <p>For food it is important to look at the division into different tenders (and thus different suppliers) - you can set the bar high for a specific product range of a separate lot. For catering you need a more general approach and it should be a process towards more sustainability.</p>	<p><b>Comment accepted</b></p> <p>The wording of the criteria has been modified to let procurers to focus on their points of interest and to set the ambition levels that they consider best</p>



Environmental hotspots	Please add the contamination of water through the use of inputs such as antibiotics and pesticides common in aquaculture systems	<b>Comment accepted</b>
	Please add: " <i>contamination of near-by waterways or cross-contamination of agricultural fields where manure from meat operations where pharmaceuticals used for growth promotion or antibiotics are used. Development and spread of antibiotic resistant bacteria due to overuse and misuse of antibiotics.</i> "	
	It is not enough to only include environmental hotspots in this table. Other relevant social development considerations, including animal welfare, should be included, as recognised in this report. This includes relevant categories of animal products that completely ignore animal welfare, despite the inclusion in the preliminary report (see, e.g., p. 194, section 3.2.1.4).	<b>Comment rejected</b> Even if some of the criteria proposed address hotspot beyond the strictly environmental ones, the section focuses on the environmental impacts/
	As with the summaries in the preliminary report, there should be some <i>focus on the relative magnitudes of the environmental hotspots for different product categories</i> . Generalised as it is currently presented discounts some significant impacts, particularly from animal product categories. Without more, looking at this table, one might incorrectly think that the environmental impact hotspots of fruits and vegetables are on par with those of animal products. This could lead to incorrect conclusions and poor efficacy of the GPP Guidelines. An additional graph showing some of the relative impacts would be useful here. For example, animal agriculture is responsible for approximately 14.5% of human-induced GHG emissions globally. According to a report from the Netherlands Environmental Assessment Agency, farm animal production is responsible for approximately 30% of terrestrial biodiversity loss globally. And the impacts and mitigation through consumption changes is significant for Europe, as well. Another report, Nitrogen on the Table: On Nitrogen Emissions and the European Environment, said that animal agriculture was related to over 80% of the EU's ammonia, nitrate, and nitrous oxide emissions from agriculture. Halving consumption of animal products could nearly halve European agricultural reactive nitrogen. Further, a just-released study shows global economic savings based on public health and environmental improvements from more plant-based foods. Such potential co-benefits should be included here.	<b>Comment accepted</b> Revision of the wording has been carried out
	Main environmental hotspots for Food and Catering Services: Meat, Milk and cheese, Eggs and Animal feed production Impacts on water use and pollution are glaringly absent from the environmental hotspots in Table 5. This is particularly significant for animal products, since animal agriculture uses significant amounts of the water supply available to humans globally. For example, in terms of protein, the water footprint is six times bigger for beef, and one and a half times larger for chicken, eggs and milk, than it is for legumes. Not only are water supplies shrinking, the farm animal sector is increasingly polluting the available water. According to the FAO, " <i>The livestock sector...is probably the largest sectorial source of water pollution, contributing to eutrophication, 'dead'</i> "	<b>Comment accepted</b> Revision of the wording has been carried out

	<i>zones in coastal areas, degradation of coral reefs, human health problems, emergence of antibiotic resistance and many others."</i>	
Environmental hotspots	In the Preliminary report, the JRC conducts a thorough scientific analysis of sustainability hotspots in the lifecycles of food and drink products. We understand this analysis should be prominently reflected in the GPP-criteria setting (see for example below comments on organic production).	<b>Comment accepted</b>
Environmental hotspots	Main environmental hotspots: Fruit: can refrigeration be added? Vegetables: can long distance transport (see fruit) be added? Oils and fats: isn't land use an issue here also? Hot drinks: coffee and cocoa (there are only drying tea leaves) are not included, and transport is probably also an issue here? Overview environmental hotspots: Fruit: biodiversity is important. Can you add mono-culture? Main environmental hotspots: cold drinks: what about heavy duty cleaning in the bottling process	<b>Comment partially accepted</b> The table with the environmental hotspots has been modified aiming to provide clearer information.
Environmental hotspots	We would like to propose in Food section " <i>Technical specifications</i> " to provide additional GPP criterion " <i>Sustainable food delivery</i> ", delivery of the environmentally friendly products from the place of production in a way that reduces the air pollution by exhaust gases and load on the road infrastructure.	<b>Comment rejected</b> A criterion on transport is set in the catering service criteria. procurers can mirror this criterion if they consider that it is appropriate for their purposes
	Sustainable deforestation = sustainable land use	<b>Comment rejected</b>
	Main improvement potential is better land use, no deforestation and social/labour standards	
	In the list of "...organic, IP, seasonal, more sustainable products" " <i>regional p.</i> " should be added, due to their generally minor " <i>CO<sub>2</sub> rucksack</i> "	
Food catering services vs	To us, most of the key sustainability aspects would seem to apply to both the " <i>Food procurement</i> " and " <i>Catering services</i> " categories. For example, animal welfare criteria should be a part of food procurement and catering decisions, yet it is absent from the latter here. Similarly, procurement of products with lower sustainability footprints, for example more plant-based foods, is important to both categories, yet it only appears vaguely in the " <i>Catering services</i> " category. HSI believes animal welfare and selection of more plant-based foods are appropriate for both areas.	<b>Comment rejected</b> The Catering service criteria set include a criterion food procurement that encompasses all the criteria included in the Food procurement criteria. therefore it is not need to repeat all the criteria in the catering service set
	Unfortunately, the TR carries over the environmental and ethical categories as singular considerations from the Preliminary Report, for example sections 4.5.1.6 and 4.5.1.7 on less meat and animal welfare. However, the best GPP opportunities lie in choices that maximize co-benefits and avoid or mitigate negative trade-offs. This is particularly important for animal-derived products in both production criteria and consumption choices. On the production side, for example, opportunities to improve animal welfare and climate change impacts exhibit areas of co-benefits and trade-offs. Shields and Orme-Evans (2015) outline these areas and show that a number of opportunities to achieve co-benefits exist. Unfortunately, the Preliminary Report (section 4.5.1.7)	<b>Acknowledged</b>

	<p>only mentions trade-offs. Instead, the GPP criteria should seek and support co-benefits. This is similarly important on the consumption side, where some animal products may have lower relative environmental impacts than others but also have worse impacts for animal welfare, A more holistic analysis of combined impacts would make clearer the better ethical and environmental consideration of plant-based options, and allow for more sustainable procurement choices overall. Finally, identification of innovative approaches, for example through the INNOCAT report, as well as areas in need of further research, should be identified. These should be included in both the aspects and improvement area portions of Table 6.</p>	
	<p>Using terms such as green or environmentally friendly in several sections in the TR does not comply with ISO 14021:1999 self-declared environmental claims (Type II environmental labelling). ISO states that <i>“an environmental claim that is vague or non-specific or which broadly implies that a product is environmentally beneficial or environmentally benign shall not be used”</i>. This concept neither complies with the Commission’s guidance on the implementation/application of Directive 2005/29/EC on Unfair Commercial Practices [1] and Guidelines on environmental claims [2]</p> <p>[1] European Commission Directorate-General Health &amp; Consumer Protection, Guidance on the implementation/application of Directive 2005/29/EC on Unfair Commercial Practices, 3 December 2009, SEC(2009)</p> <p>[2] European Commission, Directorate-General Health &amp; Consumer Protection. Guidelines for Making and Assessing Environmental Claims. December, 2000</p>	<p><b>Comment accepted</b> Wording has been amended. The Type II for environmental labels is not accepted as proof of compliance with the criteria due to the lack of external verification.</p>
Link among criteria	<p>FoodDrinkEUrope supports the proposal to introduce a new criteria on food waste reduction in catering through training and food waste minimisation plan</p>	<p><b>Comment accepted</b></p>
	<p>In the first instance, organic production should be clearly acknowledged as the only farming system that is a legally recognised and certified standard for production and labelling and marketing in more than 80 countries or regions including the EU-28. This should be clearly highlighted in the criteria and better reflected in the overall technical report. This harmonised approach is further developed in different Member States through national and private standards which reflect the specific cultural, structural, geographic and climatic diversity of individual countries and regions and helped to pioneer further progress in sustainability.</p> <p>In some cases, organic standards for mass catering have been developed in a number of Member States. Given the limited intra-community trade and national specificities, organic mass catering standards remain outside the scope of the EU regulation on organic production and labelling of organic products.</p>	<p><b>Comment accepted</b></p>
Green vs sustainable criteria	<p>Although the scope of GPP is focused primarily on reducing environmental impacts, it is important to acknowledge that the sustainability concept is much broader and includes economic, socio-cultural and ecological impacts</p>	<p><b>Comment rejected</b> In accordance with the GPP regulation environmental aspects should be addressed first. Other sustainable aspects can also be covered on voluntary basis</p>

### Annex 3. Table of stakeholder's comments on the propose criteria for EU GPP criteria for Food procurement

This section presents the comments received through BATIS and personal communication from the 1<sup>st</sup> AHWG meeting to the 2<sup>nd</sup> AHWG meeting.

#### 3.1. Organic food products

This section presents the comments received through BATIS and personal communication from the 1<sup>st</sup> AHWG meeting to the 2<sup>nd</sup> AHWG meeting.

**Table 30.** Feedback from the stakeholders on the TR1.0: Organic food products (TS1 and AC1)

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
Criteria overview	This should be the (a) goal that should be mentioned in the criteria. Organic is not the goal. Organic is the label to verify that this goal is realised. An integrated Production label can be another possibility.	<b>Comment partially accepted</b> The wording of the criterion tries to follow the standard wording; which most of them do not include the goals to be achieved. Labels are the tools to verify the criterion. IP is another criterion. Contrary to the procurement purchase schemes (private), the Regulation (EC) No 834/2007 complies with the requirements set in the Public Procurement Directive to be required directly.
	Sometimes better to specify what products are of interest, i.e. only accept organic milk and organic and/or ethically certified bananas for food products.	<b>Comment rejected</b> By setting a general threshold (not specific thresholds depending on the type of food products), flexibility is given to the tender to choose those products that are available in his/her area and that better meet the requirements of the criterion
	Farming methods that aims to have a low impact on the environment (e.g. no or low pesticide use and no synthetic fertiliser use). (Working with ecosystems). Organic production is regulated by Council Regulation (EC) No. 834/2007. All organic food, both fresh and processed fall under this regulation.	<b>Acknowledged</b>
Certifications and verification	SMEs represent 99.1% of Europe's food and drink companies [Eurostat 2011]. When developing the new GPP requirements it is essential to consider the SME perspective. For example <i>focusing exclusively on product certification as a core criterion for verification of the GPP requirements,</i>	<b>Comment partially accepted</b> The verification of the organic food products can be carried out by any third party verified schemes that complies with

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>whilst it might benefit larger food chain players, <i>may present financial barriers for SMEs. Both SMEs and larger food chain players should be able to prove to tendering governments they meet GPP criteria in a verifiable and objective manner.</i> Product or process certification should therefore be considered as one means to verify such compliance and not the only option. <i>Other tools should be permitted to prove compliance with these criteria.</i></p> <p>We wish to stress the importance of public procurers carefully monitoring targets overtime, so that goals to reach a certain percentage of organic can be met. It is important to note in the case of catering, as there is no obligation to certify mass catering, there is no solid basis to control the percentage to be achieved. If mass catering is to remain outside the scope of the EU organic legislation, encouraging the uptake of legally binding obligations, at national and regional level, can be a means to better control the procurement of organic products.</p>	<p>the requirements set in the Regulation (EC) No 834/2007. Even if the certification implies additional costs for the companies, it is a reliable tool to check and communicate the nature of the product.</p> <p><b>Acknowledged</b></p>
Catering vs food procurement	<p>A demand of percentage is only relevant when a mixed range of products (or a catering service) is procured. When a unique product is procured, it is either 0% organic or 100% organic. A percentage can be set as a goal for the whole procurement policy (when monitoring is possible). Specifications can be made on product level in the inventory of the tender. A fixed percentage can't be copied in every (food) tender. 25% / 50% as an overall goal will stimulate sustainable production methods. One might discuss the feasibility of this percentage, but since the guideline is voluntary, I think it is necessary to set the bar high enough. The guidelines should state out how to incorporate more organic within the general policy.</p>	<p><b>Comment partially accepted</b></p> <p>The percentage of organic products is considered the broader approach to cover the diversity of public procurement across Europe. Additionally, even if only one product is purchased, a percentage could make sense if this product is a perishable one purchased along the year. Some batches can consist of organic product and some others do not.</p>
Ambition levels	<p>Professional kitchens are important factor in increasing the organic market because of their big usage volumes. There for it is important that the ambition levels are set high enough. <i>We agree that percentage set to 25% (core) and 50% (comprehensive) are ok and these levels are feasible.</i> In Finland the public kitchens personnel are very interested to increase amount of organic products. At the moment organic food is difficult to get because lack of availability and higher price than conventional products. Therefore it is important that organic products are in procurement criteria. This will bring out the demand of organic products. This will also increase the organic farming, production and product development for suitable products for professional kitchens. Organic is accepted criterion in tendering by procurement.</p> <p>Product testing enables to get more organic products into kitchens. Testing is one part of menu planning. So it is possible to get involved to procurement agreement with public sector. Because organic products are more expensive the menu planning is important for increasing the usage of organic products in public kitchens. (More comments in menu planning). In organic production animal welfare is more strictly controlled than in conventional production. That's why it</p>	<p><b>Comment accepted</b></p> <p>The percentages of the organic food could be set in cost or weight. The consequences of setting the percentages in cost or weight could be significantly different, due to different reasons: the availability of products, the relative price of the products, the needs of the clients, etc. Generally speaking, a higher threshold (in absolute value) could be set in percentage of weight than in percentage of cost. This was in agreement with this feedback of the stakeholders</p> <p>The ambition level of this criterion has been revised. Opposite comments have been received concerning to this point.</p> <p>Considering the information analysed below and related to</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>is possible to claim antibiotic and GMO free meat and dairy products in procurement.</p> <p>Probably too high with respect to the seasonal availability of organic products. Procurement of organic food with high transport burden is definitely counter productive</p> <p>This is not a recommendation for organic production. It does not support the TS for 25% organic products.</p> <p>The tendering documents are usually drafted with the wanted product groups listed and for those where organic alternatives are available this is set as a criterion for that particular product group. Thus, the procurer will separate the level of organic food within milk products, cereal products, meat products etc. And this is based on the market availability for each product group. The suggested criterion does correspond to how the procurement technical documents are drafted. It has more the character of an ambition level. <i>The suggested 25% level of organic food is not realistic in many countries/cities. In Finland only 2% of the production is organic so 98% of the production is left outside.</i> Thus, market availability is the biggest challenge for the criteria in Finland.</p> <p>The technical report does not sufficiently analyse the cost implications of the recommended criteria. <i>Organic food is still generally more expensive, which makes the 25% level unrealistic for most public authorities.</i> In order to raise the level of organic, changes in menu planning are needed for instance by reducing the amount of meat.</p> <p>We believe that a 25% target for the core criteria and 50% target for the comprehensive criteria are too high. For instance, in France there has been an obligation to reach a 20% organic food target by cost for some time but it has not been achievable for the vast majority of cantinas. The market availability varies greatly from one country to another, so it is impossible to suggest a workable target for the EU-28.</p> <p>I agree on the percentage. It's a good ambitious amount to try to reach. The percentage is ok, but is it not too high for some countries? <i>Ghent should be able to reach 25% (in mass), but the 50% will not be easy to reach knowing that the percentage organic farming in Belgium is very small so the food products will have to be purchased all over Europe.</i></p> <p>Latvia considers that requirement set up in the Section "TS" that specific gravity of organic products has to be at least 25% (in the comprehensive criterion 50%) of total annual procurement costs of food and drinks, is disproportionately high and does not comply with real situation in Latvia regarding to production and processing of organic products. For example, in 2014 only about 3% of total biological agricultural products in Latvia have been reprocessed. Although range of organic products is wide, but compared to total food market, it is still quite</p>	<p>the units for expressing the thresholds, it was considered not appropriate to specify neither the units nor the thresholds. A generic wording is proposed in this criterion that should be read together with the explanatory notes. The explanatory notes thus include examples of possible combination of thresholds and units for both the core and the comprehensive criteria.</p> <p>For example, if the contracting authority selects the criterion to be expressed in mass, the recommended percentage thresholds are in the range of 20 to 60% and higher than 50% for the core and comprehensive level, respectively. For example the contracting authority can propose a minimum 20% of organic food products (keeping this value as the minimum recommended value) or go for 60%.</p> <p>If the contracting authority selects the criterion to be expressed in cost, the recommended percentage thresholds are 10-30% for the core level. The ranges work in the same way as explained before.</p> <p>The lower values are considered to be feasible and the higher values are considered to be more challenging. Procurers are required to assess the possibilities of the area for which this criterion is going to be proposed.</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>small. In addition, in the report (Market Analysis, page 12) is specified that in several EU countries, including in Latvia, organic products` market is poorly developed.</p> <p>For us, these levels are just the point of departure, thus <i>they should be increased gradually and have to be measurable</i>. For this reason, we will support any policy that encourages local and small-scale producers.</p> <p>In general I agree with the levels set. As a matter of fact the expression as total procurement costs seems to be in some instance difficult since the cost do not express the ecological impacts in any case (e.g. compare the costs and the impacts of meat and by products like cereals/potatoes/pasta). Maybe it would be better to express these ambition levels as % based on the main food types (meat, pasta, seafood, ...)</p> <p><i>The levels of core and comprehensive can be OK but can be very costly. Sometimes better to specify what products are of interest, i.e. only accept organic milk and organic and/or ethically certified bananas. And if not delivered what is the penalty of the supplier?</i></p> <p>In Vienna, an <i>"organic quota" of 30% (monetarily)</i> was already set in 1999 in the Viennese Climate Protection Programme KliP, being mandatory for keeping to it (despite budget constraints) because concluded in the City Council. <i>In kindergartens the quota is even 50%, in all-day public schools 40%.</i></p> <p>In the experiences from Copenhagen, stemming from the process of converting the entire public food system to consist of 90 % organic produce, <i>the first goal to strive for when converting to organic should typically be 30%. This level of organic, measured in weight, corresponds with a few basic and quite common food groups, and most types of kitchens can reach 30 % by converting potatoes, milk and some fibrous vegetables like cabbage and roots.</i> Another way of achieving 30% is to begin with flour and grains, by switching to organic versions and by baking organic bread, thereby substituting conventional and often costly bake-off products with a homemade organic product of lower cost. Often this method requires training or support from an organic conversion consultant to achieve a satisfactory result if baking is not in the individual kitchens usual repertoire. <i>Baking, along with potatoes and milk, will land most kitchens between 30 - 40 %</i></p> <p>Answers to the consultation questions to stakeholders:</p> <ul style="list-style-type: none"> <li>o Do you agree with the ambition levels set (% for the criteria) for the technical specifications and award criteria? <i>I agree with the ambition levels set. 25% is not ambitious by Danish standards where Organic Denmark is working towards a goal with 60% organic in all public meals but since the guide covers the entire EU I believe it's a satisfactory goal.</i></li> </ul> <p>The Copenhagen House of Food (our organic conversion expert) has this argument: "At 30%</p>	

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	organic conversion there is a risk that the quality of the kitchen will decrease or the costs will increase, because most kitchens will convert and not reschedule. Only at 50-60% you can be sure that the work transitions in kitchens will change and the amount of waste will be reduced. We have experienced that the real change happens at 50% and 75%.	
	<p>We are broadly in agreement with the ambition levels set. A number of local authorities start off by asking for 20% organic – it might be worth lowering the core criteria to 20%.</p> <p>Allowing the use of organic indications such as only one ingredient (e.g. organic potatoes) or one component (e.g. all vegetables) in a mixed menu should be considered as part of the criteria. Minimum percentages of organic ingredients could also be specified.</p> <p>Ifoam EU welcomes the fact that there is a percentage on the organic produce required (25% in core criteria and 50% in comprehensive criteria). Having a percentage means that there is a clear target that must be achieved. The percentage of organic products should be regulated in two steps. First there should be a specific percentage of those products that can be sourced 100% organically. A second step would allow specific organic products to take up core criteria (25 %) with others accounted for in comprehensive criteria (50%).</p> <p>The % threshold could also be further defined based on an assessment of the availability of organic products.</p>	See above
	It is important to remember that a percentage requirement is not always relevant as the more specific the procurement requirements are, the less relevant the use of a percentage is. For instance, in relation to the procurement of specific products e.g. tea and coffee can be purchased 100% organic. As a result, further guidelines in this regard could be considered	<p><b>Comment accepted</b></p> <p>Considering the information analysed below and related to the units for expressing the thresholds, it was considered not appropriate to specify neither the units nor the thresholds. A generic wording is proposed in this criterion that should be read together with the explanatory notes. The explanatory notes thus include examples of possible combination of thresholds and units for both the core and the comprehensive criteria.</p>
Market data	The organic market continues to grow year on year (on average 6% per year) reflecting the demand amongst EU consumers for high quality food production that supports the environment, animal welfare and rural development. In the last decade alone, the EU market doubled in value from €11.1 billion in 2005 to €24 billion by 2014 (€11.9 billion to €26.2 billion in Europe). At the same time, the latest production and market data demonstrate a challenge in filling the gap between growing market demand and the development of the supply base (Stolze et al., (2016): ). The data used in the technical report are out-of-date, given that they are from 2011. The latest	<p><b>Acknowledged</b></p> <p>Updated data have been considered during the revision</p>



Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>data available is from 2014, hence the report should be updated to ensure that the information is correct. On top of this, it needs to take into account that there is limited data regarding intra EU-trade and organic farming. Information of the latest market as well production trends can be founded in Organic in Europe: Prospects and Developments (<a href="http://www.ifoam-eu.org/sites/default/files/ifoameu_organic_in_europe_2016.pdf">http://www.ifoam-eu.org/sites/default/files/ifoameu_organic_in_europe_2016.pdf</a>)</p>	
Units	<p>I agree to be <i>in cost</i></p> <p>We believe that although total procurement cost is one of the most widely used metric, for this criterion, at least, we propose to focus on the total number of dishes of the menu. There is already one experience in Málaga (Spain) that is working under this approach: <a href="http://mensacivica.com/se-inaugura-en-malaga-la-primera-cocina-central-certificada-para-platos-100-ecologicos/">http://mensacivica.com/se-inaugura-en-malaga-la-primera-cocina-central-certificada-para-platos-100-ecologicos/</a></p> <p>Organic products are more expensive than conventional products on average. The Preliminary Report notes that organic eggs in Germany are at least double the price of conventional eggs (FiBL and IFOAM, 2014). As another example, the price of organic milk has increased by 30% while the average tender offered by public authorities has not increased. In other words, prices of organic food are more expensive but this is not compensated for in the tenders being offered by public procurers. <i>This makes meeting the current organic criteria, which is based on volumes of specific products very challenging to meet when prices of those products increase or when the products are not available.</i></p> <p>Switching to a value-based approach allows contract caterers to choose what kind of organic products to procure depending on price and availability. This alleviates this challenge to some extent. However, we cannot support setting a percentage without a thorough market analysis that shows that the percentage would be feasible for all regions, because availability differs greatly from one country to another. For instance, according to recent studies, only 1.0% of global agricultural land is certified organic. As the Preliminary Report notes, apart from northern European countries, there is a lack of production capacity for organic meat due to high prices compared to conventional production (FiBL and IFOAM, 2014) (ITC 2015)</p> <p>Cost as the basis for calculation is an option when procuring catering. When procuring food specifications should be made in another way; e.g. on product level or number of product references that are organic</p> <p><i>Revise the criteria on organic food with regard to express the criteria in terms of weight (or mass) of the total procurement amount of food and drink products within the contract instead of expressing the criteria in terms of the total procurement costs (or give the choice between these</i></p>	See above

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>two possibilities)</p> <p>The <i>percentage should be measured in mass and in cost. Mass is more stable than cost.</i> However, when you reach a high percentage of organic food, mass is no longer more stable than cost (see Copenhagen).</p> <p>Procurement criteria should be expressed in terms of percentage mass as well as (or instead of) %cost.</p> <p>In general I agree with the levels set. As a matter of fact the expression as total procurement costs seems to be in some instance difficult since the cost do not express the ecological impacts in any case (e.g. compare the costs and the impacts of meat and by products like cereals/potatoes/pasta). Maybe it would be better to express these ambition levels as % based on the main food types (meat, pasta, seafood, ...)</p> <p>The percentage should be measured in mass and in cost. Measuring in mass will also support converting a few basic and quite common food groups like potatoes, milk, flour, grain and some fibrous vegetables like cabbage and roots. These products also have a high impact on the environment when converted.</p>	<p></p> <p><b>Acknowledged</b></p> <p><b>Comment accepted</b></p>
	<p>We agree to express the criteria in terms of the total cost of food and drink products purchased within the contract. This reflects the reality that it is very difficult to get reliable data on the weight, as lots of products have differing weights and data is not available for many products bought per item e.g. eggs, bread etc. Difference between the weight of produce and processed products is also not easy to define, as well as for minimally processed produce e.g. peel fruits and vegetables. In order to ensure a simple and effective approach to keep administrative burden to a minimum (including those associated with certification), price is the most useful indicator.</p>	<p><b>Comment partially accepted</b></p>
Vending machines relation	<p><i>Very relevant for vending machines for coffee, tea and chocolate.</i> There are organic products (coffee, the, chocolate and milk) and/or ethically certified Fairtrade/Rainforest alliance/Utz (coffee, the, chocolate).</p>	<p><b>Comments accepted</b></p> <p>There is an unanimous agreement on the following points:</p> <ul style="list-style-type: none"> <li>- the <i>criterion on organic products is relevant for vending machines</i>, especially for those that offer coffee and other hot beverages.</li> <li>- <i>organic and fair traded products are on the market</i> (especially when considering hot beverage machines) Therefore, both criteria are complementary and can be required simultaneously.</li> <li>- the <i>good market availability</i> and the few number of products supplied in the hot beverage machines (coffee,</li> </ul>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
		sugar, chocolate, tea, etc) <i>makes possible to set an ambition level of 100% in mass.</i> For other vending machines (e.g. snacks) this threshold should be revised. Vending machine criteria will be included into the catering service criteria as a sub-group.
	For vending machines, we agree with a % threshold, but more details on the development and application of criteria are needed.	See section 4 where the proposed vending machine criteria are detailed
	Is this criterion particular relevant for vending machines (e.g. organic coffee and sugar)? If so, shall we have a threshold for the % of organic in vending machines? <i>The criterion is very relevant for vending machines, and the percentage can reach 100%. That is what we use for our coffee machines. The products we buy are both organic and fair traded.</i>	See above
	<i>Again: coffee or sugar is either organic or not.</i> A coffee machine offers organic coffee or non-organic coffee; a % is not relevant - it should be a 100% organic. ( only in a contract with more machines a % can be set, but would not be interesting) For other vending machines with for instance candy bars the criteria should indicate how many products that are offered should be organic (100% on product level)	See above
	It's very relevant for vending machines. Coffee, tea and sugar can be easily 100% organic and even 100% organic-fair trade. I consider this as a quick win to be able to get reach the set % goal.	See above
	The advantages of organic coffee are more disputable, we don't ask for organic coffee any more. Just 'fairly traded'	<b>Comment rejected</b> See above
	Develop a guideline that explains how these criteria can be used for vending machines	<b>Comment rejected</b> Unfortunately, the tool does not provide the possibility of developing guidelines explaining in detail how the criteria can be used for vending machines or any other aspect. However, the tool gives the opportunity of providing some explanatory notes, where this comment will be considered. Vending machines criteria are included as a subgroup in the catering service criteria
	Products instead of produce. Organic is more than fresh produce.	<b>Comment accepted</b>
Scientific base/ Rationale	Organic agriculture as such is not by default a guarantee of better environmental performance for all impacts categories related to food production. More specifically, the environmental	<b>Comment accepted / Acknowledged</b>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	analysis by the JRC on Organic Food concludes that there is insufficient evidence available to suggest that organic products have overall a lower environmental impact than conventionally produced products [1]. Similarly there is also little evidence that supports the better effect on human health of organic products over traditional ones.	
	A major source missing in the descriptions of environmental hotspots/side-effects of food production in any type of plant production are the GHG emissions (NOx) of inadequately cultivated soils. One of the major environmental benefits of organic farming are less GHG-emissions from cultivated soils (see e.g. Skinner et al. 2014).	<b>Acknowledged</b>
	<p>Organic production and the related manufactured foodstuffs can contribute to the sustainability of food systems mainly in niche product areas. However, from a GPP criteria perspective, organic agriculture as such is not by default a guarantee of better environmental performance for all impacts categories related to food production. More specifically, the environmental analysis by the JRC on Organic Food concludes that there is insufficient evidence available to suggest that organic products have overall a lower environmental impact than conventionally produced products [JRC 2016b]. Similarly there is also little evidence that supports the better effect on human health of organic products over traditional ones. Furthermore the overall objective of GPP-policy is to stimulate innovation in environmental technologies, products and services [EU GPP 2008] and not to specifically support one production technique over another.</p> <p>In addition, having GPP criteria focusing exclusively on organic certification rules out the majority of food production and all the environmental improvements and development potential that is related to other means of production.</p> <p>Finally according to recent studies [ITC 2015], only 1.0% of global agricultural land is certified organic. Such figure raises questions about the real availability and pricing of organic products for public procurement in the EU and contrast argumentations provided in the technical report justifying that organic products are available throughout EU members and organic products are currently being used either as mandatory or optional requirements in public tenders [JRC 2016b]. This reasoning does not robustly justify the selection of organic production as a criterion for GPP. The foundation of GPP criteria should be objective and factual.</p>	<b>Acknowledged</b>
	According to recent studies [ITC 2015], only 1.0% of global agricultural land is certified organic. Such figure raises questions about the real availability and pricing of organic products for public procurement in the EU and contrast argumentations provided in the technical report justifying that organic products are available throughout EU members and organic products are currently being used either as mandatory or optional requirements in public tenders [JRC 2016b]. This reasoning does not robustly justify the selection of organic production as criteria for GPP. The	See above

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>foundation of GPP criteria should be objective and factual.</p> <p>The technical report relies significantly on the use of Life Cycle Assessments (LCAs), comparing organic and conventional agriculture as the basis for the development of the GPP criteria. While LCAs offer a very precise quantitative overview of environmental impacts, they are not a panacea as they only address certain environmental aspects. However, they tend not to take into account the multi-functionality character of sustainable agriculture systems in particular aspects related to biodiversity and soil fertility where organic is a forerunner. As a result, LCAs that compare organic and conventional systems currently do not take into account the multitude of differences between farming systems and the products produced and therefore not comparing like with like. The use of LCAs in the technical report is extremely narrow as it is based on the product itself, not taking into account the background of the enterprise. While a variety of different approaches has been developed for assessing aspects of sustainability in the food sector and agricultural production, these do not always have a clear definition of sustainability and different and inconsistent indicators can lead to contradictory assessment results that may not be comparable.</p> <p>Therefore, we question the over-emphasis on the results of a patchwork of LCA studies for organic food products.</p> <p>Given the limitations of the LCAs, only existing studies that have conclusive results with significant differences between farming systems and products covering all environmental aspects should be considered in the first instance, with elements of sustainability also taken into account in the second instance.</p>	<p><b>Acknowledged</b> GPP revision of criteria is science based</p>
	<p>The EEB considers the arguments given in the technical report for integrating a criterion on organic food in public tenders as being rather weak and not very convincing. Therefore, the EEB thinks that the justification for defining TS on purchasing organic food in GPP needs to be revised. Since switching to the purchase of organic food products normally leads to higher purchasing costs, it is very important to deliver strong arguments for this criterion.</p> <p>At the same time, the EEB would like to emphasize that a certain % of organic food products can be purchased even without any increase in costs by changing the meal composition: e.g. lowering the percentage of meat and dairy products and substituting them by cereals and vegetables, as well as by buying fresh food according to the seasonal offer of the region and establishing local food purchasing chains. The example of a project run by city of Munich called "Bio for Kids" demonstrated that it is possible to purchase even 100% organic food with an overall cost increase of only 13,3% compared to conventional food.</p> <p>(<a href="http://www.muenchen.de/rathaus/Stadtverwaltung/Referat-fuer-Gesundheit-und-">http://www.muenchen.de/rathaus/Stadtverwaltung/Referat-fuer-Gesundheit-und-</a></p>	<p><b>Acknowledged / Comment accepted</b></p> <p>The rationale provided in the last TR1.0 cannot be changed at this stage, but the provided comments have been considered to draft the TR2.0 and the rationale of each of the proposed criteria.</p> <p>There are arguments in favour and against the inclusion of the criterion on organic food in the GPP. Most of them are difficult to quantify.</p> <p>For additional information check section 2.1.2</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>Umwelt/Bio_regional_fair/Biostadt_Muenchen/Leitprojekte/Bio_fuer_Kinder.html)</p> <p>Although the EEB is aware that in general the EU GPP criteria need to be based on the results of LCA studies, this only makes sense in our view when existing LCA studies come to conclusive results based on significant differences between the systems under considerations. In the case of organic versus conventional agriculture this is obviously not the case, mainly due to the overwhelming variety of existing agricultural systems. Therefore, in this case, the EU GPP criteria should take scientific results beyond LCA methodology into consideration. As a consequence, the EEB strongly recommends not focusing the argumentation for organic food products solely on the results of LCA studies.</p> <p>In addition, the EEB would like to stress that the results of those LCA studies cannot easily be generalized. The results of the different LCA studies are always given for the defined scope and system so that they cannot easily be compared. It is also obvious that with regard to the overwhelming existing variety of agricultural systems, there is big lack of data. This has also been confirmed e.g. by the results of the pilot study on meat products to establish Product Category Rules in the Environmental Footprint process coordinated by DG Environment.</p>	
	<p>Not at all. The scientific analysis by JRC <i>itself shows that organic cannot be unequivocally considered the better option environmentally</i>. It is highly misleading for both supply chain actors and consumers to maintain organic procurement as a TC and thereby suggest it to be the greenest option.</p>	<b>Acknowledged</b>
	<p><i>"...organic products...larger eutrophication acidification potential compared to conventional products (in particular for livestock production due to manure emissions and more extensive land use)...reasoning why organic larger environ. Impact than conv. is more land to grow crops...more feed for animals because they live longer..."</i></p> <p>To my opinion, this argumentation is misleading, because it completely neglects the type of stock-keeping, see also comment nr. 10. A recently released meta-study on milk and meat from organic vs. conventional production brought evidence about significantly higher content in healthy omega 3 fatty acids, mainly due to better feeding and livestock-keeping in organic. The findings are based on 196 studies for milk and 67 for meat.</p> <p>The rationale of using an LCA approach seems narrow and the methodology used has been severely criticised by both FIBL and IFOAM. These do not take account of broader environmental aspects such as soil quality, water pollution etc.</p>	<b>Acknowledged</b>
	<p>It may be worth rather considering broader aspects of organic food which have positive environmental impacts when compared to conventional agriculture. For example, organic farming methods exclude the use on neo-nicotinic fertilisers which are having a detrimental effect on bee</p>	<b>Acknowledged</b>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>population.</p> <p>Organic production and the related manufactured foodstuffs are a natural part of the sustainability discourse. However, from a GPP criteria perspective, organic agriculture as such is not by default a quality guarantee of better environmental performance in absolute terms. Hence, organic does not equal to more environmentally friendly; a label on organic produce is not an eco-label. Rather, it is just one alternative way to produce raw materials for foodstuffs among other production methods. At the moment the share of organic produce available on the market is marginal. Emphasizing organic produce within the GPP framework leads to ruling out the majority of foodstuffs and raw material for food outside the concept of GPP. ETL finds this problematic as this approach excludes the potential related to the so called conventional and other production methods available that the majority of food production is currently based on.</p> <p>This is not supported by scientific evidence! Studies show varying results in terms of health benefits of organic, with the most positive ones even reporting health benefits are next to negligible. Organic producers are not allowed to make health claims, so the government should neither.</p>	<p><b>Acknowledged</b></p> <p><b>Acknowledged</b></p>
Other: meat reduction	<p>For the additional TS/AC on reduced animal-based and increased plant-based foods, we suggest the following language for the “Consequences” section of the TR1.0 (JRC 2016b). “This criterion awards points to tenderers that increase procurement of plant-based foods and decrease that of animal products”.</p> <p>It is important to support the development of sustainable food systems across the EU for the following reasons: <i>Due to the cost savings and improved environmental and public health, as well as reduced animal suffering.</i> If more Member States signal to the market that a greater proportion of plant-based food products are sought, then it can favour the development of a more healthy and sustainable EU-wide food system.</p> <p>Per our previous comment, the following comprehensive criteria regarding animal products should be added:</p> <p><i>Technical Specification:</i> Animal products should make up no more than 15% of the total procurement cost of food and drink products</p> <p><i>Verification:</i> The tenderer shall provide data (name and the amount in mass) of animal-based food products planned to be supplied in the execution of the contract indicating specifically the products that comply with the requirements. Products that have been third party certified by widely accepted and recognised international organisations) will be deemed to comply.</p> <p><i>Award Criteria:</i> Points shall be awarded to tenders in which the amount of animal products is</p>	<p><b>Acknowledged</b></p> <p><b>Comment rejected</b></p> <p>Even if it is recognized that decreasing the amount of meat in the menu is one of the most effective measures to decrease the overall environmental impacts of the catering, it is difficult to set up the maximum or minimum levels that the meat should account for.</p> <p>The menu to be provided depends on multiple factors such as the location and cultural characteristics of the clients, the type of client (age, daily activity, religion, specific needs, etc),</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	below 15% of the total procurement cost of food and drink products <i>Verification:</i> The tenderer shall provide data (name and the amount in mass) of animal-based food products planned to be supplied in the execution of the contract indicating specifically the products that comply with the requirements. Products that have been third party certified by widely accepted and recognised international organisations) will be deemed to comply.	this means that a unique threshold maybe not appropriate for all the collectives to be served and all the occasions. Based on this assessment, it seems preferable not to include a specific limit on meat content. The reduction of meat in the total procurement purchase does not fall under the scope of the EU GPP for Food procurement, it is part of the catering service criteria and as such it is considered.
Other: animal welfare	"Animals must be healthy and must have their special needs and furthermore enjoy freedom of pain, which entails rules on transport and slaughter methods (European Commission, 2014)" These requirements also apply to conventional animal husbandry	<b>Acknowledged</b>
	Not only should the product comply - also the supplier. (EU-legislation stipulates that every company that sells organic B2B should be certified for organic) Depending on country legislation also a caterer should meet the certification requirement.	<b>Acknowledged</b>
	Without specifically calling on tenders to meet criteria for purchasing a greater quantity of plant-based foods, the GPP criteria run the risk of failing to mitigate a number of environmental impacts. At the very least, a very large mitigation opportunity could be lost, along with concomitant improvements in public health. Therefore, HSI suggests adding a TS and AC for reduced animal products and increased plant-based foods.	<b>Acknowledged</b>

## Further analysis on organic food products

### a) Relevance of the organic food products from the environmental perspective

Stakeholders questioned the inclusion of criteria on organic food products as the scientific evidence was inconclusive and also questioned whether focus should be placed on a production system that accounts for only 1% of total agricultural food production. Others argued that the use of LCAs does not capture the full environmental benefit of organic production. Examples given include soil quality, water pollution and biodiversity. Additionally, if the functional unit was land use rather than mass of product then the evidence would be more in favour of organic production. As commented in the rationale of the organic production criteria (section 1.1.2) and more in detail in the preliminary report, the organic farming has in general lower impact for most impact areas compared to conventional systems.

There are quite a large number of studies on organic production from the environmental perspective and on the comparison of organic and conventional production. For example, information collected from the UNEP 2008 shows that agrochemicals require energy in their production and distribution stages and that at least for some products, reduced energy use per tonne of organic vs non-organic produce can be achieved, demonstrating that in nearly all cases the organic option is much less demanding on resources.



**Table 31. Variance in Energy use per tonne of organic produce against conventional produce (www.wwf.org.uk)**

Vegetables	% Energy use / ton organic produce	Livestock	% Energy use / ton organic produce
Leeks	-58%	Beef	-35%
Wheat	-29%	Lamb	-20%
Carrots	-25%	Pork	-13%
Oilseed rape	-25%	Eggs	+14%
Onions	-16%	Chicken	+32%
Potatoes	+2%	Milk	-38%

### **b) Units and thresholds**

How the criteria should be measured was also questioned. Some stakeholders pointed out that it should be measured per mass and/or value and/or the number of dishes on the menu, and many stakeholders stressed that it should be product category and catering service specific, e.g. coffee, tea and sugar in vending machines. One stakeholder suggested that meal composition should be taken into consideration to compensate for higher costs, for example, a Technical Specific of maximum 15-20% meat content.

It is agreed that the availability of the products and the effects that higher amounts of organic food will have in the overall catering depends on the measured unit used. Minimum amounts of organic food expressed in mass will likely favour the consumption of relatively less expensive products and those that have less volatility in the prices (not seasonal products such as pasta, rice or legumes). On the other hand, the expression of the minimum quantity of organic food in costs might favour the purchase of less amounts of organic food but more of those food products with relatively higher prices such as meat. However, these effects can change depending on the conditions of the tender (location, service to be provided, clients, etc)

Combinations of both units were also considered. The combinations could be addressed by, for example, setting up minimum limits in mass for inexpensive food products and limits in costs for those considered as more expensive ones or setting minimum quantities of organic products in mass but thresholds in cost for the total procurement purchase.

Additionally, feedback in the form of personal communication was received suggesting that the most suitable unit would also depend on the type of product served, the process to elaborate the food product, the size of the catering company and some other aspects. For example, the catering to the schools can be done through two food preparation processes:

- *the cold line*: the raw materials are received, cooked in industrial/central kitchens, packaged in smaller portions and chilled out or frozen to be distributed among the schools or educational centers. The kitchens prepared the food for several schools by means of industrial equipment (mass production) which allows a perfect tracking of the raw materials, purchase of big food volumes, good waste management and good management of the energy and water consumption. In these cases, most of the tenders expressed their preference for mass based thresholds as they can perfectly estimate the amount of food (kgs of each ingredient) that will need and are able to close contracts with organic suppliers in advance.
- *the hot line*: the raw materials are received, cooked in the kitchen of the education centers and served. There are no intermedia steps and the food volumes are significantly smaller. Energy, water and waste management are also possible but they do not reach industrial levels. The number of menus served is also significantly lower. Most of the stakeholders that prepare the food products in a hot line express their preference for cost based thresholds.

Opinion was divided on the proposed ambition levels. Higher threshold are a chance for public procurement to 'lead by example', however, some other stakeholders highlighted the poor market availability of organic products across all Member States and the difficulties to comply with the commitments. Higher thresholds will also have an impact on the overall budget and will likely lead to higher consumption of relative inexpensive non-seasonal products (e.g. pasta, rice, legumes and some vegetables and fruits). Organic production has, for the time being, a higher variability in prices due to the less controlled production.

The additional cost of the organic products, certification being a major barrier to market entry for SMEs and that poor seasonal availability in the country of consumption could lead to increased transport burden through imports were other points raised by the stakeholders. In order to assess the level of ambition that can be suggested at EU level, several experiences were investigated. The examples provided in addition to the information collected in Table 31 are as follows:

- The city of Ghent (BE) considers that it is possible to reach 25% (in mass), but that the 50% will not be easy to reach knowing that the market availability and therefore the percentage of organic farming in Belgium is very small so the food products will have to be purchased all over Europe"
- The municipality of Copenhagen (DK) reports a value of 100% organic food products in mass but it seems to be only for fruit and vegetables
- The Italian Call for Tenders (IT) analysed for this revision sets requirements on the minimum quantity of organic products. The limits sets that at least 40% in mass of the total for fruit, vegetables, cereals, bread, pasta, rice, flour, potatoes, polenta, tomatoes and transformed products (cheese, milk, yogurt, eggs and extra virgin olive oil), should be procured and that at least 15% in mass of the total for meat and at least 20% in mass of the total aquaculture fish must be organically produced. For the Municipality of Rome, results show that organic food accounts for 69% of all food served in schools, except meat, fish and cold cuts
- In the City of Malmö (FI) it was reported that at the end of 2009, 43% of the food served in all school canteens in Malmö was organic. Malmö's goal is to serve 100% organic food in all of its public catering services by 2020.
- According to the call for tenders from the Government of Malta (MA) "at least 1% of [list of specific products, drawn by the procurer, selected according to the seasonality of produce] must be organically produced".
- Finally, UK Government Buying Standards, shows that "at least 10% of the total monetary value of primary commodity (i.e. raw ingredient) food and drink procured shall be labelled as organic" for the core criterion. The optional criterion (comprehensive criterion) is that "at least 40% of the total monetary value of primary commodity (i.e. raw ingredient) food and drink procured shall be labelled organic".

The analysis of this feedback reads that most of the procurers set up thresholds in mass and some of them even make a difference between the product types. Checking the level of ambition usually starts requiring 25 to 40% in mass of vegetables, dairies and non-perishable products up to 100%. The limits for meat and fish are lower being set up at 15% and 20% respectively. The differences are mainly attributed to the market availability commented previously.

There is only one experience of setting up the limits in costs. The thresholds range from 10% to 40% indicating that they are much lower.

An interesting comparison between the contribution to the total weight and the total costs of each product types was carried out during this revision based on the input of several stakeholders. The results are shown in the following table.

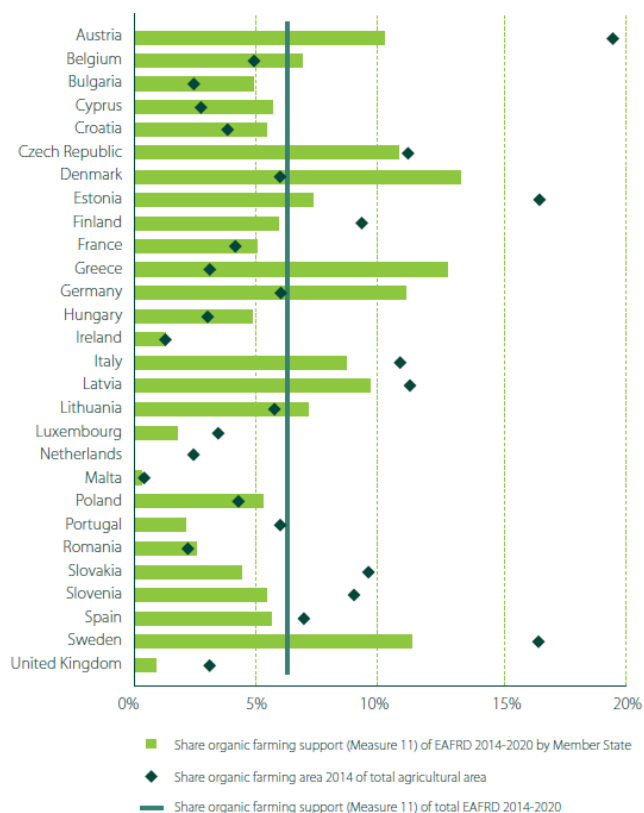
**Table 32. Examples of caterings and the mass/cost ratios of the food product types**

It can be seen that the vegetables and non-perishable food accounts for almost 60% of the diet (in mass) whereas they amount for 40% of the total costs. Opposite, meat and fish products account for less than 20% of the total mass but almost 40% of the total costs. Other types of products have a significant contribution neither in costs nor in mass. This point underlines the

Product type	in mass	in costs
	<i>School catering</i>	
Vegetables	43%	32%
Pasta, rice, etc	13%	7%
Meat and Fish	17%	37%
Fruits	16%	18%
Bread	6%	4%
Eggs		
Dairy products	5%	2%
Others		

difficulties to set a unique threshold for both units: mass and cost.

### c) Other major initiatives



Some major private initiatives, such as the SAI Platform Farm Sustainability Assessment and ENVFOOD methodology for PEF are in place to make sustainability impact within international supply chains. Most of these initiatives follow the principles included in the Organic Regulation.

The principal aim of SAI Platform Farm Sustainability formed by more than 80 industry members, e.g. Nestlé, Unilever and Danone, serves to support the development of sustainable agriculture worldwide. SAI Platform develops (or co-develops) tools and guidance to support global and local sustainable sourcing and agriculture practices. Examples of recently developed resources include: Practitioner’s Guide for Sustainable Sourcing; recommendations for Sustainability Performance Assessment (SPA); and the Farm Sustainability Assessment (FSA).

The ENVIFOOD Protocol is a scientific methodology by European Food SCP Round Table adopted for the environmental assessment of food and drink products, in order to serve as basis to establish the product environmental footprint of products.

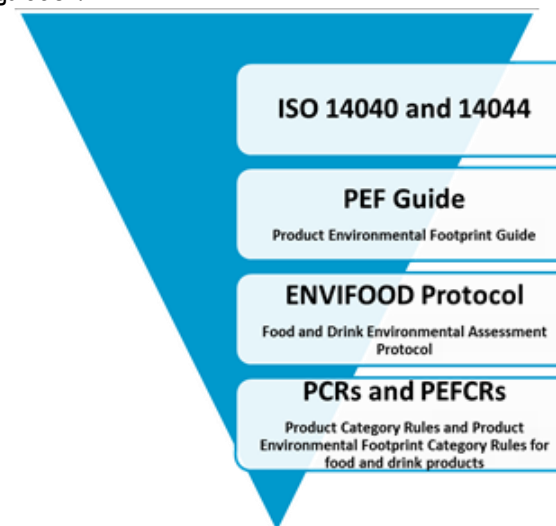


Figure 1. The ENVIFOOD Protocol represents an intermediate step between ISO standards, the European Commission’s Product Environmental Footprint and product-specific rules.

### 3.2. Marine and aquaculture food products

**Table 33. Feedback from the stakeholders on the TR1.0: Marine and aquaculture food products (TS and AC)**

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
Use of the MSC red list	<p>In Finland procurers use the WWF fish guide and the red list included in it, rather than the MCS list when choosing fish from Finnish waters. However, when for international fish and aquaculture products the MCS list is usable. Thus, the criteria as such works , but could include references also to other widely available lists</p> <p>The Marine Conservation Society guide (MCS) is just one of many purchasing guides for seafood that are available. FoodServiceEurope members use a variety of sustainable seafood certification systems and purchasing guides and scientific guidance, including but not limited to WWF's Sustainable Seafood guides, IUCN, Seaweb Europe, CITES, FAO, NOAA, Monterey Bay Aquarium Seafood Watch and Greenpeace. Based on these guides, contract caterers have also developed company-specific guidance.</p> <p>In Vienna GPP, a so-called "<i>position paper</i>" released by ÖkoKauf 2012 recommends to purchase fish (products) from a list combined of Greenpeace and WWF: "green" products are recommended, "yellow" accepted, "red" rejected.</p>	<p><b>Comment accepted</b></p> <p>The text for the criterion has been amended:            - see footnote of the criterion wording:<sup>1)</sup>... , and others: WWF's Sustainable Seafood guides, IUCN, Seaweb Europe, CITES, FAO, NOAA, Monterey Bay Aquarium Seafood Watch and Greenpeace."            Other fish to avoid lists, such as the proposed one might be used.</p>
Market availability	<p>The market availability of MSC labelled fish is good, for ASC-labelled fish we do not have enough practical experience so far. There are also some MSC certified catering services on the market.</p> <p>Good market availability for MSC but much less for ASC. Hopefully public market demand can promote ASC production.</p> <p>Market availability in the Netherlands is sufficient</p> <p>For my opinion there should not be difficulties in getting the required amounts of MSC and/or ASC certified products since these certifications are quite common and have been expanded significantly in the recent years.</p> <p>The MSC fish are fairly widely available on the market (Danish market)</p> <p>MSC products are pretty widely available on the market so the percentages here could be increased</p>	<p><b>Acknowledged</b></p> <p>The wording of the criteria has been edited.</p> <p>The MSC is not the unique label that public bodies should accept. The market availability of third party environmental certification schemes in all Member States varies and the following wording is now in place with the hope it can serve as a guide for public procurers when launching their calls for tenders:  <i>'have been produced meeting the requirements of a certification scheme for sustainable production that is based on multi-stakeholder organizations with a broad membership and addresses environmental impacts including over-fishing or depletion, biodiversity and responsible and sustainable use of the resources'</i></p>
Feasibility of SMEs to comply	<p>The Danish suppliers say that here is a big problem.</p> <p>There should not be significant problems for SME 's to stick to the criteria since in most cases the sourcing is almost the same for SME and non-SME.</p> <p>Chain of custody certification is feasible but costly!</p> <p>When SME's have to get the MSC/ASC label it can become expensive for them. This is also</p>	<p><b>Acknowledged</b></p> <p>The ambition levels have been left to be chosen by the contracting authorities, attending to the specificity of the place where the tender is launched.</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>the reason ILVO is working on a label (sustainability stars) to keep the cost tolerable for the small shipping companies.</p> <p>Certificates are also a cost issue and for small scale fisheries it might be financially impossible to become certified.</p> <p>The rationale is based to a large extent on the MSC label. However, there are about 30 different labelling systems for fish and aquaculture products. Although MSC labelled fish from international waters are widely available, the rationale could have a mention also of other labels.</p>	<p><b>Acknowledged</b></p> <p>The rationale has been edited and it gathers now the diversity of schemes that can be used to verify the criterion.</p>
Ambition level	<p>We agree, and even think the percentage can be set higher.</p> <p>In general I do agree with the ambition levels although I think it would be a problem to set higher levels (+5%).</p> <p>Low ambition for marine catch. Levels of 25% and 50% should be possible. And 100% for appointed species such as Hoki.</p> <p>The bar can be set much higher here. 10% means 90% are allowed not to comply. This should also be part of menu planning guidelines. For aquaculture: not only ASC should be considered, also Organic aquaculture.</p> <p>We ask for all fish to have a label (MSC/ASC or equal). We also forbid the usage of tuna, pangasius fish, Tilapia fish and Nile perch</p> <p>MSC products are pretty widely available on the market so the percentages here could be increased</p> <p>With the potential emergence of GMO salmon and the challenges posed by overfishing and loss of stocks due to climate change, the percentages for technical specifications and award criteria should be 20% and 50% respectively.</p> <p>Revise the criteria as described in the rationale. Define a threshold of 10% as core criteria and set the ambition level for the comprehensive criteria up to 25%</p> <p>Move from comprehensive to core the sentences: <i>"At least 10% in mass of marine OR aquaculture food products shall be compliant with the following principles."</i></p>	<p><b>Acknowledged</b></p> <p>The ambition levels have been left to be chosen by the contracting authorities, attending to the specificity of the place where the tender is launched.</p> <p>Recommendations are given however to the procurers to ask in their tenders for 0-20 and 20-50% of the fish not complying with the requirements of organic food products and having a sustainable origin depending on the core or comprehensive level.</p>
	<p>IFOAM EU welcomes the marine/aquaculture criteria. However, the criteria should complement organic, not exclude certified organic aquaculture products. The combination of organic food and aquaculture product criteria leads to more optimal results. Organic aquaculture should be considered as one of the criteria. The criteria should also focus more on how harmful fishing methods can be avoided and the way in which the different aquaculture products are raised e.g. use of antibiotics, hormones, use of feed.</p>	<p><b>Comment rejected</b></p> <p>Organic aquaculture is promoted in the organic produce criterion therefore they are excluded from this criterion. This way the procurer avoids double counting. The goal of this criterion is to recommend procurers the most environmentally friendly option to purchase marine and aquaculture products apart from those organic</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
		<p>food products. The third party certification systems already cover sustainable fishing methods, use of antibiotics, hormones and the use of feed.</p>
Use of antibiotics	<p>Potential improvement areas: TS2; Marine and aquaculture food...: what about less use of antibiotics in aquaculture? University Ghent speaks of carnivore fish and herbivore fish. The diet of carnivore fish contains of other fish (so we are still fishing our oceans empty in order to feed them) and the second one has a plant diet. This means that herbivore fish should have a lower environmental impact. But getting herbivore fish should probably be award criteria.</p> <p>If you look at fish products raised in aquaculture e.g. the use of antibiotics, hormones and feed could be addressed.</p>	<p><b>Acknowledged</b></p> <p>The use of antibiotics is covered by the certification schemes proposed (e.g. ASC or Globalgap with add-on for aquaculture). If zero antibiotics want to be requested then the procurer may then require organic aquaculture products.</p>
General	<p>From a climate change rationale red meat should be more often replaced by fish. This suggests that the criteria for fish should on the one hand be strict enough to ensure that legally and sustainably caught fish is served in public kitchens, and on the other promote growth and innovation in the fishing industry.</p>	<p><b>Acknowledged</b></p> <p>The ambition levels have been left to be chosen by the contracting authorities, attending to the specificity of the place where the tender is launched.</p> <p>Recommendations are given however to the procurers to ask in their tenders for 0-20 and 20-50% of the fish having a sustainable origin depending on the ambition level required.</p> <p>Requirement on the type of food product does not fall under the scope of EU GPP Food products. Reduction of red meat has been included in the EU GPP for Catering services under the Menu planning criterion.</p>
	<p>Please add: seafood that are “underutilized” and available through local fisheries in AC3 (Additional marine and aquaculture food products)</p>	<p><b>Comment rejected</b></p> <p>While the clear intention of the comment is to lower the environmental pressure on traditional species, such as salmon, tuna, cod and shrimp, these species if sustainably managed, and certified by e.g. the MCS are best alternative.</p> <p>None of these species is in any way threatened with extinction – some individual stocks may be overfished, but no commercially important species has ever gone extinct or even come close to it. For example, Barents Sea cod stock is at record abundance levels (4 million tons compared to Gulf of Maine’s estimated 2,500 tons). So the global marketplace for Atlantic cod is going to have a million</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
		<p>tons of Barents Sea cod, and less than one thousand tons of Gulf of Maine cod. Alaska produces hundreds of thousands of tons of sustainable wild salmon – that is both MSC certified and on the Seafood Watch best choice list.</p> <p>Fish that is underutilized might be used by the contractor but can not constitute a requirement for a tender since it is not certified. Without a certification, it is uncertain under which conditions the fish has been caught.</p>
	<p>As we state in the attached document, the misuse or overuse of antimicrobials or antibiotics in animals, concretely in this case in aquaculture, can lead to contamination of water and consequently, they pose a threat to public health.</p>	<p><b>Comment rejected</b></p>
	<p>Under Food Procurement please improvement areas should include: organic meat or meat raised without routine non-therapeutic antibiotics reduced meat provision for maximum climate and resource impact. Products produced and processed locally Prefer fish sourced from local, smaller scale fisherman.</p>	<p><b>Comment rejected</b></p> <p>Organic meat is included in the organic produce criterion. Due to the existence of a single market in EU-28, the GPP call for tenders can not require products produced and processed locally, nor the fish sourced from local and small scale fisheries.</p>

### Further analysis on marine and aquaculture food products

With regard to the list of avoided fish provided by the Marine Conservation Society, stakeholders expressed in the 1<sup>st</sup> AHWG meeting, that other lists are used as well, such as the WWF Sustainable Seafood guides, IUCN, Seaweb Europe, CITES, FAO, NOAA, Monterey Bay Aquarium Seafood Watch and Greenpeace lists.

Onto the targeted levels there is a majority agreement that the current levels are not ambitious and they could be raised. The main reasons to support the rise of the values are to prevent the emergence of GMO salmon or that the MSC products are widely available. As for the figures there are several proposals from low (+5%) to moderate: 20% and 50% for core and comprehensive respectively, and going further up to a more ambitious 100%. There is also a common proposal to make the core level equal to comprehensive level. Several cases were exposed where the public procurement deliberately prohibits certain species such as e.g. pangasius fish and Nile perch.

Marine Stewardship Council (MSC) scheme and the equivalent for aquaculture ASC are suggested as environmental certification schemes accepted as proof for verification, and the stakeholders commented the market availability of these MSC/ASC labelled products is good. However, some stakeholders expressed their concern for SMEs to get products since the chain of custody certification can be costly. The wording of the criteria has been edited, the MSC isn't the unique labelled that public bodies should accept.

GlobalGap certified production standards for farmed species (aquaculture but also other animal species) are one of the certification schemes proposed for verification, since it addresses a number of issues associated with production of fish of environmental concern, the auditing of which requires farm inspections and standard enforcement. The issues addressed include: habitat alteration; freshwater impacts; nutrient and organic pollution; escapes; interactions with local wildlife and enforcement of regulations.

The market availability in EU-28 of the third party environmental certification schemes has been revised in the EU campaign and the following table provides the list of schemes in EU-28. As shown all Member States have schemes in place that can be used for verification.

**Table 34. Resources to help choosing sustainable fish in EU-28, (INSEPARABLE 2017)**

<b>Austria</b>	<b>Bulgaria</b>
<a href="#">Fakten über Fische</a>	<a href="#">Факти за рибарството</a>
<a href="#">MSC - Marine Stewardship Council</a>	
<a href="#">Friend of the Sea</a>	<b>Czech Republic</b>
<a href="#">Global G.A.P.</a>	<a href="#">Rybolov – základní údaje</a>
<a href="#">Slow Fisch - Die Meere verstehen</a>	
<a href="#">EUMOFA - Die Europäische Marktbeobachtungsstelle für Fischerei und Aquakultur</a>	
<a href="#">WWF Shopping Guide seafood - fish, sushi and shrimp - food and fish - Consumer Tips</a>	
<b>Croatia</b>	<b>Belgium</b>
Coming soon	<a href="#">Global G.A.P.</a>
<b>France</b>	<a href="#">WWF Viswijzer 2013</a>
<a href="#">Guide des espèces - Produits de la Mer</a>	<a href="#">Friend of the Sea</a>
<a href="#">La pêche en chiffres</a>	<a href="#">De visserij in feiten en cijfers/La pêche en chiffres/Fakten über Fische</a>
<a href="#">Friend of the Sea</a>	<a href="#">Mr. Goodfish - Good for the sea, good for you</a>
<a href="#">Global G.A.P.</a>	<a href="#">Slow Fish - Mieux comprendre nos océans/Die Meere verstehen</a>
<a href="#">MSC - Marine Stewardship Council</a>	<a href="#">Calendrier des poissons - Calendrier des crustacés et des fruits de mer</a>
<a href="#">Mr. Goodfish - Good for the sea, good for you</a>	<a href="#">Viskalender - Schaaldieren- en zeevruchtenkalender</a>
<a href="#">Slow Fish - Mieux comprendre nos océans</a>	<a href="#">SeaWeb Europe - Guide des espèces à l'usage des professionnels</a>
<a href="#">Mangiamoli Giusti - Poissons pour Nous Régaler et Poissons a Laisser dans la Mer</a>	<a href="#">fish2fork - Le guide des restaurants pour les amateurs de poisson durable</a>
<a href="#">fish2fork - Le guide des restaurants pour les amateurs de poisson durable</a>	<a href="#">EUMOFA - L'Observatoire Européen du Marché des Produits de la Pêche et de l'Aquaculture</a>
<a href="#">EUMOFA - L'Observatoire Européen du Marché des Produits de la Pêche et de l'Aquaculture</a>	<a href="#">Vis- &amp; zeevruchtengids - voor professionele gebruikers</a>
<a href="#">SeaWeb Europe - Guide des espèces à l'usage des professionnels</a>	
<b>Germany</b>	<b>Cyprus</b>
<a href="#">Fakten über Fische</a>	<a href="#">Greenpeace - Γνώρισε καλύτερα τα ψάρια που αγοράζεις</a>
<a href="#">MSC - Marine Stewardship Council</a>	<a href="#">Στοιχεία για την αλιεία</a>
<a href="#">Friend of the Sea</a>	<a href="#">ΑΡΧΙΠΕΛΑΓΟΣ Οδηγός για τη βιώσιμη κατανάλωση θαλασσινών στην Ελλάδα</a>



<a href="#">Infos zu Fischbeständen</a>	<a href="#">medsos.gr - ΜΗ ΤΡΩΣ Ο,ΤΙ ΣΟΥ ΣΕΡΒΙΡΟΥΝ</a>
<a href="#">Global G.A.P.</a>	
<a href="#">Slow Fisch - Die Meere verstehen</a>	<b>Denmark</b>
<a href="#">Slow Food Deutschland</a>	<a href="#">Fakta om fisk</a>
<a href="#">Naturland - Fisch &amp; Meeresfrüchte</a>	<a href="#">MSC - Marine Stewardship Council</a>
<a href="#">Fischbestände Online</a>	<a href="#">WWF Denmark - WWF's Fiskeguide</a>
<a href="#">Stiftung Warentest - Fisch: Mit gutem Gewissen</a>	<a href="#">2 gange om ugen</a>
<a href="#">Greenpeace - Topics - Oceans - Fisheries</a>	
<a href="#">WWF Germany - Reasonable Shopping</a>	<b>Hungary</b>
<a href="#">Fisch-Einkaufsführer</a>	<a href="#">Halászáttal kapcsolatos tények</a>
<a href="#">School of Fish - Fisch Nachhaltigkeit und gesundes Essen</a>	
<a href="#">EUMOFA - Die Europäische Marktbeobachtungsstelle für Fischerei und Aquakultur</a>	
<b>Ireland</b>	<b>Latvia</b>
<a href="#">Fish Fight</a>	<a href="#">Fakti par zivīm</a>
<a href="#">MSC - Marine Stewardship Council</a>	<a href="#">Lietuvos Gamtos Fondas</a>
<a href="#">Friend of the Sea</a>	
<a href="#">Irish Wildlife Trust - Sustainable seafood guide</a>	<b>Estonia</b>
<a href="#">Global G.A.P. - Aquaculture information</a>	<a href="#">Kalandusfaktid</a>
<a href="#">Mr. Goodfish - Good for the sea, good for you</a>	
<a href="#">Slow Fish - Good, clean and fair fish</a>	<b>Greece</b>
<a href="#">Facts and figures on the Common Fisheries Policy</a>	<a href="#">Greenpeace - Γνώρισε καλύτερα τα ψάρια που αγοράζεις</a>
<a href="#">Greenpeace - sustainable seafood recipes</a>	<a href="#">Στοιχεία για την αλιεία</a>
<a href="#">EUMOFA - The European Market Observatory for Fisheries and Aquaculture</a>	<a href="#">ΑΡΧΙΠΕΛΑΓΟΣ Οδηγός για τη βιώσιμη κατανάλωση θαλασσινών στην Ελλάδα</a>
<a href="#">Fish and kids - Sustainable seafood for schools, plus games for young and old alike</a>	<a href="#">medsos.gr - ΜΗ ΤΡΩΣ Ο,ΤΙ ΣΟΥ ΣΕΡΒΙΡΟΥΝ</a>
<a href="#">Fish2Fork - The campaigning restaurant guide for people who want to eat fish - sustainably</a>	<a href="#">WWF - FishTips</a>
<b>Italy</b>	<b>Finland</b>
<a href="#">WWF guida</a>	<a href="#">Perustieto kalataloudesta</a>
<a href="#">Dati sulla pesca</a>	<a href="#">Kulutustajan kalaopas - Näin luet opasta - Kalaopas - WWF</a>
<a href="#">Pesce ritrovato</a>	
<a href="#">Il pesce dimenticato</a>	<b>Netherlands</b>
<a href="#">Friend of the Sea</a>	<a href="#">Vis- &amp; zeevruchtengids - voor professionele gebruikers</a>
<a href="#">Guida al pesce giusto</a>	<a href="#">De visserij in feiten en cijfers</a>

<a href="#">Guida alla pesca sostenibile</a>	<a href="#">MSC - Marine Stewardship Council</a>
<a href="#">MSC - Marine Stewardship Council</a>	<a href="#">Stichting De Noordzee - WWF - Viswijzer Goede Vis</a>
<a href="#">Slow Fish - Per capire gli oceani</a>	
<a href="#">Mr. Goodfish - Good for the sea, good for you</a>	
<a href="#">Fishbox diffusione più consapevole del consumo del pesce</a>	
<a href="#">Mangiamoli Giusti - i Pesci da Mettere nel Piatto e Quelli da Lasciare in Mare</a>	
<a href="#">Che pesci pigliare - No ai pesci sotto taglia! Righello con la taglia minima delle specie ittiche Mediterraneo.</a>	
<b>Poland</b>	<b>Portugal</b>
<a href="#">Fakty i liczby</a>	<a href="#">Factos sobre as pescas</a>
<a href="#">WWF poradnik</a>	<a href="#">MSC - Marine Stewardship Council</a>
<b>Slovakia</b>	<b>Lithuania</b>
<a href="#">Rybárstvo – základné fakty</a>	<a href="#">Informacija apie žuvininkystę</a>
<b>Luxembourg</b>	<b>Sweden</b>
<a href="#">Global G.A.P.</a>	<a href="#">Fisket i siffror</a>
<a href="#">La pêche en chiffres</a>	<a href="#">MSC - Marine Stewardship Council</a>
<a href="#">Friend of the Sea</a>	<a href="#">Friend of the Sea</a>
<a href="#">MSC - Marine Stewardship Council</a>	<a href="#">WWF's Seafood Guide - when you're buying eco-friendly fish - Sea and Fishing</a>
<a href="#">Mr. Goodfish - Good for the sea, good for you</a>	
<a href="#">SeaWeb Europe - Guide des espèces à l'usage des professionnels</a>	<b>Slovenia</b>
<a href="#">Slow Fish - Mieux comprendre nos océans/Die Meere verstehen</a>	<a href="#">Ribiški podatki</a>
<a href="#">fish2fork - Le guide des restaurants pour les amateurs de poisson durable</a>	
<a href="#">EUMOFA - L'Observatoire Européen du Marché des Produits de la Pêche et de l'Aquaculture</a>	
<b>United Kingdom</b>	<b>Malta</b>
<a href="#">Fish Fight</a>	<a href="#">Quickfish Guide</a>
<a href="#">Good fish guide - consumer guide to sustainable seafood</a>	<a href="#">Facts and figures on the Common Fisheries Policy</a>
<a href="#">Facts and figures on the Common Fisheries Policy</a>	<a href="#">EUMOFA - The European Market Observatory for Fisheries and Aquaculture</a>
<a href="#">Greenpeace - sustainable seafood recipes</a>	<a href="#">Fish Fight</a>
<a href="#">Friend of the Sea</a>	<a href="#">Global G.A.P. - Aquaculture information</a>
<a href="#">Coolseas - Informative game for young and old alike</a>	<a href="#">Mr. Goodfish - Good for the sea, good for you</a>
<a href="#">Global G.A.P. - Aquaculture information</a>	<a href="#">Slow Fish - Good, clean and fair fish</a>
<a href="#">Mr. Goodfish - Good for the sea, good for you</a>	<a href="#">MSC - Marine Stewardship Council</a>

<a href="#">Slow Fish - Good, clean and fair fish</a>	<a href="#">Fatti dwar il-ħut</a>
<a href="#">MSC - Marine Stewardship Council</a>	
<a href="#">Catchbox   Home</a>	<b>Spain</b>
<a href="#">The Marine Conservation Society's Pocket Good Fish Guide</a>	<a href="#">Datos de la pesca</a>
<a href="#">Marine Conservation Society - Buying seasonal fish</a>	<a href="#">MSC - Marine Stewardship Council</a>
<a href="#">Good Fish Guide mobile App</a>	<a href="#">Friend of the Sea</a>
<a href="#">Fish Fight on the App Store on iTunes</a>	<a href="#">Global G.A.P.</a>
<a href="#">Fish 4 Ever - good canned fish, sustainably fished</a>	<a href="#">WWF - Guía de consumo responsable de pescado</a>
<a href="#">Take the taste test   Fish is the Dish</a>	<a href="#">Alimentacion - Guia del tallas minimas</a>
<a href="#">Cefas: Under-utilised species</a>	<a href="#">Mr. Goodfish - Good for the sea, good for you</a>
<a href="#">Mangiamoli Giusti - Fish to Eat and Fish to Leave in the Sea</a>	<a href="#">Slow Fish - Para comprender los océanos</a>
<a href="#">Sustainable Seafood Coalition</a>	<a href="#">Fedepesca - Guia del consumo responsable de pescado</a>
<a href="#">Sustainable Fish City</a>	<a href="#">Pescados para el Paladar y Pescados que Hemos de Dejar en el Mar</a>
<a href="#">Local Catch - Eat, buy and sell fresh, local fish directly</a>	<a href="#">fish2fork - La guía de restaurantes para quienes quieren consumir pescado - respetando el medio ambiente</a>
<a href="#">EUMOFA - The European Market Observatory for Fisheries and Aquaculture</a>	<a href="#">EUMOFA - Observatorio Europeo del Mercado de Productos de Pesca y Acuicultura</a>
<a href="#">The Ethical Shellfish Company   The Ethical Shellfish Company, Mull, Scotland</a>	
<a href="#">Fish2Fork - The campaigning restaurant guide for people who want to eat fish - sustainably</a>	<b>Romania</b>
<a href="#">Fish and kids - Sustainable seafood for schools, plus games for young and old alike</a>	<a href="#">Date privind pescuitul</a>

The use of antibiotics was another concern expressed in the meeting by two stakeholders proposing these criteria include a statement to reduce the use of antibiotics and hormones. However, this consideration is not proposed here since the use of antibiotics is covered by the certification schemes proposed (e.g. ASC or Globalgap with add-on for animal welfare). If zero antibiotics want to be asked then the procurer can require organic aquaculture products.

### 3.3. Integrated production

This section presents the comments received through BATIS and personal communications from the 1<sup>st</sup> AHWG meeting to the 2<sup>nd</sup> AHWG meeting.

**Table 35. Feedback from the stakeholders on the TR1.0: Integrated Production (TS and AC)**

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
Ambition levels	For us, integrated production should be considered as a step from conventional to organic production, but as a criteria is quite difficult to define, taking into account that some European countries don't know what it really means and in Spain exist one national regulation, plus 17 ones for each region. <i>Consequently, we will not set up any criteria (10%), but if it is not possible, at least consider its gradual increase.</i>	<b>Comment partially accepted</b> The number of countries lacking an IP certification scheme is not significant. Additionally there are some international certification schemes that can be used for compliance with this criterion.
	<i>I agree with the ambition levels, I think they are reasonable, not too ambitious.</i>	<b>Comment accepted</b> From the environmental and economic points of view the IP is the best way to produce at low costs and causing lower environmental impacts. This practice is considered cost-effective. Due to the fact that there are IP certification schemes in most of the Member States plus international schemes that can be accepted as proof of compliance, a higher ambition level can be considered. Flexibility is introduced in the wording of the criteria suggesting to the procurers' higher thresholds wherever IP regulation is in place.
	<i>10 % is a low ambition for European production. IP of imported products like bananas, oranges and coffee more difficult to comply, but still 10% is a low ambition I think.</i>	
	<i>The ambition levels should be higher since in comparison with ecological schemes integrated systems are not as ambitious. I suggest + 5-10%.</i>	
	<i>Availability is very much dependent on the verification methods acknowledged.</i>	
<i>If scientific evidence suggests IP is the most sustainable production method, 10% is not very ambitious.</i>		
Similar criteria in your tenders	I don't have any experience on this matter. Marijke Van Ranst (bio forum) told me that most of the Belgian fruit is already integrated production but that we are not aware of this. Although it could be a stepping stone towards organic production.	<b>Acknowledged / Comment accepted</b> The Belgian experience reported in this comment seems to be the common practice in other Member States such as Germany or Spain.

	<p>I asked the organisations LF and ØL about this, and here are the answers to why we do not work with this in Denmark:  Answers to the consultation questions to stakeholders:  - Do you have experience in using similar criteria in previous tenders? No.  - Do you agree with the ambition levels set (% for the criteria) for the core and comprehensive criteria? Because IP products have never been successful in Denmark. Consumers and the public sector choose either conventional or organic products.</p>	<p><b>Acknowledged</b>  DK is one of the few Member States lacking an IP certification scheme. However, it should be noticed that DK is one of the countries with the highest % of organic products, although this kind of products are excluded from this criterion.  Additionally, there are also international schemes that can be used for compliance with this criterion such as GLOBAL GAP or the SUSTAINABLE AGRICULTURE INITIATIVE PLATFORM</p>
<p>Concept of Integrated Production</p>	<p>Before being able to comment, it would be critical to obtain a definition of what is meant by IP. We would need a clear definition of the standards and certification systems in place. Since there is no harmonised EU definition or legal framework and only some EU countries have IP initiatives in place, it is premature to set a technical specification and target for IP.</p> <p>What to comply to for the producers when IP is not specified? What products can be accepted in a tender? Important that equivalent products (products meeting same standards) can compete regardless of origin. For example, will both wheat flour produced according to German, Danish, Finnish and Swedish IP be accepted?</p> <p>IP certification is an often accepted verification, but the criteria must be more detailed than to accept IP. The IP standard comply with different set of rules in different productions and in different countries due to climate, national legislation, breeds of animals and so on.</p> <p>A proper definition of IP is currently lacking!</p> <p>ETL supports the chosen approach to include various forms of agriculture that result in less environmental burden in the GPP criteria set. However, the concept of IP seems to be fairly vague and not generally known throughout the Member States. A further clarification and definition on this matter is therefore needed. Besides IP, also other alternative schemes should be acknowledged.</p> <p>Specify the criteria according to which production methods should be promoted</p>	<p><b>Comment rejected</b>  Even if the definition of IP slightly differs from country to country or from region to region, most of them have a scheme that clearly defines the concept and the technical requirements to be certified.  A possible definition for IP that is pretty close to most of the definitions provided by the respective certification schemes could be: <i>"a system of specific rules to each culture, applied at various stages of the production of a vegetable food that is characterized by a weak environmental impact"</i> or in more detail and as defined by IOBC <i>"an agricultural system for producing food which makes optimal use of natural resources and regulation mechanisms by ensuring that farming is viable and sustainable over the long term. Under this system, biological methods, cultivation techniques and chemical processes are carefully selected, seeking a balance between the environment, profitability and social requirements"</i>  However, from the point of view of the applicability of the criteria, the exact definition of the IP to be applied should be that of the certification scheme that is in place in the area. In this sense, a procurer can buy IP certified products from two or more IP certification schemes that will have different but similar definitions.</p>

Verification	<p>As there is <i>no mandatory labelling or certification_of</i> food products produced according to integrated production standards in Austria, the visibility is low and verification of criteria complicated.</p>	<p><b>Comment rejected</b>  According to the information submitted by Austria for the implementation of the integrated pest management, there is no national label to easily recognise those products grown following the IP rules. However, there are guidelines at national level for vegetables and mechanisms in the regulation for verifying.  Global GAP is an international scheme that can help regarding the verification issues. (<a href="http://ec.europa.eu/food/plant/pesticides/sustainable_use_pesticides/ipm/index_en.htm">http://ec.europa.eu/food/plant/pesticides/sustainable_use_pesticides/ipm/index_en.htm</a>),</p>
	<p>The report indicates that there is no EU wide certification system setting out the minimum requirements to verify compliance [JRC 2016b] of IP systems. It is necessary that the report provides a definition of what is meant by IP and that it provides a list existing IP Certification Systems in the Member States of the European Union in order clarify and provide certainty as to which integrated production systems can producers refer to.  In addition major initiatives such as the Sustainable Agriculture Initiative Platform [SAI 2017] should be taken into account both the Preliminary and the Technical report. <i>This scheme, backed by major food manufacturers and retailers, builds upon the Integrated Production principle and aligns with international sustainability agriculture standards.</i>  These and other privately owned initiatives should be acknowledged in addition to public IP schemes, as means to implement sustainable agriculture.</p>	<p><b>Comment accepted</b>  As reported in the table below, there are countries that rely on private schemes for the IP certification. This fact was not well reflected in the wording proposed in the TR1.0.  The new wording is now open to private and international certification schemes that are 3<sup>rd</sup> party certified.</p>
	<p>Like my first comment: not the IP is the goal, but the advantages that are accomplished by this production method. Restricted use of pesticides and synthetic fertilisers can also be realised with the organic production method. We have a national label: <a href="http://www.milieukeur.nl/19/home.html">http://www.milieukeur.nl/19/home.html</a> that can be seen as an IP label</p>	<p><b>Acknowledged</b></p>
	<p>Here, only public schemes are taken into consideration. There are many national, regional and international privately owned IP schemes which can be used to verify compliance to GPP criteria, as well as the collective work done within SAI Platform. The FSA and schemes benchmarked against it (at least silver and gold levels) should be acknowledged by GPP schemes across the EU.</p>	<p><b>Comment accepted</b>  See above</p>

	This limits GPP to niche products, which very much limits its impact. Certified IP is very small scale in the EU, and not the innovation route sustainability leaders choose for. When producing, trading or processing large volumes, third party certification of all products is not possible, nor is it necessary for safeguarding the continuous improvement both GPP and private sustainability programmes should be aimed at.	<b>Comment rejected</b> The IP is, according to the data reported to the Commission widely spread across Europe. There are countries such as Germany where the IP is the common practice. Also, this technique is so widely spread that even most of the large-scale multinational retailers require a certification such as GLOBAL GAP to accept the products.
	Please explain: the work of SAI Platform is recognised by the JRC as best practices in terms of improving environmental impacts in food production, yet its principles and the FSA (farm sustainability assessment) are not considered to be a valid IP scheme?	<b>Comment partially accepted</b> The IP criterion has been opened for verification to private schemes. as long as SAI or FSA can be considered as equivalent to the national regulations they can be used to shown compliance with the criterion. These schemes cannot be used to show compliance with the criterion as long as they are not considered as equivalent to the national regulation.
	Defining integrated production as a technical criterion is questionable as it is neither defined nor controllable in all Member States. In several countries, such criteria don't even have any added value as produce produced using such methods is a standard requirement. Therefore, including IPM criteria wouldn't give advantage to more sustainable producers.	<b>Comment rejected</b> While it is true that not all Member States have put in place specific regulation or IP certificates, the implementation of the integrated pest management (Directive 2009/128/EC) is mandatory from 2014 on.
Modifications in the TR	The word ' <i>compromise</i> ' suggests organic is the optimum and conventional is the minimum, and IP meets them halfway. Both conventional and IP can be MORE sustainable than organic in some aspects.	<b>Comment accepted</b>
	Criteria for integrated production differ per country.	<b>Acknowledged</b> see other replies above

### Further analysis on integrated production

The IP represent a system of specific rules to each culture, applied at various stages of the production of a vegetable food (and in some countries also to livestock) that is characterized by a weak environmental impact. The IP practices are not defined at EU level but they are defined at national or regional level in most of the Member States. Table 36 summaries the state-of-the-art of the IP in Europe. This information was obtained from the submitted reports for the implementation of the integrated pest management (Directive 2009/128/EC) provides information on the IP certificates that are in place in each member state (European Commission 2013). The data are from 2013 being mandatory the implementation of the integrated pest management from 2014 on. As seen in the Table 36, approximately two thirds of the Member States (and especially those with large production of crops, fruits and vegetables) have at national or regional level, public or private IP certification schemes in place.

**Table 36. Existence of integrated production certified schemes across EU and their state of the art**

<b>Country</b>	<b>IP certified schemes in place?</b>	<b>Schemes and state of the art of the IP</b>
Austria	Yes	At national and regional in Styria, Burgenland, Salzburg ÖPUL guidelines for certain arable crops and for vegetables, fruit, hops and wine. Only the vegetable integrated production guideline applies nationally
Belgium	Yes	Flammers since 2014 for vegetables Wallonie through public specifications and privates schemes. FRUINET is one scheme that goes beyond the IP
Bulgaria	Yes	The terms and procedures applicable to integrated manufacturing, together with relevant registering of respective farmers (agricultural producers) and identification of integrated production are all well laid down in national Ordinance No 15 on the terms and procedures applicable to integrated production of plants and plant products, and their identification.
Croatia	No	
Cyprus	No	
Czech Republic	Yes	In national CZ directives were issued for the application of IP systems in the cultivation of fruit, vegetables and vines. For vines the directive is issued and updated by the Association of Integrated and Organic Grape and Wine Production (EKOVÍN), for fruit it is the Association for Integrated Systems for Fruit Cultivation (SISPO) and for vegetables the Association for the Integrated System of Vegetable Production.
Denmark	No	
Estonia	No	
Finland	No	
France	Yes	National Integrated farming reference document: Decree 2004-293 relating to the conditions on suing the term integrated farming Decree 2002-631 relation to the certification of agricultural farms under the "integrated farming" Order of 30th April relating to the integrated farming reference document, modified by the order of 20th april 2005 There are charters per products such as: Pomiculteurs, Peches et Nectarines, Fraise, Tomate, Cucumbers, Table grapes, cherry and prunes The certifications for the IP of these vegetables are: FARRE, QUALITERRE, AGRICONFIANCE, GLOBAL GAP
Germany	Yes	There are national guidelines for fruits and vegetables that are followed by the growers association; but the retailers (i.e. the market) have defined IP as the standard production scheme. Therefore there is no IP/IPM certification/label
Greece	?	
Hungary	yes	The introduction of integrated production with certified trademark (trademark "Qualified Farmers/Produce of Integrated Production"), is only at high professional level and, therefore, only on a voluntary basis. The elements that make integral part of it are defined in the Hungarian National Plant Protection Action Plan: <a href="http://ec.europa.eu/food/plant/pesticides/sustainable_use_pesticides/docs/nap_hungaria_en.pdf">http://ec.europa.eu/food/plant/pesticides/sustainable_use_pesticides/docs/nap_hungaria_en.pdf</a>
Ireland	No	
Italy	Yes	The national law of 3rd Februray 2011 in the Article 2(3) provides the implementation of the national system of integrated production quality



		<p>(SQNPI)</p> <p>The principal logos at regional level are:</p> <p>QUALITA CONTROLLATA: Regional law 28/99 creating the brand of the Emilia-Romagna to identify and promote the food manufactured with IP techniques</p> <p>AGRICUALITA: Regional law 28/99 creating the brand of the Tuscan area to identify and promote the food manufactured with IP techniques</p> <p>QUALITA VERIFICATA Regional law 12/01 creating the brand of the Venezia region to identify and promote the food manufactured with IP techniques</p> <p>QUALITA GARANTITA Decree 98/CSI 10/09 creating the brand of Piedmont to identify and promote the food manufactured with IP techniques</p> <p>PRODOTTI DI PUGIA Deliveration of area 1706/12 creating the mark of the Apuglia region to identify and promote the food manufactured with IP techniques</p>
Latvia	Yes	National action plan, point 3.15
Lithuania	Yes	There are public certification schemes with elements of IPM. Since 1997 is certified organic production, since 2012 is certified superior quality fresh fruits, berries and vegetables production.
Luxemburg	?	
Malta	No	
Netherland	Yes	Only private schemes
Poland	Yes	<p>The national law basis for the IP system were the provisions of the Act of 18 December 2003 on plant protection (O.J. of 2008, No. 33, item 849, as amended) and the Resolution of the Ministry of Agriculture and Rural Development of 26 July 2004 on integrated production (O.J. of 2004, No. 178, item 1834, as amended). Control over the entire system was entrusted to the State Plant Health and Seed Inspection Service. An agricultural producer interested in acquiring of the IP certificate should inform of his intention to farm the Voivodeship Plant Health and Seed Inspection Service, being registered and obliged to fulfil a training, farming in accordance with the methodologies attested by the State Plant Health and Seed Inspection Service, document all actions in the IP crops and being inspected by the voivodeship. The certificate is issued for 12 months. The producers who comply with the above mentioned conditions have the right to use the certificate and tag products with the copyright IP logo.</p>
Portugal	Yes	<p>The national Decree-Law nº 256/2009 of 24 September establishing the principles and guidance for Integrated Pest Management practice and Integrated Production and technical guidelines for the implementation of Integrated Pest Management, Integrated Production and Organic Farming and setting an official accreditation system for technical advisors.</p> <p>It is estimated that presently only ca 15 professional farmer organizations are actively promoting IPM and IP, mainly in the Lisboa and Vale do Tejo region and for the following crops: vegetables, pome and stone fruits and vines. It is also estimated that around 360.000 ha (data from 2012) is under IP.</p>
Romania	Yes	In Romania there are implementing the following specific systems: the agricultural and food products quality systems, organic production and traditional products. These systems are managed by the Ministry Agriculture and Rural Development.
Slovakia	?	
Slovenia	yes	Private certification organisation

Spain	Yes	12 out of 17 regions developed regulations for IP under the umbrella of the national Royal Decree 1201/2002 and the modification by the Royal Decree 108/2010. The regional regulations establish a framework law laying down the requirements for IP, its certification schemes and the certifying mark it uses. There is a strong IP development in Spain with 766070 ha in 2011 of olives, rice, cereals, cotton, citrus, stone fruits, vegetables, grapes for wine making, pome fruits, dry fruits, beet, tobacco, table grapes, Lucerne, bananas, corn and others.
Sweden	Yes	Sigill Kvalitetssystem AB is a private scheme that develops and manages the IP standard which is the leading independent food and flower certification scheme. The IP-standard contributes to sustainable development in crop and animal production. The standard also comprises handling and processing of foodstuff and is coupled to the control and origin brand Svenskt Sigill. Today almost 4000 companies are certified according to one or more of the different standard modules <a href="http://sigill.se/IP-STANDARD/CERTIFIERING-ENLIGT-IP/CERTIFIERING-ENLIGT-IP/IN-ENGLISH/">http://sigill.se/IP-STANDARD/CERTIFIERING-ENLIGT-IP/CERTIFIERING-ENLIGT-IP/IN-ENGLISH/</a>
UK	Yes	Private schemes since 2000 through: the Soil Association (organic sector); Linking Farming And Environment (LEAF); Assured Food Standards (AFS) scheme

### **Integrated Production: definition, objectives and principles**

Integrated production is a concept of sustainable agriculture developed in 1976 which has gained international recognition and application. The concept is based on the use of natural resources and regulating mechanisms to replace potentially polluting inputs. The agronomic preventive measures and biological/physical/chemical methods are carefully selected and balanced taking into account the protection of health of both farmers and consumers and of the environment.

One of the most comprehensive definitions of IP reads as follows:

*"integrated production is a farming system that produces high quality feed and other products by using natural resources and regulating mechanisms to replace pollution inputs to secure sustainable farming"*

The principles and objectives of IP have been compiled, analysed and formulated by an IOBC panel of experts and updated in 2004. The principles cover ecological, ethical and social aspects of agricultural production as well as aspects of food quality and safety and are representative of the IP objectives of most of the existing European regulations. The objectives of the IP are:

- *To integrate natural resources and regulation mechanisms into farming activities to achieve maximum replacement of off-farm inputs.* This objective addresses the basic intentions of a sustainable agriculture. An intelligent management and careful utilization of natural resources can help to substitute for farm inputs such as fertilisers, pesticides and fuel. Total or partial replacement of these materials not only reduces pollution but also production costs and improves farm economics
- *To secure sustainable production of high quality food and other products through ecologically preferable and safe technologies.* IP aims at high quality products mainly through ecologically sound techniques that are safe from human health. The total evaluation of the agricultural products considers also all sustainable methods of crop production (ecological quality), adequate standards in animal production and adequate working conditions of the farm workers.
- *To sustain farm income:* farm products produced with a high level of ecologically safe, ethically sound and socially acceptable quality must generate justified "added values". Sustainable agriculture and marketing have to apply the principle of fair trade to the largest possible extent.

- *To eliminate or reduce sources of present environmental pollution generated by agriculture.* Pollution of agricultural origin has to be reduced or eliminated and wherever this is feasible
- *To sustain the multiple functions of agriculture (multi-functionality).* Agriculture has to meet the needs of the entire society, including those requirements that are not directly connected with the production of food and fibre. Diversified landscapes, wildlife conservation, colonisation and cultivation of remote areas as well as maintenance of local cultural traditions are some of the non-agricultural environmental and recreational values provided by operational farms.

The principles of IP are:

- *IP is applied only holistically.* IP is not merely a combination of integrated pest management (IPM) and additional elements such as fertilizers and agronomic measures to enhance their effectiveness. Instead, it relies on ecosystem regulation on the importance of animal welfare and on the preservation of natural resources.
- *External costs and undesirable impacts are minimised.* Detrimental side-effects of agricultural activities, such as nitrate or pesticide contamination of drinking water, or erosion sediments in waterways, impose enormous costs to society. These external costs are normally not reflected in budgets for agricultural expenditure and must be reduced
- *The entire farm is the unit of IP implementation.* IP is a system approach focusing on the entire farm as the basic unit. Important strategies, such as balanced nutrient cycles, crop rotations and ecological infrastructures, become meaningful only if considered over the entire farm
- *The farmers' knowledge of IP must be regularly updated.*
- *Stable agro-ecosystems must be maintained as key components.* Agro-ecosystems are the basis for planning and realisation of all farm activities, particularly those with potential ecological impact. They are visible expressions of the holistic concepts and provide both natural resources and regulation components. Stabilisation means the least possible disturbance of these resources by farm activities
- *Nutrient cycles must be balanced and losses minimised.* Balanced in this context means targeting maximum reduction of nutrient losses (e.g. leaching), a cautious replacement of those amounts leaving the farmed area through sales of commodities and recycling of farm materials
- *Intrinsic soil fertility must be preserved and improved.*
- *Integrated pest management is the basis for decision making in crop protection.* IPM applies to noxious species of phytophagous animals, pathogens and weeds. In the context of sustainable agriculture emphasis with plant protection is placed on preventive (indirect) measures that must be utilised to the fullest extent before direct measures are applied. Control means management of the pest population to maintain it below that level that causes economic losses. Decisions about the necessity to apply control measures must rely on the most advanced tools available, such as prognostic methods and scientifically verified thresholds. The instruments of direct plant protection are the last resort if economically unacceptable losses cannot be prevented by indirect means.
- *Biological diversity must be supported.* Biological diversity includes diversity at the genetic, species and ecosystem level. It is the backbone of ecosystem stability, natural regulation factors and landscape quality. Replacement of pesticides by factors of natural regulation cannot sufficiently be achieved without adequate biological diversity.
- *Total product quality is an important characteristic of sustainable agriculture product quality*
- *Animal production on mixed farms. Animal production should regard animal density and welfare of all species*

These objectives and principles are applied to many arable crops in Europe, pome fruits, stone fruit, soft fruits, grapes, olive trees, citrus and field grown vegetables. For each one or each family of crops or vegetables a specific technical guideline is published. The Guidelines, even for the same vegetable or crops maybe different depending on the

climatic conditions of the area, type of soil, etc to be applied. The availability of the guidelines is included in the national or regional regulation as well as in the website of most of the private schemes.

### 3.4. Animal welfare

This section presents the comments received through BATIS and personal communications from the 1<sup>st</sup> AHWG meeting to the 2<sup>nd</sup> AHWG meeting.

**Table 37. Feedback from the stakeholders on the TR1.0: Animal welfare (AC)**

<b>Topic</b>	<b>Feedback from stakeholders</b>	<b>JRC-Directorate B5 assessment</b>
Ambition levels	HSI strongly disagrees with the approach of limiting animal welfare to a single AC and single product (free range eggs)	<b>Comment accepted</b> More animal product categories have been included
	I agree to the ambition levels	<b>Acknowledged</b>
	AC4. Improved animal welfare. Points shall be awarded proportionally to tenders in which the amount of animal products that meet additional high quality, verifiable animal welfare standards that are more stringent than EU standards is above 25% (50% for comprehensive) of the total procurement cost of animal products.	<b>Comment accepted</b> Due to the fact that there are animal welfare certification schemes in most of the Member States plus international schemes that can be accepted as proof of compliance, a higher ambition level can be considered.
	TS in comprehensive: "Eggs: where not organic, the eggs used shall be code 1 of Regulation 589/2008; Meat: At least 5% of the total amount in mass, used per year as 'free-range' animal products (e.g. chicken meat and pig meat).	However, since these thresholds may not be affordable to reach by all Member States, the proposal is to set the criterion as award criterion. They will be left to fix the values attending to the specificity of the place where the tender is launched.
	5% of procurement cost? Very low ambition. Better to specify products that must meet specified criteria.	
	TS4. Improved animal welfare. All animal products, whether produced within or without the EU, shall meet EU animal welfare laws and regulations. Further, the animal products that meet additional high quality, verifiable animal welfare standards that are more stringent than EU standards shall be at least 25% (50% for comprehensive) of the total procurement cost of animal products.	
	By aiming higher than 5% it would have a positive effect on meat consumption which is generally too high.	
	When widening the scope to other production systems with significant welfare benefits, the threshold can be much higher and still remain feasible. Examples are: slow-growing breeds, indoor or sheltered roaming space	<b>Comment accepted</b> See above.
If points are rewarded for more than 5% of the procurement costs, the side effect can be that the total amount of meat consumption increases; this is not what we want to promote. Maybe points can be awarded if a healthy vegetable alternative for meat can be offered.	<b>Comment accepted</b> The wording of the criterion has been changed. Instead of the % of the procurement costs the last proposal suggests a percentage of the total meat purchased. In this way, the total amount of meat does not affect the number of points to be awarded.	

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>I ask for all our eggs to be free range as TS. Next to that there is an award criterion on animal welfare, where the tenderer can get points if they add meat in the menu from free range animals.</p> <p>The meat quality of free range animals should be better. There can be an extra cost, but you should be able to work around this with good menu planning. Also the usage of less animal protein and more use of vegetable protein can make the use of more expensive free range meat affordable.</p>	<p><b>Acknowledged</b></p> <p>See above.</p> <p>An increase of vegetable proteins usage has been included in the menu planning.</p>
	<p>Specify the criteria which are most relevant according to widely available animal welfare standards Formulate the criterion on “free-range eggs” as technical specification</p> <p>“The EEB welcomes the intention to set criteria addressing animal welfare. Nevertheless, the EEB highly recommends specifying the criteria. Since there are animal welfare standards of different ambition levels, it is necessary to define the animal welfare criteria that should be addressed in a public tender.</p> <p>Most important to environmental NGOs would be aspects such as respecting natural behavioural needs of farm animals and meeting their minimum space requirements. Furthermore, the EEB recommends formulating the core criterion on “free-range eggs” as a technical specification since such eggs are easily available in high quantities.</p> <p>Mainly representatives from different environmental ministries and from public procurement offices pointed out that it is quite important to reduce the purchased meat quantities in order to switch to meat supply of higher quality.”</p>	<p><b>Comment partially accepted</b></p> <p>The rationale of the criterion includes some of the criteria that any animal welfare standard should comply with. Additionally, some specific animal welfare standards are named as an example.</p>
Verification	<p>Means of proof: consider, if possible, to add also ISO 14021 “free-range animals” indicating the producer references useful to verify the environmental assertion done or combining with the ISO 22005:2007 “Traceability in the feed and food chain”.</p>	<p><b>Comment rejected</b></p> <p>Both mentioned norms are self-declarations. In the existence of other third party and cannot be admitted as a verification proof. A third party verified product is the only accepted proof.</p>
	<p>Third party certified products to animal welfare standards are common for poultry, eggs, milk, pigs meat, cows meat, lambs meat and pasture meat. Even though some criteria, i.e. stunned slaughter, can comply with an animal welfare standard as well a national legislation in some member countries. 5% of procurement cost? Difficult to hold track of. For every supplier if more than one supplier? Very low ambition. Better to specify products that must meet specified criteria.</p>	<p><b>Acknowledged</b></p> <p>The verification system is proposed. See above for further details.</p>
	<p>The report could further investigate if there are further means to assess animal welfare criteria other than free range breeding.</p>	<p><b>Comment accepted</b></p> <p>The EC has regulated the best practices aimed at improving animal welfare, specific for each kind of farmed species. E.g COM (EU)</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
		2016/336 on reducing the need for tail-docking and optimised solutions for providing enrichment materials for pigs.
Market availability	The availability of meat products that are third-party certified for animal welfare standards varies across different countries in the EU. We would not recommend setting criteria for this aspect given the wide variability in availability across the EU.	<p><b>Comment partially accepted</b></p> <p>It is important to consider animal welfare due to consumers demand and is linked with animal health and well-being.. The market availability varies but there are a number of animal welfare certification schemes at national and international level that can be accepted as proof of compliance. Stakeholders reported that the proposed ambition levels are feasible and could be even been raised up</p>
Market availability	We have no problem in Denmark with availability, because we buy organic meat.	<b>Acknowledged</b>
	Requiring “all” eggs that are not organic to be cage-free or free-range creates a conflict between demands for local sourcing and demands for cage-free or free-range eggs. .The availability of such eggs is highly variable across the EU.	<p><b>Comment accepted</b></p> <p>In order to provide higher flexibility to the procurers to adapt to their regional conditions, an open wording of the criterion is proposed. Recommended values are included in the explanatory notes.</p>
	We do not have faced any problem buying organic eggs. However for meat is more problematic. Overall though the amount of meat has been reduced to keep the available kitchen budget.	<b>Acknowledged</b>
General comments	The overuse of antibiotics should be considered.	<p><b>Comment accepted</b></p> <p>The welfare of animals is assured by Directive 2008/120/EC. EU legislation sets welfare standards for their farming time, transport and conditions at the time of stunning and slaughter Moreover, COM REC 2016/336 on the application of the directive lies down minimum standards for the protection of pigs as regards measures to reduce the need for tail-docking. Transposition of directives and rules into national legislation is a responsibility of Member States, which can be taken as verification system. Moreover, MEPs voted to adopt an EU regulation harmonising animal welfare rules will enter into force foreseeably in 2017, with a key goal of toughening up the fight against antimicrobial resistance (AMR). Under these rules the EC will monitor the use of animal antibiotics and published data. European Food Safety</p>
	There are also other aspects of animal welfare; The use of antibiotics? Stunned slaughter? Transportation time to the slaughter house? Grazing season for milk cow? No tail docking on pigs?	

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>The evidence on setting animal welfare criteria has shown pros and cons in the respect to achievable environmental benefits. Moreover, procurement should be considered as a whole and the criteria should be set out so that criteria on animal welfare will not seem out of place. One way to increase animal welfare is thorough minimisation of livestock consumption and this seems to be lost within the criteria proposals. The connection between criteria also deserves further attention. A stakeholder responded that this criterion aims to promote the purchase of meat of higher quality in the case where it is chosen to be bought. At same time the menu planning criterion includes the aspect on reducing the livestock consumption. Both aspects tackle different points on the livestock consumption. Implicitly this leads to the conclusion that better quality meat should be bought in the smaller quantities.</p> <p>We propose the inclusion of the scheme explained in the Regulation (EU) No 665/2014 with regard to conditions of use of the optional quality term 'mountain product'</p>	<p>Authority (EFSA) experts have been consulted to update the list of potentially dangerous diseases together with farmer's organisations, veterinary associations, animal welfare movements and others involved in drafting contingency plans.</p> <p><b>Comment accepted</b> See above</p> <p><b>Acknowledged</b> Mountain product is a designation of animal products produced in mountain areas The scope of the animal welfare criterion is on all farmed animal species, which comprises mountain products as well.</p>
General comments	<p>Healthier conditions prevent diseases and limit the use of drugs to cure animals, so this one it's not only an ethical criterion.</p> <p>We propose to add a criterion allowing antibiotics to be used only if prescribed by a veterinarian.</p> <p>Even in free range systems, animal welfare is for an important part dependent on indoor housing facilities, as animals will not be outdoors 24/7. Free range production standards acknowledged by GPP should be based on an integrated approach on animal welfare.</p> <p>There is a wide range of production methods in between conventional and organic in terms of animal welfare levels. Solely focussing on free range is a missed opportunity to develop this segment, as it is the segment where the best balance between welfare, environmental impact, human health and cost is achieved.</p>	<p><b>Acknowledged</b></p> <p><b>Acknowledged/Comment accepted</b> Animal welfare standards include a rational use of antibiotics. Healthier conditions prevent diseases and limit the use of drugs to cure animals. See previous comment above as well</p> <p><b>Acknowledged</b> Integrated approach has been set as a different criterion.</p> <p><b>Comment accepted</b> The criteria wording has been changed accordingly.</p>



Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>IFOAM EU welcomes the inclusion of animal welfare standards. However, since this topic can be quite wide it is important to set clear criteria for these standards.</p> <p>Free range egg criterion should not undermine the procurement of organic eggs.</p> <p>It is important to highlight also that organic agriculture already has clear and high standards for animal welfare compared to conventional produce. These products should not exclude organic labelling. The combination of these two criteria will lead to optimal results.</p>	
	<p>Free range breeding is only one aspect related to animal welfare, others include issues such animal health (the use/avoidance of hormones and antibiotics etc.). In addition, the legal base related to animal welfare vary between Member States, others having stricter requirements than others.</p>	<p><b>Comment accepted</b> See above</p>
	<p>Municipalities and other public authorities in Denmark which focus on animal welfare demand organic products.</p>	<p><b>Acknowledged</b></p>
	<p>Free-ranged animals (e.g. bovines) use land which cannot be cultivated by arable cropping, that is why organic stock-keeping is environmentally less favourable not because animals need more fodder because living longer (as written in the rationale)</p>	<p><b>Comment accepted</b> The rationale wording has been changed accordingly.</p>
<p>Wording of the criterion</p>	<p>"The binary nature of the discussion on trade-offs between animal-welfare and environmental improvements here are erroneous. Opportunities to both improve animal welfare and climate change impacts exhibit areas of co-benefits and trade-offs. Shields and Orme-Evans (2015) outline these areas and show that a number of opportunities to achieve co-benefits exist. Unfortunately, the Technical Report, as with the Preliminary Report (section 4.5.1.7) only mentions trade-offs. Instead, the GPP criteria should seek and support co-benefits. HSI suggests that phrasing to this effect be added to the Technical Report in lieu of the current line on trade-offs: <i>"Opportunities to both improve animal welfare and climate change impacts exhibit areas of co-benefits and trade-offs. The GPP criteria should support opportunities with co-benefits and avoids trade-offs wherever possible."</i></p> <p>Further, this analysis appears to rely only on LCAs with functional units per mass of product—not in terms of land use. Garnett (2011), however, has pointed out that environmental impacts per land use units can effectively shift the results for LCAs for farm animal production. We therefore ask that the Technical Report additionally consider this aspect of impacts analysis, which is required for a complete, holistic, and balanced sustainability analysis."</p>	<p><b>Comment accepted</b> The rationale has changed accordingly to the suggestion.</p>

<b>Topic</b>	<b>Feedback from stakeholders</b>	<b>JRC-Directorate B5 assessment</b>
Wording of the criterion	The use of "slightly" when talking about the cost of animal welfare products, because the Cost difference is very much dependent on specific product and supply chain model used.	<b>Comment accepted</b> Wording implemented
	<i>"Points shall be awarded to tenders where non-organic eggs in shell to be delivered have been produced respecting animal welfare standards on outdoor access, depending on availability."</i>	
Others	In addition to water impacts, other impact categories particularly relevant to farm animal production should be included: methane and nitrous oxide from manure management should be included.	<b>Comment rejected</b> The lack of schemes on this topic makes impossible the implementation of this requirement into the criteria set
	As we state in the attached document, the misuse or overuse of antimicrobials or antibiotics in animals have a negative impact on the environment and health.	<b>Acknowledge</b>
	Besides the energy use in slaughtering there should also be the slaughtering and handling schemes mentioned (e.g. small slaughtering houses with consecutive processing; centralised slaughtering units with cold storage/deep freezing/transport and further processing in other establishments	<b>Acknowledge</b>
	Please add under Food Procurement: Impact from animal livestock: use of antibiotics and development and spread of antibiotic resistant bacteria in the environment	<b>Comment rejected</b> The use of antibiotics is covered by the EU Regulation and some of the third party certification schemes as proof of compliance. Revised regulation is expected to come into force in 2017 addressing this point
	Under Food Procurement please improvement areas should include: organic meat or meat raised without routine non-therapeutic antibiotics reduced meat provision for maximum climate and resource impact. Products produced and processed locally	<b>Comment rejected</b> Organic food products are already included in criterion 1

### **Further analysis on animal welfare**

This criterion has been conceived to promote the purchase of animal products of higher quality and in smaller quantities, being this criterion linked to the meat reduction measure taken in menu planning. Despite no harmonized animal welfare labelling system exist in the EU, the majority of the stakeholders agreed on extending the scope of the criteria, limited up to now to free range eggs, and include as well all free range animal products (e.g. chicken and pig meat). Moreover, the common opinion is to increase the ambition levels, and to put the criteria as a technical specification.

When buying food of animal origin, consumers are increasingly interested in the animal welfare situation of the animals. Commission has taken steps to address the issue of labelling related to animal welfare and also introduced ban on cat and dog fur.

**Table 38. Steps taken for labelling related to animal welfare products, EU Commission.**

<p>Community Action Plan for Animal Welfare 2006-2010</p> <p>Choose translations of the previous link - one of the main areas of action described in this plain was to involve the general public and enable consumers to make more informed purchasing decisions. The Action Plan envisaged the creation of an Animal Welfare Reference Centre, which could serve as a coordinating body for the different initiatives related to animal welfare labelling (standardisation/certification of welfare indicators, auditing schemes, databases related to existing certified labels). The Centre should also facilitate the preparation of relevant socio-economic studies and impact assessments.</p>
<p>Council Conclusions 2007</p> <p>In 2007 the Council adopted Council Conclusions inviting the Commission to assess further the issue of animal welfare labelling in all its aspects, and to submit a report to the Council in order to allow an in-depth debate on the subject.</p>
<p>UK Farm Animal Welfare Council report 2006</p> <p>The 2006 Report by The Farm Animal Welfare Council (FAWC) in the UK examined the case for the provision of animal welfare information to consumers to help improve the welfare of animals. These discussions highlighted that any animal welfare labelling needs to be based on science. Therefore the Action Plan proposed to link the labelling to the use of standardised animal welfare indicators, recognised both in the EU and internationally.</p>
<p>Animal welfare indicators 2004-2009</p> <p>Such animal welfare indicators were being developed by the EU funded research project "Welfare Quality". The project focused on the integration of animal welfare in the food quality chain, and addressed public concern by improved welfare and transparent quality. The project aimed to:</p> <ul style="list-style-type: none"><li>• accommodate societal concerns and market demand;</li><li>• develop reliable on-farm monitoring systems, product information systems, and practical species-specific strategies to improve animal welfare including welfare indicators;</li><li>• focus on three main species and their products: cattle (beef and dairy), pigs, and poultry (broiler chickens and laying hens).</li></ul>
<p>Conference "Animal Welfare – Improving by Labelling?", 2007</p> <p>During the conference the European Economic and Social Committee (EESC) presented an exploratory opinion on this issue. The Conference concluded that labelling could, under certain conditions contribute to improving animal welfare.</p>
<p>COM RECOMMENDATION (EU) 2016/336</p> <p>On the application of Council Directive 2008/120/EC laying down minimum standards for the protection of pigs as regards measures to reduce the need for tail-docking</p>

Husbandry systems differ across the Member States. It is therefore necessary to recommend at Union level best practices for the protection of animal welfare, such as e.g. reducing the need for tail-docking and optimised solutions for providing enrichment materials. (COM (EU) 2016/336).

MEPs voted in 2016 to adopt an EU regulation harmonising animal welfare rules, with a key goal of toughening up the fight against antimicrobial resistance (AMR) (European parliament news, 2016). Under the regulation that will enter into force foreseeably in 2017, the European Commission will monitor the use of animal antibiotics and published data. And European Food Safety Authority (EFSA) experts have been consulted to update the list of potentially dangerous diseases with farmer's organisations, veterinary

associations, animal welfare movements and others involved in drafting contingency plans. The Revision of the Veterinary Medicines Legislation is ongoing at the moment of the drafting of the GPP recommendations. Onto the reduction of red tape the regulation will:

- streamline marketing authorisation procedures will allow companies to place and maintain a veterinary medicine on the entire EU market; and
- pharmacovigilance rules (the monitoring of adverse effects of veterinary medicines on the market) will be simplified.

To stimulate the development of new medicines:

- special rules for the authorisation of veterinary medicines for small markets such as apiculture and aquaculture will be introduced; and
- a better reward mechanism will be put in place, i.e. extended data protection to innovative veterinary medicines, that will make the companies' investments worthwhile economically.

To help the circulation of animal medicines across the EU:

- rules are introduced to facilitate the internet retailing of veterinary medicines within the EU.

The controlled used of antibiotics in the cattle is a major must of private schemes in labels such Globalgap when the add-on about Animal Welfare is comprised.

In addition to farmed animals, animals used for scientific purposes (in laboratory tests) and wild animals are also protected by harmonised EU standards, which are under responsibility of Directorate General Environment.

### 3.5. Fairly traded products

This section presents the comments received through BATIS and personal communications from the 1<sup>st</sup> AHWG meeting to the 2<sup>nd</sup> AHWG meeting.

**Table 39. Feedback from the stakeholders on the TR1.0: Fair traded products (AC)**

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
Market availability	The market availability of fairly traded certified products is sufficient.	<b>Acknowledged – Comment accepted</b> Wide and increasing availability in the selected products
	Sugar is available also from regional (European) and sustainable (organic) production. This shall also be taken into consideration as “ <i>produced having sustainable considerations in regard</i> ”.	
	The availability of such products is variable from one country to another. For most countries, it would be difficult to achieve a 20% target and impossible to achieve a 50% target, while for a small number of countries a 50% target may be relatively easy to achieve if this refers to sustainable products more broadly. However, achieving even a 20% target will increase the cost. We recommend encouraging the procurement of some fairly traded products, depending on availability, without setting a specific target. Due to the variation in market availability in different EU countries, we also recommend keeping this as an Award Criterion.	
	Good, and increasing, market availability of coffee, tea, chocolate.	
	No problem with availability. In Denmark we have a wide range of Fairly Traded certified products and it’s not a problem to create competition in a tender of fair trade products	
	The Fairly traded products mentioned (bananas, chocolate/cocoa, tea, coffee and sugar) are all easily available on the market so the ambition level here could be raised	
	Vienna’s KWP (Retiree’s homes Organization), completely changed to fair trade & organic coffee in 2013.	
Ambition levels	I agree to the ambition levels.	<b>Acknowledged – Comment accepted</b> Due to the fact that there is a wide market availability of fairly traded certified products in most of the Member States, a high ambition level can be considered. . However, since these thresholds might not be affordable in all Member States, the latest proposal includes in the explanatory notes the minimum level which tenders start scoring points. These
	Yes, we agree and think that a minimum percentage of 20 as core criteria should be set for tea and coffee.	
	We agree that a core minimum percentage of 20 should be set for coffee, tea and cacao (chocolate) and other percentages should be set for other products, such as sugar or tropical fruits. For comprehensive criteria, we found correct the percentage of 50%.	
	"Coffee, tea and chocolate should be 100% fairly traded. It is preferred not to use the	

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>phrase 'fair trade' as it refers to a specific label. Bananas are often fair trade and organic.</p> <p>The EEB does not agree with the proposed thresholds that we consider being too low and not ambitious enough. Therefore, we suggest to require at least 50% by weight (not by procurement cost!) of the purchased coffee, tea, chocolate (cocoa), sugar or bananas that have been produced taking sustainable/ethical considerations into account for the core criteria; and 100% of the purchased coffee, tea, chocolate (cocoa), sugar or bananas have been produced taking sustainable/ethical considerations into account for the comprehensive criteria. Stakeholders from public procurement departments explained that they do not face any problems in buying "Fair Trade products" in higher amounts.</p> <p>Maybe we could go higher?</p> <p>Coffee and tea should be 10% fairly traded and a more extended list should be considered</p> <p>In our tenders we require 10% for coffee, tea and sugar so a more ambitious levels for the criteria should be set.</p> <p>Is it possible to combine technical and award criteria? Greenwashing and over-valuing certain marketing schemes by certain companies should be avoided</p>	<p>explanatory notes are not mandatory and let the public institution to fix the most appropriated levels attending to the specificity of the place where the tender is launched. Recommendations are given to the procurers to require in their tenders for 10-30 and 30-70% of each purchase of the mentioned products</p> <p><b>Comment rejected</b> No, it is not possible to combine. Third party certified products ensure that greenwashing does not take place.</p>
Others	<p>Add another Award Criteria "Points shall be proportionally awarded to tenders that undertake a share of total amount of products constituted by protected designations of origin, protected geographical indications and traditional specialties guaranteed (PDO, PGI, TSG) products according to regulation UE 1151/2012".</p> <p>This AC is proposed as a social criterion. These kinds of products promote the safeguard of local traditions and, in some cases, the safeguard of the soil/land features useful to guarantee the high level of organoleptic and taste quality typical of them. Moreover, in these production protocols could be also addressed environmental criteria better than in food products without any standard.</p> <p>Ifoam EU welcomes the inclusion of fairtrade product criteria and sees the added value of such criteria to complement organic criteria. However, it is not a practical approach to have a percentage for specific products. When supplying coffee, you need to have several retailers of coffee to have a percentage. But, often, procurers only have one supplier of coffee in their contract that has a range of coffee products not all of which can meet the criteria. These products should not exclude organic labelling. The combination of these</p>	<p><b>Comment rejected</b> The scope of both schemes: fairly traded schemes and protected designations cannot be considered as equivalent. The former focuses on the social and sustainable aspects whereas the latter relies on traditions and geographical indications.</p> <p><b>Comment rejected</b></p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	two criteria will lead to optimal results.	
Others	Fair trade could be included as a contract performance clause instead?	<b>Comment accepted</b> A contract performance clause could assist on the verification, especially of those criteria that rely on third party certified schemes. A general contract performance clause will be included in this revision
	Fair trade should be part of a contract performance clause or an award criterion but not a technical specification.	
	Technical and award criteria addressing the same criteria areas can be combined. They proposed to have 100% organic (for coffee) as a technical criterion and fair trade as an award criterion. E.g. A tenderer that offers Organic coffee (TC: 100% organic) can gain extra award points when it is also Fair trade.	<b>Comment accepted</b>
	Are national targets an option to take into account when setting requirements on fairly traded products.	<b>Comment accepted</b> GPP is developed for the EU28 and then procurers adapt it to their own area's specificities.
	Food products that are certified as organic (and fulfil criterion TS1, AC1) are out of the scope of this requirement.	<b>Comment rejected</b> See above
	Fair trade vs organic fair trade: after consultation of different legal advisors from different public institutions, I'm giving extra points for organic fair trade (award criteria), so no exclusion of organic fair trade	<b>Comment accepted</b> The products that are organic and fairly trade will score points from the two criteria.
	When stimulating sustainable production in developing countries, you should stimulate both social sustainability as well as ecological sustainability. Technical and award criteria can be combined, when the technical criteria are not seen as a percentages. E.g. A tenderer that offers Organic coffee (TC: 100% organic) can gain extra award points when it is also Fair trade.	
General	Specification on product level can be made. A percentage is not relevant within a tender, but should be set as a goal for the general policy. Award criterion in combination with percentage is also a bit strange: normally with award criteria: the one that scores the highest (percentage) gets the most points on this specific aspect. So there is no difference between the core and comprehensive criteria as such. The list of products is too limited.	<b>Comment rejected</b> The percentage sets a threshold from which tenderers get points. The word ' <i>proportionally</i> ' has been added to make clear that the one offering a higher value above the threshold will get a higher score. Point scales are a matter of authorities. Even if the market availability for fairly traded products is growing, the list of products is still short: coffee (59%); being the next most
	The list of products is too limited.	

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>"such as e.g. Fairtrade, Rainforest..." who decide what is a recognised international organisations?</p> <p>Clarify Fairtrade® (the registered trademark) and fair traded product</p> <p>Furthermore, the Rainforest Alliance and UTZ labels are not fair trade labels. ICLEI therefore does not recommend that they be recommended as a form of verification for fair trade standards, principles, issues, etc, in public procurement. Certain aspects of the following publication (STA 2013) (on fair timber procurement) may provide useful for your recommendations in this area</p>	<p>important products, bananas (15%), cocoa (8%), flowers and plants (6%) and seed cotton<sup>2</sup>.</p> <p><b>Acknowledged</b> There are several schemes of international recognition. For example, for product certification, the Fair Trade Labelling Organisations International (FLO) serves as a coordinating organisation for national labelling initiatives and producer networks as well as a certification body. The use of any scheme under FLO indicates that a product has been certified by independent auditors to ensure that it respects environmental, labour and development standards.</p> <p><b>Comment accepted</b> It is rephrased in the rationale</p> <p><b>Comment rejected</b> A report from the International Institute for Sustainable Development (IISD) and the International Institute for Environment and Development (IIED) evaluated the Standards and the Green Economy in 2014. (see below)</p>
General	<p>The rainforest alliance label isn't a label we use and we don't want to use. We use Fairtrade (FLO standards) because we want to support smaller farmers and pay an honest price for what they have produced. UTZ and Rain forest alliance (RFA) have other goals. RFA mainly wants to protect the rainforest and UTZ has its goal on developing minimum standards and transparency for the production (agricultural, social and environmental).</p> <p>Copenhagen Municipality ask for fair trade products. We use fair trade (FLO standards)</p>	<p><b>Acknowledged</b> Schemes are suggested as a voluntary sustainability initiative to be used for the verification. They are examples for compliance, it is absolutely not mandatory to use them. Below there is a review of social indexes coverage made by the International Institute for Sustainable Development (IISD) and the International Institute for Environment and Development (IIED). SAN/RA seems to cover the majority of social indices (except for the gender balance where only 50% of the products comply with it). For UTZ the community involvement and the employment benefits are as well as gender balance out of coverage.</p> <p><b>Acknowledged</b></p>

<sup>2</sup> Fair trade and consumers in the European Union, Ron Davies, European Parliamentary Research Service. 2014.



Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>because we want to support smaller farmers and pay an honest price for what they have produced.</p> <p>UTZ and Rain forest alliance (RFA) have other goals. RFA mainly wants to protect the rainforest and UTZ has its goal on developing minimum standards and transparency for the production (agricultural, social and environmental).In our tenders on coffee, tea, sugar, and the tender on hot drink vending machines we ask for organic and fair trade products. One does not rule the other one out.</p> <p>Answers to the consultation questions to stakeholders:</p> <ul style="list-style-type: none"> <li>- Which is your experience in the market availability for products fair trade certified? No problem with availability. In Denmark we have a wide range of Fair Trade certified products and it's not a problem to create competition in a tender of fair trade products</li> <li>- Do you agree with the threshold level (20%) and 50% set, respectively, for the core and comprehensive criteria)? Maybe we could go higher?</li> <li>- Is this criterion particular relevant for vending machines? It's very relevant to go for fair trade in vending machines. It's a quick win. And for coffee, tea and sugar you can go for a 100%.</li> </ul>	<p>See above</p> <p>Regarding the levels of ambitions, see above.</p> <p>Criteria for vending machines have been proposed as a separate GPP criteria set in this second revision</p>
	<p>The social or sustainability standards used and the way they are controlled should be the focus of GPP, whether or not this is made visible via a consumer facing logo</p>	<p><b>Acknowledged</b></p> <p>These are the goals pursued with this criteria</p>
	<p>Can the label from the Rain Forest Alliance be considered to comply with this requirement for fairly traded products? This is despite the fact that the label is awarded to products when only 30% of all volume is fairly traded.</p>	<p><b>Acknowledged.</b></p>
<p>Vending machines related</p>	<p>These percentages should be included to at the vending machines gradually, particularly whether we talk about coffee and tea.</p> <p>I consider equal relevant for vending machines. There are community councils procuring 100% fairtrade coffee as they are Fair trade Cities without problem regarding whole and grained coffee as well as vending machines.</p> <p>In our tenders on coffee, tea, sugar and the tender on hot drink vending machines everything has to be 100 % fair trade (TS) and being organic fair trade is even better.</p>	<p><b>Comment accepted</b></p> <p>There is an unanimous agreement on the following points:</p> <ul style="list-style-type: none"> <li>- as the <i>organic products</i> criterion the criterion on <i>fairly traded products is relevant for vending machines</i>, especially for those that offer coffee and other hot beverages.</li> <li>- <i>organic and fairly-traded products are on the market</i> (especially when considering hot beverage machines) Therefore, both criteria are complementary and can be required simultaneously.</li> <li>- the <i>good market availability</i> and the few number of products supplied in the hot beverage machines (coffee, sugar, chocolate, the, etc) <i>makes possible to set an ambition level of 100% in mass.</i></li> </ul> <p>For other vending machines (eg snacks) this threshold should be</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
		revised.
Wording	It is not because a product is produced organically that it is fairly traded, so the following note should be removed: "Food products that are certified as organic (and fulfil criterion TS1, AC1) are out of the scope of this requirement."	<b>Comment rejected</b> Precisely because an organic product may not be fairly traded, this sentence should remain to avoid double counting
	"...having sustainable/ethical considerations...": is it "sustainable AND ethical" or "sustainable OR ethical" ?	<b>Comment accepted</b> Text has been edited to: "...having sustainable and ethical considerations"...
	"Cost for all coffee, tea, chocolate, sugar or bananas have ....": it is not clear whether 20% of the procurement of coffee AND 20% of the procurement of tea AND 20% of the procurement cost of chocolate AND.... Or if 20% of the procurement cost of coffee + tea + chocolate + ..... have been produced having sustainable/ethical considerations in regard.	<b>Comment accepted</b> The criterion wording has been rephrased
	Fair trade products criteria should bear different naming given that it can be confused with the fair trade trademark. We therefore recommend using a different wording for referring to this criterion.	<b>Comment accepted</b> The criterion has been renamed as <i>fairly traded</i> products. The concept of fairly trade has been clarified in the rationale: fair trade is a social movement whose stated goal is to help producers in developing countries achieve better trading conditions and to promote sustainability. Members of the movement advocate the payment of higher prices to exporters, as well as improved social and environmental standards.
	We recommend using the term " <i>fairly traded products</i> " rather than " <i>fair trade</i> " products, which refers to a limited and specific trademark. It is also necessary to be clear about whether these will need to be fairly traded products or sustainable products more broadly, since the criterion refers to "products that have been produced having sustainable/ethical considerations in regard".	
	Change wording; this implies GPP refers to the use of FLO-certified Fair Trade products specifically.	
This criterion should be named differently in order to reflect the ends (applying an ethical certification scheme or otherwise fulfilling the requirements set in the scheme) rather than one specific means (the fair trademark which is a brand of its own).		
	We consider the current wording chosen to be too vague, and thus will be ineffective in practice in achieving its aims.	

### Further analysis on fairly trade

The EU has exclusive competence for trade policy. In a 2009 Communication on the role of fair trade in sustainable development, the European Commission held that it should not take a role in regulating non-governmental sustainability assurance schemes, including those for social and environmental sustainability such as fair trade labels. The Commission stated that it would, however, continue to provide some financial support to fairly trade initiatives through its development cooperation budget. On the other hand,

the European Parliament (which has an informal cross-party group on Fair Trade) has repeatedly called for promotion of fairly trade initiatives and a coherent policy on fairly trade. In early 2014 the European Parliament and Council adopted legislation that allows public bodies in the EU to require, in their procurement procedures, labels as certification that a product meets objective criteria related to factors such as environmental or social sustainability. However suppliers may provide any label that certifies conformance with the criteria; if they are not able to obtain a label, they may offer alternative forms of proof.

According to a report of the EU Parliament, there are two complementary approaches to fairly trade, each represented by an international organisation. For product certification, the Fair Trade Labelling Organisations International (FLO) serves as a coordinating organisation for national labelling initiatives and producer networks as well as a certification body. Secondly the World Fair Trade Organisation, that does not certify products, but seeks to influence the practices of organisations in the supply chain,

The market availability for fairly trade products is growing, the stakeholders confirm it. According to the European Parliament research service, the EU is the most important region for fairly trade products, accounting for roughly two-thirds of world sales (including the USA), with the UK (€1.9 billion), Germany (€533 million) and France (€345 million) representing the largest markets. Estimated 'premium' receipts – over and above the Fairtrade minimum price which covers the cost of sustainable production – for 2012 were €80 million. In 2010-11, more than half of sales income came from sales of coffee (59%); the next most important products were bananas (15%), cocoa (8%), flowers and plants (6%) and seed cotton (3%).

TABLE 3.8 AVERAGE COVERAGE OF SSI SOCIAL INDICES FOR EACH VOLUNTARY SUSTAINABILITY INITIATIVE.

	Labour rights	Health and safety	Employment conditions	Community involvement	Human rights	Gender	Employment benefits	Humane treatment of animals	Total average
SAN/RA	100%	80%	80%	90%	80%	53%	90%	100%	84%
RTRS	100%	80%	92%	80%	67%	67%	50%	NA	76%
RSB	100%	83%	80%	100%	100%	67%	0%	NA	76%
Fairtrade	91%	100%	100%	0%	67%	73%	80%	NA	73%
ProTerra	83%	50%	76%	90%	27%	0%	80%	NA	58%
UTZ	100%	93%	84%	0%	93%	33%	0%	NA	58%
IFOAM	86%	53%	80%	0%	20%	67%	0%	100%	51%
RSPO	97%	87%	36%	90%	0%	7%	40%	NA	51%
ETP	89%	87%	44%	0%	20%	40%	60%	NA	48%
GLOBALG.A.P.	20%	100%	20%	0%	33%	20%	20%	100%	39%
FSC	100%	50%	0%	100%	0%	0%	0%	NA	36%
PEFC	100%	50%	0%	100%	0%	0%	0%	NA	36%
4C Association	83%	37%	40%	0%	47%	27%	0%	NA	33%
CmiA	60%	30%	48%	50%	40%	0%	0%	NA	33%
Bonsucro	100%	40%	32%	50%	0%	0%	0%	NA	32%
BCI	94%	47%	76%	0%	0%	0%	0%	NA	31%

Note: the criterion humane treatment of animals is only applicable to three of the 16 standards; therefore, all other standards list "NA" for "not applicable."

Table 40. Average coverage of social indices for each voluntary sustainability scheme. SSI Review 2014. International Institute for Sustainable Development (IISD) and the International Institute for Environment and Development (IIED)

About the ambition levels the stakeholders agree they could be higher, since they were not ambitious if kept as presented in the 1<sup>st</sup> AHWG meeting. Stakeholders from public procurement departments explained that they do not face any problems in buying "Fairly Trade products" in higher amounts.

There were several stakeholders that raise some criticism about fairly trade marks. The Fairtrade Foundation (International Fairtrade Certification Mark) does not monitor how much of the extra money paid to the exporting cooperatives reaches the farmer. Furthermore, retailers almost never sell identical Fairtrade and non-Fairtrade lines side by side, so it is rarely possible to determine how much extra is charged or how much reaches the producers in spite of Unfair Trading legislation. WFTO Fair trade principles include however, transparency and capacity building. And the coverage of social

rights and environmental and economic indexes by several voluntary schemes has been reviewed in a report from International Institute for Sustainable Development (IISD) and the International Institute for Environment and Development (IIED):

TABLE 3.9 AVERAGE COVERAGE OF SSI ENVIRONMENTAL INDICES FOR EACH VOLUNTARY SUSTAINABILITY INITIATIVE.

	Soil	Waste	Synthetic inputs	Water	GMO prohibition	Biodiversity	Energy	Greenhouse gas	Total average
IFOAM	100%	100%	100%	100%	100%	100%	100%	67%	96%
SAN/RA	80%	60%	60%	70%	100%	93%	80%	47%	74%
ProTerra	90%	87%	67%	80%	100%	27%	40%	67%	70%
RSB	100%	100%	40%	85%	0%	67%	50%	100%	68%
PEFC	100%	67%	67%	75%	100%	100%	0%	0%	64%
ETP	100%	100%	67%	100%	0%	33%	100%	7%	63%
FSC	100%	100%	67%	25%	100%	100%	0%	0%	61%
Fairtrade	60%	53%	53%	50%	100%	60%	60%	47%	60%
GLOBALG.A.P.	100%	100%	67%	100%	0%	73%	20%	0%	58%
RTRS	100%	100%	60%	45%	0%	67%	0%	60%	54%
RSPO	40%	87%	60%	30%	NA	33%	40%	67%	51%
UTZ	80%	33%	60%	95%	0%	13%	60%	0%	43%
Bonsucro	90%	53%	0%	20%	0%	33%	40%	60%	37%
4C Association	20%	27%	47%	30%	100%	13%	40%	0%	35%
CmiA	30%	20%	67%	15%	100%	0%	0%	0%	29%
BCI	60%	20%	100%	25%	0%	20%	0%	0%	28%

Note: There is no genetic modification in the palm oil sector; therefore, RSPO lists "NA" (not applicable) for the GMO prohibition index.

the product purchased is guaranteed to be sourced from Rainforest Alliance-certified farms or estates.

Fairtrade defines a minimum price for all certified coffees, tracks the shipments from grower to retailer, claims a small fee from each component of the supply chain along the way, then uses these funds to effectively advance public awareness of Fair Trade and the issues it addresses, thus increasing the market value of the certification for both producers and retailers. On the other hand, Rainforest Alliance allows the market to define a premium for its certification seal and is mainly supported by grants.

Rainforest Alliance program certifies farms, not coffees. All coffee produced by a Rainforest Alliance Certified farm is, in effect, Rainforest Alliance Certified.

Finally, Rainforest Alliance is easier on those who create certified blends. Fair-Trade certified blends must contain 100% Fair-Trade coffees, whereas Rainforest Alliance will allow blends with as little as 30% content from Rainforest Alliance Certified farms to carry their green frog seal.

Table 41. Average coverage of environmental indices for each voluntary sustainability scheme. SSI Review 2014. International Institute for Sustainable Development (IISD) and the International Institute for Environment and Development (IIED)

*Research on the minimum percentage of content to hold logos on fair trade*

It has been noted by stakeholders that requirements specified to hold the fairtrade logos vary considerably across products and labels. Many of the labels certify farms production not products. It can happen therefore that the label will allow blends with as little as 30% content from certified farms. There is a review below of these minimum certified contents that the labels set to award their certification to one product.

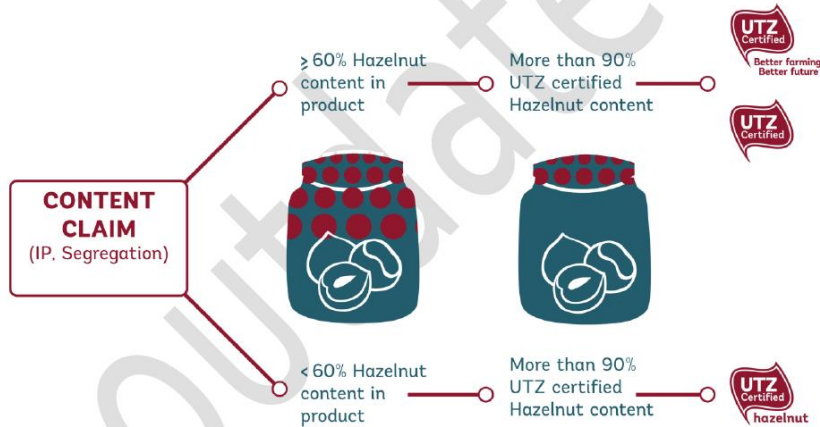
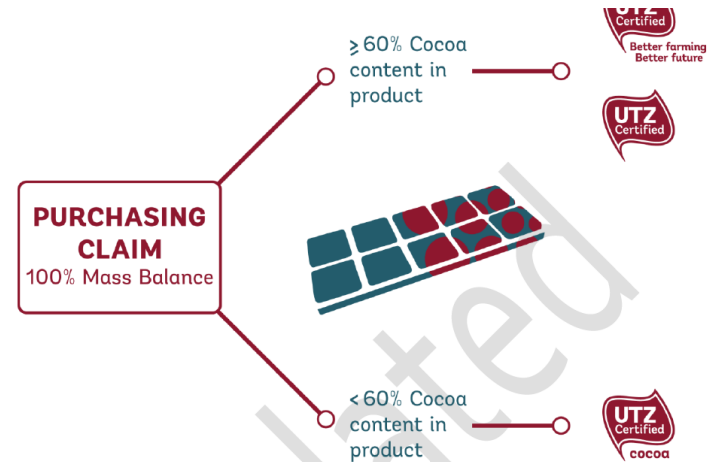
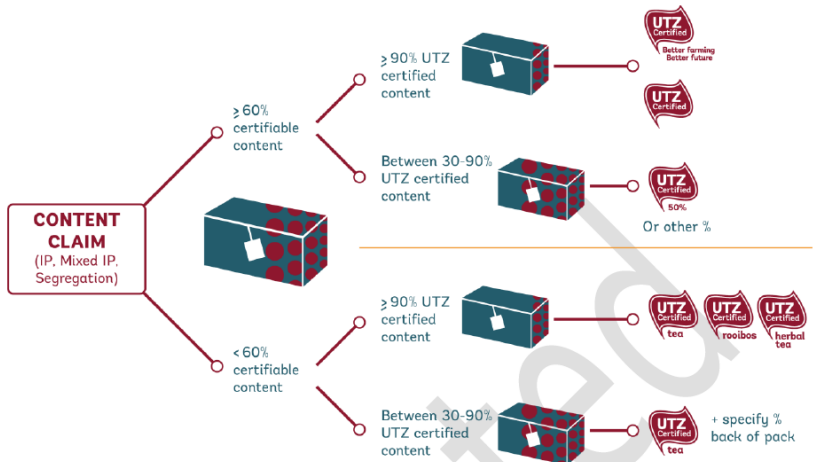
**Rainforest Alliance**

One downside of Rainforest Alliance is that just 30% of

**UTZ products (UTZ, 2016)**

The minimum percentages that UTZ allows for labelling products are the following:

- 90% of UTZ certified content while > 60% of the cocoa
- 90% of UTZ certified content while > 60% of the coffee
- 30% of the tea



## **Bonsucro**

For consumer products containing a pre-determined percentage of Bonsucro certified sugar cane, it will be possible to display the Bonsucro logo and related claim on the packaging (on-product).

The requirements to claim on-product when the sugar cane is

1. Single product OR
2. Hidden ingredient of your products and:
  - a. These products only contain sugar made of cane AND/OR
  - b. Sugar cane is in the top 3 of ingredients used in these products. In other cases only off-product communication is allowed.
3. What can I claim on-product?

If you comply with the above mentioned requirements you may claim on-product:

- a. In case the product contains at least 90% of certified sugar cane (segregation): The sugar in this product is responsibly produced
- b. In case the product contains at least 30% of certified sugar cane (mass balance of segregation):

X% of the sugar in this product comes from mixed responsible sources and we are committed to Y% in [year]

## **Ethical Tea Partnership**

No detail information on the minimum percentage needed for the certified products to get the label. Only applies to products containing more than 5% of tea content.

### 3.6. Packaging

This section presents the comments received through BATIS and personal communications from the 1<sup>st</sup> AHWG meeting to the 2<sup>nd</sup> AHWG meeting.

**Table 42. Feedback from the stakeholders on the TR1.0: Packaging**

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
<b>General</b>		
Environmental impact of packaging and LCA	<p>In the technical report, the impact of packaging is defined in some cases as low compared to food production and process. Change the sentence so that it is not so dogmatic regarding the impact of packaging.</p> <p>In the technical report, it is written:</p> <ul style="list-style-type: none"> <li>- Table 3, page 8: Packaging generally has a low total environmental impact compared to the production and processing stages of food products. The exceptions are bottled water and milk, where packaging has a large total impact</li> <li>- §2.3, page 10: At the catering service stage in the foodservice supply chain, energy and water use are important contributors to environmental impact, as well as waste generation and management.</li> </ul> <p>We could conclude that packaging could help to reduce food waste, over dosing, over use of energy, while having a "<i>low total environmental impact compared to the production and processing stages of food products</i>"</p>	<p><b>Comment accepted</b></p> <p>The rationale has been changed accordingly.</p>
	<p>These general recommendations are an approach not based on science. They are too generic and can be in contradiction with other findings. Only a case by case approach and comparative life cycle assessments can reveal sensible conclusion. When we look for example to the peer reviewed TNO study "<i>single use cups or reusable (coffee) drinking systems: an environmental comparison</i>, October 2007 (available at <a href="https://www.tno.nl/downloads%5C2006-a-r0246e_b_summary.pdf">https://www.tno.nl/downloads%5C2006-a-r0246e_b_summary.pdf</a>) then we see that single-use cups may have indeed a lower environmental impact.</p> <p>Single-unit packaging may be used for hygiene, (food) safety, resource savings (less content loss), lower energy consumption at the production, and finally practicability by the applicant. Therefore, without any scientific underpinning, single-unit packaging should be allowed as any reusable products. The packed products should be assessed on the basis of their full life cycle. Packaging is part of the product and serves a purpose. Only LCA can provide the proper answer. The same holds for the criteria 45% recycled content as well as the raw material source to produce the package. LCA and functionality play a key role.</p>	<p><b>Acknowledged</b></p> <p>In general, the use of excessive packaging can drive environmental impacts up. Since in other cases, it has been demonstrated that may serve to prevent food waste, the criterion has been removed</p>
Existence of the packaging	<p>Packaging is an inseparable part of the product, no product are delivered/sold without packaging, whatever this packaging is reusable, bulk or single-unit, metal or fibres based, and this packaging is in many cases</p>	<p><b>Comment accepted</b></p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
criterion	<p>influencing the use phase and food waste and therefore the environmental impact of the products on its life cycle. Therefore there should not be a criterion which is specific to packaging. Packaging should be addressed with the product on a scientific basis and full life cycle approach. Remove the criteria on packaging</p> <p>It has been repeatedly shown by LCA that food packaging is typically less than 5% of the overall impact associated with food. Furthermore, using packaging significantly reduces food waste by extending shelf-life, portioning and convenience features that allow consumption "on the go". As such I seriously question whether there is a place for packaging in this GPP document.</p> <p>Re-write the section explaining that the relative benefits of packaging far outweigh the negatives and unnecessarily complicate the GPP process. European Commission PEF pilots have shown that one way e.g. PET water bottles and single use packaging e.g. coffee capsules have the lowest overall environmental impact. Other LCA's show that there is no correlation between a lower environmental impact and the use of renewable materials or higher recycled content. In fact most often these have higher environmental impacts.</p>	<b>Comment accepted</b>
	In general I agree to the criteria. The verification of the secondary packaging recycled content should be very difficult since not in any cases data are available.	<b>Comment accepted</b>
	Most important is of course less packaging, but if necessary we like to promote bio based packaging. I would like to present an attachment with a catalogue of bio-based materials.	<b>Acknowledged</b>
<b>Primary packaging</b>		
Inclusion of recycled content in the packaging	<p>Indeed it is not applicable across all materials, however the materials which are known to be recyclable and which can be reused in primary packaging (i.e. steel, aluminium), should be considered in the award criteria at the same "level" as sustainably sourced fibres or compostable are.</p> <p>Add a criterion for materials which are highly recyclable, highly recycled and usable as primary packaging (i.e. aluminium).</p> <p>Aluminium is:</p> <ul style="list-style-type: none"> <li>- highly recyclable (aluminium is not using its technical properties when recycled and can therefore be used for the same purpose it was made for the previous time),</li> <li>- highly recycled (more than 80% of the soda cans are back as recycled soda cans),</li> <li>- infinitely recyclable (more than 75% of aluminium ever produced is still in use),</li> <li>- have a very good ratio (performance/weight): less mass of aluminium is often required to pack a product than plastic</li> </ul>	<b>Comment rejected</b> <p>Although the potential benefits of recyclable materials is acknowledged, there is not, for the time being any certification scheme or label that specifies the amount of recycled content.</p> <p>Therefore, setting up a criterion on this point is very difficult from the verification perspective.</p>
	<p>Answers to the consultation questions to stakeholders:</p> <ul style="list-style-type: none"> <li>- <i>Do you have any experience on how the verification of the recycled content for the packaging materials being used?</i></li> </ul> <p>In Copenhagen Municipality we have a project called "Zero plastic", working to get black plastic out of food</p>	<b>Acknowledged</b>



Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>packaging because black plastic can't be discarded in waste sorting plants.</p> <p>- Are you aware of any GPP scheme that uses type 1 Ecolabel (e.g for Nordic Ecolabel restaurants) as a proof of compliance for the requirement on recycled content and renewable materials for this criterion?</p> <p>Yes some of the governmental institutions e.g. The Prime Minister's Office use Nordic Ecolabel for canteen/catering.</p>	
LCA of packaging	<p>As explained above, the approach is too generic and therefore fails the science test. In some cases reusable packaging may be better than disposable packaging or vice versa. The criteria should therefore be based on the full life cycle of the packed product. The package is there to save and protect food and is often only a minor part of the environmental impact. Having criteria specifically on packaging needs to show in the first place that this is a main environmental impact over the total life cycle of the packed product on the one hand and to then ensure that the criteria are being set based on science. LCA should be the only criteria used to assess whether single-unit, renewable raw materials or recycled content is better and should be preferred.</p>	<p><b>Acknowledged</b></p> <p>In general, the use of excessive packaging can drive environmental impacts up. Since in other cases, it has been demonstrated that may serve to prevent food waste, the criterion has been removed, considering also the limitations of the verification.</p>
Single-unit packaging	<p>Appropriate single unit packages favour avoidance of food/drink waste and indirectly improve water and energy efficiency food/drink during preparation stages. While portioned solutions are designed to prepare the right amount of food intended to be eaten/drunk, bulk options might lead to overdosing (excess of product quantity used to prepare food/drink servings) and/or over preparation (excess of food /drink quantity per serving). These two phenomena have a direct effect on food/drink wasted and the efficiency of water and energy used in the preparation of servings (eg. water used for of single-served coffee brewing when compared to bulk brewing [Quantis 2015]).</p> <p>Portion sized packaging is also developed to provide quantity balanced portions from a nutritional point of view and it is necessary under certain health or religious dietary requirements. Finally, allowing tenderers not to meet the proposed criteria [JRC2016b] ("the supplier must explain why this is more adequate than bulk"), puts tendering competitors in an unequal foot in the tendering process.</p>	<p><b>Comment accepted</b></p> <p>The last proposal of the criterion allows the use of single-unit packaging.</p> <p>This use of single-unit packaging could be beneficial in those situations where this type of packaging can help to reduce avoidable good waste.</p>
	<p>In the first place does packaging help to avoid food waste. Good packaging makes sure that our food stays eatable for a longer time. It can also help that less additives have to be used because for example the food is air tight packed (vacuum). Individual portions can't always be avoided because it is important for diet food (no gluten, no peanuts, no dairy,...), for food safety it is also important.</p> <p>On the other hand it also keeps food waste under control for example in Ghent we buy ready meals that are offered in different package sizes. This makes it possible to order big packages and small packages and if there are some children sick that day you don't have to heat the single portions. You can then serve the single portions another day. If you would only order big packages you have to heat up all the food and what is left has to be thrown away.</p>	<p><b>Comment accepted</b></p> <p>See above</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>We don't tell our tenderers what packaging material they have to use, because we are no experts in it. We ask for as much packaging sizes as possible (AC) (to make the packaging puzzle so we don't have to heat up all the food for less children and so avoid food waste).</p>	<b>Acknowledged</b>
Single-unit packaging	<p>We ask for the national criteria regarding the packaging that is in contact with the food – and I believe we do not have enough focus on this in our contracts. We have a problem with single packaging, primarily because items that are sold in food service often originally were intended for retail. Therefore the problem will be minor over time, as the food service market is growing (and therefore producers begin to pack targeted for food service) This is what we see in Denmark right now.</p> <p>Answers to the consultation questions to stakeholders:</p> <ul style="list-style-type: none"> <li>- Do you consider feasible the requirements for the core and comprehensive criteria? · Yes</li> <li>- Are you aware of any legal constraints within FSCIS3? · No</li> </ul>	<b>Comment accepted</b> See above
Recyclability of the packaging	<p>The packaging the tenderer uses, has to be recyclable (TS).</p> <p>We ask for a proof on what happens with the recycled product. Our current catering supplier let the packaging be recycled into swimming pool foil and blankets. I also notice that a small amount of the smaller packages aren't always returned because the school/kindergarten reuse it to store craft materials in it (it is a strong material so they use them for a very long time although this is not our idea of recycling but who are we to prevent them from being creative).</p> <p>The packaging has to be recyclable (TS).</p>	<b>Comment rejected</b> Although it is acknowledged that recyclable materials can bring environmental benefits if properly managed, currently there is no certification schemes that label materials as recyclable under any circumstance.
Role of packaging	<p>Packaging is essential to reduce food waste. For instance, a cucumber wrapped in a plastic sleeve can last up to 14 days, while without a plastic sleeve it last only 3 days on average. This text should also acknowledge that packaging plays an important role in preventing food waste.</p>	<b>Acknowledged</b>
Composability vs biodegradability	<p>The term biodegradable applied to packaging products seems not to be appropriate. Therefore it is suggested to use the term composability according to EN 13432 which guarantees biodegradation in an industrial composting plant. Biodegradation can be defined as a process by which microbial organisms transform or alter the structure of chemicals introduced into the environment (US EPA, 2009). The claim that a product is biodegradable can mean different things; it can mean that a product can biodegrade under different conditions (i.e. heat, anaerobe or aerobe) and different environments (water, soil, sea-water) therefore it leaves to much room for misunderstand or misperception.</p> <p>Also the term is should not be used to describe packaging material which should never end-up in the natural environment but in residual waste streams. Using this term might lead to the misperception by consumers that the product can be littered without negative consequences for the environment.</p>	<b>Comment accepted</b>

<sup>3</sup> Food safety and inspection services

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>The wording seems to suggest that on the one site there are bio-based polymers which are compostable and on the other site oil-based polymers which are not compostable. Such a distinction is not correct. It is suggested to use the wording 'non-compostable polymers' instead of 'oil-based polymers' in the first sentence. Bio-Based and oil/fossil-based polymers can be compostable or non-compostable. The use of the term bio-based or fossil-based only refers to the used feedstock; it does not refer to certain characteristics. Bio-based products do help to decrease dependency from oil and fossil-based resources. Some bio-based polymers such as PLA can be produced with less GHG emissions than traditional fossil-based polymers. Therefore they can assist climate change mitigations. Compostable products certified according to EN 13432 can be made of fossil-based or bio-based feed stocks.</p>	<p><b>Acknowledged</b></p>
<p><b>Secondary packaging</b></p>		
<p>Single-unit packaging</p>	<p>This technical report is often referring to LCAs scientifically demonstrating by LCA (which is the tool promoted by EU for the PEF project) that single portion coffee has environmental benefits as it avoids over-dosing and over preparation which both often create water, food (Roast&amp;Ground coffee) and energy (the electricity used to heat up the water) wastage. Humbert &amp; al. (200): <i>User phase: 50-75 % of total energy use – depending on behaviour has a large total impact on GWP. Spray dried soluble coffee had lowest environmental impact (of the three systems investigated) since least dry matter (coffee beans) was needed. The espresso used a bit more coffee and its single-use packaging system added to the total. Filter coffee had the greatest impact since it was assumed that too much is brewed and 1/3 of the total is wasted. Hence the use of coffee was highest and also the use of heated water for making the coffee.</i></p> <p>As highlighted during the 1<sup>st</sup> AHWG for the revision of the EU GPP criteria set for food and catering services, single unit packaging might offer the best environmental performance in some specific situations, if the whole life cycle is considered. E.g. is it better to prepare litres of coffee without knowing how much is going to be drunk and potentially have left overs OR to have single portion coffee pods/capsules so that each person willing to drink a coffee is preparing exactly on demand the coffee (s)he is going to drink.</p> <p>This award criteria could be written in a less strict way, such as <i>"single unit packaging are accepted if the supplier can explain why this is more adequate than bulk option, including sustainable design, recyclability, recycling schemes in place, recycled content, sustainable packaging production."</i></p>	<p><b>Comment accepted</b> See above</p>
<p>Single-unit packaging</p>	<p>As stated in the executive summary, the aim of the GPP is to <i>"help public authorities ensure that the food and catering services procured are executed in a way that reduces their associated environmental impacts"</i>, but not to minimise the environmental impact associated to packaging. Especially, as related few times in this TR, from an LCA perspective there are ALSO many environmental benefits to gain by using single unit packaging which of course means more packaging. This comment has to be removed</p> <p>For some products and in some situations, single portion can help saving food, energy and water by avoiding</p>	<p><b>Comment accepted</b></p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>over dosing and over preparation during the use phase.</p> <p>The context is important, for example, Is it better to have a on demand hot water dispenser in offices to prepare a single cup of tea, or to have thermos of hot water prepared in the morning for an unknown number of cups. Energy wise and waterwise, the first solution is better</p>	
	<p>Esp. in catering services, single unit packaging is an important tool for food waste prevention. Manufacturers would not use single unit packaging (i.e. voluntarily make more costs) if this was not beneficial for product preservation, reducing wastage or portion control. This criterion should therefore be left out of GPP.</p>	<p><b>Comment accepted</b> See above</p>
	<p>Packaging plays a crucial role in food safety and hygiene. Single-serve packaging is sometimes required for food safety reasons. For instance, in Spain contract caterers are required by law to use single serve packaging for olive oil to ensure food safety and hygiene.</p> <p>We suggest removing item 2, which states that no single unit packaging should be provided. Requiring suppliers to explain every time single unit packaging is necessary for food safety and hygiene reasons would be onerous on businesses.</p> <p>This criterion 'no single unit packaging shall be provided' does not seem to follow from the recommendations on the previous page (page 33 - Evaluate single unit packaging), which state 'if it is more resource efficient to use single portion packaging - this is recommended'.</p>	<p>See above</p>
	<p>Appropriate single unit packages favour avoidance of food/drink waste and indirectly improve water and energy efficiency food/drink during preparation stages. While portioned solutions are designed to prepare the right amount of food intended to be eaten/drunk, bulk options might lead to overdosing (excess of product quantity used to prepare food/drink servings) and/or over preparation (excess of food /drink quantity per serving). These two phenomena have a direct effect on food/drink wasted and the efficiency of water and energy used in the preparation of servings (eg. water used for of single-served coffee brewing when compared to bulk brewing [Quantis 2015]).</p> <p>Portion sized packaging is also developed to provide quantity balanced portions from a nutritional point of view and it is necessary under certain health or religious dietary requirements. Finally, allowing tenderers not to meet the proposed criteria [JRC 2016b] puts tendering competitors in an unequal foot in the tendering process.</p>	<p>See above</p>
	<p>Potential environmental improvement areas for food and catering services</p> <p>-Materials in packaging: It should be included in which situations single-use portions are better than bulk, namely for safety reasons.</p>	<p>See above</p>
<p>Background information in</p>	<p>Why this award is limited to fibres, and not to sustainably sourced materials in general? <i>"Food products are supplied in packages produced from sustainably sourced fibres"</i> should be changed into <i>"Food products are supplied in packages produced from sustainably sourced materials"</i>. Indeed, some materials are requesting a</p>	<p><b>Comment accepted</b> Wording has been modified.</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
the TR1.0	<p>lot of energy to be produced the first time, but then are fully and indefinitely recyclable into the same products (e.g aluminium soda cans). not every food products can be delivered in fibres packaging as fibres can't be used for liquid and don't protect food from light, oxygen, moisture.</p>	
	<p>In analysing the impact of packaging, the avoided impact of food waste in supply chains should be accounted for.</p>	<b>Acknowledged</b>
	<p>... as long as an environmental benefit can be demonstrated in a LCA.</p>	
Biodegradable VS Compostable	<p>Compostable packaging should receive an award only if the sorting and logistics are in place to bring this packaging to a composting plant WHICH IS ACCEPTING AND COMPOSTING IT. An award should also be given to recyclable packaging It might be good to source compostable packaging but ONLY if this packaging is indeed composted.</p>	<p><b>Comment partially accepted</b> Due to the difficulties to assess if this clause will bring some environmental benefits, it has been removed.</p>
	<p>Compostability / biodegradability is a technical properties but not a guarantee of better environmental performance, which is the aim of the GPP. There is no clear scientific evidence that "biodegradable" delivers environmental benefits over other forms of packaging end-of-life scenarios. Industrial composting is only available in a few Member States, hence composting according to EN 13432 is not possible. Again, a proper LCA must compare this type of packaging to an alternative. This award should be either removed or based on a scientific assessment on the market, there are products which are delivered by some companies in compostable material and by others in oil based plastic or metal. When comparing these products, the compostable / biodegradable option has a higher environmental impact because the amount of compostable / biodegradable material is 3 to 4 higher than oil based plastic or metal as the barrier properties of the compostable / biodegradable material is not good enough, each product need a second packaging.</p>	<p><b>Acknowledged</b> See above</p>
	<p>Biodegradability only has environmental benefits if separately sorted with bio-waste. In many countries, this is not even allowed. If sorted with other packaging waste, biodegradable decreases the quality and recyclability of other materials. Littering of biodegradable materials has negative environmental effects as well. Therefore, this criterion should be left out or made conditional to separate bio-waste collection.</p>	<p><b>Acknowledged</b> See above</p>
	<p>Compostable and biodegradable packaging does not necessarily have a better environmental footprint if there is no appropriate waste stream available and it end up in landfill or incineration. If this packaging is mixed with other packaging waste, biodegradable packaging can decrease the quality and recyclability of other packaging materials. We recommend stating that the packaging used should be aligned to available waste streams. The EU criteria should also allow Member States to have the flexibility to adapt the criteria to locally available waste</p>	<p><b>Acknowledged</b> See above</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	streams.	
Recycled content and recyclability	<p>Awards are given only to reusable or bio-based packaging, while recyclable and recycled material should also be awarded</p> <p>Add an award: <i>"Food products are supplied in recyclable and recycled packages material. Some packaging is made of highly recyclable and/or recycled material, which based on LCA can have as good environmental performance as compostable / biodegradable material or reusable material. Some are even part of a close loop system (e.g. aluminium can) as long as the consumer recycle it"</i></p>	<p><b>Acknowledged</b></p> <p>See above</p>
	<p>Recycled content is from a food safety perspective not always desirable (e. g. MOSH/MOAH migration), even in packaging which is declared here as secondary. This paragraph should be made more specific to corrugated board. Corrugated board is anyways made from recycled fibres. Hence, this paragraph is obsolete.</p>	<p><b>Acknowledged</b></p>
	<p>As a general word of caution, while the EU Circular Economy Package puts an emphasis on recycling, setting criteria in GPP on using recyclable packaging would be a challenge. There is no EU definition for what is 'recyclable', and what is recyclable varies depending on the local infrastructure available. For instance, there is a lot of recyclable packaging that ends up in landfill because it is not collected separately from other waste and sent to a recycling plant.</p> <p>We recommend stating that the packaging used should be aligned to available waste streams. The EU criteria should also allow Member States to have the flexibility to adapt the criteria to locally available waste streams.</p>	<p><b>Comment accepted</b></p> <p>No criterion about recyclable packaging has been included.</p>
	<p>Availability of packaging materials for packaging production largely depend on external market conditions, e.g: availability and use of recycled content for plastics can be dependent on price relative to virgin as well as material of sufficient quality. In certain circumstances sourcing these types of materials can result in loss of competitiveness for food manufacturers.</p>	<p><b>Acknowledged</b></p>
	<p>Prioritize reusable/ returnable packaging options within the award criteria</p> <p>Require a check with competent authorities if biodegradable packaging materials are compatible with local treatment processes for biowaste</p> <p>In general, the EEB welcomes the criteria set, but we are concerned that all listed options for primary and secondary packaging are rated equally. We would suggest to clearly prioritize the first option in the award criteria, i.e. reusable and returnable packaging systems. Only in cases where this is not possible or adequate, the other options such as use of recycled content, sustainably sourced fibres or biodegradable materials should be eligible for award points.</p> <p>With regard to the requirement "Food products are supplied in packages certified compostable/biodegradable according to EN 13432, or equivalent and 90% biodegradability in 6 months has been demonstrated in a single or combined composting and/or anaerobic digestion process", the EEB would like to establish a link with</p>	<p><b>Comment accepted</b></p> <p>Removal of criteria for primary and secondary packaging has been introduced.</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>the criteria on waste sorting and disposal (TS6). Environmental benefits can only be assumed if separate collection of biowaste actually takes place. Why should biodegradability be rewarded if the packaging waste is burned? In addition, only if biodegradable packaging materials (that meet the above mentioned requirements) do not disturb or deteriorate the local treatment process for biowaste (i.e. composting or anaerobic digestion), it would make sense to define it as an award criterion. The JRC should provide a disclaimer for the procurer to check this issue with local waste authorities before defining it as a default option.</p>	
Returnable bottles	<p>Using returnable bottles is not necessarily more environmentally advantageous than non-reusable bottles, once water use from cleaning and the wastewater associated with disinfection are taken into account. The additional environmental impact and economic cost of cleaning, water consumption and use of soap products must also be taken into account.</p> <p>This practice also requires a certain amount of space for bottles to be stored. It also poses a logistics issue because in many cases, due to dense traffic and narrow city streets, smaller trucks must be used but they would need to make extra trips to collect all the bottles. The need for extra logistics has cost implications that must be factored into the tender.</p> <p>Using returnable bottles can also create barriers to the internal market if drinks are imported. When drinks are imported, the environmental impact of transporting returnable bottles over long distances must also be taken into account.</p> <p>Given that reusable packaging systems (e.g. returnable bottles) are not necessarily more environmentally advantageous than non-reusable packaging once water use and wastewater from cleaning and extra road miles to transport the packaging for reuse are taken into account, we suggest removing this item.</p>	<b>Comment accepted</b>
Certification schemes	<p>At Nestlé we use the Responsible Sourcing Guidelines for fibre packaging. These are more stringent than FSC, hence we are not using FSC declaration</p>	<b>Acknowledged</b>
	<p>Criteria on packaging produced from sustainable sourced fibres, with a specific recycled content or certified compostable or biodegradable, both for primary and secondary packaging might be too restrictive from the point of view of the materials food and drink producers can use.</p> <p>The food and drink industry's first priority is to ensure that the safety and quality of food and drink products is maintained throughout the supply chain including when products reach their place of consumption. It does this by selecting packaging materials that are fit for this purpose taking into account the nature of the product and the demands of the supply chain. Whilst this may include using materials with a specific recycled content, certified compostable or biodegradable or from sustainable source fibres, these options might not always be appropriate both from a technical standpoint (including food safety) and whole supply chain sustainability perspective. In addition the benefit of separate collection of biodegradable packaging is not</p>	<b>Comment accepted</b>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>guaranteed, as there is no clear scientific evidence that "biodegradable" delivers environmental benefits over other forms of packaging end-of-life scenarios. Furthermore industrial composting according to the required EN 13432 standard is only available in a few Member States. If sorted with other packaging waste biodegradable packaging could decrease the quality and recyclability of other packaging materials.</p>	
Other	<p>We recommend stating that the packaging used should be aligned to waste streams that are locally available and in line with the waste hierarchy. For instance, a country might want to encourage the use of recyclable packaging where recycling facilities exist.</p>	<b>Comment accepted</b>
	<p>If the Nordic Ecolabel complies with criteria, the public consumer often ask for compliance of standards on energy, food products as well as packaging materials, not packaging materials alone. Still, packaging materials can still contain phthalates and PVC...</p>	<b>Acknowledged</b>
	<p>Only the latter should be the aim. The amount used CAN be a factor in the total environmental impact but not necessarily.</p>	<b>Acknowledged</b>
	<p>Actually, here is rather distribution packaging meant. Then, it should be described like that.</p>	<b>Acknowledged</b>
	<p>With regards to packaging, referring specifically to the technical report, some improvements could be made. Firstly, a wider spectrum of stages in food supply chain (outlined in Table 3, p.3) should be considered. This includes:</p> <ul style="list-style-type: none"> <li>- emissions from processing i.e. the processing stage creates ... and emissions</li> <li>- packaging exceptions for juice and soft drinks e.g. water and milk, juice and soft drinks</li> </ul> <p>The main environmental hotspots and causes from food and catering services (outlined in Table 5, p.11-12) should consider:</p> <ul style="list-style-type: none"> <li>- water and energy in the context of meat processing, milk and cheese production, fruit processing</li> <li>- packaging materials in the context of vegetable packaging e.g. production of steel, glass and plastic</li> <li>- manufacturing processes in the context of hot drinks production e.g. drying of teas leaves, roasting coffee</li> <li>- production of materials in the context of packaging materials i.e. (e.g. glass, paper, cellulose)</li> </ul> <p>Food packaging requirements should also be able to meet the needs of the user.</p>	



### 3.7. Environmentally responsible palm oil

This section presents the comments received through BATIS and personal communications from the 1<sup>st</sup> AHWG meeting to the 2<sup>nd</sup> AHWG meeting.

**Table 43.** Feedback from the stakeholders on the TR1.0: Sustainable palm oil (AC7)

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
Existence of labels and certification schemes	There is no (mandatory) labelling or certification of RSPO food products. Thus the level of information about and the visibility of these products are low and verification of criteria is very complicated.	<b>Comment rejected.</b> Even if the visibility of these products is low, it is possible to track back the origin of the palm oil ingredients to know if they are coming from sustainable certified sources or if at least the book and claim (B&C) system has been used.
	Food and Drink producers have already made substantial progress in the shift towards certified sustainable palm oil. Including sustainability criteria in GPP would be an important market signal and would increase consumer awareness. A comprehensive sustainable sourcing policy is the appropriate approach to tackle palm oil use in food. It is the only way to a truly sustainable production system and would provide industry with the flexibility to choose sustainably sourced commodities. Sustainability criteria must be relevant and be set according to science based schemes such as the Round Table on Sustainable Palm Oil (RSPO).	<b>Comment accepted.</b>
	Here, <i>only visibly labelled products are considered</i> , whereas the bulk of certified palm oil is processed invisibly for the consumer. RSPO-certified palm oil is widely used in the European food industry, and is even becoming the norm thanks to company- and sector commitments. Availability is no problem at all.	<b>Comment accepted.</b> The wording of the criteria has been split into two parts addressing the limits of units containing sustainable certified palm oil and the limits of sustainable certified palm oil purchased by the tender.
	<i>This criterion should be feasible since there should be enough availability in the market.</i> It should also be relevant for vending machines since there is in most cases a valuable fat content (e.g. for soups coffee creamer)	<b>Comment accepted.</b>
	Promoting sustainably sourced palm oil is a way to secure more sustainable production and use of this widely used ingredient. Also <i>other existing initiatives for various critical raw materials should be considered in order to promote sustainable sourcing practices.</i> However, limitations such as market availability and price should be taken into account as the uptake and development of various schemes has so far been gradual.	<b>Comment accepted.</b> The inclusion of some other schemes for certifying sustainable vegetable oils has been considered.
	There is on the national level in some countries, such as the Netherlands	<b>Comment accepted.</b>
	Other certification schemes for sustainable palm oil should be mentioned as well. We suggest mentioning as	<b>Comment accepted.</b>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	additional certifiers or schemes for sustainable palm oil: ISCC Plus, Rainforest Alliance, RSB. The RSPO Certification system is the only one mentioned. In fact there are other alternatives with similar requirements for sustainable palm oil production including: ISCC Plus, Rainforest Alliance, RSB.	See above
Promotion of other oils	<p>Olive oil or sunflower oil should be preferred to sustainable palm oil.</p> <p>For us, the criteria will be not to use palm oil, even if it is sustainable, but should rather <i>promote the use of oils and fats produced in Europe</i>, such as olive oil or, failing this, sunflower oil because of their healthy properties, the reduction of food miles and the economic benefits for some producers.</p> <p>This criterion should be about the level of commitment to sustainable palm oil in the contract caterer's overall strategy rather than a percentage of food products procured. A percentage would be extremely complicated to implement in practice because of the variety of products that contain palm oil.</p> <p>In Spain, contract caterers have an agreement with AECOSAN (Agencia Española de Consumo, Seguridad Alimentaria y Nutrición), NAOS STRATEGY (Strategy against obesity): <i>"To favour improvements in school food, an agreement has been drawn up with leading businesses from the catering industry, belonging to the Spanish Federation of Associations Given to Social Catering (FEADRS). These businesses undertake to: Not use oils rich in saturated fats (palm oil, saw palmetto and coconut) or trans-fatty acids when frying, replacing these oils with other healthier oils."</i></p> <p>In addition, by law, "In nursery schools and schools selling food and beverages with a high content of saturated fatty acids, trans fatty acids, salt and sugars shall not be permitted. These contents will be established by regulation. <i>"In industrial processes that can generate "trans" fatty acids, operators responsible establish the right conditions to minimize formation thereof, when intended for food, either individually or as part of the composition of foods."</i> (Ley 17/2011, de 5 de Julio, de seguridad alimentaria y nutrición).</p> <p>We believe that the GPP criteria should encourage moving towards more sustainable palm oil production rather than avoiding palm oil. We recommend awarding extra points if the contract caterer can provide proof that the palm oil is from sustainable sources in cases where frying oil and products are used that include palm oil.</p>	<p><b>Comment rejected</b></p> <p>The GPP criteria for food procurement are not a suitable tool to:</p> <ul style="list-style-type: none"> <li>- limit the consumption of a certain product or ingredient based on its nutritional characteristics</li> <li>- promote the use of other oils based only on nutritional grounds</li> </ul> <p>The decision on which is the most appropriate ingredient to be used/purchased should be done by the procurers. The GPP criteria for food procurements will therefore only encourage the purchase of more sustainable ingredients (especially if it is the same ingredient).</p>
Promotion of other oils	<p>Shouldn't palm oil be avoided in the first place and if there is no other option it should be sustainable. When it comes to health and nutritional issues I put it under the technical specifications, if it is about sustainability I put a lot more under award criteria (unless I know for a 100% that it is already common).</p> <p>As palm oil is inherently unhealthy and leads to deforestation, it would be better to switch the focus. In the first instance, palm oil should be avoided (thus the requirement should be rephrased to ask for palm oil free products) and if this is not possible sustainable palm oil should be requested.</p> <p>Impacts of cultivation are very much dependent on type of oil or fat</p> <p>Sustainable palm oil should be included under technical specifications. In addition, olive oil or sunflower oil</p>	<p><b>Comments rejected</b></p> <p>See above</p>

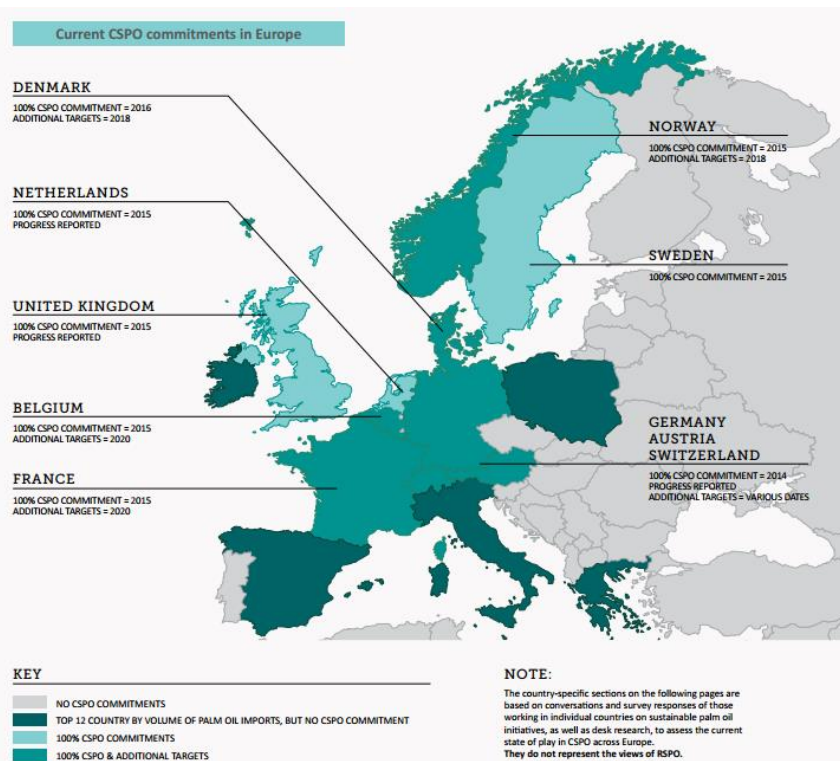
Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
Level of ambition	should be promoted as a substitute for palm oil, even if sustainable.	
	<p>Modify the AC: Points shall be awarded to tenders that prove that at least 50% (100% in comprehensive) units of food products are palm oil free products or contain palm oil from sustainable sources.</p> <p>This criterion should be about the level of commitment to sustainable palm oil in the contract caterer's overall strategy rather than a percentage of food products procured. A percentage would be extremely complicated to implement in practice because of the variety of products that contain palm oil.</p> <p>In Spain, contract caterers have an agreement with AECOSAN (Agencia Española de Consumo, Seguridad Alimentaria y Nutrición), NAOS STRATEGY (Strategy against obesity): <i>"To favour improvements in school food, an agreement has been drawn up with leading businesses from the catering industry, belonging to the Spanish Federation of Associations Given to Social Catering (FEADRS). These businesses undertake to: Not use oils rich in saturated fats (palm oil, saw palmetto and coconut) or trans-fatty acids when frying, replacing these oils with other healthier oils."</i></p> <p>In addition, by law, "In nursery schools and schools selling food and beverages with a high content of saturated fatty acids, trans fatty acids, salt and sugars shall not be permitted. These contents will be established by regulation. <i>"In industrial processes that can generate "trans" fatty acids, operators responsible establish the right conditions to minimize formation thereof, when intended for food, either individually or as part of the composition of foods."</i> (Ley 17/2011, de 5 de Julio, de seguridad alimentaria y nutrición).</p> <p>We believe that the GPP criteria should encourage moving towards more sustainable palm oil production rather than avoiding palm oil. We recommend awarding extra points if the contract caterer can provide proof that the palm oil is from sustainable sources in cases where frying oil and products are used that include palm oil.</p>	<p><b>Comments rejected</b></p> <p><b>Comment partially accepted</b></p> <p>The percentage of CSPO is easy to calculate when this commodity is bought as an ingredient (without being yet part of a processed food, such as the case of e.g. frying palm oil). In these cases the accounting of CSPO should be straight-forward. The purchase of CSPO raw ingredient should also be possible across EU as the system operates worldwide.</p> <p>For pre-packed food products (i.e. biscuits or chocolate bars), the calculation of the percentage of CSPO purchased is more complex and becomes especially difficult if the relative weight of the ingredients in the processed food product is not clearly stated.</p> <p>To deal with these cases, a modification has been introduced in the wording of the criteria, considering the whole pre-packed food product as the reference unit and calculating the % of CSPO as the % of units of pre-packed food products that contain CSPO.</p> <p>E.g. if the procurer buys 100 items made of palm oil, 20 items should be made with CSPO.</p>
Verification	<p>Palm oil free products, <i>means of proof: tags.</i></p> <p>In catering services, information on amount, kind, and relevant environmental aspects (also this one if awarded) of the food served, must be reported in the aforementioned biannual report.</p>	<p><b>Comment accepted</b></p>
	<p>Very much so, as long as B2B-standards and certification is alongside consumer-facing labels. Tenderers can <i>select brands based on their reported CSPO use</i>, or, in some countries, can rely on the fact that eventually all palm oil used will be certified sustainable.</p>	<p><b>Comment partially accepted</b></p> <p>The RSPO scheme provides on their website a public database with the companies and trades that hold the certification. This can be another way of</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
		verifying the use of certified sustainable palm oil
	Palm oil is a product that is almost unavoidable. There are different names used to refer to palm oil (ingredient list speaks of vegetable oil and there's a big chance it is palm oil). <i>This makes it difficult to check and to avoid.</i>	<b>Comment rejected</b> According to the information provided below (Dec 2014), it is no longer possible to hide the palm oil ingredient under other names such as "vegetable oil". This should make the tracking of the palm oil much easier
	<i>RSPO is available to a limited extent</i> and including sustainable palm oil as award criteria gives an important signal to the market, however <i>this is very difficult to verify.</i>	<b>Comment rejected</b> See above
Traceability system / Level of traceability	Unfortunately palm oil is almost unavoidable and it goes by different names in ingredient list, and it makes it difficult for the end buyer to check and avoid. <i>If we want to create awareness palm oil should be avoided in the first place and if there is no other options it should be sustainable.</i> Answers to the consultation questions to stakeholders: -This is a new proposal criterion. From your experience is this criterion feasible in terms of market availability and verification process for certified RSPO food products within tenders? It should be avoided. It would be impossible to follow up if only part of the oil should be sustainable. - Is this criterion particularly relevant for vending machines? I do not know	<b>Acknowledged</b> The % of sustainable palm oil indicated in the latest criterion wording refers to the % of total frying palm oil use or the % of total palm oil used as ingredient. If the procurers are buying processed food (e.g. biscuits) the % refers to the number of cookies that contain palm oil with respect to the total number of cookies bought.
	<i>Palm oil from more sustainable sources.</i> Green certificates (mass balance certificates) not accepted as I understand it. Still, that really could promote the demand of RSPO-oil produced according to RSPO in products. And, in the longer run, buy RSPO-oil from segregated origin.	<b>Clarification</b> All traceability systems provided by RSPO or an equivalent scheme are accepted as proof of compliance with this criterion. Even if the traceability of the book and claim system is not as strict as in the other systems, book and claim (B&C) should guarantee the sustainability of this commodity. Additionally, it gives flexibility to the tenders to comply with this criterion as B&C system is available worldwide.
LCA related issues	This does not hold in a full LCA including land use, as palm oil has the highest yield per hectare of all vegetable oils The aspect of land use & land grabbing in tropic regions and underdeveloped countries should be clearly stressed in the rationales. Add the following environmental hotspots to the technical report: Land use and land use change in the food	<b>Acknowledged</b>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	product categories “oils and fats” (e.g. palm oil), “hot drink” (e.g. cultivation of coffee, cacao, sugar cane and tea) and “confectionaries”.	
	Specify most relevant aspects in the criteria for sustainable palm oil production and require traceability of the original source at least in the comprehensive criteria.	
	Change in land use is also a significant issue here	

## Further analysis on sustainable palm oil

Figure 2. Member States targets for CSPO 2017.



### a) Inclusion of the sustainable palm oil criteria

Stakeholders were divided as to whether the criterion on palm oil should avoid entirely its use, due to the associated health issues (40% atherogenic saturates which causes cardio vascular problems), or should aim at purchasing oil sustainably sourced, which addresses the environmental issues of deforestation.

Although it seems clear that the GPP criteria is not the correct tool to prohibit any ingredient due to its nutritional characteristics, the inclusion of this criterion seems to be challenging due to both the difficulties in the traceability of the palm oil and in the verification process. Regarding the first point, it has been commented that palm oil is an ingredient in many products and it is not always declared as a specific ingredient. Thus, tracking back the origins of the palm oil in pre-packed food can be challenging. Regarding this point, it should be noticed that under a new EU law which came into effect on 13 December 2014, the types of vegetable oil used in food products must be stated explicitly on the label. This means that manufacturers can no longer hide palm oil in their ingredients under the generic term ‘vegetable oil’. Therefore, the proposed solution about limiting the scope of the criterion to frying oil, which would be much easier to implement, seems to be no longer valid.

A number of stakeholders stressed that *the availability of sustainable palm oil is not a problem* and hence the challenge is identifying where the palm oil is used to enable the substitution to take place. Regarding the first point, it is confirmed by the information provided by <http://www.sustainablepalmoil.org/europe/> that certified palm oil is available in Europe: “Europe is a core consumer goods manufacturing and retail market for certified sustainable palm oil (CSPO= CSPO is palm oil from a plantation that has been managed and certified according to the principles and criteria of the RSPO. CSPO is certified through one of four RSPO supply chains: ‘Identity Preserved’, ‘Segregated’, ‘Mass Balance’ or ‘Book and Claim’). USDA data for the EU-27 countries shows imports of 6.7 million metric tonnes and consumption of 6.5 million metric tonnes in 2015, making it the second largest

market for imports after India, and the fourth largest for domestic consumption after India, Indonesia, and China" The availability of CSPO in the coming years will even be higher if the commitments expressed by the Member States are realized according to the previous figure. The state of the art for most of the European Member States has been summarized in Table 44.

**Table 44. State of the art on the sustainable certified palm oil and vegetable oils.**

Country	State of the art
<b>Belgium</b>	<p>In 2012 the Belgian Alliance for Sustainable Palm Oil (BASP) was launched to address sustainability issues, and more recently nutrition and health in the Belgian palm oil market.</p> <p>The commitment of BASP is to have 100% CSPO used by its members by the end of 2015 and thereafter to achieve full traceability, incorporate a High Carbon Stock approach and exclude palm oil sourced from peat lands by 2020.</p> <p>BASP is currently led by the food sector, but has reached out to the cosmetic industry association which has reacted positively and is interested in the issue of sustainable palm oil, despite finding it very difficult to trace palm oil in its members' products.</p> <p>Retailer and the animal feed industry federation are not currently a member of the Alliance, however BASP is exploring ways to include them through membership or support.</p> <p><a href="http://www.duurzamepalmolie.be">www.duurzamepalmolie.be</a> and <a href="http://www.huiledepalmedurable.be">www.huiledepalmedurable.be</a></p>
<b>Denmark</b>	<p>There are two separate initiatives in place in Denmark: the first run by the Danish Chamber of Commerce (which covers retailers); the second led by the Confederation of Danish Industry (DI) (which covers food producers).</p> <p>The Confederation of Danish Industry-led initiative made a commitment in June 2014 to buy 100% CSPO by 2016, including the purchase of GreenPalm certificates, and to have 100% segregated certified palm oil by 2018.</p> <p>There has been progress amongst the larger retail companies towards transforming their palm oil supply, with the three main supermarkets (accounting for 90% of the market) advancing with their efforts. Most of the large retailers are already covering all private label food products with certificates and moving towards mass balance</p> <p>However, there is a general lack of consumer information and interest. As in Norway and Sweden, companies and associations are cautious when it comes to reaching out to consumers for fear of provoking the 'no palm oil' movement.</p> <p><a href="http://www.di.dk">www.di.dk</a> and <a href="http://www.danskerhverv.dk/CSR">www.danskerhverv.dk/CSR</a> <a href="http://www.huiledepalmedurable.org">www.huiledepalmedurable.org</a></p>
France	<p>In 2010, a number of NGOs raised awareness of the negative impact of palm oil production on the environment. At the same time, the media reported criticism from some nutritionists about palm oil and its effect on the nation's health due to its high saturated fatty acid content. This led to the Food Industry reconsidering its approach to palm oil.</p> <p>Whilst some companies opted to remove palm oil from their products, others chose to take action by forming the French Alliance for Sustainable Palm Oil in 2013.</p> <p>The Alliance consists of 12 members (including global leaders such as Nestlé and Unilever and medium-sized companies such as Labeyrie Traiteur Surgelés and Royale Lacroix), and has two main goals: to give French citizens information on palm oil; and to encourage the use of palm oil produced in highly sustainable conditions, by mobilising the industry as a whole.</p> <p>Alliance members have made two major commitments: to use 100% RSPO-certified palm oil in their products by the end of 2015; and use 100% sustainable</p>

	<p>palm oil, according to stricter criteria, by 2020. Stricter criteria include traceability, no peat, no deforestation and no conflict. Since 2014, the Alliance has managed to position itself as a key reference point in the palm oil debate, recognized by all the stakeholders involved (NGOs, media, key opinion leaders, scientifics, governments, growers, producing countries, refiners, companies, retailers and final users). The Alliance has also become a strong channel of communication to promote a sustainable and traceable palm oil under the criteria defined by its members</p>
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<p><b>Germany</b></p>	<p>The German Palm Oil Forum (FONAP) was set up in 2013 with the goal to increase the proportion of segregated CSPO in the German, Austrian and Swiss markets.</p> <p>Members of FONAP include food manufacturers and retailers, as well as a large number of cosmetic, personal and home care members, but none from the animal feed sector.</p> <p>FONAP members have made a public commitment that by the end of 2014 they will use only certified sustainable palm oil in their products, in all supply chain options.</p> <p>FONAP conducted a monitoring report in 2014, based on 2013 figures provided by their members. According to that data, progress so far shows that amongst the Forum’s members they have achieved: 52% CSPO in the food sector; 30% across all sectors; 50% in the cosmetics, personal and home care sector; 10% in the chemistry and pharmacy sector; and 1% in the feed sector.</p> <p>Most of the sectors are still far from reaching their target; the only one which is close to 100% CSPO is the margarine producers</p>																													
<p><b>Italy</b></p>	<p>Italy is Europe’s second largest importer of palm oil, including for use as biofuels.</p> <p>On 29th October 2015 the European Palm Oil Conference (EPOC 2015) held in Milan welcomed the launch of the Italian Union for Sustainable Palm Oil (Unione Italiana per l’olio di palma sostenibile). Members include manufacturers such as Ferrero and Nestlè and industry associations such as Aidepi and Assitol.</p> <p>The aim of The Union is to achieve the 100% CSPO goal by 2020.</p> <p>The Union’s first step is to raise awareness of the benefits and contribution of certified sustainable palm oil for the food industry.</p>																													
<p><b>NE</b></p>	<div> <p><b>GENERAL RESULTS</b></p> <p><b>Share and volumes of sustainable palm oil used in the Dutch food industry</b></p> <table border="1"> <thead> <tr> <th>Year</th> <th>Use of sustainable palm oil (%)</th> <th>Use of conventional palm oil (%)</th> </tr> </thead> <tbody> <tr> <td>2011</td> <td>30%</td> <td>70%</td> </tr> <tr> <td>2012</td> <td>53%</td> <td>47%</td> </tr> <tr> <td>2013</td> <td>61%</td> <td>39%</td> </tr> <tr> <td>2014</td> <td>72%</td> <td>28%</td> </tr> </tbody> </table> <p><b>2014</b></p> <ul style="list-style-type: none"> <li>Book &amp; Claim: 31%</li> <li>Mass Balance: 30%</li> <li>Segregated: 39%</li> </ul> <p><b>Share and volumes sustainable palm oil in the Dutch food industry per sector</b></p> <table border="1"> <thead> <tr> <th>Sector</th> <th>Use of sustainable palm oil (%)</th> </tr> </thead> <tbody> <tr> <td>Potato processing industry</td> <td>80%</td> </tr> <tr> <td>Snack industry</td> <td>82%</td> </tr> <tr> <td>Sauce manufacturers</td> <td>78%</td> </tr> <tr> <td>Dairy and milk substitutes</td> <td>94%</td> </tr> <tr> <td>Other</td> <td>77%</td> </tr> <tr> <td>Margarine slurry</td> <td>80%</td> </tr> </tbody> </table> <p><small>*Including dry savory snacks and nuts</small></p> </div> <p>The Netherlands is Europe’s largest importer of palm oil, importing approximately 6 million tonnes a year.</p> <p>The Netherlands is committed to using 100% RSPO certified sustainable palm oil by 2015.</p> <p>On 2 December 2015 the ‘Dutch Alliance on Sustainable Palm Oil’ (DASPO) was launched. The DASPO is the successor of the Dutch Task Force Sustainable Palm Oil which was created in 2010 initially because there was a lack of CSPO uptake.</p> <p>In 2014, 72% of the palm oil processed by the Dutch food industry was sustainable – an 11% increase compared to the 2013 reporting.</p> <p>To support the European demand, IDH (The Sustainable Trade Initiative) and MVO – the Netherlands Oils and Fats Industry, recently launched the ‘European Sustainable Palm Oil’ (ESPO) initiative. The Task Force supports this initiative and its objective to work together on sustainable palm oil on a European level.</p>	Year	Use of sustainable palm oil (%)	Use of conventional palm oil (%)	2011	30%	70%	2012	53%	47%	2013	61%	39%	2014	72%	28%	Sector	Use of sustainable palm oil (%)	Potato processing industry	80%	Snack industry	82%	Sauce manufacturers	78%	Dairy and milk substitutes	94%	Other	77%	Margarine slurry	80%
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<p><b>Norway</b></p>	<p>Norway is committed to using 100% certified sustainable palm oil by 2015.</p> <p>The National Initiative in Norway was set up in response to mounting pressure from Norwegian civil society to tackle the problems associated with palm oil – both from an environmental and health standpoint.</p> <p>Prominent NGOs, such as the Rainforest Foundation, were highly influential in raising the debate and pressuring companies to do something about palm oil. The</p>																													



	<p>Norwegian food and beverage association was responsible for bringing together food and retail sector companies to make a commitment to sustainable palm oil in 2014.</p> <p>Members of the National Initiative in Norway committed to either reduce use of palm oil in products or to use only RSPO CSPO by 2015. They have further committed that by 2018 any palm oil products used will be segregated and traceable. The Norwegian commitment applies both to imports of palm oil or finished products consumed in Norway. The main sectors involved in the drive to increase the use of sustainable palm oil in Norway are the food and retail sectors. The animal feed sector is not formally involved with the Norwegian network</p>
<b>Sweden</b>	<p>The key driver for change in the Swedish market has been NGO pressure. As in Norway, NGOs push for both certification and also replacement of palm oil in products.</p> <p>The Swedish food industry federation set up an initiative in 2014, the main goal of which is to achieve 100% CSPO in the Swedish food sector by the end of 2015, via any supply chain delivery method, including Book &amp; Claim.</p> <p>There is a separate initiative within the detergent industry which is adopting a similar statement to that of the food industry.</p> <p>While other sectors are not currently part of the initiative, the retailers have adopted their own individual commitments, but not through an association as there are only three or four major retailers in Sweden.</p>
<b>UK</b>	<p>The UK is committed to using 100% RSPO certified sustainable palm oil by 2015.</p> <p>Organisations that have signed up to the UK statement represent oil processors and distributors, food and drink manufacturers, retailers, animal feed manufacturers, contract catering and hospitality sector, renewable energy sector, cleaning products industry, speciality chemicals sector, WWF and ZSL.</p> <p>On 17th November 2015 DEFRA announced new figures that show UK imports of certified sustainable palm oil (CSPO) rising to as much as 93% of all palm oil imported.</p>

The second point commented by the stakeholders is *regarding the substitution of palm oil*. It is understood under the scheme of GPP for food products that whenever palm oil is included as an ingredient, certified sustainable palm oil should be preferred. This scheme does not address which type of ingredients should be purchased or used for preparing the food products.

EU legislation sets legal limits for trans-fat in infant formulae and follow-on formulae (3% of the total fat content of the food, to allow for the use of milk, which naturally contains ruminant trans-fats, as a source of fat). Other food products are however not regulated at EU level. Legislative measures limiting the content of industrial trans-fats to 2% of the total fat content of the food were adopted for instance in Denmark (2003), Austria (2009), Hungary (2013) and Latvia (2015). In Belgium, Germany, the Netherlands, Poland, the UK and Greece voluntary self-regulation measures have been agreed with the food industry.

#### b) Traceability of the palm oil in the catering services and food products.

Regarding the traceability and accounting of the palm oil in the food products, it was commented that there are two different points:

- the traceability and accounting of the palm oil in the food products (which food products contain palm oil and in which quantities)

According to the information provided by the stakeholders, *palm oil can be purchased as a raw ingredient* to be used in the preparation of the food products that are going to be served or that can be purchased as part of already prepared and pre-packed food products that are purchased and served. In the former case, the identification and accounting

of the certified sustainable palm oil is easy. *Invoices of the CSPO and non-CSPO can be collected as well as the associated certificates.* In the latter case, the identification of palm oil in the pre-packed food products is difficult and accounting of the amount of CSPO in those products is even more difficult.

Concerning the identification of palm oil in pre-packed food products, the Regulation (EU) No 1169/2011 requires since 13 December 2014 to specify in the ingredients list of all pre-packed foods (non-pre-packed foods are not covered by this provision) whether refined fats/oils are partly hydrogenated. Ingredients should be specifically named and generic or aggregated names must not be used. The Regulation however does not require the indication of the exact trans-fats content of the food in the nutrition declaration. It is important to note in this context that the Regulation (EU) No 1169/2011 also prohibits operators from declaring the trans-fats content of foods on nutrition labels on a voluntary basis. It was indeed considered that this possibility would be used as a marketing tool by only some operators, leading to consumers' confusion. This fact makes the accounting of the palm oil contained in the pre-packed food products difficult as well as the accounting of the CSPO in those products.

Due to this fact, *two different accounting systems are proposed in this criterion* with the same level of ambition. One deals with the palm oil bought as raw ingredient and another one deals with the pre-packed food products containing palm oil.

- the traceability of the palm oil back to its origins and the proof of being CSPO.

Another point concerning this criterion is the *tracking system requested to demonstrate the CSPO*. The RSPO scheme (which is considered the scheme with the highest market share) allows the purchase of certified sustainable commodities through mainly four different supply chain systems that are briefly explained. Each of these systems comes with its own advantages, requirements and pre-approved consumer claim. The four systems ensure that sustainability in the production is supported.

- "Segregated" or "identity preserved": Under these schemes the manufacturers and the retailers have the option to reassure their clients that the actual palm oil they buy came from plantation(s) that work in a sustainable way. They can do so by saying: "*This product contains [only/..%] RSPO certified sustainable palm oil*". In order to make such a claim, oil from sustainably producing plantations has to be kept apart all the way: at the mill, in trucks, in vessels, in processing lines and in storage tanks. Manufacturers who purchase the oil at the end of the chain must be able to trace it all the way back to one or more RSPO-certified plantations.

The claim can be underpinned by either of two supply chain systems: "*Identity preserved*"<sup>4</sup> tracing sustainable palm oil all the way back to specific RSPO-certified plantations or "*segregation*"<sup>5</sup>, permitting the mixing of RSPO-certified oil from various sources as long as the mix is kept apart from uncertified oil

- "Mass balance" or "book and claim": Under these schemes the manufacturers and retailers can also tell customers that they advance sustainable production of palm oil in cases where they cannot be sure that the actual oil in the products originated from certified plantations. Administrative certification procedures still ensure that such a claim corresponds with actual production of sustainable palm oil. The claim can be underpinned by either of two supply chain systems. The first of those "*mass*

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<sup>4</sup> The identity preserved supply chain system provides an elaborate way to separate and track sustainability produced palm oil. The model requires that fruit bunches and oil receive unique identifiers and are kept physically apart by growers, mills, transport and storage providers, refiners, and manufacturers. All steps in the supply chain are documented, creating a paper trail that can be followed back all the way from end-users to one specific palm grower. The end-user is assured that the physical palm oil he received came from the uniquely identifiable, RSPO-certified plantation. Because of the extensive need for documentation and verification, IP is the most costly of the for supply chain systems

<sup>5</sup> The segregation supply chain system provides an elaborate way to separate and track sustainably produced palm oil. The model allows for the mixing of palm oil or derivatives from various RSPO-certified sources. The model requires that fruit bunches and oil from RSPO-certified sources are kept physically apart from other palm oil by growers, mills, transport and storage providers, refiners and manufacturers. The end-user is assured that the physical palm oil he received came from one or more RSPO-certified plantations. However, other than with the IP system, the oil cannot be traced back to individual plantations. Because of the extensive need for documentation and verification, segregation is a relatively costly supply chain system. However, it is less costly than IP

*balance*<sup>6</sup> allows for administratively monitoring at any mixing of RSPO-certified and uncertified palm oil in the supply chain, to check whether the volume of sustainable oil that is claimed does not exceed that amount that is actually produced. The second '*book and claim*'<sup>7</sup>, does not track oil through the supply chain but let suppliers and end-users trade sustainability certificates through an online trading system. Every ton of oil sold under this claim corresponds with one ton of oil that is produced sustainably without the need for tracking and tracing.

All the RSPO supply chain systems support the sustainability of this commodity and therefore all they are accepted as a proof of compliance with this criterion. In the case of the book and claim system, which is the widest available system, it should be noted that the purchased certificates should be redeemed during the same administrative year to be valid.

### C) Sustainable certification schemes – requirements comparison

Table 45 compares the sustainability requirements of the schemes proposed to show compliance with the criterion. The compliance with this criterion is not restricted to these three schemes but they fulfil other requirements needed for the verification process such as the requirements on traceability and chain of custody.

**Table 45. Comparison of the principal requirements of three certification schemes.**

RSPO	ISCC	RSB
Commitment to transparency		
Environmental responsibility and conservation of natural resources and biodiversity	Protection of land with high biodiversity value or high carbon stock. this includes primary forests and other wooded land of native species, highly biodiverse grassland, peatland, wetland, continuously forested areas, areas designed for the protection of rare, threatened or endangered ecosystems or species as well as high conservation value (HCV) areas.	Conservation
Responsible development of new plantings		
Use of appropriate best practices by growers and millers	Environmentally responsible production to protect soil, water and air	Greenhouse gas emissions
		Soil
		Water
		Air

<sup>6</sup> The mass balance supply chain system relates volumes of RSPO-certified palm oil delivered into an unsegregated supply chain to volumes of oil purchased by the end-users. The model allows for mixing of sustainable palm oil with oil from uncertified sources at any point in the supply chain so long as the total volume of oil purchased as being RSPO-certified does not exceed the volume of RSPO-certified sustainable oil that went into the chain. For this system, trade in sustainable palm oil is monitored administratively throughout the entire supply chain. Sustainable palm oil does not, however, have to be stored or shipped separately. For this reason, the mass balance supply chain system is relatively inexpensive. However, under the system end-users cannot make claims about the actual physical content of their products.

<sup>7</sup> The book and Claim system is the most flexible and cost-effective way for end-users to claim their support for specific volumes of sustainably produced palm oil based on RSPO-guaranteed certificates they have purchase online. At the very origin of the chain, RSPO-certified palm oil suppliers may put such certificates up for sale. Under the scheme, certified growers and mills feed crude palm oil to unsegregated supply chains; end-users obtain their oil from unsegregated sources. Digitally traded certificates specify oil volumes credits. Traceability requirements in this system are limited to the manufacture of end products to ensure that claims are covered by purchased certificates. End-users cannot make claims about the actual physical content of their products.

		Use of technology, inputs and management of waste
	Safe working conditions	
Responsible consideration of employees and of individuals and communities affected by growers and mills	Compliance with human, labour and land rights and responsible community relations	Human and labour rights
Commitment to long-term economic and financial viability		Rural and social development
		Local food security
Compliance with applicable laws and regulations	Compliance with applicable laws and relevant international treaties	Legality
Commitment to continuous improvement in key areas of activity	Good management practices and commitment to continuous improvement	Planning, monitoring and continuous improvement

**Annex 4. Table of comments on the proposed criteria for EU GPP criteria for CATERING SERVICES**

**4.1. Staff training**

This section presents the comments received through BATIS and personal communications from the 1<sup>st</sup> AHWG meeting to the 2<sup>nd</sup> AHWG meeting.

**Table 46. Feedback from the stakeholders on the TR1.0: Staff training (SC1)**

<b>Topic</b>	<b>Feedback from stakeholders</b>	<b>JRC-Directorate B5 assessment</b>
Ambition level and SME	<p>As the document states, staff training is a crucial aspect for sustainability in food services. The exact content on what should be required as a selection criterion varies according to what the sustainability targets for the particular procurement is. Staff training should also form an integral part of environmental management, thus it should be included in the criteria on EMS. As the rationale states the list in the criteria is to be seen as a checklist to choose the most relevant issues for each procurement. The current wording is too detailed for practical purposes and may be a challenge for SMEs. If the market analysis reveals that it is too hard to meet as a selection criteria, it can be included as a contract clause. Setting a criterion for the minimum duration of training does not seem as a proper procedure. It is the quality, rather than the time used that makes a difference. Also, cost-implications for SME:s should be considered. The savings from the training can only be estimated if energy and waste consumption, food waste reduction etc. are monitored. If the same procurement omits to require monitoring, the training criterion loses its credibility</p> <p>We propose that staff training is included as part of the criteria on EMS and that the environment plan for the service to be executed should influence the exact content of training.</p>	<p><b>Comment partially accepted</b></p> <p>Staff training is now mentioned in the EMS criterion as an important item to accomplish the minimization of environmental burdens of the catering service. Internal evaluation and monitoring of the achievements are vital for the development of an EMS system to detect and correct failures; to see e.g. whether the savings from the investment in training are being fruitful.</p> <p>A certain number of hours has been considered taking into account the rotation of the personal in this sector. The quality of the training might not be easy to proof by the tenderer nor to verify by the procurer.</p>
Content	Catering staff should be informed of the detergents used and potential allergies.	<p><b>Comment partially accepted</b></p> <p>While the staff has to be trained on the use of detergents in order to avoid their overuse, the object of the GPP is to diminish the environmental impact, and allergies are as such a health and safety topic.</p>
	We consider relevant to inform and train staff in terms on cleaning and cross contamination when it is referred to intolerances or allergies and how to avoid them.	<p><b>Comment partially accepted</b></p> <p>Dosage and handling of chemical products have been included as one of the points of the staff training.</p> <p>Another point dealing with cleaning procedures that are more environmentally friendlier has been included.</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>You can also give training for cleaning! How to use environmental products</p> <p>The second bullet under Procurement staff should include the TS and AC on Reduced animal products and increased plant-based foods, as well as the TS4 and amended AC4 on Improved animal welfare.</p> <p>Eco driving if transport is necessary</p> <p>Maybe eco-driving training could also be included (this may fit better in the vehicles section)</p> <p>The bullet on potential improvement areas should be edited to read: "Multiple sustainability benefits (use of food products with lower environmental impacts such as plant-based foods, improved animal welfare, as well as energy and water minimisation in food storage and meals preparation), minimisation, management and adequate disposal of solid waste (including food waste)."</p>	<p>The information about cross contamination should be included in a training related to health aspects</p> <p><b>Comment partially accepted</b> The training of the staff involved in the purchases has been removed in this revision as the purchase is considered to be part of the food procurement.</p> <p><b>Comment partially accepted</b> The wording of the criterion reflects now the training of the staff involved in the delivery of food and eco-driving is an important aspect to achieve it.</p> <p><b>Comment partially accepted</b> The wording of the criterion has been edited and now there is no bullet on improvement potential areas. However, the suggested aspects have been incorporated</p>
Duration	<p>We strongly agree with the importance of staff training. But the requested "minimum duration" of 16 hours seems too ambitious and not realistic.</p> <p>We believe that different levels of training / education, with diverse content and duration should be provided to the intended recipients. We think, then, that 16 hours is not enough for explaining these issues and others more concretely to the staff according to their function. In addition, we believe that the establishment of a reminder system, within no more than 2 years, should be set in specific topics (such as peeling fruit for school monitors) and in short sessions.</p> <p>Setting a minimum training requirement of 16 hours for new staff within 4 weeks would be difficult to achieve. For instance, some staff work part-time. Even for full-time staff, it seems to be too much too soon given all the new information and processes a new staff member needs to learn upon arrival. It would be more efficient to have a training programme that includes initial training plus some modules within 3 to 6 months after arrival, when the person is fully operational.</p>	<p><b>Comment partially accepted</b> Your suggestion has been taken. It is true that the duration of the training can be ambitious in a sector where there is a large rotation, a recommended value of 16h per year has been proposed for permanent staff while for temporary and short term staff shall be proportional to the duration of the contract. The wording of the criterion has been edited as follows: <i>"For permanent staff 16h per year is a recommended value for the duration of the formation while for temporary and short term staff shall be proportional to the duration of the contract."</i> <i>"Depending on their specific functions, the training should be different. The staff working at the kitchen shall be trained ....I among other aspects".</i></p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>16 hours of training for kitchen staff that isn't much. Especially if you see the subject they have to be trained in. In Belgium there are hotel-and catering schools (high school) and a full program takes 6 to 7 years to become a chef. Cooking organic, seasonality, vegetarian, avoid food waste, menu planning is complex, so I think it is impossible to have a well trained staff with only 16 hours. Basic training should be minimum 35/38 hours (work week) and then every year there should be extra training of 16 hours (repeating importing things + new information/techniques).</p>	
	<p>16 hours staff training time seems relatively low, considering the breadth and complexity of the subject matter</p>	
	<p>Increase the minimum duration of 16 hours for new catering staff The EEB fully supports the criteria on staff training proposed by the JRC. It is very important to train both staff responsible for procurement and staff responsible for catering. Representatives from the cities of Gent and Copenhagen also pointed out that the proposed minimum duration is too short.</p>	
<p>Examples of training</p>	<p>With conversion to 90% organic produce our kitchen staffs attends a training course if they want to. The course is a 5 week course, and it costs nothing for the unit to attend because it is a training course for the unemployed giving them a chance to get the experience in a real unit, and afterwards a better chance to get a fulltime job. The conversion to 90 % organic produce is done within the budget of the kitchen and some of the key factors are huge reduction due to reduced wastage and a major upgrading of the kitchen staff so that it can be done. Which result in better food quality and nutrition. Children and Youth Administration, Copenhagen Madhus and Job Centre Copenhagen have partnered on a rotation project. Therefore, we can offer kitchen employees five weeks of career advancement in AMU auspices, while a rotation agency handles the kitchen work. Temporary workers are up skilled to cook organic food through a two-week course in Copenhagen Madhus and are now at work in one of the institutions that participate in the first course. The course is both for kitchen staff with little or much experience. The key is motivation and desire to develop their own skills and gain new inspiration. On the course we teach, inter alia, in: • Cooking methods • Sensory and seasoning • Ecology • Nutrition for children • Menu Planning • Knowhow knowledge into practice. If you want more information about this program we can forward it. Answers to the consultation questions to stakeholders: . o Do you consider relevant to add new requirements to this proposal? • Eco-driving and</p>	<p><b>Acknowledged</b> See above.</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>training for environmental friendly cleaning.</p> <ul style="list-style-type: none"> <li>o Is the 16 hours' minimum duration of training for all new staff adequate? · 16 hours of training for kitchen staff that isn't much. Especially if you see the subject they have to be trained in.</li> </ul>	
Scope of the training	<p>We will include some training / support to food producers for working cooperatively and to be able to (1) provide food at a competitive price which is accredited for food safety, (2) ensure there is sufficient capacity to supply and at a consistent quality, and (3) have the potential to manage complex distribution arrangements.</p>	<p><b>Comment rejected</b></p> <p>The suggestions are out of the scope of this criterion: the staff providing the catering service is trained to diminish the environmental impacts of the service, and allergies are as such are a health and safety topic.</p>
	<p>This requirement should be limited to staff that is involved in the procurement and preparation of food. For instance, monitors who supervise students during the lunch hour should not be included in the training requirement.</p> <p>We suggest clarifying what is meant by "<i>all other staff</i>" and specifying that the training requirement pertains only to staff that is involved in the procurement and preparation of food.</p>	<p><b>Comment rejected</b></p> <p>The training is meant to be given to the personnel involved in the catering service. Depending on their specific functions, the training should be different. The staff working at the kitchen shall be trained on some aspects that can be different from those the serving staff is trained. Also the staff involved in food delivery shall be trained on environmentally-conscious driving on a regular basis to increase fuel efficiency.</p>
	<p>Which staff has to be trained? Staff working for the tenderer? Staff of the contracting authority? Is the training meant for the staff on the floor (kitchen staff + procurers of food products) or do you also foresee training for administrative staff (who write the tender + follow up)? For example if the caterer gives training for his administrative staff on procurement of seasonal fruits and vegetables, why should the public procurer not be able to join in?</p>	<p><b>Acknowledged</b></p> <p>See above for the first questions.</p> <p>For the last one, the public procurer might attend voluntarily to whatever training they consider relevant.</p>
Terminology	<p>Both the core criteria and comprehensive criteria sections under Staff training should replace "<i>environmentally responsible</i>" with "<i>more sustainable</i>." This would reflect the fact that environmental improvements are just one aspect of sustainability, whereas the GPP goes beyond this to include, for example, improved animal welfare.</p>	<p><b>Comment rejected</b></p> <p>The definition of green public procurement is to lower the environmental impact of public purchases.</p>
	<p>"Environmentally" should be replaced with "sustainability" to reflect the more inclusive meaning it entails in relevance to the GPP Guidelines.</p>	
Verification	<p>For verification purposes there should not only be the need to provide records but also a curriculum / training concept of the staff training. Very often the training records do not</p>	<p><b>Comment rejected</b></p> <p>The scope of the training criterion is to serve to public procurers to</p>



Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	indicate detailed enough the topics mentioned in the training activities.	select only those companies in which specific and relevant training on environmental aspects is given to the staff delivering the catering service. The CVs of the personnel are private information that is not of interest for the public authorities. The records shall include the keywords on environment aspects.

### Further analysis on Staff training

The stakeholder's opinion on the minimum duration of the training is rather divided. While some stated it would be difficult to achieve, others advocated for an increase. There are as well opinions about focusing on quality more than in time, i.e. the staff needs to reach a minimum standard irrespective of how long this takes.

The cost of staff training is not significant when the overall savings that can be realised through reduced food waste, energy consumption and water usage are taken into consideration. Including staff training as a technical specification will allow procurers to assess if tenderers can ensure that their staff has the appropriate skills to deliver more environmentally conscious catering services.

Different trainings are here proposed depending on the specific functions of the personnel. Eco-driving is a relevant practice to the staff involved in the delivery of food, while the use of cleaning products and detergents are relevant for the staff working in the kitchen. Safety aspects are covered by different legislation and are therefore put of the realm of this criterion.

## 4.2. Food procurement

This section presents the comments received through BATIS and personal communications from the 1<sup>st</sup> AHWG meeting to the 2<sup>nd</sup> AHWG meeting.

**Table 47. Feedback from the stakeholders on the TR1.0: Food procurement**

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
Scope (plant based products and improved animal welfare)	In line with our previous comments and justifications, this should include the TS and AC on Reduced animal products and increased plant-based foods, as well as the TS and amended AC on Improved animal welfare.	<p><b>Comment partially accepted</b></p> <p>The criterion itself does not include a reduction of the meat consumption but a specific criterion on this point has been developed</p>
	Aspects related to meat production are mentioned as part of the menu planning. Although vegetable-based foodstuffs tend to have in general a lower environmental burden than animal-based foodstuffs, there are also various ways to produce meat and other animal-based foodstuffs. Hence, improvements have been accomplished in terms of climate and other environmental impacts and with the increased knowledge base additional potential exists and various means to improve the climate efficiency of meat production are developed. In addition, meat production should not be regarded in isolation since the same animals often are a source of also other foodstuffs (dairy) and provide raw material even for other industries	<p><b>Acknowledged</b></p>
Packaging	In regard to sustainably sourced fibres, the FSC scheme is mentioned as an example of how to verify compliance. However, there are also other certification schemes available for fibre-based packaging, such as the PEFC which is widely used for example in Finland	<p><b>Comment accepted</b></p> <p>Examples of other schemes are also included as well as the possibility of verifying using equivalent criteria</p>
General comment	The EEB fully supports the idea that the final set of criteria on food products is also applied for the procurement of catering services	<p><b>Acknowledged</b></p>

#### 4.3. Promotion of vegetarian menus (BEFORE: Menu planning)

This section presents the comments received through BATIS and personal communications from the 1<sup>st</sup> AHWG meeting to the 2<sup>nd</sup> AHWG meeting.

**Table 48. Feedback from the stakeholders on the TR1.0: Menu planning TS5**

<b>Topic</b>	<b>Feedback from stakeholders</b>	<b>JRC-Directorate B5 assessment</b>
Animal welfare	On the sentence <i>"The criterion will encourage the use of food and beverage products with low environmental impacts and will help reduce the quantity of food waste being generated"</i> HSI recommends the following edits to the "Consequences" of TS5 to better reflect the justifications and goals set out in our prior comments: <i>"The criterion will encourage the use of food and beverage products with: lower environmental impacts; improved public health and animal welfare; and cost savings; and will help reduce the quantity of food waste being generated."</i>	<b>Comment rejected</b> The criterion has been changed to <i>"Promotion of vegetarian menus"</i> and it does not contain the referred text.
Meat limit	By menu planning it is possible to increase organic products into public kitchens. By reducing meat in menu and recipes it is possible to increase organic although it is more expensive than conventional products. It is not needed to set maximum % meat content. The quality and amount of meat are the most important things. The quality impacts also to animal welfare (4.1.1.5). In the revision there are good proposals to seasonality and food waste. It should be considered that seasons differ in EU countries. It is possible to get perishable raw ingredients locally.	<b>Comment rejected</b> The increase on organic produce is targeted in a separated criterion. With respect to seasonality, due to the controversy around the subject it is proposed to be left aside.
	Could taste be one of the criteria? This could reduce food waste.	<b>Comment partially accepted</b> Taste has been proved to be one of the factors for reducing food waste especially in schools and hospitals. It is therefore recommended to include the consumers in the menu planning, in order to encounter their tastes and thus reducing food waste. .
	A maximum % meat content might be difficult to implement and to verify. It might be easier to require a minimum of meatless dishes (per day / week)	<b>Comment accepted</b>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>On the sentence "Hence, there are opportunities available to minimise environmental impacts by reducing the use of livestock products. It is not proposed to limit the use of such products, but suggested to use them in moderation." The second line here is superfluous. Due to the immense negative impacts on animal welfare, public health, and the environment overconsumption of animal products has on health and environment, these products should be limited in public authorities catering services. At the very least, the GPP Guidelines should allow public authorities to choose their course of action; the Guidelines should not recommend against limits, which can cut against the goals of the Guidelines and stifle innovation and implementation. Therefore, the following line should be deleted: <i>"It is not proposed to limit the use of such products, but suggested to use them in moderation."</i></p>	<p>Indeed the proposal is to leave the figure on percentage of meat reduction to be fixed by the public authority. The pointed out sentence will be removed</p>
	<p>A maximum % meat content for the core and comprehensive criteria can and should be set. In the US the HCWH Healthier Hospitals Program Less Meat goal sets a standard for <i>"reduce meat purchased by 10% per year OR achieve ultimate goal of an average 1.5 oz (.09375 lbs / meal) per meal served."</i> Please visit: <a href="http://healthierhospitals.org/hhi-challenges/healthier-food">http://healthierhospitals.org/hhi-challenges/healthier-food</a></p>	<p><b>Acknowledged</b> While one of the tools to reduce the environmental burden is the reduction of meat protein in the menus, a requirement has been proposed in this revision: <i>"Reduction of red meat"</i> A fixed target for the EU might not be set, due to the diversity of catering services, guests and country specificities. Public authorities, however, are hereby informed and recommended where to direct the efforts to, letting them to choose their course of action.</p>
	<p>We agree with the nutritional guidance given by countries like Sweden or the Netherlands that limit meat at 500 g per week (200 g of red meat as maximum). In plus, other sources of protein should be explored, as for example, pulses.</p>	
	<p>We believe that a maximum percentage of meat content should not be included in the criteria. In some contracts, contract caterers are required to provide a minimum amount of meat (e.g. meat must be served three times per week). There are also specific nutritional standards for how much food should be given to children depending on their age. In addition, calculating the percentage of meat served would be difficult in practice when processed meat products are considered (e.g. tortellini stuffed with ham). We recommend keeping the text as it is and not setting a maximum percentage, which would be unfeasible to implement.</p>	
	<p>I think it would be better to not state the maximum content of meat but to ask for at least 1 full meal without meat every day.</p>	
	<p>In Finland the menu rotation is usually for a 6 week period. The national nutritional guidelines reduce the amount of red meat. It is quite difficult to set the amount of meat as a criterion. The environmental impact is of course also different between different sources of meat and it cannot be bundled together as one product group in a call for tender. Rather it should be expressed as an objective, which then the service provider takes into account in menu planning, done tightly together with the procuring authority. Following nutritional recommendations should always be a mandatory requirement.</p>	<p><b>Acknowledged</b></p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>The percentage of meat: a dish has to contain a certain amount of protein. Dieticians are not willing to touch the norms set out by our High council of health. You can't lower the amount of protein in a dish, but you can say that it can exist out of animal proteins and vegetable protein. With this system you can lower the amount of meat but you have to add vegetable protein so you reach the norms.</p> <p>The idea of maximum meat percentages is broadly positive, but there is a perception that meat is necessary as part of a balanced diet. It would be useful to consult with nutritionists to overcome dietary fears relating to meat intake. It might be worth considering a balanced menu as including a certain amount of protein rather than meat specifically and then limiting amounts of meat or suggesting diverse protein sources.</p>	
Meat limit / plant-based options	<p>Formulate a new core criterion on menu planning to provide a "daily vegetarian offer" or to set a maximum share or amount of meat on the weekly offer.</p> <p>Add a technical specification that requires providing a feedback system that helps adapting food portions to the client</p> <p>The EEB welcomes very much the proposed criteria on menu planning because of the great potential of lowering the environmental effects of food consumption. But we highly recommend formulating a new core criterion "daily vegetarian offer". Especially the public procurers present at the 1st AHWG meeting supported this proposal</p> <p>For those caterers that offer only one meal or menu per day, a maximum amount of meat based menus should be set. The EEB suggests a maximum amount of two meat based menus per week. Another option could be that the share of meat products in the menu week plan should be based on general nutrition recommendations like the recommendation of the German Society for Nutrition that recommends 300-600g meat/week for an adult.</p> <p>We also recommend adding another two aspects to the food waste minimisation plan: As part of the core criteria, the catering service has to provide a feedback system that helps adapting food portions to the clients. The offering of doggy bags could be considered within the comprehensive criteria.</p>	<p><b>Acknowledged</b></p> <p>The criterion has been edited accordingly. The food portions and all related to food waste is considered now in the specific food waste criterion.</p>
	<p>We have a weekly veggie day (vegetables only). Additionally we offer a full two-week vegetarian menu that follows national dietary recommendations. In Denmark we have some institutions with a vegetarian profile who don't serve meet. Seasonality should be incorporated in menu plans, both from an economic and an environmental perspective. Meat is not essential for a balanced diet – protein on the other hand is. Nursery and daycare facilities in Denmark operate with 1 or 2 weekly meet days in the institutions. The protein intake in the resisting meals is covered by vegetable protein and fish. Nutritional values of the menus and information's on allergens should be available on request. Include a requirement and fresh raw vegetables ingredients in every meal and a weekly fish day. Include a requirement to provide tap water rather than bottled water. <a href="http://altomkost.dk/raad-og-anbefalinger/de-officielle-kostraad/">http://altomkost.dk/raad-og-anbefalinger/de-officielle-kostraad/</a> Answers to the consultation questions to stakeholders: o Can a maximum % meat content for the core and comprehensive criteria be set? · I would like a balanced menu including a certain amount of protein rather than meat %.</p>	<p><b>Acknowledged</b></p> <p>The criterion has been edited accordingly. Weekly vegetarian day(s) is/are included as well as an increase in vegetarian proteins at the expense of a strong reduction of meat.</p> <p>A balanced menu requirement cannot be set since there is not agreement on what this can be across the EU.</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
		Tap water for drinking has been established now as a Contract Performance Clause.
Meat limit to cover other animal products	<p>Per our previous comment, the following core criteria regarding animal products should be added:</p> <p>Technical Specification Animal products should make up no more than 20% of the total procurement cost of food and drink products</p> <p>Verification The tenderer shall provide data (name and the amount in mass) of animal products planned to be supplied in the execution of the contract indicating specifically the products that comply with the requirements. Products that have been third party certified by widely accepted and recognised international organisations) will be deemed to comply.</p> <p>Award Criteria Points shall be awarded to tenders in which the amount of animal products is below 20% of the total procurement cost of food and drink products</p> <p>Verification The tenderer shall provide data (name and the amount in mass) of animal-based food products planned to be supplied in the execution of the contract indicating specifically the products that comply with the requirements. Products that have been third party certified by widely accepted and recognised international organisations) will be deemed to comply.</p>	<p><b>Comment partially accepted</b></p> <p>Although a fixed value has not been set, the criterion has been edited accordingly.</p> <p>It now requires for an increase in vegetarian proteins at the expense of a strong reduction of meat.</p>
	For the reasons we set out above, yes, we believe a maximum percentage of meat, dairy, and egg contents can and should be set for the core and comprehensive criteria.	

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>HSI advises against recommending substituting red meat with chicken or pig products. As monogastrics tend to be more intensively farmed than ruminants, this raises animal welfare concerns and therefore would conflict with AC4. We further note that plant-based foods have the lowest environmental impact and can improve public health and save lives and money, Further, a 2014 study found that a 50 percent reduction in all EU consumption of meat, dairy and eggs would cut agricultural greenhouse gas emissions by 19 to 42 percent. Among others, studies in the UK, US, India, and Italy have shown lower emissions for more plant-based diets.</p> <p>Therefore, we recommend these lines be edited to say: <i>“Reducing content of animal products and replacing with plant-based options is one example of how to minimise environmental impact. Red meat was found to have the largest impact on the environment in the current production systems and chicken and pork had lower impact (section 3.1.5.1.4., Preliminary Report), Further, plant-based diets are consistently shown to have the lowest environmental impacts, while at the same time exhibiting potential improvements in public health and animal welfare.”</i></p> <p>As recognised, the dairy industry has a large impact on the environment and on animal welfare. Therefore, rather than simply recommending substitution of dairy products based on fat content, the Technical Report should recommend reducing all dairy products and substituting with plant-based alternatives (e.g. soya or almond milks). Thus, we recommend adding the following sentence: <i>“Furthermore, full-fat dairy products have larger environmental impact than half-fat dairy products due to the attribution of the fat to the product (section 3.1.5.1.5., Preliminary Report). Additional environmental and animal-welfare benefits may be had by reducing all dairy products and substituting with plant-based alternatives (e.g. soya or almond milks). Hence, there are opportunities available to minimise environmental impacts by reducing the use of livestock products.”</i></p> <p>Based on our prior justifications, we recommend the following changes: <i>“The meat, dairy and egg content in the overall meal composition shall be limited whilst maintaining the correct nutritional balance.”</i></p> <p>As recommended in the 2012 report commissioned by the European Commission (DG ENVI), <i>“Assessment of Resource Efficiency in the Food cycle,”</i> which states that <i>“Provision of more food products that serve as alternatives to meat and fish,”</i> we recommend this text be amended to say: <i>“The meat, milk, egg, and fish content in the overall meal composition shall be limited whilst more food products that serve as alternatives will be sought, while maintaining the correct nutritional balance.”</i></p>	<p><b>Comment accepted</b> Although a fixed value has not been set, the criterion has been edited accordingly. It now requires for an increase in vegetarian proteins at the expense of a strong reduction of meat. Other alternatives to reduce the meat consumption are given in Explanatory notes.</p> <p><b>Comment partially accepted</b> The criterion has been changed to a <i>“Promotion of vegetarian menus”</i> in the scope it does not include the dairy products. The sentence about the nutritional balance has been added as follows: <i>“...reduced meat consumption whilst maintaining the nutritional balance in the menus recommended for the targeted guests.”</i></p>
Perishable ingredients	On the sentence <i>“Perishable raw ingredients shall be included in more than one dish, (e.g. carrots, onions, potatoes).”</i> It should be noted that the more perishable raw ingredients are used, the more food waste there will be.	<b>Acknowledged</b> The use of ingredients and all related to food waste is considered now in the specific food waste criterion.
Planning based on past	On the sentence <i>“The menu shall be planned based on past performance, i.e. what meals do customers like best.”</i> This is difficult, it makes it difficult to introduce new, and healthy choices.	<b>Acknowledged</b> The proposal now has been taken

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
performance	<p>A client may have certain requirements (e.g. meat three times per week). If those are not the dishes that are most favoured by consumers, then the contract caterer would not be able to fulfil this requirement since they would still be contractually required to provide the dishes.</p> <p>What we hear works best is when the client and the contract caterer can work together to see how food waste can be reduced in canteens. Perhaps this can be addressed in implementation guidance rather than GPP criteria, which is not the best place for setting rules on contract caterers that actually require the consent of both the contract caterer and the public authority.</p> <p>The inclusion of shaping menus to what consumers 'like' would not work for example in the context of schools, where part of the purpose is to educate children on healthy eating and educate their palates.</p>	<p>but under the specific food waste criterion created. .</p> <p><b>Acknowledged</b></p>
Plant-based options	<p>Add to core criteria that daily plant-based meal options shall be available, for example, one third of meals shall be plant-based. HSI suggests the following language: "A weekly 'veggie day' shall offer a fully plant-based meal at least once per week."</p> <p>Part of the core criteria, in efforts to reduce animal products and increase plant-based options, should be to have a weekly plant-based offer. Thus, we suggest adding an additional bullet stating: "<i>A weekly plant-based offer shall be available.</i>"</p> <p>The current wording is unclear, does this a vegetarian option once a week? We suggest the following alternative wording: "<i>A plant-based offer, including main dishes, shall be available daily.</i>"</p> <p>There should always be a vegetarian (or plant based) alternative. Although it should not be the only possibility it should always be possible and attractive to choose.</p> <p>A vegetarian meal should be provided on a daily basis. Thus, we recommend that having a veggie day would better serve as a comprehensive criterion.</p> <p>Our core TS is Thursday veggie day and a daily vegetarian alternative. The vegetarian dish can't be more expensive than a traditional meal.</p> <p>The definition of a veggie day as '<i>including a vegetarian option</i>' seems relatively weak. We would prefer it to be defined rather as a vegetarian-only day.</p>	<p><b>Comment accepted</b></p> <p>Although a fixed value has not been set, the criterion has been edited accordingly.</p> <p>It now requires for an increase in vegetarian proteins at the expense of a strong reduction of meat.</p> <p>Other alternatives to reduce the meat consumption are given in Explanatory notes.</p>
Seasonal products	<p>Seasonal produce is not a synonym for less environmental impact. For instance, a vegetable might be in season in the country of consumption but in order to source a sufficient quantity it may be necessary to source the vegetable from a country where it is not in season. If the intention is for the produce to be in season where it is grown, the verification would require seasonal calendars for every agriculture-producing country.</p> <p>Forcing food service providers to purchase only seasonable produce would be extremely limiting in terms of the variety of offer. We would need to ensure that seasonal calendars still allow for variety and nutritional balance.</p> <p>The quantity of seasonal produce available must also be taken into consideration. There may not be a sufficient supply of non-refrigerated produce to meet the demand for seasonal produce based on local seasons. There is also</p>	<p><b>Comment rejected</b></p> <p>The criterion is now about reducing the meat consumption and not any longer about menu planning since the planning is reflected in the rest of the criteria. Seasonal produce has moreover been removed from the</p>



Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>the potential for this requirement to become a barrier to trade in the internal market if the intention is to limit sourcing to local suppliers. We recommend <i>"The menu shall endeavour to make use of produce in season when available and affordable"</i></p> <p>Seasonality is a TS criterion for the tenderer to show us what food products are in season. A real seasonal menu planning according to the 4 seasons is an AC.</p>	list because of the discrepancy about the benefits of a product whether is globally seasonal or locally seasonal and the impossibility to be verified.
Separate criteria: meat reduction and food waste	In menu planning there is more than one goal. E.g. eat less meat, eat more healthy, get less food waste. Maybe it is better to present these goals separately? Employee health is very important now and food is an important mean to contribute. This criterion is becoming the most important of the catering services!	<p><b>Comment accepted</b></p> <p>The criterion has been changed to a <i>"Promotion of vegetarian menus"</i> and the food waste will be targeted in a separate criterion indeed.</p>
Tap water	Include a requirement to provide tap water rather than bottled water.	<p><b>Comment accepted</b></p> <p>This suggestion has been included as a contract performance clause.</p>
Consumer information	<p>These <i>"Information to consumers"</i> requirements go beyond the scope of GPP, the aim of which is to facilitate for public authorities the purchase of products, services and works with reduced environmental impacts. There also appears to be no justification for this requirement in the Technical Report or Preliminary Report. Furthermore, the EU Food Information to Consumers (FIC) Regulation leaves it up to Member States to determine whether and how nutritional information is provided to consumers for non-pre-packed food, so this technical specification would not be in line with existing EU and national rules.</p> <p>We recommend removing <i>"Nutritional values of menus and information on menus"</i> from the list of elements that must be included under menu planning.</p> <p>In any case, providing nutritional information and allergen information in a contract catering setting, where a variety of food options are often freshly prepared by hand, is more challenging and entails a higher administration cost than in a retail environment, where a large quantity of one type of food is generally industrially produced in a standard way. When providing nutritional and allergen information has been required by contract caterers, some contract caterers have had to dedicate a full-time staff member to this task. SMEs who have less flexibility to dedicate someone to the task would particularly struggle to fulfil this criterion.</p> <p>Regarding allergen declarations, such information is required under the FIC Regulation to be provided for non-pre-packed food but how contract caterers are required to provide this information varies per Member State. For instance, in some Member States the information can be given orally upon request.</p>	<p><b>Acknowledged</b></p> <p>The criterion has been changed to a <i>"Promotion of vegetarian menus"</i>.</p>
Consumer	Please add cooking techniques, such as vapor, low temperature, etc.	<b>Comment accepted</b>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
information		This suggestion will be dealt with in energy and water consumption criterion indeed.
Verification/ Consumers feedback	Menus should be balanced, nutritive and that respect the seasonality of products. On the other hand, we would like to consider the aspect of participatory/collaborative management, as a way to verification, where consumers can be involved in the food service and provide feedback about the quality and taste of it in order to improve meals and their satisfaction. At this point, some cooking techniques should also be considered.	<p><b>Comment accepted</b></p> <p>For keeping the nutritional balance a sentence has been added to the wording of the criterion.</p> <p>The information to the guests and collaborative management is both reflected in the EMS criterion and in the foodwaste criterion.</p> <p>The suggestion about the cooking techniques will be dealt with in energy and water consumption criterion indeed.</p>
Food waste	Food waste is an important aspect of circular economy and it should be more elaborated in the criteria set maybe even as a criterion separate from menu planning. The proposed draft comprehensive criteria concerning food waste does not suffice as a criterion for promoting circular procurement with regards to best practices already available. In the Finnish procurement guidelines regular monitoring and reporting of food waste is recommended as a core criteria. The recommendation for the comprehensive criteria is that the amount of biowaste is regularly monitored by weighing the following fractions: total amount of biowaste, kitchen waste, serving waste, plate waste. The results are reported to the buyer.	<p><b>Comment accepted</b></p> <p>This suggestion has been accepted and foodwaste is now a different criterion. The monitoring and reporting of food waste is being dealt in EMS criterion.</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>The focus should be on prevention. Contract caterers are actively working to prevent food waste in the kitchen through data recording, awareness raising and changing food preparation techniques. But preventing food waste in canteens often requires collaboration with the procurer. For instance, when a procurer requires the full range of menu options to be available from the start to the end of the service, there is more food waste than when the caterer can provide limited options at the beginning and end of the service.</p> <p>Post-consumer food waste is the responsibility of the procurer. Contract caterers are limited in their ability to reduce post-consumer food waste. Nonetheless, when procurers wish to take action in this area, contract caterers have taken initiatives together with procurers to raise awareness among consumers, to encourage consumers and to discuss with the server what portion size they would like.</p> <p>We see food donation as a last resort. Much of the food waste from canteens is unsuitable for redistribution due to food safety and hygiene. For instance, food in the contract catering sector needs to be consumed within 24 hours of being prepared and unrefrigerated food that should be refrigerated is no longer deemed suitable for consumption after a certain fixed period. Only a limited amount of food that has not been offered to consumers can be donated (e.g. sandwiches that are fully packaged). In addition, it is the procurer, not the contract caterer, who decides whether food is donated.</p> <p>The text should specify that the obligation to sort and report bio-waste only pertains to kitchen waste where space allows for separation.</p> <p>While reducing post-consumer food waste is also very important, this should not be addressed in GPP criteria for contract caterers since post-consumer food waste belongs to the client.</p>	<p><b>Comment accepted</b></p> <p>This suggestion has been accepted and food waste is now a different criterion. The monitoring and reporting of food waste is being dealt in EMS criterion.</p>
	<p>Including a food waste minimisation plan is a useful first step, but it would be useful to provide more practical information and suggestions on what this should include and how to manage it.</p>	<p><b>Comment accepted</b></p> <p>This suggestion has been accepted and food waste is now a different criterion where practical information and options to reduce it are given.</p>
Waste sorting and disposal	<p>This is also a key criteria and should be compulsory for all public spaces to have one waste management programme in which it was included its separation (paper, glass, plastic, organic waste and (hazardous waste - in some cases), as minimum). Also, disposal and incineration, in except of hazardous products, should be looked as an ultimate alternative according to the EC Circular Economy Package, so more re-utilization and recycling strategies should be designed and implemented.</p> <p>Also, food donation should be considered, if possible, both for human or animal purposes, prioritizing human ones, as food Banks or social entities/organizations, instead of throwing it away or dispose it.</p> <p>Sorting on site should only be required where space allows for such separation.</p> <p>We suggest "shall be sorted into the correct waste stream categories wherever the client provides the means and</p>	<p><b>Comment accepted</b></p> <p>The sorting and disposal for waste comments are considered for the Waste sorting and disposal. Food waste is now a different criterion.</p> <p><b>Comment accepted</b></p> <p>The sorting and disposal for waste</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>where space allows for such separation..."</p> <p>See suggestion to align this with previous comment. add "...and when space allows..."</p> <p>Sorting into waste stream categories (including packaging) only makes sense if the waste streams for separate collection and recycling are available.</p> <p>Suggestion to state "...wherever the client provides the means (e.g. waste containers for distinct solid streams) for the sorting of different solid waste and when waste streams for the separate collection and recycling of that waste is available.</p> <p>I agree with the modification.</p> <p>Since there are different schemes of waste segregation (e.g. in Germany differing on community by community) these legal schemes should be taken into account. When sorting is done by the community waste disposal agency sorting within the catering firm does not make sense and should not lead to a negative evaluation.</p>	<p>comments are considered for the Waste sorting and disposal.</p>
	<p>For now we ask the supplier to show us a plan for waste sorting and disposal. Answers to the consultation questions to stakeholders: o Do you agree on the modifications proposed for this criterion? · Yes o Are you aware of any limitation to implement and verify this criterion? No</p> <p>The EEB welcomes the proposed criteria set on waste sorting and disposal.</p>	<p><b>Acknowledged</b></p>

### Further analysis on menu planning

Meat production accounts for almost one fifth of the world's total GHG emissions. Cattle and sheep, which are ruminant animals, cause particularly large greenhouse gas emissions due to their feed digestion (15-40 kg of greenhouse gases/kg of meat). Pigs and chickens produce significantly lower emissions (respectively, approximately 5 and 2 kg of greenhouse gases/kg of meat).

The comments on the ambition levels for meat content were divided with one stakeholder stating that some contracts specify a minimum meat content clause and others in agreement with the ambition levels. However, measuring meat content was considered problematic in pre-prepared ready meals where the meat content is not readily quantifiable. Additionally, another stakeholder stated that both the core and comprehensive criteria should be extended to include dairy, eggs and fish. For example, plant based alternatives to dairy products include soya or almond milk.

The substitution of red meat with chicken or pig products could conflict with the criterion on animal welfare since the latter are more intensively farmed.

The number of weekly vegetarian / plant based options is debated issue among stakeholders with some proposing that vegetarian options are available every day and one completely vegetarian / plant based day per week.

#### **4.4. Avoidable food waste prevention**

Food waste prevention has been identified during this revision as one of the main environmental aspects of whole catering service. Food waste is actually a problem in today's catering services and it accounts between 4 and 10% of their food procurement (Technology university of Michigan, [www.leanpath.com](http://www.leanpath.com)). The reduction of food waste in the catering services is considered an evidence of good performance, and a better management from the social and the environmental point of view.

The food waste is defined as follows:

*Food waste is composed of raw or cooked food materials and includes food loss before, during or after meal preparation in the household, as well as food discarded in the process of manufacturing, distribution, retail and food services activities (Technical report 2010-054)*

This section includes information about the food waste generation, possible ways to reduce it as well as the needs for implementing these proposed measures and the benefits (economic and environmental perspectives) that they can bring to the caterers and the society.

##### **Sources of food waste**

The studies about the diversity of causes of food waste causes in the manufacturing, wholesale/retail and food service sectors have been revised in this section. They are expected to be similar across Europe even though they will vary according to product specificities. Manufacturing food waste was estimated at almost 35 Mt/year in the EU 27 in 2010 (approx. 70 kg per capita), although a lack of clarity over the definition of food waste (particularly as distinct from by-products) among the Member States makes this estimate fragile. According to this further estimate, the wholesale or retail sector generates close to 8 kg per capita (with an important discrepancy between the member States) representing around 4.4Mt for the EU27 in 2010 and the food service sector an average of 25 kg per capita for EU 27 in 2010. There is a notable divergence between the EU 15 at 28kg per capita (due to the higher trend of food waste in the restaurant and catering sector) and 12kg per capita in EU 12 (*Technical report 2010-054*). These figures are expected to rise in the future if no additional prevention policy or activities are implemented.

Betz et al 2015 carried out a study about the magnitude and potential reduction of food waste in the Swiss food service industry. They realized that in Europe 280-300 kg of food per capita is wasted per year (Gustavsson et al 2011), the losses being spread over the whole value added chain but they are concentrated at the end as typical from high-income countries. Beretta et al (2013) claimed that in the food service industry, more than two thirds (13.5% of the food input) was avoidable. Wong (2011) investigated a German university canteen and found that the total loss in the value added chain came to 9.65%. Furthermore, Baier and Reinhard (2007) calculated an average of 7.41 tonnes of food loss per year per food service company (in the education and business sectors) in the Swiss canton of Aargu.

Other studies have calculated food waste per meal: Andrinin and Bauen's (2005) figured 50g food waste per meal, whereas Baier and Reinhard (2007) estimated 124 g per meal. In two Swedish canteens food waste was found to vary from 46g to 115g per meal (Engstrom and Carlsson-Kanyama, 2004) Moreover, in a study which took place in secondary schools in the UK over a period of three weeks, pupils produced 159-191 g per meal per day of waste (Cordingley et al 2011). The results per portion vary considerable, which may be accounted for by the different assessment methods used.

Finally, Betz et al 2015, reported that in two analysed companies in the education and the business sector, 10.73% and 7.69% respectively of total food delivered waste lost over the value added chain. With 10.47-16.55 tonnes of annual food waste, a food waste service company has huge financial losses. In a company the losses reached 78957CHF and in the other 68346CHF that are potentially avoidable each year. This study pointed out that the food that is wasted in the later stages of the value added chain

has a greater negative effect than food which is wasted in the agriculture stage, because additional resources (eg staff, transport and packaging) have been employed to prepare the food stuff for consumption. This is one main reason why the reduction of food waste at the end of the value added chain (including the food service industry) is of major importance.

The data shown that service losses, which are the main group of losses and almost completely avoidable could be minimized by adapting portion size and using smaller serving bowls. The customer survey showed that the importance of this topic is known. Long-term implementation, control and evaluation of reduction measures were recommended in the study. Furthermore, it is important to increase the awareness of staff as well as to sensitise customers to the issue of food waste avoidance in order to increase their tolerance towards measures taken.

A Nordic study carried out in 2012 (Marthinsen 2012) estimates that each serving generates in average 125 g of food waste and several studies carried out in Sweden report that as average the mean plate loss in the schools reaches between 7.5 and 9.6% of the served food. According to the study if a portion weights 0.333kg, a plate loss of 7.5% equals 25g. Similar studies report that the plate loss at an average of approx. 6% of prepared food, while waste from the kitchen and the buffet was approx. 12% on average. Another survey performed in the same project of 4 different types of dining places (school kitchen, restaurant and staff canteen) showed similar amount of food waste. In total, they recorded 18% avoidable food waste of which a plate loss of 10%, 4% loss in storage and preparation and 4% loss in serving. Based on an average portion at schools of 0.333kg, an avoidable food waste of 18% equals 60 g per portion. Based on data from EUROSTAT 2006, the BIOIS report uses an average of 27.32 kg per capita of food waste from "food services and catering" in EU 15 (European commission, 2010).

The main reasons for this increase are the population growth and the increase in the disposable income.

In the food manufacturing and especially in the catering service sector, three main aspects have been identified as key points that affect the generation of food waste:

- *the preparation, distribution and serving of the food*: the restaurants and catering services are covered by the Regulation HHAC on the processes that should be regarded for serving and delivering the food products. For example, this regulation stipulates the temperature to be held for frozen products as well as the need to discard products if the regulation has not been regarded at any point of the delivery.
- *the conservation and deadlines in the conservation of the food*: the need for clarification and standardization of current food date labels (that all the pre-packed or packed food products should display) such as "best before", "sell by" or "display until" dates, and the dissemination of this information to the public to increase awareness of food edibility criteria, thereby reducing food waste produced due to date label confusion or perceived inedibility. For example WRAP 2010 reported that in the UK 45-49% of the consumers misunderstand the meaning of the date labels "best before" and "use by".

Table 49 provides information about the types of expressions, the meaning and the mandatory requirements to display this information as well as complementary information that can come along with the mandatory one. There are food products that are exempted of this requirement such as fresh fruits and vegetables, refreshments, wines, liquours, bread and bakery products, salt, sugar or vinegar.

**Table 49. Information regarding the date label on the food products.**

<b>Deadline expressions</b>	<b>Examples</b>	<b>Minimum duration</b>	<b>Where?</b>	<b>Complementary information</b>
Best before...	dd.mm.aaaa	< 3 months	Pre-packed and packed food products	
Best before the end of...	mm.aaaa	> 3 months - between 3 and 18 months		

	aaaa	- > than 18 months		
Expired date	dd.mm.aaaa	No minimum period	Very perishable pre-packed and packed food products that can be considered as a risk to the health after a short period beyond the expired date.	Description of the conservation conditions that are needed to be regarded.

The display date is always closer than the expired date in terms of health and food safety. The expression "best before" has to be understood as a recommendation about the date by which the product should be consumed. If this date is over, some organoleptic characteristics of the product can be varied, but there is no a risk from the health or food safety perspectives.

- *the residues*. The actual regulation considers that the residues coming from most of the catering services such as bars, restaurants, hotels, cantinas or school cantines can be considered as municipal residues. On the other hand, the residues coming from catering services that prepare food to be packed and delivered and where the processes used are similar to those industrial ones should be considered as industrial residues.

Therefore the caterers should manage their residues depending on its classification. The management of the industrial residues is very specific and this is not the case of the majority of the caterers. According to the regulation, those caterers considered as non-industrial ones can manage their residues throughout the municipal collection system in place.

The municipality is usually the authority responsible for the management of the municipal residues. This authority decides the end-of-life of the municipal residues that have been collected as well as the price or fees of this service. The catering services are obliged to hand in the residues in a way that allows their proper sorting. This means that depending on the municipality there the catering service is located; the caterer should sort out the residues into organic residues, packaging, paper and glass. Therefore, this requirement was included in the criterion on Waste sorting and disposal

### **Ways for preventing food waste generation in catering services**

Waste prevention incorporates the first three terms of the waste management hierarchy: eliminate, reduce and reuse. The elimination/reduction is the best option for minimising waste. But first of all, how much food waste is generated in Europe? The literature provide little information or evidence to estimate the amount of edible food waste. WRAP reported data of avoidable and unavoidable food waste in the hospitality sector in UK. The average rate for avoidable food waste for the profit sector is calculated to 67%. This value varies from 63% in the hotels or 64% in the pubs to 72% in the fast food restaurants or 70% in the restaurants.

Several instruments and initiatives have been implemented at EU level to try to reduce the food waste generation. Among them, the "from farm to fork" initiative tries to reduce by 50% the food waste generation by 2025 or the food waste generation targets placed in 2014 in accordance with the waste framework directive. Recently EU has developed a Strategy 2020 including a plan for resource efficiency. Reducing avoidable food waste might also be regarded as part of this overall strategy. In the Roadmap to a Resource Efficient Europe food is described as a key sector and actions are proposed in order to reduce the amount of food waste.

Some other initiatives have been implemented at national level and are related directly to the food services:

- Serving portions according to the needs of the guests (Portugal)
- Good practice guide for restaurants (Belgium, Spain, etc)
- Guide for food waste prevention for canteens and hospitals (Ireland) and other catering services (Spain)

- Sustainable catering (Netherlands)
- A la carte menu for hospitals (Denmark)
- Experiment at lunch catering (Netherlands)
- Green hospitality award scheme (Ireland)

The guide "less food waste more profit" provides a number of measures that can be implemented in the catering sector to prevent the food waste generation. Proper food stock management (ordering minimum stock, rotating stock), menu planning and portion control are the most important areas for minimising catering food waste. Another important issue in waste prevention is the training and motivation of staff. All staff must be aware of the procedures and steps that should be taken.

This section comments some suggestions and recommendations on how to prevent and reduce food waste. All these suggestions may not be applicable to all the business models because of the size and location of the catering service.

**Table 50. list of measures to prevent food waste generation in catering services Source: Less food waste more profit 2012**

<b>Prevention - purchase</b>	
Do not over-order food	The actual use of the ingredients should be checked out against a number of orders. The caterer should establish an accurate stock inventory and ordering system to avoid over-ordering and spoilage of stock.
Buying in bulk	It should only be performed if the all the products will be used. otherwise it becomes waste and when the waste cost is included the bulk product may be more expensive
Check deliveries	caterers should carefully check all deliveries to ensure that food is free from contamination, packaging is not damaged and cans are not leaking or rusty, perishable food is within it " <i>best before</i> " or " <i>use by</i> " date, temperature check particular foods eg fish, to ensure it is fresh and has been stored and transported at the right temperature (food should either be hot or cold, but not warm)
Single primary purchaser	All ordering of stock should be through a single primary purchaser. This purchaser can prevent over-ordering of a product by different employees. They can also look at trends in stock and food covers to highlight wastage
Accurate ordering	Considering setting up a "stock and order" form in your food storage areas. this form highlights what is in stock and what should be ordered. As an ingredient is used the member of the staff reduces the number of stock and adds the quantity to be ordered. This allows staff to know at a glance what is being used for accurate ordering.
Ordering	Ordering food as close to the time of use as possible. Many food distributors are able to deliver in a short period of time.
<b>Prevention - storage</b>	
Label upon delivery	Label and date upon delivery. Label should indicate the contents and the products expiration date. Other necessary information, such as handling and storage instruction, may also be included Operate a back-to-front (FIFO) policy. Place the new products at the back or the bottom of the shelf. The older product will be then used first
Storage temperature	To prevent spoilage store perishable fresh food should be stored at temperatures below 5C (refrigerator or chill room or freezer) or above 63C
Storing fruits and vegetables	Vegetables particularly leafy vegetables should be stored as far as possible from cooler condenser units to prevent freezing. Store all soft fruit (except bananas) and salad items in the refrigerator. Store all other fruit and vegetables in wire baskets. This allows air to circulate around the food reducing microbial growth.



Storing oils and grease	To avoid picking up a strong flavour all oils and grease should be stored away from strong smelling foods.
Storage areas	Store areas should be dried and clean. Storage areas should have easy access to product. Place all dry goods off the ground on pallets or shelving. These steps will help to minimise waste due to spills, breakages and spoilages
Storing lettuce	Never store tomatoes and lettuce in the same container or close to each other, as tomatoes emit a gas that will turn lettuce brown,. Never cut lettuce with a meal knife as it encourages browning of the leaves.
Storing herbs	Certain vegetables and herbs (eg parsley can wilt when stored) freshen these vegetables by trimming off the bottom section and storing in warm water.
Vacuum packs	Consider vacuum packaging for expensive food such as meat and fish upon delivery or ask the supplier
Prepared food and perishables	Washed and prepared food should be stored in reusable airtight containers to prevent unnecessary dehydration and spoilage, especially if the containers are stored at or below 5C
<b>Prevention - preparation</b>	
Avoid over-trimming	Over-trimming typically occurs in the preparation of bulk meats, fish and whole vegetables. Be aware of how much over-trimming occurs and try to reuse it. Alternatively the product pre-prepared and portioned can be ordered
Food to order	Prepare foods to order to avoid waste generation from over-preparation
Pre-portioned meat or fish	Purchasing pre-portioned and cut meat or fish can reduced the quantity of meat or fish trimmings to be disposed of. Waste meat or fish trimmings are difficult to handle and its methods of disposal are limited.
<b>Prevention - cooking</b>	
Recipes	Whenever possible prepare foods to order to avoid waste generation from over-preparation
Pre-prepared food	Cook smaller quantities of pre-prepared staple food (pasta, potatoes and vegetables) in smaller batches as required. This reduces the likelihood of excess food being unnecessarily prepared and thrown away
Equipment	Keep oven equipment calibrated to avoid over-baked products
Portion size - Adjust portion sizes	Look at the size of meal portions and accommodate the quantities depending on the possible left-over of the returns The following steps can help decide which meal portions should be adjusted: - obtain feedback from service staff, who see on a daily basis which meals have the largest quantity of leftovers - undertake a leftover waste survey
<b>Prevention - serving</b>	
Serving options	When serving vegetables or bread provide them in the centre of the table as opposed to individual portions. This allows customers to decide the portion size they require.
Condiments	When possible use refillable bottles or dishes instead of individually wrapped single-use packages for condiments. These dishes are refilled from bulk containers. This step reduces both food and packaging waste. Where you need to use singleUse condiments packages avoid putting these items in one central location. This usually case in takeaways and restaurants. Customers will offer take more than they actually need, with eh unopened packages being thrown out with any leftovers and napkins. Place condiments in each table
Customer	Obtain feedback from guests on their preferences for portion size and meal types

feedback	
Doggy bags	Routines for doggy bags are important as part of the efforts to reduce food waste today. Food brought home is not regarded as an avoidable food waste
Excess food for staff	Internal routines for eating not sold food internally (by staff) can be another way to reduce avoidable food waste
<b>Prevention – food storage and post cooking</b>	
Hot food cooling	Food should be cooled in a cold room or preferably in a blast chiller where available. Food should not be cooled at room temperature. All hot food should be chilled and placed in the refrigerator within 90 minutes of cooling commencing to prevent microbial growth
<b>Prevention – reuse</b>	
Turn leftovers into turnover	Plan menus that use leftover food or food that is approaching its use-by-date. Consider promotional offers to encourage customers to buy this dish. Examples includes: - vegetable and meat offcuts for soup stock, garnishes and pates - excess bread and toast for bread crumbs and croutons - main course meats in salads
Donate	Donate food what will not be used before its use-by-date to local charities. Ensure that all food to be donate is carefully managed in line with HACCP and food hygiene regulations

Apart from the mentioned list of measures, some communicative instruments have been considered to involve other interested parties in the commitment of reducing or preventing food waste. Some examples are:

- *Management reporting systems*: most companies report on avoidable food waste as part of the cost control and their management reporting systems. Within the hospitality sector advanced systems follow up the cost of goods per serving. Each canteen, restaurant and hotel are measured on these key figures (besides productivity and quality) and do benchmarking with other units in the chains/industry in order to be more efficient. This management reporting systems seems to be a common and efficient tool in order to prevent avoidable food waste within the hospitality sector. Education of the staff is an important part of the work today reducing the avoidable food waste. a
- *Production optimization and logistics* including the structure of the kitchens (eg central vs local kitchens) is also an aspect to be considered. the structure of the production might have an influence also on the avoidable food waste along the value chain. Dependent on strategy waste generation can be moved upwards to the food producer (the central kitchen) or downwards to the local kitchen or even to the guest being served at home.
- *Internal communication and dialogue with the guests*: in order to develop and implement the communication with the guests is important. Netter dialogue with guests can be regarded as a food basis for right portions. For example, a buffet normally generates an avoidable food waste of 1kg/guest. Information to the guests about the avoidable food waste issue can help to reduce it

### **Environmental and economic benefits due to the food waste prevention**

The food waste reduction has a direct effect on the purchase cost of the food (considered as an internal cost). Additionally other external costs can be identified that impact the environment and the society, but not the cost of the products. The variety of costs are presented in Table 51

**Table 51. Costs due to the food waste generation**

Type	Catering service costs	Description / comments
Internal	Facilities amortization	An increase in the costs of amortization caused by the need for larger storage space to accumulate food, more pieces of furniture to show the available food and more equipment and machinery to process the purchased food.
	Equipment amortization	
	Furniture and food ware	Higher costs to purchase extra food ware such as trays, casserole and other instruments to prepare, preserve and serve food.
	Utilities (electricity and water)	Higher energy expenses by the increase of the installed power in the machinery/equipment and the warehouse space Higher water consumption to process the extra purchased food and clean the instruments to prepare it
	Purchases of food and drink products and other purchases	Higher bills on food and drink products and consumables products associated to the food and drink products
	Stock	Higher value of the stock and higher costs of the stock management An increase in the likelihood of spoiling more food during the storage phase. Any incident in the warehouse, in the cold rooms or in the freezer implies more food wasted by incidence.
	Labour costs	Higher costs due to the time spent in processing the food that finally is not served or the post-consumer food waste and more time to manage the waste
	Marketing	Potential extra losses due to the misdistribution in the space between the warehouses and the serving areas
	Insurances	Higher insurance fees to have higher amounts of food covered and higher insurances fees related to the larger areas and the higher cost of the equipment
	Financial costs	Loss of financial incomes due to higher amounts of stored food or getting spoiled.
	Taxes and fees	higher taxes or fees due to the higher food waste generation
External	Societal costs	
	Environmental costs	

The most important costs for catering services are the labour cost and the purchase of food and drink products and associated products, which accounts for 25-33% of the total costs depending on the service provided. The amortization of the facilities, equipment, furniture and other costs related to the taxes and fees, insurances, utilities and so on are not as important as the two previous ones. The estimation of the food waste per kg generated is relatively easy if only the internal costs are considered. According to (*Universidad de Barcelona, 2013*), a catering service needs around 1200g of food to be able to serve 800g. The difference is broken down into food waste (approx. 84 gr) and other unavoidable losses due to the preparation process, cooking and stock. Therefore, the authors estimated that a caterer that provides approximately 120 serves, wastes approximately 10kg or 31euros per day (this means approximately 3000kg or 9200euros annually).

Apart from the food and drink purchase, there are other costs as depicted in the second column in Table 51. The quantity and importance of each of the costs depends on the policy and the type of service that the caterer wants to follow. If the caterer followed a policy oriented to the total and immediate satisfaction of the customer, the restaurant will have a tendency to over buying, to increase the security margins of the stock, to overcooking and to serve larger quantities per portion and with large variety. This strategic decision implies that the quantities of food products treated will be higher and consequently the associated costs. The associated direct and indirect costs are included in the

Table 52 The only benefit from the economic point of view is that it triggers a lower price per food product unit thanks to a better position in the negotiations with the suppliers due to the scale economy.

Table 52 includes an example of the costs associated to a catering service published in the Universidad de Barcelona 2013. The first part depicts the value and percentage of the costs a catering service incur and the second part provides an overview of the possible saving that the catering service can get if a food waste prevention aptitude is adopted.

**Table 52. Breakdown of the costs per serving of a catering service (example)**

Costs		Value		Percentage	
<b>direct</b>	Served raw material	3.18 euro	3.66 euro	28.9 %	33.2 %
	Security margin	0.48 euro		4.3 %	
<b>Indirect</b>	Labour	6.39 euro	7.36 euro	58.0 %	66.8 %
	Utilities	0.12 euro		1.1 %	
	Amortizations	0.60 euro		5.5 %	
	Purchases	0.13 euro		1.2 %	
	Marketing	0.03 euro		0.3 %	
	Insurance	0.04 euro		0.4 %	
	Taxes	0.04 euro		0.3 %	
	Financial costs	0.02 euro		0.2 %	
<b>Total</b>		<b>11.02 euro</b>		<b>100 %</b>	

If the catering service is generating more than 3000kg of food waste, even if the purchase price of the food products are around 33% of the total, a prevention policy will trigger a reduction of the direct and indirect costs as shown in Table 53

**Table 53. Possible savings if a food waste prevention policy is applied**

Costs	Without food waste prevention policy			With a food waste prevention policy	
	Kg waste	Euro/kg	Total euro	Kg waste	Euro/kg
Direct	3014	3.06	9223	2162	3.06
Indirect		6.15	18548		7.83
Total		9.21	27771		10.90

If the external costs, those that are not easily accounted but that represent the damage to the society and the environment, are considered, the total amount depicted in table xx will be likely higher.

From the social point of view, the food that is going to be wasted could be donated to collectives that cannot afford buying it. To do so, it is needed that the food is preserved from the preparation steps. (Universidad de Barcelona 2013) estimated the costs associated with the management of the food donation. This cost was calculated based on the

costs incur by charitable organizations. They reported that the food waste due to the societal aspects could be considered as 0.13euro/kg or 0.30euro/kg. the first one is reported when the food is provided directly by the companies and the second one when the food provides from an European programme.

From the environmental point of view, the food waste triggers also additional costs. This cost could be estimated based on the emissions to the air and water that are produced when preparing, storing, serving and finally managing the waste of 1 kg of food. The study reports that as an average 1.98 t CO<sub>2</sub> equivalent is produced per ton of food. If an average ETS price of 13.9euro / tCO<sub>2</sub>eq is considered, the food waste generation of 3000 kg will generate an extra environmental cost of approx. 83 euro/year (the extra environmental cost per kg will be 0.03euro).

Table 54 shows the total costs of the food waste generation according to the example showed in Table 52 and Table 51. The figures of the example indicate the importance of the food waste. The cost of food waste (as raw material) is lower than half of the indirect costs and does not reach one third of the total processing costs.

**Table 54. Total estimated cost of food waste generation**

<b>Internal</b>	Direct	3.06 euro	9.21 euro
	Indirect	6.15 euro	
<b>External</b>	Societal	0.13 euro	0.16 euro
	Environmental	0.03 euro	
<b>Total</b>			<b>9.37euro</b>

Better understanding and use of date marking on food, i.e. "use by" and "best before" dates, can prevent and reduce food waste in the EU.

It is estimated that a considerable share of household food waste (15-33%, depending on the studies) could be linked to date marking due, amongst others, to consumer misunderstanding of the meaning of these dates. The approaches and practices adopted by the food business operators and regulatory authorities in the supply chain can also have impact on food waste, for example:

- use in addition of "sell by" dates in-store;
- shelf life requirements requested by retailers on delivery;
- different national rules and practices regarding marketing and redistribution of foods past the "best before" date, etc.

The Commission is considering possible options to simplify date marking on foodstuffs:

- Extending the list of foods which are exempt from the obligation to include a "best before" date in food labelling (as specified in Annex X of Regulation (EU) No 1169/2011). Today these include foods such as vinegar, sugar or salt. In the future, other non-perishable foods for which removal of date marking would not pose a safety concern could be also included in the list.
- Modification of the terminology used for "best before" labelling, especially if there is evidence that alternate wording is better understood and more useful to consumers.

The Commission is currently exploring these options with both public authorities in EU Member States and actors in the food supply chain and consumers. If any changes are proposed in the future, it is critical that these:

- meet consumer information needs,
- can contribute to food waste reduction,
- do not put consumer safety at risk.

In order to help inform its work on date marking, the Commission has launched a new study to map how date marking is used in the market by food business operators and control authorities. Findings from this research, expected by end 2017, will support future policy making in relation to date marking and food waste prevention.

- Terms of Reference: Market study on date marking and other information provided on food labels and food waste prevention (SANTE/2016/E1/024)

### **Best environmental management practices (BEMP 2013)**

The BEMP recommends procedures for waste management and/or separating organic waste from general waste to avoid it going to landfill. The benchmarks of excellence for organic waste management are stated below:

- “≥95 % of organic waste separated and diverted from landfill, and, where possible, sent for anaerobic digestion or alternative energy recovery.
- Total organic waste generation ≤ 0.25 kg per cover.
- Avoidable waste generation ≤ 0.18 kg per cover”.

These benchmarks are indicative for the companies registered in EMAS and help to design and deploy actions within their environmental management systems that lead to measurable improvements. As mentioned above, (see 3.2.9 Environmental management measures and practices).

### **Food donation**

The comparative study carried out in 2014 by Deloitte (Deloitte 2014) provides the main findings and issues that the Member States under study faced when increasing the rate of food donation.

The general food law applies to all food and organizations placing food on the market, including non-profit organizations such as food banks. According to the law, food business operators are responsible for the safety of foods at all stages of the food chain and must ensure that the requirements of the General Food Law are met within their area of responsibility. This legal framework does not seem to incentivise food surplus donation in the selected Member States, as food donors are wary of jeopardising brand image and facing fines in the unfortunate case of food poisoning.

France and Italy are the only EU Member states which have put in place a Good Samaritan Law which recognises food banks themselves as the final link in the food chain and prevents individuals receiving food from food banks being able to lawsuit against the food donor.

A lack of knowledge and misinterpretation of the EU Hygiene Package is another issue that prevents food donation in EU. For example, Poland seems to have transposed in a more rigid way the EU directive and in Portugal until some years ago the prepared food or meals were disposed of due to the consensual misunderstanding that according to the available EU legislation, it is forbidden to recover such as food.

In terms of food durability and labelling, the study shows that although the donation of products past their "best before" date is allowed under EU law. Greece, Hungary, Spain and Sweden have introduced national provisions that present barriers to donating food which has passed its best before date. One of the main causes is that food donors are not willing to take the risk of liability for the donated foods, or fear a reduction in quality after this date impacting their brand image.

Another barrier is the tax on the donated food. The Council Directive 2006/112/EC clarifies that food donors are taxable and that *"the taxable amount is the purchase price at the moment of the donation adjusted to the state of those goods at the time when the donation takes place (article 74)"*. Even if the European commission recommends setting *"fairly*

*low or even close to zero*" the value of foodstuffs close to their best before date or which cannot be sold due to their external appearance. Most of the Member States do not impose VAT when food is donated to food banks and charities, if certain conditions are fulfilled. One reason might be that they interpret VAT Directive such that the value of the donated food nearing expiry is small or zero, as their own national tax legislation "*abandoning the imposition of VAT on food donation*": Greece, Poland, Belgium and Germany.

Finally the study demonstrates that fiscal incentives through tax credits and tax deductions encourage food donations. In France 60% and in Spain 35% of the value of donated food can be claimed as a corporate tax credit, meaning that food donors are able to deduct that percentage of the value of the donated food from the corporate tax on their revenue. In other Member States food donation can be treated as a deductible tax expense and can reduce the taxable income (the income basis used to calculate the income corporate tax), within certain limits and thresholds depending on the Member State. Portugal has in place an enhanced tax deduction, meaning that donors can deduct 140% of the value of the food at the time of donation, provided that the food will be used for social purpose and limited to a certain percentage of the turnover.

There is no EU legislation or specific guidance on how to apply the EU waste hierarchy to food. National approaches are found in some countries that include: prevention, redistribution to humans, feeding to animals, energy or nutrient recovery by methods such as anaerobic digestion (AD), composting and landfilling.

The study concluded with some recommendations, among they are:

- Food use hierarchy: it is recommended that the EU publish guidance on a food use hierarchy that clearly prioritises feeding humans, through food waste prevention and donation to the charities of unsaleable foods, over waste management options such as composting, anaerobic digestion and landfilling. This hierarchy would provide further clarification on the existing EU waste hierarchy in the context of food and send a clear signal to business and governments that economic incentives, investment in infrastructure, and communication activities should be prioritise food redistribution.
- there are a range of fiscal tools being used successfully in the EU to support food donation, including the abandonment of VAT liability and the use of corporate tax credits for donated food. VAT liability appears to have been "abandoned" in a number of Member States, although the use of the term VAT "exemption" is controversial and the compatibility of these policies with the EU VAT Directive is unclear
- Good Samaritan legislation as it exists in Italy and the United States, limits civil and criminal liability for good faith donation of products, known to be fit for consumption at the time of donation. In Italy, charitable organizations redistributing food are not considered food business operators, and thus the transaction between donor and charity carries the same liability conditions as retailer to consumer. In the United States, liability protection is extended to donors, gleaners, persons and non-profit organisations distributing this food; liability being limited to acts of "gross negligence" or intentional misconduct.
- An extension of the list of products that could be exempted from the requirement for a best before date (annex X of the EU Regulation 1169/2011) is suggested, facilitating both donation and the likelihood of final consumption, as misunderstandings around the importance and meaning of best before dates persist among consumers. The development of EU guidance is recommended for assessing additional lifetimes of products after their initial (producer indicated) date of minimum durability has passed

#### 4.5. Waste sorting and disposal

This section presents the comments received through BATIS and personal communications from the 1<sup>st</sup> AHWG meeting to the 2<sup>nd</sup> AHWG meeting.

**Table 55. Feedback from the stakeholders on the TR1.0: Waste sorting and disposal (TS6))**

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
Food donation	<p>We see food donation as a last resort. Much of the food waste from canteens is unsuitable for redistribution due to food safety and hygiene. For instance, food in the contract catering sector needs to be consumed within 24 hours of being prepared and unrefrigerated food that should be refrigerated is no longer deemed suitable for consumption after a certain fixed period. Only a limited amount of food that has not been offered to consumers can be donated (e.g. sandwiches that are fully packaged). In addition, it is the procurer, not the contract caterer, who decides whether food is donated.</p> <p>Also, <i>food donation</i> should be considered, if possible, both for human or animal purposes, prioritizing human ones, as food Banks or social entities/organizations, instead of throwing it away or dispose it.</p>	<p><b>Comment accepted</b></p> <p>Even if food donation could be a practice to decrease the food waste of catering services, this option shows difficulties for verification. Additionally, there are some limitations on when food donation can be carried out that makes even harder to set up this option as a criterion.</p> <p><b>Comment rejected</b></p> <p>See above</p>
Food waste from post-consumer	<p><i>Post-consumer food waste is the responsibility of the procurer.</i> Contract caterers are limited in their ability to reduce post-consumer food waste. Nonetheless, when procurers wish to take action in this area, contract caterers have taken initiatives together with procurers to raise awareness among consumers, to encourage consumers and to discuss with the server what portion size they would like.</p>	<p><b>Comment accepted</b></p> <p>Offering different size is considered as a possible measure to better match the consumers demand, in this way, the consumers decide which the quantity of food that better matches their needs.</p>
Waste management plan or programme	<p>This is also a key criteria and should be compulsory for all public spaces to have one <i>waste management programme</i> in which it was included its separation (paper, glass, plastic, organic waste and (hazardous waste - in some cases), as minimum).</p> <p>Also, disposal and incineration, in except of hazardous products, should be looked as an ultimate alternative according to the EC Circular Economy Package, so more <i>re-utilization and recycling strategies</i> should be designed and implemented.</p>	<p><b>Comment partially accepted</b></p> <p>The criterion aims at ensuring a proper management of the residues that are generated at all the stages of catering, including the food preparation and serving. Therefore the minimum requirements for sorting out the waste generated are included in the criterion even if it is not explicitly requested to include a waste management programme or plan. An implementation of a plan or programme under the framework of an international standard is considered a step forward that, even if it is highly recommendable, it may be an extra burden for the SMEs.</p> <p>In most of the cases the hierarchy of the waste treatment</p>



Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	<p>Including a food waste minimisation plan is a useful first step, but it would be useful to provide more practical information and suggestions on what this should include and how to manage it.</p> <p>While reducing post-consumer food waste is also very important, this should not be addressed in GPP criteria for contract caterers since post-consumer food waste belongs to the client.</p> <p><i>The focus should be on prevention.</i> Contract caterers are actively working to prevent food waste in the kitchen through data recording, awareness raising and changing food preparation techniques. But preventing food waste in canteens often requires collaboration with the procurer. For instance, <i>when a procurer requires the full range of menu options to be available from the start to the end of the service</i>, there is more food waste than when the caterer can provide limited options at the beginning and end of the service.</p> <p>For now we ask the supplier to show us a plan for waste sorting and disposal. Answers to the consultation questions to stakeholders:  - Do you agree on the modifications proposed for this criterion? Yes  - Are you aware of any limitation to implement and verify this criterion? No</p>	<p>is not a decision to be made by the procurer or tender, but it depends on the local or national authorities.</p> <p><b>Commented accepted</b>  The prevention of food waste is considered in this set of criteria through the menu planning criterion and the newly developed criterion on food waste.</p> <p><b>Acknowledged</b></p>
Space limitation	<p>On the sentence <i>"shall be sorted into the correct waste stream categories wherever the client provides the means (e.g. waste containers for distinct solid streams) for the sorting of different solid waste"</i> Sorting on site should only be required where space allows for such separation. We suggest <i>"shall be sorted into the correct waste stream categories wherever the client provides the means and where space allows for such separation..."</i></p> <p>On the sentence <i>"When facilities for the collection and recycling of bio-waste are available"</i>. See suggestion to align this with previous comment" add <i>"...and when space allows..."</i></p> <p>On the sentence <i>"Waste generated at the sites where the catering service is provided shall be sorted into the correct waste stream categories wherever the client provides the means (e.g. waste containers for distinct solid streams) for the sorting of different solid waste."</i> Sorting into waste stream categories (including packaging) only makes sense if the waste streams for separate collection and recycling are available. Suggestion to state <i>"...wherever the client provides the means (e.g. waste containers for distinct solid streams) for the sorting of different solid waste and when waste streams for the separate collection and recycling of that waste is available."</i></p> <p>The text should specify that the obligation to sort and report bio-waste only pertains to kitchen waste where space allows for separation.</p>	<p><b>Comment rejected</b>  The verification of the availability of space in the kitchen and catering services is difficult to assess and not the objective of this criterion. There are multiple designs of the kitchens and disposal bins that make difficult to judge if the room is enough.</p> <p><b>Comment accepted</b>  The wording has been modified accordingly</p> <p>See above</p>

<b>Topic</b>	<b>Feedback from stakeholders</b>	<b>JRC-Directorate B5 assessment</b>
General comment	I agree with the modification. Since there are different schemes of waste segregation (e.g. in Germany differing on community by community) these legal schemes should be taken into account. When sorting is done by the community waste disposal agency sorting within the catering firm does not make sense and should not lead to a negative evaluation.	<b>Comment accepted</b> The note that the sorting out of the waste should only be required when and where there is a separate municipal collection system in place has been included.
	The EEB welcomes the proposed criteria set on waste sorting and disposal.	<b>Acknowledged</b>
	Food Waste avoidance should be seen as a positive impact of food packaging in the analysis made in the Technical report	<b>Acknowledged</b> The relation between packaging and food waste was discussed in the rationale of the Packaging criterion. it will also be included in the rationale of the Food waste criterion
Others	From my opinion this holds not true: the food waste emerging by cleaning of fresh foodstuff (e.g. potatoes, salad) in C&C kitchens usually is outsourced to packing companies, but occurs to the same amount as in a (smaller) Cook Warm kitchen processing fresh from field products themselves.	<b>Acknowledged</b>

### **Further analysis on Waste sorting and disposal**

Once the waste is generated, it should be properly managed to avoid further economic and environmental impacts on the catering service business. Due to the biodegradability characteristics of the food waste, it is expected to cause high amount of CO<sub>2</sub> if landfilled.

The management of the waste sorting and disposal depends on several factors that will be described in this section.

### **EU legislation**

Catering services are covered by mainly two EU legislation regarding the waste sorting and disposal:

#### **a) The EU Landfill Directive (1999/31/EC)**

The EU landfill Directive 1999/31/EC highlights the waste management hierarchy to be implemented across Europe in most of the sectors. The catering service sector falls then under this directive. Accordingly, the two first measures to be implemented are the elimination and reduction of the waste generated. These measures are commented in more detail in the previous section. Subsequently, the directive suggests the reuse of the waste generated. Regarding the food waste, the reuse of food includes the reuse of unused food in meals; donate unused food/meals to local charities or homeless hostels (although there are legal barriers in some member states that do not allow to implement this measure). If the catering service separately collects the food waste these measures could be easily implemented. The four measure highlighted is recycling. Compost, either onsite or off site, convert food waste into fuel by anaerobic digestion or other processes are examples of waste management covered by recycling. The final option is the

treatment or landfill disposal. There are already countries where national legislation bans the landfilling of commercial food waste, therefore it is no longer an alternative and it is a practice that should be whenever possible avoided.

The EU Landfill Directive requires all member states to reduce the quantity of biodegradable municipal waste disposed in landfills. The EU Landfill Directive 1999/31/EC outlines measures to prevent or reduce the negative effects of landfills on the environment. The main aspects of the Directive which will have a significant effect on the management of catering food waste is the mandatory, staged reduction in the amount of biodegradable waste that is allowed to be landfilled. By July 2010 only 75% of the total quantity (by weight) of biodegradable waste, which was generated in 1995 could be landfilled. This was further reduced to 50% by 2013 and 35% by 2016.

The EU Landfill Directive implementation could trigger different needs depending on the type of business. On a phased basis, specified premises will not be allowed to dispose of food waste to landfill. Instead:

- all food waste arising on the premises will need to be segregated and kept separate from other waste and contaminants. This means that all food waste should be separated from the general waste and stored in dedicated containers. This separation prevents other waste streams being contaminated, making it easier to recycle all streams (cardboard, plastics, food waste, etc)
- such segregated food waste will have to be treated in an authorised treatment process either:
  - on-site or
  - collected by an authorised collector or
  - brought by the producer to an authorised facility.

Where the local authority has already implemented separate food waste collection there is no change, of all other areas the requirements are being implemented on a phased basis:

- for specified premises from July 2010, except
- for specified premises where food waste produced is less than 50kg per week, from July 2011 but only if a written declaration to this effect is sent to the local authority before July 2010

Where a separate food waste collection service is available to producers of food waste, and without prejudice to the conditions of a discharge licence or a waste collection permit, such producers must

- not put food waste in the residual waste collection
- not use macerators to send food waste to sewer.

Specified premises include

- premises that supply hot food for eating on or off the premises, including where this is just a subsidiary activity
- pubs where food is supplied
- premises where food is supplied to employees
- hotels, guest houses, and hostels with > 4 guest bedrooms
- shops or supermarkets selling food, including sandwiches or hot food, including where this is just a subsidiary activity
- restaurant, cafes, bistros, wine bars, etc where food is prepared on the premises

- hospitals, nursing homes, etc where food is prepared on the premises
- schools, colleges, higher level institutions, training centres, etc where food is prepared on the premises
- state buildings where food is prepared on the premises, including prisons, barracks, government department, local authorities, etc
- stations, airports, ports, harbours and marines where food waste is unloaded

In addition, organizers of trade shows, exhibitions and events where food is supplied must prepare plans before and reports after the event, on the provisions made to meet these Regulations.

This means that the most of the caterers are obliged to segregate the food waste and either to treat it by themselves or to ensure that a manager will take good care of it. This requirement indicates that the waste sorting and disposal criterion is of high importance and therefore most national or local authorities have implemented a collection system that allows the caterers to dispose the different waste streams.

In regions with separate collection of food waste, the solution are often more expensive than the residual waste solutions. Organizations without a clear policy to sort the kitchen waste are thus tempted to leave the kitchen waste with the residual waste for incineration. Incentives for sorting are often missing and to fill in this gap is the idea of this criterion. In those regions with a separate collection of food waste, once separated from other waste streams a waste disposal company will collect catering food waste, and treat it in an appropriate manner e.g. compost or anaerobic digestion treatment. Charges are usually based on combination of pick up and disposal or treatment charges

The cost for separate collection vary according to Member States differences and treatment differences, but are comparable to the treatment costs of mixed waste according to a 2007 UK study (see **Error! Reference source not found.**). This fact points out that waste separation is a cost-effective measure:

**Table 56 Estimated costs associated with the implementation of waste collection or alternatives end-of-life ways.**

Costs of implementing separate food waste collection	
Cost of separate collection followed by composting	35-75 euro2006/tonne
Cost of separate collection of bio-waste followed by anaerobic digestion	80-125 euro2006/tonne
Compared with landfill and incineration	
Cost of landfill of mixed waste	55 euro2006/tonne
Cost of incineration of mixed waste	90 euro2006/tonne

*b) The Animal by Product Regulation (EC) No 1069/2009*

Over the years the management of catering food waste has changed. Some years ago, most facilities separated their waste and recycled it by sending it to the local swill man for feed and farmed animal e.g. pigs. However, as a result of the food and mouth crisis the practice of the feeding of swill to farmed animals (cattle, sheep, pigs, goats, deer, poultry or other biungulates) has been banned. Swill includes any broken or waste foodstuff (including table, catering or kitchen refuse, scraps or waste).

The 2002 EU Animal By-Products Regulation set out how different categories of animal's by-products (ABP) can be disposed. Under the ABP Regulation the majority of catering waste (including cooked food, eggs shells, processed foods, etc.) is a lower risk material, classed as Category 3 and can be disposed of the in biogas or composting plants. This provision remains regardless the 2009 amendment of this regulation.

### c) Communication on circular economy COM (2015) 614

At the light of this communication, a platform on food losses and food waste was built up. The platform aids the Commission in identify and prioritising actions to be taken at EU level in order to prevent food losses and food waste and supports all actors in identifying and implementing appropriate actions to take at national, regional and local levels. The platform makes easier sharing of information, learning and best practice related to food waste prevention and food waste management. The platform's work covers such areas as:

- implementation and application of the EU legislation related to waste, food and feed to ensure the highest value use of food resources (in line with a food use hierarchy)
- optimization of use of former foodstuffs and by-products from the food chain in feed production
- promoting better use and understanding of the date marking
- awareness, information and education campaigns

One of the main points worked by this platform is on food donation. This platform carried out a study aimed to provide an overview of current legislative or practical barriers to food donation; and establish best practices and recommendations. Outcomes of the study point to the need for clarification on how to implement a 'food use' hierarchy that clearly prioritises redistribution of surplus food for human consumption, role of fiscal measures in encouraging food donation; how to comply with food safety / food hygiene rules; implications of liability legislation for food donation and date marking rules in relation to food donation.

Among the barriers that prevent the food donation identified by the study and the subsequent meeting are the storage and logistic issues, including the need to maintain the cold chain during the transport and throughout the supply chain, could be hurdles to food distribution. The platform recognized the work of some member states that had developed guidance for the catering sector such as France, Spain or Germany but highlighted that specific guidelines for food donation at EU level are still needed. The EU guidelines on food donation could provide direction on issues subject to different interpretations by the member states authorities; for instead, clarifying that EU legislation does not restrict placing on the market of foods past the 'best before' date provided that these are safe and that their presentation is not misleading.

This EU guideline could also outline the principles of the food use hierarchy, recommending the highest value use of surplus food which should preferably be utilised for human consumption, followed by possible use in animal feed prior to possible utilization for energy/nutrient recovery.

One of the main troubles to be solved is the concern regarding the issue of liability and transfer of responsibility between actors in the food chain, including food banks as well as the fiscal rules which apply for food donation (eg VAT) and the role of fiscal incentives in this regard.

### **Fats, oils and grease (FOG)**

Large quantities of cooking fats, oils and grease are used for a number of processes in the catering business including deep frying, shallow frying, stir-frying, and griddle cooking, roasting or in dressing and sources. This food category when becoming food waste should be handled very carefully as it can cause important environmental impacts. Fats, oils and grease share common physical properties and produce similar environmental effects. They can

- cause devastating physical effects, such as coating animals and plants with oil and suffocating them by oxygen depletion
- be toxic and form toxic products
- produce rancid odors
- foul shorelines, clog water treatment plants and catch fire when ignition sources are present and

- form products that linger in the environment for many years.

Scientific research and experience with actual spills have shown that spills of animal fats and vegetable oils kill or injure wildlife and produce other undesirable effects. Wildlife that becomes coated with animal fats or vegetable oils could die of hypothermia, dehydration and diarrhea, or starvation. Aquatic life may suffocate because of the depletion of oxygen caused by spilled animal fats and vegetable oils in water. Spills of animal fats and vegetable oils have the same or similar devastating impacts on the aquatic environment as petroleum oils.

Therefore the disposal of food waste and oil down drains either in solid form (from washing) or from the use of macerators should be avoided as this only transfers the waste from landfill to the local wastewater treatment plant (WWT). Waste food, particularly FOG can cause significant blockages as they coat, congeal and accumulate on pipes. These blockages can be in the pipes in the caterer's premises and later downstream in the main sewer pipes. The costs of clean these pipes can be quite expensive with one local authority spending roughly 40000euro/year to clean the sewer network at only one pumping station. For this reason food waste and FOG should be prevented from entering into the sewer. A number of steps can be taken to minimise the quantity of FOG entering the sewers, including the installation of grease traps.

Some of those measures are:

- Never put oil or food directly down the drain: collect and scrape all FOGs from ware, cooking equipment and storage containers (eg tuna oils). This FOG should be put into a suitable container for recycling. This is essential when washing cooking equipment as UK studies have shown that in fast food restaurants 93% of the oil and grease discharged to the WWT is generated from ware washing. For full service restaurants 75% of the oil and grease discharged to the WWT is generated from the pot sink
- Make sure all kitchen staff are trained how to use and dispose of FOG correctly: training the staff to put food in waste food containers. Explain the staff how failure to do so can block drains and grease traps leading to expensive cleaning costs. Reminders placed near relevant bins and sinks and on the staff noticeboards can help.
- Make sure all sinks have a trainer in the plug hole: this prevents solids going straight down the drain
- Never hose materials down the drain when cleaning large areas: when cleaning floor areas don't hose food and dirt into the drain, even if cleaned out afterwards. Always use a dry clean system first
- A dry clean-up system: this should be used for the first clean of the area and prior to washing of equipment. Dry cleaning methods not only reduce the quantity of food waste entering the drain but also reduce the quantity of costly cleaning materials and water. Dry clean-up methods include:
  - o Scrape as much of the leftovers on the dish into a food waste container for recovery or disposal
  - o Use rubber scrapers and squeegees and paper towels to remove FOGs from cookware, utensils, oven dishes and serving ware
  - o Use food grade paper to soak up oil and grease under fryer baskets
  - o Use brooms or vacuum to sweep up spills of dry ingredients
  - o Use paper towels to wipe down work areas and clean spills. Cloth towels will accumulate grease that will eventually end up in your drains from towel washing/rinsing.

The correct treatment of FOG is therefore considered in the drafting of this criterion.

#### 4.6. Chemical products and consumable goods (BEFORE: consumable goods)

This section presents the comments received through BATIS and personal communications from the 1<sup>st</sup> AHWG meeting to the 2<sup>nd</sup> AHWG meeting.

**Table 57. Feedback from the stakeholders on the TR1.0: Consumable goods (AC8)**

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
Scope of the criterion	On the question "Are the proposed consumable goods providing a good coverage of the consumables being used within the catering services provision?" Yes.	<b>Acknowledged</b>
	On the question "Are the proposed consumable goods providing a good coverage of the consumables being used within the catering services provision?" Apart from trying that consumable good (e.g. cleaning products, paper products and bulbs) are safe and environmentally-friendly; other goods should be considered, such as energy or water.	<b>Acknowledged</b>
	Man-made bio-based fibres should be considered as sustainable option This criterion should include <i>staff uniforms and reusable textiles for table cloths</i> from man-made bio-based fibres. Points will be awarded to tenders that use <i>at least 20% of staff uniforms and table cloths</i> from man-made bio-based textiles. Energy and water uses in meals preparations are an environmental hotspot, also due to cleaning of staff uniforms and table cloths. Use of man-made bio-based fibers in stuff uniforms and table cloths means fewer washings, resulting in savings on water and energy. Textiles for stuff uniforms can be made from many materials. These materials come from following main sources: animal (wool, silk), plant (cotton, flax, jute) and synthetic (nylon, polyester, acrylic). Additionally, man-made cellulose fibres are increasingly used. Cotton, the most common natural cellulose fibre, has several environmental downsides; high water requirements being just one of them (WWF 2015). However, there is a lack of other viable plant-based textile alternatives, particularly since hemp and soya currently constitute only a very small proportion of the world fibre supply. Therefore, dissolved-pulp fibres – both innovative and traditional – offer the greatest potential for a sustainable clothing material in sufficient abundance to meet growing global demand (FAO 2014). Man-made bio-based fibres comprised 11% of the total 55 million tons of man-made fibres produced worldwide in 2013 (Aeschelmann et al. 2015). Bio-based fibres include both natural cellulose fibres and manufactured cellulose fibres. Natural cellulose fibres are fibres that are still recognizable as being from a part of the original plant because they are only processed as much as needed to clean the fibres for use like hemp or cotton. Manufactured cellulose fibres come from plants that are processed into a pulp and then extruded in the same ways that synthetic fibres like polyester or nylon are made. Wood-derived " <i>manufactured</i> " cellulose fibres such as viscose (also known as viscose rayon or rayon), but also the newer and more innovative versions	<b>Comment rejected</b> A lack of information about the importance from an environmental point of view of the staff uniforms and their cleaning process is the main reason for not including this aspect in the scope of this GPP revision.

Modal® and Lyocell or Tencel®, occupy the third place in the overall fibre market, after synthetics and cotton and ahead of wool (FAO 2014). As of today, the vast lion's share is held by viscose. Lyocell, or Tencel®, is made in a closed-loop process using less toxic chemicals than are used in conventional viscose production. Like conventional viscose, it can be made from any form of cellulose including eucalyptus and bamboo. What makes it more environmentally-friendly is simply that it is made from biomass but also that the production process is less pollutant (e.g. amino acid compound recovery; water recovery). Clothing made of the innovative man-made fibre e.g. Lyocell remains odour-free through multiple wearing, and for much longer than cotton. This means fewer washings, resulting in savings on water and energy, along with less tearing occurring on any fabric during the cleaning and drying processes (Mass 2015). Synthetics, on the other hand, have hundreds to thousands of times higher bacteria count over the same usage time period than, for example, Lyocell®. Lyocell's® anti-bacterial property is inherent to the fibre without the need for chemical additives such as those used on synthetics or on many cotton products. Additionally, no micro-plastics are created as a result of washing. Comparing the global warming potential (GWP) of different fibres figure shows: (a) it can be seen that from cradle to factory gate, 1) all man-made cellulose fibres have lower GWP than PET fibres; 2) all man-made cellulose fibres except for Lenzing Viscose Asia have lower GWP than PET, PP, PLA without wind and cotton; 3) Lenzing Modal and Tencel Austria 2012 have nearly zero carbon emissions; and 4) Lenzing Viscose Austria has a negative GWP, which means that it sequesters more carbon in the product than it emits. (Shen & Patel, 2010)

*Compostable gloves and bin bags*

The end of life option play a role if the gloves or bin bags (composted according to EN 13432) as might be important for bio-waste disposal (BioPlastic Magazine 2015). The disposable gloves as well as the bin bags can be produced additional to virgin or recycled polymers of biodegradable bio-polymers. That lowers the environmental impact on the climate change compared to virgin fossil based alternatives of plastic and helps to solve the problem of disposal with food waste (FNR 2013). Disposable gloves used in cleaning and cooking are made of different polymers including latex, nitrile rubber, vinyl and neoprene; they are produced unpowered, or powdered with corn starch to lubricate the gloves. Due to the increasing rate of latex allergy among in the general population, gloves made of non-latex materials such as vinyl, nitrile rubber, or neoprene have become widely used in the market. *Compostable disposable bio-based gloves offer alternative to the fossil based products.*

**Acknowledged**

The inclusion of compostable material in accordance with EN 13432 has been kept



Ambition level	In our tenders these are TS and not AC.	<p><b>Comment accepted</b></p> <p>The attributed environmental impacts that this criterion addresses is largely dependent on the type of catering service offered. However, the use of chemical products is in all or most of the catering services and therefore it has been also proposed as TS.</p>
Verification	Please refer also to all available and relevant ISO Type 1 Ecolabels on the European market (not only the EU Ecolabel), e.g. Nordic Swan, Blue Angel, Austrian Ecolabel, ...	<p><b>Comment accepted</b></p> <p>The wording has been modified accordingly</p>
Biodegradable goods	<p>With regard to the core requirement <i>“Points will be awarded to tenders that prove that a minimum of 50% of the cutlery units is certified according to EN 13432, EN 14995 or equivalent and 90% biodegradability in 6 months has been demonstrated in a single or combined composting and/or anaerobic digestion process”</i>, we can assume that this would create a mixed stream of biodegradable and non-biodegradable waste.</p> <p>In order to promote separate collection and treatment of biowaste, this situation should be avoided. Either the requirement is raised to 100% or it should be removed from the core criteria set.</p> <p>Furthermore, the EEB would like to establish a <i>link with the criteria on waste sorting and disposal</i>. Environmental benefits can only be assumed if separate collection of biowaste actually takes place. Why should biodegradability be rewarded if the disposable tableware is burned? In addition, only if biodegradable tableware materials (that meet the above mentioned requirements) do not disturb or deteriorate the local treatment process for biowaste (i.e. composting or anaerobic digestion), it would make sense to define it as an award criterion.</p> <p>The JRC should provide a disclaimer for the procurer to check this issue first with local waste authorities before defining it as a default option. It should be required a check with competent authorities if biodegradable tableware materials are compatible with local treatment processes for biowaste</p>	<p><b>Comment accepted</b></p> <p>The explanatory notes includes the clarification that this requirement should only be included if an appropriate collection system is in place.</p>
Disposable goods	<p>Like packaging, the <i>use of reusable tableware needs to be aligned to available waste streams</i> in line with the waste hierarchy and must allow flexibility for local markets. For instance, there is no benefit to using crockery instead of disposable cups if there is no way to wash the dishes.</p> <p>The additional <i>environmental impact and economic cost of cleaning, water consumption and use of soap products must also be taken into account</i>. A FoodServiceEurope member trialled the use of reusable tableware and found that it did not make environmental or economic sense. The additional environmental impact and economic cost of cleaning, water consumption and use of soap products should be further assessed before setting a GPP criteria for an action that may not be environmentally beneficial when cleaning, water use and water effluence are taken into account.</p>	<p><b>Comment accepted</b></p> <p>The use of disposable items whenever the tenderer demonstrates that it is more convenient from an environmental, economic or feasible perspective.</p>

Reusable and disposable goods and biodegradability-terminology	Directed to the first sentence: <i>Differentiate between disposable and reusable</i> Therefore the distinction needs to be between reusable and disposable products were one option (among others) is to use products which can be composted according to EN 13432. The first sentences suggests a distinction between reusable and biodegradable (see comment above) tableware on the one hand and disposable tableware on the other. This seems to be incorrect. Products which are compostable shall be applied when reuse is not an option.	<b>Comment accepted</b> The terminology used has been modified
	Although reusable tableware is clearly prioritised within the award criteria, the environmental benefits of the proposed criteria for disposable tableware needs to be validated	<b>Acknowledged</b>
	Regarding the use of the term 'biodegradable' (i.e. line 2) see comment 1	<b>Acknowledged</b>
	Key environmental aspects and impacts: suggestion to add as example of consumables goods: gloves, packs)	<b>Comment accepted</b> Examples have been included
Cleaning products	In some markets, there is a problem with the availability of the cleaning products that are being recommended. Therefore, the criterion related to cleaning products should take into account market availability. We suggest conducting a market analysis on the availability of cleaning products across the EU before setting a threshold.	<b>Comment accepted</b> The wording has been modified accordingly
	Probiotic cleaning methods could be used in the comprehensive criteria.	<b>Comment rejected</b> The use of microbial cleaning products is only advisable in certain cases. Anyway, their use is not restricted by this criterion
Thresholds	<i>Paper products: aim higher for example we purchase 100% ecological toilet paper and paper handtowels.</i>	<b>Comment accepted</b> The thresholds have been modified accordingly
	<i>Cleaning products: all products can be 100% ecolabel or Nordic swan</i>	
	Cleaning products should be 100% ecolabel or Nordic swan as we have in our cleaning contracts. Answers to the consultation questions to stakeholders: - Are the proposed consumable goods providing a good coverage of the consumables being used within the catering services provision? · Yes - Are the proposed threshold % limits accessible to all service providers? · In my opinion it is no problem.	
	Ambition levels here are seen as weak, these products are easily available on the market. We suggest: Handsoap – 100% environmentally friendly and Dishwasher detergents and other cleaning products – core 50%, comprehensive 100% environmentally friendly	

Increase the thresholds for purchasing sustainable paper and cleaning products to 50% as core criterion and 100% as comprehensive criterion. The EEB does not agree with the proposed thresholds for paper and cleaning products that we consider being too low and not ambitious enough. It is quite easy to reach 100% sustainable products for these categories. Therefore, we suggest 50% as core criterion and 100% as comprehensive criteria for both product groups. Several public procurers stated that they do not have problems to get environmental-friendly consumable goods as paper articles and cleaning agents.

## **Further analysis on Chemical products and consumable goods**

### **How to choose the right consumable good?**

There are several materials the consumable disposable goods are made of:

- *plastic* is the material to make most of the common disposable utensils. Almost all types of catering consumables: plates, cups, bowls and trays can be made of plastic. Depending on the type and density of the plastic used, the products take longer or shorter to break down in a landfill or to be converted in compost in industrial facilities. This aspect has been considered for the requirement on biodegradability that is aligned to the requirement included in the packaging criterion
- *paper* is a popular choice for many stall holders for hot beverage cups. Paper is a renewable resource as long as the forestry it comes from is managed in a sustainable way. Therefore the inclusion of a sustainable certification is required
- *fibre/bagasse* is the biomass that remains after the sugarcane stalks are crushed to extract their juice. It is annually renewable. Fibre comes from renewable plants such as seed and bamboo. Usually, these two raw materials are combined to produce a pulp product. It is 100C water resistant and 150C oil resistant, microwable and refrigerator safe, as well as being biodegradable in a home compost in under 3 months
- *potato starch* is also used. When potatoes are washed in the preparation between the farm and dinner plate, starch is extracted from the waste water after the potatoes have been sliced or cut into the shapes required. These products are biodegradable within approximately 4 weeks in a home-compost and contain no chemicals or bleaches. The average costs of a box of 25 servings trays was 6.5AU\$ in 2009.
- *wood* is used for few disposable catering supplies. Wood comes from trees, most often virgin trees, but they are a renewable resource, taking several years to biodegrade. The requirement in this sub-criterion focuses on the coverage by sustainable forestry management certification schemes.

The comments on the ambition levels were split with market availability being cited as an issue in some Member States but other stakeholders stating that they lack ambition. Therefore, the recommended values have been increased by an exemption wherever a lack of availability is identified has been introduced.

### **Cleaning products.**

The scientific evidence suggests that cleaning products do not represent a significant environmental burden within the food and catering service sector and is absent from most LCA studies that were reviewed. However, to ensure that the environmental burden from cleaning products is minimised it is proposed that the criterion for cleaning products be kept as an award criterion for catering services. Stakeholders' feedback required specificity on the criteria applicable to the cleaning products to be used within catering services. The current EU GPP criteria for indoor cleaning services can be used as a guideline and it includes floor cleaning, sanitary cleaning, glass/window cleaning and surface cleaning - with technical specification limits for hand soaps and cleaning products.

#### 4.7. Energy and water consumption in kitchens (BEFORE: Equipment)

This section presents the comments received through BATIS and personal communications from the 1<sup>st</sup> AHWG meeting to the 2<sup>nd</sup> AHWG meeting.

**Table 58. Feedback from the stakeholders on the TR1.0: Equipment (AC9)**

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
GWP of refrigerants	<p>All newly procured equipment should already meet the full F-gas regulation in order to be compatible with future technology and maintenance services. This means refrigerants with GWP below 150 instead of 2500. The comprehensive criteria can be set at GWP below 5 and asking for natural refrigerants. CO<sub>2</sub>, R600a and R290 are the most commonly used green refrigerants and they are all natural and with GWP below 5.</p> <p>The F-gas regulation will ban refrigerants with GWP below 2500 in 2020, and already two years later, in 2022, those with GWP below 150. Therefore products using refrigerants with GWP of 150 or higher should be avoided starting today. They will be outdated soon.</p> <p>For plug-in refrigeration equipment the most commonly used green refrigerants are CO<sub>2</sub>, R600a and R290. They are all natural and with GWP below 5. Therefore this can be set as comprehensive criteria without problem</p> <p>Change text for core criteria to: "Points shall be awarded to the equipment using refrigerants with a GWP below 150"</p> <p>Change text for comprehensive criteria to: "Points shall be awarded to the equipment using natural refrigerants with a GWP below 5"</p>	<p><b>Comment accepted</b></p> <p>The criterion proposal is based on the work done by TopTen and ProCold, therefore, the criterion will be updated accordingly,</p>
Scope of the criteria for professional refrigeration	<p>We recommend introducing core criteria also for storage chest freezers and wine storage appliances. These two product categories are often used in food services and catering, and it is easy to recognise the best available technology models using the EU energy label for household refrigerating appliances.</p> <p>Stock in the EU: wine storage appliances 1.7 mio. units and growing; no estimates for storage chest freezers, but almost every small food service business has one.</p> <p>Savings: A+++ storage chest freezer compared to A+ (typical new model) = half the energy costs;  A+ wine storage appliance (one temperature zone) compared to G (typical new model) = 70% reduced energy costs;  A wine storage appliance (multi temperature zones) compared to C (typical new model) = 30% reduced energy costs.</p> <p>Add the following core criteria under 1 Refrigeration:</p> <p>Points shall be awarded to storage chest freezers and wine storage appliances with Energy efficiency index (EEI) as set in the following table:</p> <p>Storage chest freezers: EEI &lt; 22, Min. energy efficiency class A+++  Wine storage appliances with one temperature zone: EEI &lt; 42, Min. energy efficiency class A+  Wine storage appliances with multi temperature zones: EEI &lt; 55, Min. energy efficiency class A</p> <p>Note: The Energy efficiency index shall be calculated according to EU regulation 1060/2010 (energy labelling of household refrigerating appliances).</p>	<p><b>Comment accepted</b></p> <p>The criterion proposal is based on the work done by TopTen and ProCold, therefore, the criterion will be updated accordingly,</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
Energy classes requested to professional refrigeration	<p>Topten will update its criteria for 2 categories in July 2016 due to the market development of top-performing products and the coming-into-force of the EU energy label. We recommend to already update the core criteria accordingly.</p> <p>New criteria:            Storage refrigerators 1-door: EEI &lt; 35, min. energy efficiency class B            Storage freezers 1-door: EEI &lt; 50, min. energy efficiency class C</p>	<p><b>Comment accepted</b></p> <p>The criterion proposal is based on the work done by TopTen and ProCold, therefore, the criterion will be updated accordingly,</p>
Energy classes proposed and ambition level	<p>I agree with the thresholds.</p> <p>Even in case that there are increased costs there is also a return on investment for energy saving investments</p> <p>The US energy star should be withdrawn since there are enough energy ratings introduced in the EU.</p>	<p><b>Acknowledged</b></p>
Energy classes proposed and ambition level	<p>In general, the EEB agrees with the proposed criteria on equipment, but we recommend checking if the proposed ambition levels for these award criteria are too difficult to fulfil for catering services provided by Small and Medium Sized Enterprises (SMEs).</p>	<p><b>Acknowledged</b></p> <p>It is proposed as award criteria to prevent the exclusion of SMEs. However, the criterion is meant to award best technologies in the market that have been proved to be cost-effective.</p>
EMS: Monitoring energy and water consumption	<p>The aspects of energy- and water consumption would deserve to be given more emphasis. The environmental improvement potential and relevance from activities related to these are more considerable than those of consumable goods and vehicle criteria</p> <p>According to Finnish studies the energy consumption in professional kitchens amount to 1/3 of the CO2 emissions. It is also of non-negligible relevance to achieving the targets in the EU EED article 6. Recently published criteria on professional kitchen equipment ( dishwashers and refrigerators and freezers) and criteria for energy- and water consumption are available in Finnish</p> <p><a href="http://www.motivanhankintapalvelu.fi/files/748/Motiva_Ammattikeittolaitteiden_hankinta_FINAL_versio_1.0.pdf">http://www.motivanhankintapalvelu.fi/files/748/Motiva_Ammattikeittolaitteiden_hankinta_FINAL_versio_1.0.pdf</a>  <a href="http://www.motivanhankintapalvelu.fi/files/462/Motivan_hankintaohje_Ruokapalvelu_Energia_ja_vesi_15.5.2014.pdf">http://www.motivanhankintapalvelu.fi/files/462/Motivan_hankintaohje_Ruokapalvelu_Energia_ja_vesi_15.5.2014.pdf</a></p> <p>Monitoring energy consumption as part of the environmental program/plan can be a comprehensive level award criteria. A stakeholder informed that the carbon calculator tool, produced by the Carbon Trust, provides the energy consumption by meal, among other information. This tool is in the public domain but lacks energy efficiency indexes.</p>	<p><b>Comment accepted</b></p> <p>It is proposed to be included as part of the EMS criterion. Best practices for the use of kitchen equipment have been added.</p>
Length of contracts	<p>The length of a contract also has an influence, as for short contracts companies tend to invest in low cost equipment due to the low return profits. A requirement for companies to buy high quality equipment even for shorter contracts should be in place.</p> <p>Another stakeholder said that the length of the contracts is too short (2-3 years) to buy high quality equipment to pay</p>	<p><b>Acknowledged</b></p> <p>The criterion proposal does not cover any provisions to exclude short length contracts. It is proposed as</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
	back investment. Stakeholder said that this in itself can be an obstacle to innovation in technology	award criteria to enable enough flexibility to be adapted to the broad variety of catering services
Durability and lifetime	A stakeholder said that they agree with the general approach but, in the scope of the circular economy package, the life of the equipment should be considered as well as the origin of energy, specifically renewable energy	<b>Comment rejected</b> The lifetime and durability of the equipment are very important but difficult to measure and verify. A criterion on extended warranty would only apply to new purchases, and it would have no effect in equipment already installed and not covered by the warranty. With regards of the origin of electricity, it is covered by the GPP criteria for electricity.
Space limitations	A stakeholder said that the contract caterer may face some space limitations, or even be impeded in bringing new equipment, when working at the client premises.	<b>Acknowledged</b> It is proposed as award criteria to enable enough flexibility to be adapted to the broad variety of catering services
Water consumption	A stakeholder mentioned that the criterion lacks a reference to water consumption, especially for dishwashers.	<b>Comment accepted</b> The criterion proposal has been completed with requirement on water- saving technology for professional dishwashers

### Further research/analysis on Energy and water consumption in kitchens (BEFORE: Equipment)

The literature review has shown that the LCA studies for catering services are scarce, meaning that results should be considered with caution, especially with regard to their representativeness. From the life cycle perspective, the primary production of food stands for the major environmental impact (Baldwin et al., 2011; Calderón et al., 2010), nevertheless, the energy use in kitchen operations has an impact on fossil fuels, carcinogens and eco-toxicity, and it plays an important part once the catering service is analysed isolated from the primary production of food (Fusi et al., 2015). The study carried out by IEAA (2012) showed that almost 40% of the energy the four sites is used for cooking with refrigeration at 28%, extraction at 17% and dishwashing at 5%. In carbon terms cooking at 27% is less important than refrigeration at 34%. This is due to the lower carbon impact of gas which accounts for 68% of cooking energy. In the case of extraction, the main parameters affecting the energy consumption are related to the type of cooking appliances and dishwashers. The other parameters, as the speed variable fans, are usually part of the kitchen design which is out of the control of the catering service operator

on some occasions. Even though most of the measures proposed in the study are cost-effective, it is also highlighted that in many occasions, the caterer does not pay the energy bill. Therefore there are not economic incentives for caterers to reduce the energy consumption, and other type of drivers may be needed.

Best practices in the use of kitchen equipment

The study by IEEA (2012) also showed that there is considerable potential for improvements based on how staff uses the kitchen equipment. The study estimated that the energy savings could reach 40% in cooking and 25% in dishwashing, with very affordable investments. Therefore, it is proposed that the GPP criteria include a technical specification requiring the implementation of best practices for the use of kitchen equipment, aimed at the staff working in the kitchen/s providing the contracted catering service. In the explanatory notes, the recommendations from the study by IEEA (2012) are provided as guidance for the caterer.

Harmonisation with EU product policies

Another relevant aspect relates to the harmonisation other product policies setting requirements on professional kitchen equipment, as shortly described below for refrigeration appliances, cooking appliances and dishwashers.

The European Energy Label and Ecodesign schemes cover professional and commercial refrigeration equipment commonly used by catering services. Professional refrigeration equipment includes appliances used in professional kitchens. Commercial refrigeration equipment covers appliances used to show and make accessible refrigerated food to the final consumers (supermarkets, shops, vending machines, etc.)

For professional refrigeration, the Ecodesign Regulation EU No 2015/1995 sets minimum requirements for professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers, while the Energy Label Regulation (EU) No 2015/1995 settles the energy classes for professional refrigerated storage cabinets (Section 3.2.2 Preliminary report). According to the comments received, the Regulation (EU) No 1060/2010 on energy labelling of household refrigerating appliances is also relevant for professional purposes, since its scope comprises storage chest freezers and wine storage appliances that may be used in catering services.

Another policy ruling the refrigeration appliances in Europe is the so called F-Gas Regulation (Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006). This regulation aims at the phase out of HFC refrigerants with high global warming potential, particularly for commercial and professional refrigeration; it sets the following deadlines to ban high and medium GWP refrigerants (Table 59).

**Table 59: Phase out deadlines for refrigerants with a high GWP according to the F-Gas Regulation (Regulation (EU) No 517/2014)**

Refrigerators and freezers for commercial use (hermetically sealed equipment)	That contains HFCs with GWP of 2500 or more	1 January 2020
	That contains HFCs with GWP of 150 or more	1 January 2022

The harmonisation of product policies bolsters their appropriate implementation and interpretation by means of common framework, terminology and test methods, and therefore they should be taken as references for the wording of the GPP criteria. However, the other energy consumers within the catering services, i.e. the professional cooking appliances, lack European Ecodesign or Energy Labelling policy tools, which are just developed (or under development) for domestic appliances, that are out of the scope of the criterion. The existing gap for professional appliances might be overcome by the US Energy Star, which sets minimum energy efficiency requirements several cooking appliances (Section 3.2.2. JRC 2016a).

Regarding US Energy star cooking appliances, the market availability of those appliances in Europe is uncertain. No data have been found for the European market and some comments from stakeholders pointed out that US Energy star was not relevant. Besides, as an example of non-US market, a Canadian market analysis of commercial kitchen equipment (commissioned by the Natural Resources Canada and carried out by the consultancy company Dunsky) showed that the availability of commercial kitchen equipment in Canada is quite uneven across the different categories of products, and in general it is still very limited. US Energy Star cooking equipment is difficult to find and is often questioned regarding its ability to meet the same quality standards necessary to guarantee food uniformity (Gobeil et al, 2015). This was also supported by the stakeholders in the field of equipment manufacture. The lack of information about the uptake of US Energy Star cooking appliances in the European market, together with the comments related to its low relevance, has led to the withdrawal of this energy rating system in the revision of the current criterion.

Regarding professional dishwashers, there is not Ecodesign and Energy labelling.

Best available technologies in cooking appliances

The BEMP on Tourism services identified a set of measures related to cooking equipment that might help public procurers in the wording of award criteria.

- Replace electric hob with induction hob.
- Replace electric hob with gas hob (optimised burners).
- Replace gas hobs with new hobs controlled by pot sensors.
- Replace uninsulated food heating unit with insulated model.
- Replace conventional oven with convection oven.
- Use a combi oven or pressure cooker instead of conventional oven.
- Use microwave instead of oven or hob to (re)heat food.

The study carried out by IEEA, (2012) also recommends choosing gas appliances over the electrical ones, where possible. These recommendations are used as to propose a criterion aimed at rewarding the most efficient technologies.

Best available technologies in professional refrigeration

The market segmentation of the professional refrigeration in Europe has been analysed by TopTen.eu the project ProCold, whose main goals are showcasing best products, supporting green procurement and helping to implement effective policies (ProCold, 2016). In their publication focusing on professional refrigerated storage cabinets and blast cabinets, it is provided data of the energy classes available in the European market, according to the Regulation 2015/1994 (Table 60) (TopTen, 2016b) The product lists on TopTen.eu represent 7 different brands (Gram, Desmon, Electrolux, Foster, Liebherr, Porkka, Snowflake) with 65 model types (not counting similar models with different configurations) that are all at least class D or better. It is important to highlight that the models registered in the TopTen.eu database shall meet at least class D, so it is not known the models below class D that are available in the market.

**Table 60. Models for professional refrigeration in Europe for energy classes above G (TopTen, 2016)**

		Energy classes				
Category	A+	A	B	C	D	Total



Storage counter refrigerators	1	3	1	...	...	5
Storage refrigerators 1-door		12	10		...	22
Storage refrigerators 2-doors		1	...	2	3	6
Storage counter freezers		1	3	...	...	4
Storage freezers 1-door		1	4	16	...	21
Storage freezers 2-doors		...	...	...	5	5
Storage refrigerators freezers		...	...	1	1	2
Total	1	18	18	19	9	65

Based on these figures, TopTen (2016a) recommends the following Energy Class for each type of refrigeration equipment:

**Table 61: TopTen recommendation for professional refrigeration (TopTen, 2016a)**

Category	Energy efficiency index	Min. energy efficiency class
Storage counter refrigerators	<35	B
Storage refrigerators 1-door	< 35	B
Storage refrigerators 2-doors	<75	D
Storage counter freezers	<35	B
Storage freezers 1-door	<50	C
Storage freezers 2-doors	<75	D
Storage refrigerator-freezers	<75	D

The proposal of TopTen would ensure an alignment to the Ecodesign tier planned for 2019 (EEI < 85, i.e. Energy Class shall be above F), and also that there are models currently available in the market. For that reason the ProCold (2016) recommendations are taken to draft the core criterion. For the comprehensive criterion, it is proposed to require Energy class A (EEI < 25) for all categories, in order to reward the highest energy rating classes (A and above). There is no data about the availability of some of these product categories in the market; therefore, this criterion proposal is open to discussion based on market data that the stakeholders might provide.

In the case of storage chest freezers and wine storage appliances, TopTen data base also offers the energy classes of the best performance products in the EU market (Table 62)

**Table 62: Models for household refrigeration in Europe for energy classes above G (TopTen, 2016)**

Category	Energy classes				Total
	A+++	A++	A+	A	

Storage chest freezers	19				19
Wine storage appliances with one temperature zone		4	11		15
Wine storage appliances with multi temperature zones			3	6	9
Total	19	4	14	6	43

For these appliances, TopTen recommends Energy class A+++ for storage chest freezers, A+ for wine storage appliances with one temperature zone and A for wine storage appliances with multi temperature zones.

Best available technologies in professional dishwashers

The study carried out by IEEA (2012) provides the following recommendations:

- Purchase the most energy efficient equipment (in kWh/100 dishes) when replacing.
- Consider models with heat recovery from hot sanitation.
- Purchase water-efficient dishwashers as these tend to be the most energy-efficient.
- Where local hot water generation exists, it may enable heat recovery from refrigeration.

The stakeholders pointed out that the water consumption was not taken into account in the criteria proposal, but the strong relationship between the energy consumption and the water consumption in the performance of the dishwashers ensures that this aspect is already considered. Additionally, one of the stakeholders recommended not to set any thresholds for dishwasher water consumption if the test method was not standardized, since the results would not allow any comparison. For that reason, an approach based on the promotion of more efficient technologies is proposed. In this regard, the criterion proposal is drafted to award points to dishwashers equipped with heat recovery systems.

#### 4.8. Food transportation (BEFORE: Vehicle fleet and planning of food delivery)

This section presents the comments received through BATIS and personal communications from the 1<sup>st</sup> AHWG meeting to the 2<sup>nd</sup> AHWG meeting.

**Table 63. Feedback from the stakeholders on the TR1.0: Vehicle fleet and planning of food delivery (TS7)**

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
Scope of the criterion	Yes, we consider the typology of refrigerants should be covered in this criterion.	<b>Comment accepted</b> A criterion on GWP has been included
	I think the criterion should also cover refrigerator transports since in the last years the use of deep frozen food/components increased significantly. In this regard also heavy duty trucks are being used for transport.. One stakeholder raised the point that this criterion may also be relevant for the procurement of food. Another stakeholder added that heavy vehicles such as trucks should also be taken into account because they are used to deliver food.	<b>Comment accepted</b> HDVs are included in the scope of the criterion.
	One stakeholder raised the point that this criterion may also be relevant for the procurement of food, and its transport of food to catering locations.	<b>Comment accepted</b> The scope of the criterion includes a definition of food delivery, covering the food transport to the kitchen
Ambition level	In general, the EEB agrees with the proposed criteria but we recommend checking if these technical specifications could be formulated as award criteria in order to not exclude SMEs that might find it too hard to comply.	<b>Comment accepted</b> The criterion on EURO 6/VI is formulated as award criterion.
Logistics	A stakeholder shared the opinion that the efficiency of the transport logistics should be awarded more than the types of vehicles used. As an example of a possible indicator, a stakeholder mentioned an Environmental Product Declaration where the reference unit is set to be CO2 emissions per mileage. Another stakeholder highlighted the importance of an optimisation of logistics as well as route planning	<b>Acknowledged.</b>
Logistics	Another stakeholder stated that logistics are very important but that in some situations trucks are owned by the wholesale companies so it might difficult to set requirements for low environmental impact vehicles.	<b>Comment accepted</b> The criterion is proposed to be applied to the fleet owned or leased by the tenderer.
Training	Besides the emissions classes for the vehicles there should also be a mandatory training for the drivers on energy saving driving. So far this is only mandatory for heavy duty vehicle drivers.	<b>Comment accepted</b> Ecodriving is included in the SC on competences of the tenderer and staff training CPC.
EU GPP alignment	Another stakeholder said that it would be useful for procurement purposes if the criteria align between different GPPs (e.g. transport and catering)	<b>Comment accepted</b> It has been aligned as much as possible.

### **Further analysis on Vehicle fleet and planning**

Transportation was not identified as a main hotspot in food supply chains although contributing to overall environmental impact (depending on food category and depending on situation). The use of fossil fuels leads to global warming, abiotic resource depletion, ozone depletion and acidification. Nevertheless, Cerutti et al. (2016) found that the GHG emission share of urban food distribution in the carbon footprint of the school catering service is relevant (24–28% of the total CF); and highlighted the possibilities for GHG emission reductions. The distribution of food is part of the catering service, and therefore, falls under the caterer responsibility. By requesting vehicles to be more fuel efficient or have lower emissions, will also minimise the impact on the other impact categories. But food supply chains are too complex to require all vehicles to achieve a certain environmental standard.

Reduction plan for fuel consumption: The BEMP for Food and Beverage Manufacturing had recommendations on logistics and route optimisation. It is good practice to avoid empty loads and to use back-haul, in order to minimise the so called last mile issues. The review of other GPP criteria shows four procurers apply requirements to reduce the food delivery transportation. Some examples are the following:

- Deliveries to be made once a week and on a more regular basis when needed
- A contractual delivery stop on orders with a value below EUR 100

Eco-driving has also an important potential of fuel reduction, which could be reinforced by additional measures other than the training, for example, the drivers could receive regularly information on their fuel efficiency performance, so they could improve their driving behaviour continuously.

Air pollutants emissions: With regards to air emissions covered by Euro standards, for light commercial vehicles, the Euro 5 standard became mandatory for all new registrations in January 2015. As for Euro 6, it sets stricter diesel NO<sub>x</sub> limits, PN limits for gasoline vehicles, on-board diagnosis requirements, its implementation will be completed in September 2018, when real drive emissions requirements will be in force, and the New European Driving Cycling will be replaced by Worldwide harmonized Light vehicles Driving Cycling (ICCT, 2015).

For heavy duty vehicles, the Euro V standard became mandatory for all new registrations in 2009. EURO VI was required to all new vehicles registration in January 2014, and some specific parts of it in 2017. It reduces 67% the PM emissions limit compared to EURO IV and V, and includes a PN limit. It also decreases the NO<sub>x</sub> emissions limit; replaces the European Stationary Cycle and Transient Cycle used for testing by the World harmonized Transient cycle. EURO VI also introduces in-service conformity testing using Portable Emission Measurement System. Besides, it sets new limit for ammonia emissions and stricter limits for methane on CNG and LPG vehicles (ICCT, 2015). Nevertheless, it is not clear how relevant these heavy duty vehicles are for distribution of food in the catering service activities

In the view of the set of improvements that EURO VI/6 standards introduce, new vehicles on the market need to make important efforts to comply with their requirements, and therefore, it is proposed these new standards to be promoted within the EU GPP criteria. The total replacement of a fleet to EURO VI/6 may entail significant costs, therefore it is proposed an award criterion for fleets totally composed by EURO VI/6 vehicles.

CO<sub>2</sub> emissions Based on the information available in the Preliminary report for the revision of EU GPP Criteria for transport, the most fuel efficient internal combustion engine vehicles (ICEVs) are cost-effective, meaning that the additional cost of the vehicle is outweighed by the fuel saving over the lifetime of the vehicle. Conversely, electric and semi-

electric vehicles are still at a lower production scale which makes their prices not as competitive as ICEVs. For this reason, the comprehensive award criterion is meant to promote the use of plug-in hybrids and electric vehicles, which are the only ones able to perform 50 g CO<sub>2</sub>/km (type approval CO<sub>2</sub> value)

*Cyclelogistics* has demonstrated its capability to operate in urban deliveries, which makes it suitable for deliveries within catering services. According to CIVITAS 42% of all motorized trips in urban areas could be shifted to logistics by bicycle (this corresponds to 25% of all trips). As an example of cyclelogistics the CITIES Foundation as part of its Farming the City project, launched in summer 2014 a cyclelogistics start-up called FOODLOGICA in Amsterdam. The initiative aims at offering to consumers and businesses in a real food delivery service making use of electric cargo bikes (Chiffi & Galli, 2014).

*HFC refrigerants*: Refrigerant gases are also relevant for vehicles used in food delivery such as vans and refrigerated trucks. From 2017 onwards the GWP of air conditioning gases used in cars and vans should be below 150. Alternative refrigerant options include CO<sub>2</sub> and the HFO refrigerant called R1234yf, which has been introduced in certain car models recently. These refrigerants have a GWP of 1 and 4, have a high energy efficiency, bring no or acceptable additional cost and are commercially available. Given that the only currently available alternatives to meet the legal limit already perform very low GWP, an award criterion for lower GWP beyond that limit would be easily complied by all the vehicles and wouldn't bring any added value.

Trucks are excluded from the MAC Directive (2006/40/EC), however, the HFCs used in these systems are affected by the phase-down put in place by the F-gas Regulation (Regulation (EU) No 517/2014), which will exert a strong pressure on prices of these gases as the supply will become more restricted. Therefore, there is a strong regulatory driver in place that favours the use of low GWP or even non-HFC (e.g. CO<sub>2</sub>) technologies in this sector. It is proposed to set an award criterion for those refrigerants with GWP (100 years) below 150 at comprehensive level.

Implementing these criteria may help reducing for instance global warming potential as well as air quality in cities. EURO VI/6 represents a significant environmental improvement for air emissions, and it would be promoted by means of an award criterion. In order to complement the criteria proposal and achieved a level of harmonisation with the EU GPP criteria for transport, it is proposed to promote best performance vehicles, low/zero tailpipe emissions vehicles and cyclelogistics at comprehensive level. Besides that, it is proposed to include a plan to minimise the fuel consumption. It is also proposed to define this criterion as technical specification complemented by a contract performance clause. This would allow the contracting authority to evaluate the criterion prior to the contract award.

#### 4.9. Environmental management measures and practices (BEFORE: environmental management system)

This section presents the comments received through BATIS and personal communications from the 1<sup>st</sup> AHWG meeting to the 2<sup>nd</sup> AHWG meeting.

**Table 64. Feedback from the stakeholders on the TR1.0: Environmental management system (SC2)**

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
Ambition level	<p>A selection criterion that requires the service provider to have in place an environmental management system containing an environmental policy, an action plan and an internal audit process risks excluding SMEs. For instance, in Hungary, around 50% of contract catering companies are SMEs.</p> <p>We recommend that the service provider "should have in place an environmental management system or should have the intention to implement one".</p> <p>Both SMEs and large companies should be able to fulfil and prove their compliance with GPP criteria.</p>	<p><b>Comment accepted</b></p> <p>The criterion has been simplified and the wording tailored to the catering service sector. The link to the GPP criteria based on operational procedures and best practices has been made clear.</p>
	<p>Change the core and comprehensive selection criteria on environmental management measures and practices to award criteria and make sure that they do not exclude small and innovative catering services that have an outstanding performance on the food related criteria</p> <p>The EEB recommends adapting these criteria, since even the proposed core criteria are too ambitious for small companies. In Germany, especially some very good caterers for school and kindergarten catering could not fulfil the proposed core criteria. A representative from the city of Gent made the same experience.</p>	<p><b>Comment partially accepted</b></p> <p>The criterion has been simplified and the wording tailored to the catering service sector and the rest of GPP criteria. The criterion is now proposed as an essential element to implement the GPP criteria based on operational procedures and best practices, therefore, it cannot be defined as an award criterion</p>
	<p>Using EMS as a selection criterion is appropriate as long as also non third party certified systems are allowed. The comprehensive criteria can be used if there is a sufficient amount of service providers with certified schemes and it can be seen as proportionate to the aim. In Finland certified schemes are not generally used as mandatory criteria. The link between the SC2 and menu planning etc should be described in a clear way. The environmental program for the particular service procured should be provided to the purchasing authority either attached to the tender, or at the start of the contract period.</p> <p>We propose that the service provider shall provide an environmental plan for the service to be supplied during the contract period. The procuring authority should state which aspects are to be included as a minimum in the environmental program/plan for the service to be provided. These mandatory elements can then be further defined as minimum and award criteria. The plan if followed up and further developed in cooperation with the procuring authority during the contract period.</p>	<p><b>Comment accepted</b></p> <p>The criterion has been simplified and the wording tailored to the catering service sector. The link to the GPP criteria based on operational procedures and best practices has been made clear.</p>
General	<p>I fully agree to the criterion. The verification should not be a problem even for SME when looking at the core criterion</p>	<p><b>Comment partially accepted</b></p> <p>EMS are very helpful to implement environmental criteria on services, however, other comments point out the difficulties that some operators may find,</p>

Topic	Feedback from stakeholders	JRC-Directorate B5 assessment
Other sustainable issues	Consider renaming this “ <i>Sustainability management measures and practices</i> ” and tracking broader sustainability measures such as impacts on animal welfare. Even a basic framework for tracking purchases, which is already required to meet AC4 and TS4, can lay the groundwork for more detailed and improved measurements in the future.	and therefore it has been revised accordingly. <b>Comment rejected</b> GPP is a tool to promote best environmental performance, and just considers other aspects such as social and ethical issues, when the product group raises a relevant concern.
Verification	EMAS and ISO 14001 are not very common instruments among catering services (in Austria). Also Ecolabels shall be taken into consideration concerning verification, if they have a management section within their criteria. Several appropriate ISO Type 1 ecolabels for catering services are already on the European market.	<b>Comment accepted</b> The certified EMS is no longer required as proof of compliance, but it can be accepted as a proof of compliance. Type 1 ecolabels are also deemed to comply.
	Very common criteria to specify the aspects that must be included concerning the Environmental management measures and practices in procurements of catering services The applicant most often provide the ISO 14001 certificate and/or EMAS registration as a mean of compliance for this criterion, or sometimes equivalent if it is a SME.	<b>Comment rejected</b> EMS are very helpful to implement environmental criteria on services, however, other comments point out the difficulties that some operators may find, and therefore it has been revised accordingly
	It is important the procurer is trained to deal with the systems used by the tenderer that don't have certificates as EMAS/ISO14001., but I also noticed that these kind of certificates are not offered by SME's and if they have to offer an equal system (we use the same description as written down in the core criteria) it isn't easy because it's a rather abstract issue for them.	<b>Comment accepted</b> The verification specifies which written procedures should be provided by the tenderers and technical specification sets their minimum content.
	IFOAM EU is not in favour obliging SMEs to comply with EMAS/ISO14001 or equivalent schemes. Establishing complex requirements with an additional certification system is too far reaching approach with a tremendous additional burden (workload and costs) for SMEs. Imposing such systems has a high potential to exclude many operators. It is therefore highly important to define requirements which meet the needs of SMEs, rather than disadvantaging them in favour of larger industry players.	<b>Comment accepted</b> The certified EMS is no longer required as proof of compliance, but it can be accepted as a proof of compliance. Type 1 ecolabels are also deemed to comply.

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## List of abbreviations and definitions

Assembly-serve	The food is delivered pre-processed and cooked. Then the food is reheated (if necessary) and assembled on site.
Bio-waste	Biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises and comparable waste from food processing plants.
Catering service	The preparation, storage and, where appropriate, delivery of food and drinks for consumption by the consumer/client/patient at the place of preparation, at a satellite unit or at the premises/venue of the client.
Centralised production unit	Central kitchens or central food factories that send out completed dishes or pre-processed ingredients/meals to satellites. Can include both ready-prepared services and assembly-serve services.
Contract catering firm	A business engaged in (amongst other activities or services) providing a meals service (for example by running a staff restaurant or providing school meals) or providing drinks, snacks or vending.
Conventional kitchen	A kitchen (at the place of consumption) where all, or a significant part of, food is prepared from raw ingredients.
Conventional production	Traditional farming methods.
EU Ecolabel	'EU Ecolabel' refers to a voluntary eco-labelling award scheme developed and managed by The European Commission intended to promote products and services with a reduced environmental impact during their entire life cycle and to provide consumers with accurate, non-deceptive, science-based information on the environmental impact of products or services. There are three types of voluntary labels identified by ISO with the EU Ecolabel falling under the Type I category.
Green public procurement	'Green Public Procurement (GPP)' is a voluntary instrument defined in the Commission Communication "COM (2008) 400 - Public procurement for a better environment" as "...a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured."
Integrated production	Farming methods that try to optimise resource use (e.g. pesticides and synthetic fertilisers use) and aim to have a low overall impact on the environment.
Life-cycle assessment	Calculating environmental impact for each stage in a food supply chain, focusing on determined environmental impact categories.
Organic production	Farming methods that aims to have a low impact on the environment (e.g. no or low pesticide use and no synthetic fertiliser use). (Working with ecosystems).
Private sector	Private companies (restaurants, pubs etc.)
Public sector	The cost sector (education, health and social care etc.)
Ready-prepared	Preparation on site or at a central facility of large batches of items for consumption that are then adequately stored frozen or chilled until required.
SMEs	Small and medium-sized enterprises
Type I Ecolabel	'Type I Ecolabel' is defined by the ISO 14024 standard as a voluntary multi-criteria-based, third party program that awards a license that authorises the use of environmental labels on products indicating overall environmental preference of a product within a particular product category based on life cycle considerations.
Vending and hot-drink machines	Machines that are available at all times with snacks, fruit, drinks and/or sandwiches etc. that are ready to eat/drink or that can be reheated.
Water dispensers	A device specifically for dispensing drinking water, which might have the possibility of heating and/or cooling the drinking water.

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