

# JRC Scientific and Technical Reports



## Results of the GAEC workshop 2011

Vienna, 3-5 October 2011

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# Report

## Results of the GAEC workshop 2011

Vienna, 3-5 October 2011

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## **1. Introduction**

### **1.1. Report objectives**

- 1.1.1. The aim of the report is to describe the main technical findings and results of the GAEC workshop 2011 organised by the Federal Ministry of Agriculture, Forestry, Environment and Water Management of Austria with the technical support of the MARS Unit of the Joint Research Centre.
- 1.1.2. The workshop was held in Vienna at the Trend Hotel Schloss Wilhelminenberg, Savoyenstraße 2 on 3rd -5th October 2011. 132 delegates attended the workshop representing 24 European Union Member States (all but Cyprus, Latvia and Portugal) and two candidate countries (Croatia and Iceland). European Commission was represented by two experts of the Joint Research Centre (MARS Unit), two of the Directorate-General Agriculture and Rural Development (DG AGRI D3) and one of the Directorate-General Environment (DG ENV B1).

### **1.2. Acknowledgements**

- 1.2.1. The authors would like to express sincere thanks to the Federal Ministry of Agriculture, Forestry, Environment and Water Management of Austria for the organisation and hosting of this successful event. They would like to thank all persons that were involved in the organisation and management of the workshop and without whom the workshop could not have taken place. A special thank to Matthias Reeh for his strong engagement in the coordination.
- 1.2.2. He would also like to thank the presenters for agreeing to deliver their talks, as well as all participants for their contribution to the discussions and to the success of the event.

## **2. Outcomes of the plenary sessions**

### **2.1. Background**

- 2.1.1. Good Agricultural and Environmental Conditions (GAECs) have been implemented by Member States since 2005. Since then, minimum requirements defined by Member States have undergone changes following clarifications given by the European Commission (e.g. all standards should be implemented), results of audit missions and specifications established by the Member States in order to make them more effective and linked to local conditions. The agreement reached by EU agriculture ministers on 20 November 2008 (the so-called Health Check) finally modified the existing GAEC framework which is now composed of 5 issues and 15 standards of which 8 compulsory and 7 optional (Annex III of Council Regulation (EC) No 73/2009). Following the discussions for the Common Agricultural Policy (CAP) after 2013, the GAEC framework may be modified and a “greening” component may be introduced in the direct payments.

2.1.2. The aim of this workshop was to have open and constructive exchanges about the practical implementation of the Good Agricultural and Environmental Condition (GAEC) with a focus on buffer strips, the JRC GAEC database and control issues also related to the use of remote sensing.

## **2.2. Agriculture and GAEC in Austria**

2.2.1. In Austria agriculture production value is around 8 billion euros (including forestry) and this accounts for 1,5 % of the gross value added<sup>1</sup>. Exports accounts for 7,77 billion euros (77 % to EU countries, such as Germany, Italy, Hungary, Slovenia), import is about 8,68 billion euros (85 % from EU countries such as Germany, Italy, Netherlands, Hungary, France).

2.2.2. Small family farms shape the agricultural sector in Austria. The average utilised agricultural area (UAA) of the Austrian farms is 19.3 ha. 132.653 farms are registered in the Integrated Administration and Control System (IACS). Austrian Utilised Agricultural Area (2.760.257 ha, according to IACS data) is mainly shared between arable land and permanent grassland.

2.2.3. 50% of Austrian farms (66.558 farms) are mountain farms. They have 14,3 ha of UAA as an average: 43% among them have milk quotas and 23% are organic farms.

2.2.4. In Austria there are 22.132 organic farms (16,7% of farms registered in IACS), with an average of 20,1 ha of UAA; 34% among them have milk quotas.

2.2.5. Austrian agricultural budget accounted 2.327 million euros in 2010 and 34% of it was used for the first pillar of the CAP (direct payments) and 50% for the second pillar (rural development) and mainly for measures of the axis 2 (agri-environmental measures).

2.2.6. Considering the period 2008-2010, the average of subsidies per farm is 623 euros/year, of which 260 coming from direct payments, 302 from the agri-environmental programme (ÖPUL) and less favoured areas subsidies and 61 from other sources.

2.2.7. The main challenges that Austrian agriculture will have to face in the future will be: the conversion from the historical model to a regional model for calculating subsidies, the international competitiveness of small holders, the high proportion of subsidies (80 percent of the agricultural income) and the preservation of the cultivated landscape in extremely less favoured areas (forest included).

2.2.8. In Austria GAEC requirements are defined at national level. 13 GAEC minimum requirements are currently implemented (5 out of 7 optional standards)<sup>2</sup>.

2.2.9. In Austria in general a permit is required for the abstraction of water for irrigation<sup>3</sup>. Regional or local authorities are in charge of permit procedures; the Austrian Water Act defines required

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<sup>1</sup> Presentation “Agriculture and GAEC in Austria” by Leopold Kirner (Federal Institute for agricultural economy), accessed at: <http://mars.jrc.ec.europa.eu/mars/News-Events/GAEC-workshop-2011/Agenda-and-presentations/Kirner-s-presentation>

<sup>2</sup> Presentation “GAEC in Austria” by Anna Zauner (Austrian ministry - Division CMO-Law and Product quality), accessed at: <http://mars.jrc.ec.europa.eu/mars/News-Events/GAEC-workshop-2011/Agenda-and-presentations/Zauner-s-presentation>

application/project documents, specified by guidelines/outlines of the enforcement authorities (such as irrigation area, a description of abstraction and irrigation devices, basic hydrogeological conditions). The permit in general prescribes the allowed water quantity and other requirements such as the maximum abstraction, the maximum irrigation amounts for different crops, the construction details, the records and sometimes the use of water metering devices.

### 2.3. Buffer strips

2.3.1. The whole Austria is classified as a nitrate vulnerable zone (NVZ). The Nitrate Action Programme establishes periods in which fertilizer application is forbidden<sup>4</sup> and established a minimum requirement of six months of storage capacity. The capacity has to be sufficient in order to guarantee that other provisions of the action programme are not violated e.g. to avoid manure application at times with little crop demand, danger of runoff due to uncovered soils (e.g. for maize dominated crop rotation more than 6 months).

2.3.2. The Nitrate Action Programme does not allow fertilisation near water courses with the following distances (see table below). For the implementation of the GAEC standard on buffer strip, Austria has

Nitrate Action Programme (AT)	GAEC standard- Establishment of buffer strips along water courses (AT)
Fertilisation not allowed near water courses: <ul style="list-style-type: none"> <li>• <b>near stagnant waters:</b> 20 m in general, 10 m if accurate fertilisation devices are used</li> <li>• <b>near running waters:</b> 5 m in general, 2.5 m if accurate fertilisation devices are used</li> <li>• <b>near running waters in case of steep slopes (&gt; 10 %):</b> 10 m in general, 5 m if accurate fertilisation devices are used</li> </ul>	<ul style="list-style-type: none"> <li>• Austrian Nitrate Action Programme</li> <li>• restricted use of pesticides</li> <li>• no use of machinery</li> <li>• no conversion from permanent pasture into arable land</li> </ul> <b>Tillage</b> not allowed near water courses: <ul style="list-style-type: none"> <li>• <b>near stagnant waters:</b> 10 m</li> <li>• <b>near running waters more than 5 m wide:</b> 5 m</li> </ul> Water courses where it is applied: 5m wide at the bottom Stagnant water: 1 ha

defined a stricter requirement than the one established by the nitrate action programme: in fact the

<sup>3</sup> Presentation “Irrigation in Austria” by Robert Fenz (Austrian ministry – Division National Water Economy), accessed at: <http://mars.jrc.ec.europa.eu/mars/News-Events/GAEC-workshop-2011/Agenda-and-presentations/Fenz-s-presentation-about-irrigation>

<sup>4</sup> Presentation “Buffer strips in Austria” by Robert Fenz (Austrian ministry – Division National Water Economy), accessed at: <http://mars.jrc.ec.europa.eu/mars/News-Events/GAEC-workshop-2011/Agenda-and-presentations/Fenz-s-presentation-about-buffer-strips>

GAEC provision related to buffer strips do not allow tillage for 10 m near stagnant water and 5 m near running waters more than 5 m wide.

- 2.3.3. The Hungarian experience in the definition of the buffer strips requirement was presented by Bernadett Csonka<sup>5</sup>. In the definition of the requirement Hungarian authorities have considered the following issues: introducing the GAEC requirement only for water bodies already reported in the Water Framework Directive; the size of the buffer should be coherent with the buffers already used in the national regulations (5 meters); direct and exact communication to farmers about where the new rule must be implemented (i.e. to visualize the areas under restrictions on the web-declaration); easy to be managed for the farmers and cost-effective to be controlled.
- 2.3.4. The process of defining the GAEC requirements on buffer strips involve different levels of administration: FÖMI for the up-to-date digital map of water bodies, the Ministry for defining the width of the strips and the requirements farmers shall respect; the Paying Agency for integrating the new thematic layer and WEB-declaration into the IACS GIS and for defining the controls.
- 2.3.5. It is stated that if the requirement shall be applicable only on some water bodies, the target must be clearly defined for the farmers on a map. Different sources material is available to create the current digital map of the water bodies: digital topographical maps at 10:000 scale, a digital map created by the water management authority for the Water Framework Directive and remote sensing data used for Land Parcel Identification System (LPIS) update (infrared ortho-photographs of ¼ of the territory per year and partial VHR images). A process of harmonisation among the different sources has been carried out. An image processing is put in place to minimise the work of the manual interpretation and to increase its efficiency; this process includes strengthening the visual interpretation and searching for risky areas and not-updated vector objects. Finally an updated digital water map where the GAEC requirement shall be implemented is produced.
- 2.3.6. Like Hungary, Italy is currently defining the GAEC requirement on buffer strips to be applied starting from 2012. Possible criteria to be used for defining buffer strips are analysed through a test on run-off effects based on different data sets such as crops, slope, fields length, rainfall intensity, soil, fertilisers use, DTM, orthophotos etc. and supported by field experience<sup>6</sup>. First results of the test show that buffer strips of 1-10 m can abate run-off in flat areas while in steep areas 10-35m buffer strip seem to be necessary. For a study area (Chienti basin) it was also calculated how much land will be affected by a buffer strip requirement: 50% of it is agricultural area of which 70% appears already protected.

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<sup>5</sup> Presentation “Introduction of water protection buffer strips as a GAEC measure in Hungary, using GIS and remote sensing” by Bernadette Csonka (FOMI, HU), accessed at: <http://mars.jrc.ec.europa.eu/mars/News-Events/GAEC-workshop-2011/Agenda-and-presentations/Csonka-s-presentation>

<sup>6</sup> Presentation “Defining buffer strips in Italy: results of preliminary tests” by Livio Rossi, Paolo Tosi (AGEA SIN, IT), accessed at: <http://mars.jrc.ec.europa.eu/mars/News-Events/GAEC-workshop-2011/Agenda-and-presentations/Rossi-s-presentation>

## 2.4. The GAEC Web-Database

2.4.1. As it is foreseen by Article 140 of Council Regulation (EC) n° 73/2009, Member States have to communicate the measures taken to implement the GAEC under Article 6 of Regulation (EC) n° 73/2009.

2.4.2. Currently, the notification is based on a questionnaire to be sent to DG AGRI, providing all detailed information on the standard defined for implementing GAEC. On the basis of the summary of the GAEC described in the notifications, DG AGRI has carried out an examination of the requirements defined by the Member States<sup>7</sup>.

2.4.3. The main principles that have been taken into account for the evaluation are:

- the absence of standards: clearance of accounts and infringement
- non-Annex III (GAEC framework) standards: infringement
- vague or inconsistent standards:
  - (1) identify clearly non-compliant cases (subsidiarity, summary notifications)
  - (2) where appropriate, clearance of accounts and infringement examined the contents of the notifications sent in previous years.

2.4.4. The examination showed that 370 standards have been defined by Member States in 2009 and 415 in 2010; the cases of Missing of standards have decreased in the same period from 68 in 2009 to 58 in 2010 (which means from 18% to 14% of the total standards defined each year). Missing notion corresponds to either the absence of no definition for as standards, or a clearly non compliant definition with the standard.

2.4.5. Currently the requested notification is sent by Member States by electronic means to the DG AGRI mail box. This procedure generates transcription work as well as some kind of rigidity for using information. In parallel, a GAEC database has been developed by the MARS Unit of the Joint Research Centre. This tool contained the information sent by Member States and makes the information at EU level more easily accessible. Therefore, In order to improve the efficiency of the notification procedure and to have the full benefit of JRC database, it seems appropriate to use the JRC database as the single means for Article 140 notifications<sup>8</sup>.

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<sup>7</sup> Presentation “Current use of notifications by DG AGRI and its follow-up” by Emmanuel Petel (European Commission – DG AGRI D3), accessed at: <http://mars.jrc.ec.europa.eu/mars/News-Events/GAEC-workshop-2011/Agenda-and-presentations/Petel-s-presentation>

<sup>8</sup> Presentations “Possible future use of the GAEC database for notification to DG AGRI” by Aymeric Berling (European Commission – DG AGRI D3), accessed at: <http://mars.jrc.ec.europa.eu/mars/News-Events/GAEC-workshop-2011/Agenda-and-presentations/Berling-s-presentation> and “GAEC database user guide” by Vincenzo Angileri (European Commission – JRC), accessed at: <http://mars.jrc.ec.europa.eu/mars/News-Events/GAEC-workshop-2011/Agenda-and-presentations/Vincenzo-s-presentation-on-GAEC-database>



- 2.4.6. Before the workshop a discussion paper about the use of the JRC GAEC database for notification was sent to the delegates in order to prepare them to discuss this proposal during the workshop. The proposal discussed contained the elements explained below.
- 2.4.7. A limited number of persons are designated by the national administration for having an uploading access in order to introduce the notifications in the JRC database. The read-only access to the database will be open to national administrations (agriculture and possibly other administrations) and European institutions (European Commission, European Parliament, European Court of Auditors, other EU institutions or bodies). Only the information related to the summary of the national standards and the links to national legislation and information spread to farmers will be visible. The Commission reserves its right to communicate the information to other external organisations upon request. Some Member States have expressed the view that the access to the database shall not be public.
- 2.4.8. For the notification the following information will be communicated by the national administration as part of the Article 140 notification:
- Summary of the national standard for each of the EU standards;
  - References to the relevant national legislation;
  - Reference to the information provided to farmers.
- 2.4.9. The summary of the national standards will be introduced in national languages as well as in English. Only the summary of the national standard in native language is considered as the official notification pursuant to Article 140 of Council Regulation (EC) No 73/2009. As regards the reference to national legal provisions, the relevant texts including, where appropriate, the concerned provisions have to be indicated as well as the internet link to the texts concerned.
- 2.4.10. The annual notification will be introduced by the 31<sup>st</sup> January of the year for which the national standards are applied. This limit has been discussed during the workshop and an extension may be considered by the Commission in the final proposal.

## **2.5. Audit on cross compliance**

- 2.5.1. The scope of the cross compliance audits concerning GAEC refers to: the definition of the GAEC standards; the quality and the effectiveness of the on-the-spot checks and the evaluation and sanctioning of non-compliances<sup>9</sup>.
- 2.5.2. In preparation of the audit, the following sources of information are used: notifications done by the Member State (MS) (according to article 146 of Regulation (EC) No 1782/2003 and article 140 of Council Regulation (EC) No 73/2009) and the evaluation carried out by DG AGRI; statistics sent by the MS; previous audit reports. During the audit, the auditors review the control procedures, carry out interviews with the staff and take part in the on-the-spot-checks.

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<sup>9</sup> Presentation: "Overview of cross compliance audits regarding GAEC in EU MS" by Ingrid Garcia Reyes (European Commission, DG AGRI J3), accessed at: <http://mars.jrc.ec.europa.eu/mars/News-Events/GAEC-workshop-2011/Agenda-and-presentations/Garcia-Reyes-s-presentation>

2.5.3. In relation to the definition of the standards the main findings in the audit are the absence or non-compliance of the definition of the standard, a minimum requirement apparently not linked with the GAEC standard, standards not foreseen in the legislative GAEC framework. Other findings regard the weaknesses in the control procedures resulting in ineffective on the spot checks (e.g. lack of or unclear control manual for the inspectors, unclear or imprecise control points, concentration of GAEC controls in certain months of the year that are not always the appropriate ones). If remote sensing is used, it is controlled whether it allows an effective control on the different GAEC.

## **2.6. Controlling GAEC with remote sensing**

2.6.1. In the control methodology for GAEC, remote sensing (RS) data may be used for as a support for the selection of CC sample (risk analysis) or for on-the-spot checks, “where appropriate” cfr. Art. 52 (3) Comm. Reg. 1122/2009. Commission services ask that the control with RS can assure that the non-compliance will be effectively detected (e.g. detection capability of RS in comparison with traditional ground survey should be demonstrated).

2.6.2. Among 23 Member States that use RS for on the-spot checks on eligibility, 7 Member States and 5 Regions use RS also to perform on-the-spot checks for GAEC<sup>10</sup>. Two Member States use RS for GAEC checks only as a complementary tool. The percentage of GAEC controls that are carried out with RS in the different Member States vary from 100% to 25% of the total of GAEC checks (only for Cyprus is less than 25%). Generally Member States that use RS to control GAEC do it in all the “control zones” used for eligibility control (a “control zone” is a geographical area where the controls are carried out and defined on the basis of GIS analysis, taking into account the technical constraints, such as standard satellite 'scenes' and risk analysis). Italy is the Member State that controls the greatest number of GAEC standards with RS.

2.6.3. The importance of assessing the confidence of the results was stressed. This can be achieved with an analysis comparing RS and ground survey. This analysis (to be adapted to local situations) shall be aimed at identifying: no discrepancies (infringements identified with RS and ground survey), “false positive” (infringement detected with RS, but not confirmed after field check) and “false negative” (infringement not detected with RS, but existing and detected by field check). Only the latter are significant errors that reduce the level of confidence of the results obtained with RS and represent a risk for the European funds.

2.6.4. All Member States currently using RS intend to continue with it in the future, almost half of them intend also to extend the use of RS in controlling GAEC standards that currently are not checked with RS.

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<sup>10</sup> Presentation: “The use of RS to control GAEC” by Vincenzo Angileri (European Commission – JRC), accessed at: <http://mars.jrc.ec.europa.eu/mars/News-Events/GAEC-workshop-2011/Agenda-and-presentations/Angileri-s-presentation>

- 2.6.5. In Czech Republic four GAEC are controlled using RS<sup>11</sup>. The methodology implemented uses VHR, HR-1, HR+1 – (current year), aerial ortophotos (previous years) and CAPI (Computer Assisted Photo Interpretation).
- 2.6.6. The control of wide-row crops on areas with high risk of erosion is carried out through the identification of the crop (wide-row crops, rapeseed crops, cereals) on High Resolution (HR) and Very High Resolution (VHR) images and by overlapping areas with high risk of erosion.
- 2.6.7. Infringements for the burning of herbal residues are the results of findings of Rapid Field Visit (RFV), findings on VHR together with RFV. Large areas should also be found on HR and VHR, but there are very few findings in CZ.
- 2.6.8. For the control of non-removal of permanent landscape features, the identification of the permanent features is done in the database or in the ortophotos of previous years. Removed landscape features are founded on VHR images or with RFV in some cases.
- 2.6.9. Changes of grassland into arable land are detected through the identification of arable land on HR and VHR images and with RFV in some cases.
- 2.6.10. In France the standard on buffer strips is controlled with RS<sup>12</sup>. All farmers must establish a buffer strip 5 metre wide, composed of grass, shrubs or tree cover with no treatment or fertilization along watercourses. Watercourses subject to this standard are those drawn with a blue line on the latest official map (map drawn up by the French national institute) on a scale of 1:25.000 and those added at the local level, because of special interest to environmental protection (in the absence of added watercourses at the local level, those with a dotted blue line named on maps shall also be considered).
- 2.6.11. In the buffer strip bare soils are forbidden and the strip must be covered with grass, shrubs or trees or permanent wild vegetal cover.
- 2.6.12. The Computer Aided Photo-Interpretation (CAPI) for the control of buffer strips implies the following steps:
- Identification of watercourses: various types of references used (1:25.000 map, departmental decree);
  - Digitisation of watercourses on a scale of 1:25.000 National Geographic Institute and the VHR or aerial photograph;
  - Setting up automatic buffer 5m buffer-strip on each bank;
  - Qualification of the watercourses by the photo interpreter with two possibilities: “Bordered watercourse” or “Non-bordered watercourse”.

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<sup>11</sup> Presentation: by Jakub Veverka, State Agricultural Intervention Fund, CZ, accessed at: <http://mars.jrc.ec.europa.eu/mars/News-Events/GAEC-workshop-2011/Veverka-s-presentation>

<sup>12</sup> Presentation by Christian Lafforgue, Agence de services et de paiement, FR

- 2.6.13. A farm visit is systematically done. The minimum field inspection consists of verifying at least blocks with warnings or with elements to be confirmed after CAPI. Points to be checked are: no crop other than grass or fallow land in the buffer strip, no visual traces of fertilizer or pesticides in the buffer strip, no unauthorized cover.
- 2.6.14. In 2010, France carried out a study with the scope of knowing if CAPI alone could carry out the controls without farm inspection for GAEC on buffer strip. The results gave a confirmation of CAPI results in 91% cases, non-confirmation in 9%, of which: anomaly during CAPI and no anomaly in the field (false positive) accounted for 7% and anomaly in the field without anomaly during CAPI (false negative) accounted for 2%. Even if the results are very promising, France authorities want to be stricter during CAPI in future and for security they have performed systematic farm inspection in 2011.

### 3. Outcomes of the field visit

- 3.1.1. The field visit was aimed at observing concrete cases of GAEC standards for terraces and good vegetative condition of vineyards in Wachau and Krems (Lower Austria) and GAEC for irrigation and buffer strips in Weinviertel – Korneuburg (Lower Austria).
- 3.1.2. During the field visit it was possible to observe practical cases of the relationship between GAEC requirements established in the first pillar and agri-environmental commitments in the second pillar of the CAP in Austria (see table).

GAEC Standard	GAEC minimum requirement (AT)	Rural Development measure (AT)
Minimum soil cover	Green soil cover and cultivation of <ul style="list-style-type: none"> <li>• arable land and</li> <li>• areas destined for fruit-growing, wine-growing and hops</li> </ul> (in case these areas are not in use for agricultural production)	In vineyards green cover or cover by means of straw, grass, or bark mulch <ul style="list-style-type: none"> <li>• Permanent (long-term green cover)</li> <li>• Part-time (autumn-winter, spring-summer)</li> <li>• Rotation</li> <li>• Natural greening (controlled weed cover)</li> </ul> If slope $\leq 25\%$ : from 1/11 to 30/4 If slope $>25\%$ all year <i>Soil erosion has been reduced up to 85% in vineyards (37.000ha)</i>
Retain terraces	Retaining terraces	Reparation/reconstruction of stone walls Rural development Axis 3 + national measures <i>since 2002: more than 65.000 meters of stone walls and 84.000 m<sup>2</sup> of slopes recovered</i>
Maintenance of olive groves and vines in good vegetative condition	Vineyards must be kept in good vegetative condition, esp. through appropriate tending measures, such as pruning	

- 3.1.3. Discussions took place for terraces about what can be considered as bad maintenance and what can be seen as an improvement of the landscape done by farmers and therefore subject to agri-environmental payments. In order to give some hints to make decision in different cases, the concept of “passive” and

"active" maintenance could be taken into account, where in general only the latter should determine agri-environmental payments.

- 3.1.4. Another criterion is to consider landscape features in GAEC only if they are at risk due to farming activities.
- 3.1.5. For the future also the so-called "greening" component of direct payments shall be taken into account in the determination of the baseline for agri-environmental measures.
- 3.1.6. As regards the field visit for irrigation, the implementation of GAEC on authorisation water was examined on the spot. The farmer must have a permit for the abstraction of water for irrigation. Permit described the condition for water use (period, max abstraction...). A catchment equipment was showed. Some questions were raised on the metering means.

## **4. Conclusions**

- 4.1.1. After several years of GAEC implementation, the situation starts to be stable, meaning that all GAEC standards are implemented, at least from what concerns the definition of a minimum requirement for each standard by the Member States. Issues that are now becoming important in the debate on GAEC are their practical implementation and efficiency.
- 4.1.2. The field visit gave the possibility to concretely see some useful practical examples that:
  - allowed to discuss the different view of Member States for a same concern, but dependent on their specific farming practices and landscape situations;
  - made evidence of some difficulties in defining limits (river border..) or reference (landscape features to be maintained); the possible use of RS imagery and/or ancillary data can be useful in this case (INSPIRE will also impose to make environment related maps and data publically available);
  - showed the need of making all these information available to farmers.
- 4.1.3. The contents of GAEC for the CAP after 2013 were still under discussion as at the moment of the workshop the Commission proposal was not published yet. Some elements, already known, such as the "greening component" seem to raise the need of more efficient control of the farming practices that are linked to this component.
- 4.1.4. Discussion in the Commission for a better definition of GAEC may be linked with a system of coding. Anyway whatever the content, there is a need to work on their scientific justifications (i.e. why is the slope threshold fixed to 12% almost everywhere?).
- 4.1.5. An increasing demand to start working on GAEC efficiency was raised as well as the need to define indicators.

- 4.1.6. The use of remote sensing imagery proved to be efficient in the frame of many GAEC standards management (support to risk analysis, support to control), but still a better quantification of the results is required.
- 4.1.7. An agreement was reached on the use of the JRC GAEC database for official notification by MS to the Commission (Art. 140). However some Member States highlighted their contrariety in making the database publicly accessible and requested to consider as the official version of the notification only the one in native language. A formal and final discussion has been decided for the next cross compliance experts group meeting to be held in in Brussels in November.
- 4.1.8. Some basic rules were reminded and emphasized:
- GAEC is the baseline
  - AEM imply additional investment and work to improve the current situation
  - Landscape feature in GAEC only if considered at risk with farming activities.

## Annex 1- Workshop agenda

### Monday 3 rd October Afternoon; 13:00 – 18:00

11:00	<i>Registration</i>
12:00	<i>Welcome coffee</i>
13:00 – 13:20	<p><b>Welcome speeches</b></p> <ul style="list-style-type: none"> <li>- Edith Klauser (Director General for Agriculture and Nutrition – Ministry for Agriculture, Forestry, Environmental and Water management – Austrian ministry)</li> <li>- Philippe Loudjani (European Commission - JRC)</li> <li>- Aymeric Berling (European Commission – DG AGRI)</li> </ul>
13:20 – 13:30	<p><b>Introduction in the Workshop and Moderation (Contents and organisation)</b></p> <ul style="list-style-type: none"> <li>- Matthias Reeh (Austrian ministry - Division Meat, Livestock and Direct Payments)</li> </ul>
13:30 – 14:30	<p><b>Agriculture and GAEC in Austria</b></p> <ul style="list-style-type: none"> <li>- Leopold Kirner (Federal Institute for agricultural economy)</li> </ul> <p><i><u>Austrian Agriculture</u></i></p> <ul style="list-style-type: none"> <li>- Anna Zauner (Austrian ministry - Division CMO-Law and Product quality)</li> </ul> <p><i><u>GAEC in Austria</u></i></p> <ul style="list-style-type: none"> <li>- Robert Fenz (Austrian ministry – Division National Water Economy)</li> </ul> <p><i><u>Irrigation in Austria</u></i></p>
14:30 – 15:30	<p><b>Buffer strips</b></p> <ul style="list-style-type: none"> <li>- Robert Fenz (Austrian ministry – Division National Water Economy)</li> </ul> <p><i><u>Buffer strips in Austria</u></i></p> <ul style="list-style-type: none"> <li>- Bernadette Csonka (FOMI, HU)</li> </ul> <p><i><u>Introduction of water protection buffer strips as a GAEC measure in Hungary, using GIS and remote sensing</u></i></p> <ul style="list-style-type: none"> <li>- Livio Rossi. Paolo Tosi (AGEA SIN. IT)</li> </ul>

	<i>Defining buffer strips in Italy: results of preliminary tests</i>
15:30 – 16:00	<i>Coffee break</i>
16:00 – 17:20	<p><b>The GAEC Web-Database</b></p> <p>- Emmanuel Petel (European Commission – DG AGRI D3)</p> <p><i>Current use of notifications by DG AGRI and its follow-up</i></p> <p>- Aymeric Berling (European Commission – DG AGRI D3)</p> <p><i>Possible future use of the GAEC database for notification to DG AGRI</i></p> <p>- Vincenzo Angileri (European Commission – JRC)</p> <p><i>GAEC database user guide</i></p> <p>- Open discussion with MSs</p>
17:20 – 18:00	<p><b>Preparation for the field visit</b></p> <p>- Lukas Weber-Hajszan (Austrian ministry – Division AEM)</p> <p><i>Terraces in the second pillar</i></p> <p>- Christian Jaborek (Austrian ministry – Division Wine)</p> <p><i>Maintenance of vines in good vegetative condition and wine terraces in Austria</i></p>
18:00	<i>End of the first day</i>
19:00	<p><i>Dinner offered by the Austrian Ministry</i></p> <p><i>Hotel – “Schloss Wilhelminenberg“</i></p>

**Tuesday 4 th October Field visit; 08:00 – 21:30**

08:00	<p><i>Departure from the hotel</i></p> <p><i>2 buses</i></p>
10:00 –	<p><b>Lower Austria – Wachau - Krems</b></p> <p>- terraces. - vineyards. - good vegetative condition</p>



12:00	- GAEC control execution
12:30 – 14:00	<i>Lunch in a farm</i> <i>(Direct marketer)</i>
15:00 – 17:00	<b>Lower Austria – Weinviertel - Korneuburg</b> - irrigation, - equipments, - buffer strips
17:30	<b>Reception of Governor Lower Austria – Near Vienna</b> <i>Heuriger - typical Austrian wine tavern - serving the wine of this year + typical Austrian food)</i>
21:30	<i>Arrival in Vienna</i>

### Wednesday 5 th October Morning, 9:00 – 14:00

9:00 – 9:05	<b>Introduction and Moderation</b> - Philippe Loudjani (European Commission – JRC)
09:05 – 09:30	<b>Experiences from the field visit</b> - JRC - Ministry – Austria - Discussion
09:30 – 10:15	<b>Audits on Cross Compliance</b> - Ingrid Garcia Reyes (European Commission , DG AGRI J3) <a href="#"><i>Overview of cross compliance audits regarding GAEC in EU MS</i></a>
10:15 – 11:15	<b>Controlling GAEC with Remote sensing</b> - Vincenzo Angileri (European Commission – JRC) <a href="#"><i>The use of RS to control GAEC</i></a> - Experiences from MSs

	<p><a href="#">Jakub Veverka</a>, State Agricultural Intervention Fund, CZ</p> <p><a href="#">Christian Lafforgue</a>, Agence de services et de paiement, FR</p> <p><a href="#">Paolo Tosi</a>, SIN AGEA, IT</p>
11:15 – 11:45	<b>Coffee break</b>
11:45 – 12:45	<p><b>CAP 2020 – Greening, GAEC + AEM</b></p> <p>· Round table</p> <p>with Klaus-Dieter Borchardt (EC DG AGRI), Peter Anthoniesen (Danish ministry), Waldemar Guba (Polish ministry), Matthias Reeh (Austrian ministry)</p>
12:45 – 13:30	<p><b>Final speeches</b></p> <p>- JRC</p> <p>- Edith Klauser (Director General for Agriculture and Nutrition – BMLFUW)</p>
14:00	<i>Lunch</i>

**All presentations may be accessed on-line at:**

<http://mars.jrc.ec.europa.eu/mars/News-Events/GAEC-workshop-2011/Agenda-and-presentations>

## **Annex 2: List of participants**

<b>Nr.</b>	<b>First Name</b>	<b>Last Name</b>	<b>Organisation</b>	<b>Country</b>
1	Hannelore	Aigner**	Lebensministerium - III 7	Austria
2	Barbara	Dragschitz**	Lebensministerium - III 7	Austria
3	Mathias	Janko**	Lebensministerium - III 7	Austria
4	Hannes	Mayrhofer**	Lebensministerium - III 7	Austria
5	Matthias	Reeh	Lebensministerium - III 7	Austria
6	Erich	Ruetz**	Lebensministerium - III 7	Austria
7	Ernst	Semmelmeier**	Lebensministerium - III 7	Austria
8	Sabine	Steger **	Lebensministerium - III 7	Austria
9	Gabriela	Steindl **	Lebensministerium - III 7	Austria
10	Robert	Fenz	Lebensministerium - VII 1	Austria
11	Andrea	Idinger	Lebensministerium - I 7	Austria
12	Christian	Jaborek	Lebensministerium - III 8	Austria
13	Edith	Klauser	Lebensministerium - Sektion III	Austria
14	Wolfgang	Riecker	Lebensministerium - I 7	Austria
15	Paul	Schenker	Lebensministerium - VII 1	Austria
16	Lukas	Weber-Hajszan	Lebensministerium - II 8	Austria
17	Matthias	Wirth	Lebensministerium - II 7	Austria
18	Anna	Zauner	Lebensministerium - I 7	Austria
19	Leopold	Kirner	Bundesanstalt für Agrarwirtschaft (AWI)	Austria
20	Barbara	Erlacher	Agrarmarkt Austria	Austria
21	Adelheid	Feichtinger	Agrarmarkt Austria	Austria
22	Ruth	Fischereder	Agrarmarkt Austria	Austria
23	Günter	Griesmayr	Agrarmarkt Austria	Austria
24	Ferdinand	Neumayr	Agrarmarkt Austria	Austria
25	Maria	Rath	Agrarmarkt Austria	Austria
26	Manfred	Ratzinger	Agrarmarkt Austria	Austria
27	Eva	Roselieb	Agrarmarkt Austria	Austria
28	Simon	Fritz	Landesregierung Kärnten	Austria
29	Dieter	Petutschnig	Landesregierung Kärnten	Austria
30	Gottfried	Angerler	Landesregierung Niederösterreich	Austria

31	Johann	Klug	Landesregierung Steiermark	Austria
32	Andreas	Schlager	Landwirtschaftskammer Niederösterreich	Austria
33	August	Strasser	Landwirtschaftskammer Steiermark	Austria
34	Andrea	Zetter	Landwirtschaftskammer Österreichs - Wien	Austria
35	Franz	Regner	agroVITIS e.U.	Austria
36	Bettina	Scheiderbauer	Wiener Umweltschutz - MA 22	Austria
37	Jean-Pierre	GODFRIN	Service public de Wallonie - Office of controls	Belgium
38	HULIN	GUILLAUME	Service Public de Wallonie	Belgium
39	Nathalie	Perelmuter	SPW- DPEAI-DPA	Belgium
40	Kristof	Vanoost	Agency for Agriculture and Fisheries	Belgium
41	Hristo	Hristov	State fund agriculture	Bulgaria
42	Lyuba	Ilieva	Ministry of Agriculture and Food	Bulgaria
43	Sanja	Krnić	Ministry for Agriculture, Forestry and Water Manag	Croatia
44	Zvonimir	Novosel	PAAFRD	Croatia
45	Dino	Vujaklija	Paying agency for agriculture	Croatia
46	Ctibor	Becvar	SZIF	Czech Republic
47	Tomas	Havlicek	Ministry of Agriculture of the Czech Republic	Czech Republic
48	Jaroslav	Hudacek	Ministry of Agriculture of the Czech Republic	Czech Republic
49	Martin	Mistr	Ministry of Agriculture of the Czech Republic	Czech Republic
50	Veronika	Průšová	SZIF	Czech Republic
51	Jakub	Veverka	State Agricultural Intervention Fund	Czech Republic
52	Gabriela	Vitova	SZIF	Czech Republic
53	Karin	Kjaer	FoedevareErhverv	Denmark
54	Knud	Mortensen	Directorate for Food, Fisheries and Agribuisness	Denmark
55	Madli	Karjatse	Ministry of Agriculture of Estonia	Estonia
56	Diana	Laur	Ministry of Agriculture Republic of Estonia	Estonia
57	Ave	Tamman	Agricultural Register and Informatsion Board	Estonia
58	Veronika	Vallner-Kranich	Ministry of Agriculture , Republic of Estonia	Estonia
59	Vincenzo	Angileri	Joint Research Centre	European Commission
60	Aymeric	BERLING	European Commission	European Commission
61	Klaus-Dieter	Borchardt	European Commission	European Commission
62	Jeremie	Crespin	European Commission	European Commission

63	Ingrid	Garcia-Reyes Geist	European Commission	European Commission
64	Philippe	LOUDJANI	Joint Research Centre	European Commission
65	Emmanuel	Petel	European Commission	European Commission
66	Juliette	Vella	Joint Research Centre	European Commission
67	Riikka	KLEMOLA	Agency for Rural Affairs	Finland
68	Tiina	Koivula	Agency for Rural Affairs	Finland
69	Leila	Peltola	Ministry of Agriculture and Forestry	Finland
70	Nicolas	Cordier	Ministry of Agriculture	France
71	Christian	Lafforgue	Agence de services et de paiement	France
72	Alain	PETITJEAN	ASP	France
73	Clotilde	ROUILLON	Station Expérimentale Arvalis	France
74	Gerhard	Becker	BMELV	Germany
75	Cordt	Büker	EFTAS GmbH, Muenster, Germany	Germany
76	Claudia	Ebach	Bundesministerium für Ernährung, Landwirtschaft und	Germany
77	Josua	Leistner	STMELF (Paying Agency)	Germany
78	Harampalos	Panagopoulos	OPEKEPE	Greece
79	VASILIKI	TYLIGADI	MINISTRY OF RURAL DEVELOPMENT AND FOOD	Greece
80	KOCSIS	ATTILA	Institute of Geodesy, Cartography and RS	Hungary
81	Bernadett	Csonka	FÖMI	Hungary
82	László	István	Institute of Geod., Cart. and RS (FÖMI)	Hungary
83	Melinda	GULYÁS-JENCS	Paying Agency (MVH)	Hungary
84	Zsuzsanna	MÁCSÁNY	Paying Agency (MVH)	Hungary
85	Júlia	PAPP	Ministry of Rural Development	Hungary
86	Dóra	RABE	Paying Agency (MVH)	Hungary
87	András	SÁNDORFY	Ministry of Rural Development	Hungary
88	Ákos	SZERLETICS	Paying Agency (MVH)	Hungary
89	Melinda	TÉRMEG	Ministry of Rural Development	Hungary
90	Stefán	Guðmundsson	Icelandic Food and Veterinary Authority	Iceland
91	Gudmundur	Stefansson	Soil Conservation Service of Iceland	Iceland
92	Liam	Fahey	DAFF	Ireland
93	Al	Grogan	Dept of Agriculture	Ireland
94	Michael	Moloney	Department of Agriculture, Fisheries & Food	Ireland
95	Antonio	Frattarelli	Ministry of Agricultural Policies	Italy

96	Davide	Liberati	Ministry of agriculture food and forestry policies	Italy
97	Livio	Rossi	SIN srl	Italy
98	Francesco	Serafini	National Rural Network (ISMEA) - ITALIA	Italy
99	Paolo	Tosi	SIN Srl	Italy
100	Mantas	Martinkus	National paying agency	Lithuania
101	Asta	Petrauskaite	National Paying Agency	Lithuania
102	ENRIKA	RAIBYTE	National Paying Agency	Lithuania
103	Georges	Thewes	Service d'Economie rurale	Luxembourg
104	Kriss	Debono	Paying Agency	Malta
105	Marlies	Heerema	Ministry of Agriculture, Nature and Food Quality	Netherlands
106	Marga	Rademaker	Ministry of Agriculture, Paying Agency	Netherlands
107	Ewa	Chętnik	ARiMR	Poland
108	Waldemar	Guba	Ministry of Agriculture and Rural Development	Poland
109	Czapla	Joanna	Ministry of Agriculture and Rural Development	Poland
110	Katarzyna	Pawlikowska	Ministry of Agriculture and rural development	Poland
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112	Nicolae	Horumba	Romanian Paying Agency	Romania
113	Elena	Mierlea	APIA, PAYMENT DEP	Romania
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115	Tatiana	Čičová	Soil Science and Conservation Research Institute	Slovakia
116	Gabriela	Matecna	S+H Consulting Ltd.	Slovakia
117	Igor	Matecny	S+H Consulting Ltd.	Slovakia
118	Monika	Miskova	Soil Science and Conservation Research Institute	Slovakia
119	Vladimir	Doberšek	AAMRD	Slovenia
120	ANČKA	GABRIJEL	AAMRD	Slovenia
121	ANTON	JAGODIC	Chamber of agriculture and forestry	Slovenia
122	KATARINA	KERČ	AAMRD	Slovenia
123	Maša	Kerstein	AAMRD	Slovenia
124	PILAR	GARCIA ALGAR	FEGA (MAPA)	Spain
125	Jesús	López-Tapia	FEGA	Spain
126	Andreu	Taberner	Generalitat de Catalunya	Spain
127	Josep Maria	Virgili	Depart. d'Agricultura - Generalitat Catalunya	Spain

128	Christina	Larsson	Statens Jordbruksverk	Sweden
129	Britta	Lundström	Swedish Board of Agriculture	Sweden
130	David	Bussell	Welsh Assembly Government	United Kingdom
131	David	Gillespie	Agriculture Development Centre	United Kingdom
132	MICHAEL	PARKER	Scottish Government	United Kingdom
	**organisation			

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**Abstract**

JRC-IES action GeoCap, together with Federal Ministry of Agriculture, Forestry, Environment and Water Management of Austria organised the 2011 Good Agricultural and Environmental Condition (GAEC) workshop. The event was held in Vienna (AT) on 3-5 October 2011 and was attended by 132 delegates coming from 24 EU Member States, two candidates countries (Croatia and Iceland) and the European Commission (DG AGRI, DG ENV and JRC). Technical presentations and discussion focussed on buffer strips, the JRC GAEC database, control issues related to the use of remote sensing and relations between the first and second pillar of the Common Agricultural Policy.



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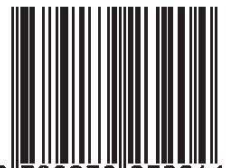
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