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Enhancing Resilience Of Urban Ecosystems through Green Infrastructure (EnRoute)

Inception report



2017

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1 Introduction

In 2015, the working group on Mapping and Assessment of Ecosystems and their Services (MAES) carried out a pilot study on urban ecosystems and their services, the “Urban Pilot”. This pilot was a collaboration between the European Commission, the European Environment Agency, the Portuguese Directorate-General for Territory, the Dutch Presidency of the EU and 10 cities in Europe. It delivered the 4th MAES report which provides a framework for the assessment of Urban Green Infrastructure (UGI), that cities in Europe can use to support their policies, assessment and monitoring of urban GI and the urban ecosystem.

Following the Urban Pilot, a two-year project has been developed under the title Enhancing Resilience Of Urban Ecosystems through Green Infrastructure: EnRoute. This project is funded via a grant of the European Parliament.

The project consists of three tasks:

1. Task 1: Operationalisation of the URBAN MAES-framework
2. Task 2: Science-policy interface on urban green infrastructure
3. Task 3: Networking and improving flows of knowledge and information

This inception report describes the overall goals of EnRoute and the activities that are foreseen in the Project. It also provides a detailed description of the way the three tasks will be executed, and how they will interact with each other (or: how they are linked to each other). The report also contains a rolling plan which will be regularly updated.

2 General objectives and products

EnRoute builds on the results of the MAES Urban Pilot. It aims to introduce the MAES approach into the local policy arena, connecting the governance levels horizontally and vertically, with a view to contribute to the further deployment of Green Infrastructure in cities and in urban contexts. The purposes of the project are:

1. to demonstrate the potential of the application of the URBAN-MAES framework on a multi scale progression, from the European wide to the local urban scale;
2. to analyse how science supports policy, considering the effective interactions between the research community and the local practitioners and stakeholders;
3. To enhance contacts between communities of practice at different scales in order to exchange experiences and knowledge on mapping, assessment and implementation of urban green infrastructure, urban biodiversity and urban ecosystem services, so as to support the further deployment of urban Green Infrastructure.

The contemplated outcomes are:

1. an accepted common framework for the spatially explicit multi-scale assessment of Urban Green Infrastructure (UGI) and Urban Ecosystem Services (UES);
2. an overview of policy opportunities and needs for connecting urban green infrastructure to the local policy arena;
3. a network of organizations involved in the further development and use of green infrastructure at various governance levels in the EU.

These outcomes will be achieved with participating cities and stakeholders through desk studies, case studies, surveys and workshops. The results of EnRoute will be presented in an interim report at the end of 2017, and in a final-report in November 2018. Besides, we foresee several meetings and events, including an event in the EP in December 2018 to present the overall outcomes of the project. We will strive for an optimal synergy between the different work lines, as described under paragraph 3, 4 and 5 and synthetized in Table 1.

Table 1: Expected events. * JRC in touch with the Maltese ESMERALDA¹ partner for local organization. ** Event on urban GI; possibly in combination with a second meeting on the urban partnership.

		EnRoute			ESMERALDA	EnRoute		
When		7-8 March 2017	May/June 2017	October/November 2017	January 2018	Spring 2018	April 2018	December 2018
Where		Rome (University La Sapienza-Italy)	Malta (Valletta)	Estonia (Tallin)	JRC	Italy (Trento)	Bulgaria	Belgium (Brussel)
EVENT		Kickoff meeting with the city experts	First technical workshop on UES assessment and urban GIUGI*	Technical meeting on UGI and UES in Multi sectoral and cross scale plans	Technical workshop with the city experts	ESMERALDA training activity on mapping urban ecosystem services	Science policy workshop Linked to the urban agenda	Presentation of results at European Parliament **
Sub tasks	Task 1	Overall aim of the task presented Detailed discussion on task 1.2						
	Task 2	Official start of the “narrow survey”	Official start of the “broad survey” Side event: workshop	Side event: workshop			Side event: workshop	
	Task 3				first meeting on the urban partnership			

¹ ESMERALDA (Enhancing ecoSystem sERVICES mApping for poLicy and Decision mAKing) (<http://esmeralda-project.eu/>)

3 Operationalization of the URBAN MAES-framework

This task aims at implementing the URBAN-MAES Framework to evaluate the structural and functional role of UGI, focusing in particular on:

- a. the contributions and effects of UGI on urban development (urban form, composition, structure and spatial configuration of cities)
- b. the relevance of UGI for the provision of urban ecosystem services;
- c. the biodiversity – ecosystem service relationship in urban area;
- d. the importance of a multi-scale approach.

This brings us to the following questions:

- a. Is the development of UGI possible in densely populated cities?
 - Regarding a possible role of UGI in urban policy and planning, is it better to densify or to sprawl?
 - Can densification and UGI be well combined?
- b. How does UGI contribute to the EU's biodiversity goals?
- c. Can we derive an overall pattern of UES among the European urban areas?
- d. From the methodological and operational point of view: does the URBAN-MAES framework work? Does it function (operate?) as a practical instrument for a consistent multi-scale assessment?

The assessment will be organised within an across scale logic and with different levels of engagement of stakeholders. Two sub-lines of activities will be developed; one at pan European scale: the “*EU-wide assessment*” and one at local scale: the “*Local level assessment: “city labs”*”. Figure 1 presents the rationale of the approach and Figure 2 shows the case studies.

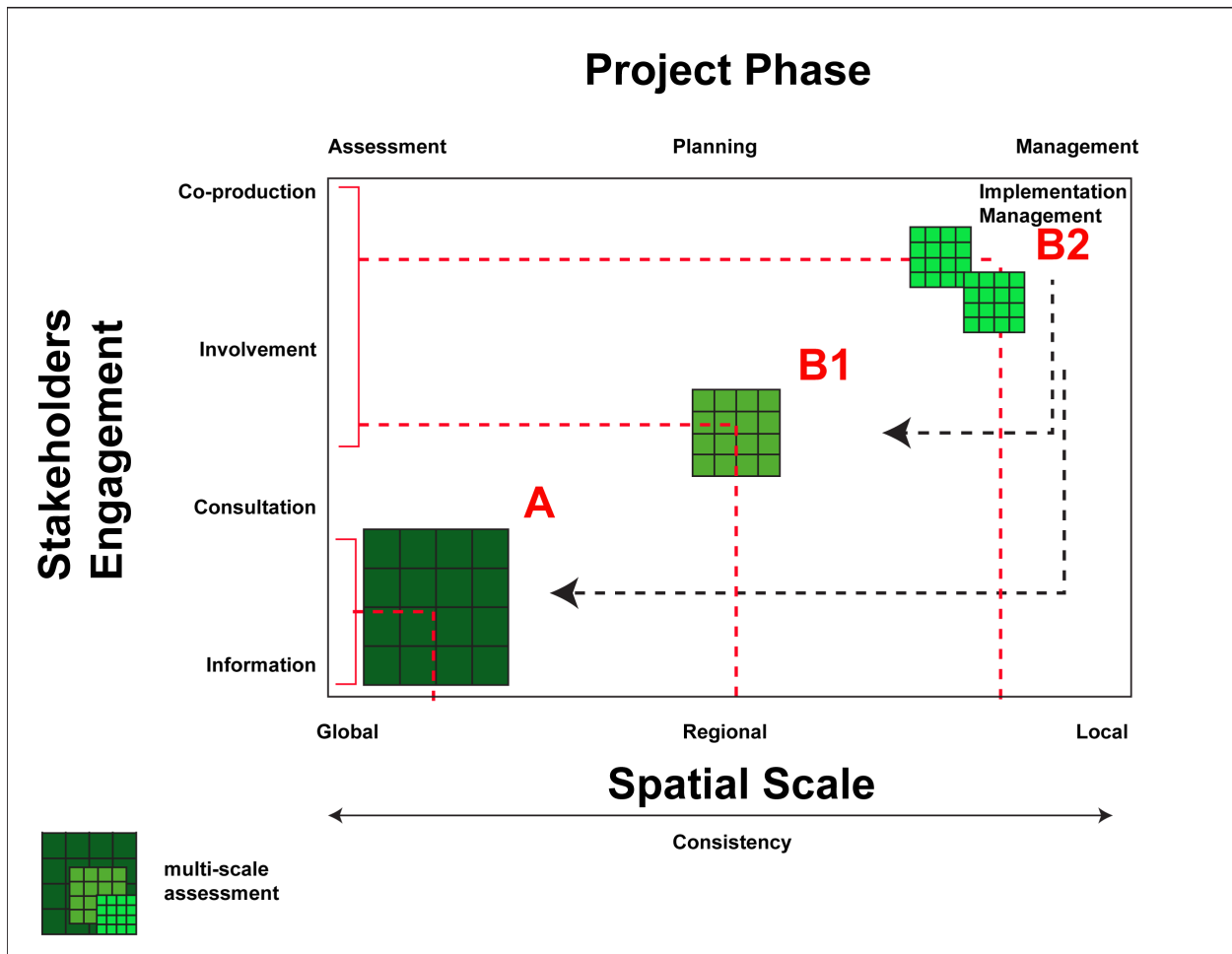


Figure 1: Schema of the cross scale logic of the project. The schema is derived and modified from Cowling et al. 2008 and Schleyer et al. 2015 . A: represents the EU-wide assessment, with a lower involvement of stakeholders. This task will provide a consistent comparison of cities across different regions, and will inform multi sectoral actions and policies. B1 and B2 represent the city labs, where the level of engagement of stakeholders is higher. This task will focus on local details maintaining coherence with the global assessment.

As a first step the overall goals and the key policy questions will be discussed with client DG (ENV) and other interested DGs (REGIO and RTD). This consultation will take place in Brussels in mid-February.

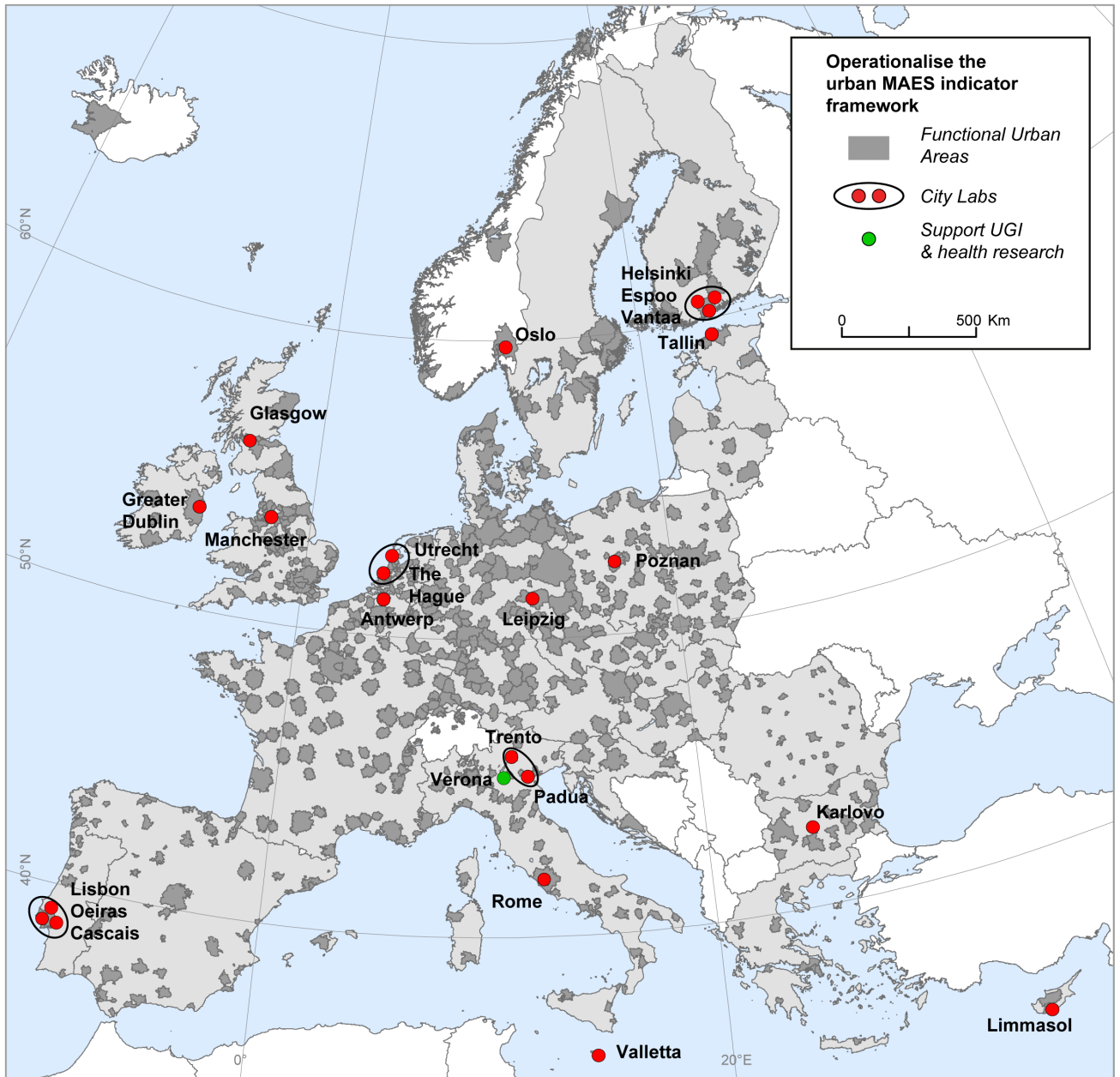


Figure 2: Case studies of task 1.

3.1 EU-wide assessment

The aim of this phase is to provide a consistent and comprehensive analysis of UGI and of the relevant UES in Europe.

The analysis will be carried out for the ~700 Functional Urban Areas (FUA) in Europe². OECD, in collaboration with the European Commission (Eurostat and DG REGIO) has developed a harmonised definition of urban areas as “*functional economic units*”, thus overcoming previous limitations linked to administrative boundaries. According to this harmonised definition of urban areas, Europe is characterised by a polycentric network of FUAs, reflecting the diversity and density of the European urban system, embracing cities and urban areas of different size and with complementary functions. This polycentric network of urban areas allows for the development of a consistent comparison of cities across different regions, addressing the relationship between multiple UES as well as how they are affected by shared drivers and management decisions.

A part of the indicator framework proposed in the 4th MAES report will be applied:

- to measure the conditions of urban ecosystems (see table 4 in the 4th MAES report): using
 - pressure indicators (urban sprawl, air pollution)
 - state indicators (relate to grey/built infrastructures and green infrastructures)
- to measure the relevant Urban ES in terms of capacity and demand (see tables 21-22-23 in the 4th MAES report)
 - regulating services: air quality regulation, noise reduction, local climate regulation, coastal protection, flood protection, insect pollination
 - cultural services: nature-based recreation opportunities; nature – based educational opportunities
- to analyse the structure and the functional role of the Nature 2000 network within FUA in support of the EU Biodiversity Strategy to 2020.

Models, indicators derived from the URBAN-MAES framework and Tools³ developed by the JRC will be applied, using different publicly available data and data sources (e.g. COPERNICUS DATA).

The results will provide an overall picture across the European urban network with the aim to inform multi sectoral actions and policies (e.g. BD strategy and Regional policy).

² http://www.espon.eu/main/Menu_Publications/Menu_Posters/Functional-Urban-Areas.html

³ GUIDO's ToolBox <http://forest.jrc.ec.europa.eu/download/software/guidos/>

3.2 Local level assessments: “city labs”.

The EU-wide assessment will be complemented by a more detailed analysis of a set of case studies or “*city labs*”, where the URBAN-MAES framework will be implemented using local data and involving in the process the local stakeholders and focusing on specific issues.

The local assessment will be based on 17 city labs that will work with 22 cities. The choice of the case studies was based on the cities that have been involved in the urban pilot, and on some cities that have already shown interest in EnRoute mainly through the MAES working group.

Hereto a letter of invitation was sent to the initial group, together with a description of EnRoute. The letter explained the objectives of the project, the workload expected by the cities, and the expectations they may have of the project organization.

If the first call for participation does not result in the desired number of cities an extra call will be launched. This list of cities involved in this second round will be based on personal contacts, contacts obtained via the MAES working group and contacts obtained via the working group on Green Infrastructure. A general call for participation is not foreseen except from a call for collaboration to the MAES working group.

For each city, the assessment will be carried out by a team: the “*city lab*”. Each team will consist of at least a civil servant from the city and/or a research officer capable of handling spatial data using GIS. Each city lab must obtain a commitment of the city administration. An invitational letter was sent by the end of November 2016. By January 2017 19 cities responded positively and 10 official expressions of interest were received. Although this is already a substantial group, a few extra cities could be added. Table 2 shows the state of the art at the 31st of January 2017, Figure 2 recaps the case studies of Task 1 (1.2 : EU-wide assessment and 1.2: city labs).

Table 2: List of cities invited in the first round. Each city lab is composed by a delegate of the municipality and a researcher.

City Lab			Official commitments received
Municipality	Delegate from	Research Institute	
Antwerp (Belgium)	Europese subsidies – energie en milieu	VITO	Not yet
Helsinki, Espoo, Vantaa (Finland)		SYKE	Not yet
Limassol (Cyprus)		Neapolis University of Pafos	YES
Lisbon, Oeiras and Cascais (Portugal)			YES
Oslo (Norway)	Agency of Urban Environment Oslo, Norway.	NINA	YES
Trento (Italy)		University of Trento	YES
Padova (Italy)	“Area lavori pubblici” Municipality of Padova		YES
Poznan (Poland)	Urban Regeneration Office, Municipality of Potznan	Mickiewicz University, Potznan	YES
Karlovo (Bulgaria)	Municipality of Karlovo	Bulgarian Academy of Sciences, Sofia	
Tallinn (Lithuania)	Tallinn Environment Department	Stockholm Environment Institute Tallinn Centre (SEI Tallinn)	YES
Rome (Italy)	II Municipio, Rome	University La Sapienza	YES
The Hague (Netherlands)		Alterra	Not yet
Utrecht (Netherlands)			Not yet
Valetta (Malta)	Planning Authority Valletta	Institute of Applied Sciences, MCAST, Malta	Not yet
Verona (Italy)		University of Verona	YES
Leipzig (Germany)	To be decided	Helmholtz-Zentrum für Umweltforschung GmbH - UFZ Department Stadt- und Umweltsoziologie	YES
Dublin (Ireland)	To be decided	Department of Arts, Heritage, Regional, Rural and Gaeltacht Affairs (Ireland)	Not yet
Glasgow	Clyde Valley Green Network Partnership (Scotland UK)	Glasgow Caledonian University	Not yet
Manchester (UK)	Programme Director Manchester Climate Change Agency		Not yet

Once the cities are selected, the city teams will be brought together for the project kick-off meeting. The aims of this meeting are to firstly have the cities involved in the project since its start, and to discuss and accept the project goals, its planning and overall structure. This is also the first moment that they meet with their fellow cities. Secondly, during the meeting, the teams will draft a work plan for their individual process. Each team will choose a key topic: e.g.

Urban Ecosystems condition; UGI and biodiversity or relevant ecosystem services that play a key role in the local context. Model, methods and indicators to be implemented will be selected from the URBAN- MAES framework.

Verona (Italy) represents a special case. In Verona a research group from the Department of Neurosciences, Biomedicine and Movement Sciences, Section of Psychiatry has been involved to focus on the relationship between public health and ecosystem services.

The kick-off meeting will take place in Rome on 7 and 8 March 2017.

We will bring the cities together on a regular basis during the project. We expect to involve them in meetings in May 2017, October/November 2017, and January 2018, and finally in April/May 2018. The purpose of these meetings is to report on progress, to exchange experiences and results.

The meeting in January 2018 will have the purpose to enable cities to finalize their individual reports by March 2018.

4 Science-policy interface (SPI)

In the MAES Urban Pilot it was recognized that:

1. the assessment of urban green infrastructure could play a positive role in engaging UGI to fulfil different societal goals;
2. there was a positive correlation between policies on UGI at different policy-levels;
3. the positive relationship between UGI and societal benefits is not always clear to local policy makers.

The SPI task is meant to further research these topics, in order:

- to better understand how urban policy on GI at different governance levels is mutually reinforcing;
- to examine the potential of urban GI as a catalyst for engagement in increasing urban resilience in a number of contexts (within communities and organizations) in different urban socio-economic, climatic and cultural settings through an online-survey, workshops and trainings;
- to explore/examine how science is used in policy/planning and how, potentially, it could inform policy/planning in operational terms.

This brings us to the following questions:

- a. How can MAES-related research play a role from a multi-scale point of view?
- b. What is the added value of an UGI-policy at a higher policy level (regional, national, EU) in addition to the local level (city, municipality)?
- c. What do local policy makers need from higher policy-levels?
- d. How can science help policy?

These questions will be answered by means of two surveys amongst policy officers and stakeholders, complemented by workshops organized during the events mentioned under section 4.2.

After this phase, further elaborating on the survey of the Urban Pilot, we will develop two surveys; a **broad survey** with Close-Ended or multiple-choice questions, and a **narrow-survey** with open-ended questions.

The “**broad survey**” will focus on the degree the UGI and the UES framework are integrated in the planning system from a local-regional-national perspective.

This survey is meant to be completed by a large number of civil servants at various policy levels, from national to the local scale. For this reason, it must be translated into the native language of the civil servants. This also means that the answers should be easily transferred to the results, preferably without the need for further translation. Hence, the closed character of the survey, using Close-Ended, multiple-choice or lickert scale based questions. This wide survey

will start after the first network meeting that is planned in May/June, together with the meeting on the assessments.

The **narrow survey** will collect information on whether science is used to support policy and planning (the mainstreaming of the ES concept into policy and planning); and, if yes, what are needs of the policy arena from the science community. These are complex issues that cannot be addressed by closed-answer questions. These are also questions that will probably be best answered during the full length of the project, with cities and scientists that are already involved in or connected to the network. The open and qualitative character of the questions and answers make it difficult and costly to translate them. This survey will thus be in English. It will start directly after the first meeting with the cities in March 2017 and will run through March 2018.

4.1 Training, workshops demonstrating and disseminating

Next to gaining information through the surveys the SPI will also demonstrate to policymakers how models and data may be used to work on local policy goals such as health or climate mitigation. This will be done by means of workshops and demonstrations at various events. Several future training workshops are planned (new contract on MAES/GI from DG ENV, and ESMERALDA workshop on urban ecosystems in 2018). The project will list these workshops and see how best to collaborate with them to avoid overlap and to make best use of resources. In any case, through the JRC, the project can provide technical assistance or co-organise these trainings (similar set up to the TRAIN contract). Furthermore, side events will be organised at a number of meetings that are organised within EnRoute.

Table 1 contains the planned events and workshops (an agenda of events will be regularly updated during the project).

Dissemination of knowledge and experiences will be done by organizing events and participation in events that are not primarily organized by EnRoute. This will be further described under paragraph 5.

Nowadays other initiatives related to the Science-policy interface are active across different policy scales. For example, the UNCCD has a SPI with the aim to better link the scientific work to the policy arena. To efficiently make use of the ideas and experiences of these SPI's we consider doing a structured internet research with regard to the goals, the instruments and the experiences of these SPI's. This will result in a brief report with –if possible- recommendations for the SPI of EnRoute.

5 Networking and improving flows of knowledge and information

The 19 cities involved in task 1.2 (Operationalization of the URBAN-MAES-framework) will co-produce a local assessment with the aim of testing the MAES framework. Beside this activity, we will enhance contacts between communities of practice at local, regional and national level in order to exchange experiences and knowledge on mapping, assessment, valuation and implementation of urban green infrastructure, urban biodiversity and urban ecosystem services.

On the 31st of May, the city of Utrecht hosted the EU conference on Evidence based policy making for sustainable cities. The conference has showed that nature-based solutions and green urban infrastructure offer a rich potential to support urban regions in addressing a variety of environmental, social and economic challenges and to become attractive, healthy and thriving cities. This goes well beyond environmental policy, implying that environmental issues must be integrated into social, economic and other policies, and vice versa.

Such an integrated approach sets high requirements for coordination between departments of governments at various levels, as well as coordination among the Commission, national, regional and local governments and other stakeholders. The Urban Agenda for the EU offers possibilities for improving coordination and creating a network.

The conference in Utrecht demonstrated the interest of cities to be involved in a partnership under the Urban Agenda. To bring this interest into an actual partnership we will –strive to organise events in line with the development of the EU urban agenda and with the specific priorities of the EU Presidencies in 2017 and 2018 (in agreement with DG ENV). This means that at the events that will be organised in close cooperation with the respective Presidencies (Malta, Lithuania, Bulgaria) we will organize specific events to finally establish an Urban Agenda partnership, possibly formalised by declaration. To organize this we will:

- Gain oversight of the requirements for establishing a partnership ('LOR', list of requirements (January 2017))
- Analyse the current developments of the Urban Agenda to gain insight in the existing partnerships, their possible relations with the theme of EnRoute, and hence the niche for a partnership regarding urban green infrastructure
- Work where applicable and possible together with the organisation of the Urban Agenda to organize the process towards a partnership (continuously)
- Create a network of cities to be involved (specifically with regard to the EU Partnership).

Next to the developments regarding the Urban Agenda it is sensible to discuss the desirability of active communication and the opportunities for the improvement of the information and knowledge flows (eventually via a network).

Active communication may be of good use to disseminate the experiences and knowledge of EnRoute, but also as a means of enhancing the legitimacy of EnRoute, GIIR and MAES Working Group. To take maximum advantage of these opportunities it is wise to think of a key-

message, and a communication agenda. These can be formulated in a short communication plan. A simple communication plan will be established before the first meeting with the involved cities. This plan will be discussed with the cities, to make optimal use of their experiences and network. One of the elements of such a plan will be the development of a folder (including a logo) to inform interested individuals and organisations, as well as to get them interested in EnRoute. Such a folder will be developed in an earlier stage than the communication plan (January 2017) as it is highly needed to communicate EnRoute in a clear way.

Active communication may also help involving interested organisations and individuals into the network. There is a lot of knowledge available on the way to develop a network. There is a range of 'instruments' to be applied in building and maintaining networks. They all require their own quality and intensity of efforts. For example the question whether one wants to use social media (linked-in, twitter, facebook), a specific website, active communication through general or content-specific media, etc.. The desirability of working towards such a network will also be discussed in the communication plan.

Finally, DG RTD launched a number of projects on nature based solutions (NBS) in cities. Clearly the concept overlaps with green infrastructure so it is useful to be informed about ongoing activities in these projects. A first meeting organised by RTD and EASME was held on 9 December 2016. Useful to know is the list of cities where NBS will be implemented (Table 3)

Table 3: H2020 cluster with NBS projects (projects approved at the end of 2016)

PROJECT	Front Runner Cities	Follower Cities
UNALAB	Tampere/FI	Stavanger (NO)
	Eindhoven/NL	Prague (CZ)
	Genova/IT	Castellon (ES)
		Cannes (FR)
		Norderstedt (DE)
		Basaksehir (TK)
		Hong Kong (company/univ)
		Buenos Aires (company)
		Guangzhou/China (Observer)
	Network of Brazilian Intelligent Cities (Observer)	
CONNECTING	Genk (BE)	A Coruna
	Glasgow (UK)	Bologna (IT)
	Poznan (PL)	Burgas (BG)
		Derry (UK)
		Ioannina (GR)
		Nicosia (CY)
		Malaga (ES)
		Sarajevo (BA)
		Solred (DK)
	Thessaloniki (GR)	
URBAN Green UP	Valladolid (ES)	Mantova (IT)
	Liverpool (UK)	Ludwigsburg (DE)
	Izmir (Turkey)	Rovaniemi (FI)
		Chengdu (China)
		Binh Dinh (Vietnam)
	Medellin (Colombia)	
GROW GREEN	Manchester (UK)	Lille (FR)
	Valencia (Spain)	Zadar (HR)
	Wroclaw (Poland)	Modena (IT)
	Wuhan (China)	
Nature4Cities http://cordis.europa.eu/project/rcn/206413_en.html	TEST SITES: Milano (IT), Alcala de Henares (ES), Ankara (TR) and Szeged (HU)	
NATURVATION	12 case-study cities	
	6 URIP cities: Barcelona (ES), Győr (HU), Leipzig (DE), Newcastle (UK), Malmo (SE), Utrecht (NL),	
	+ 6 further case study cities TBD	

	6 international comparator cities in Belmont Forum countries: Cape Town (South Africa), Melbourne (Australia), Tianjin (China), Sao Paulo (Brazil), Winnipeg (Canada)
NAIAD	DEMOS: Medina del Campo Groundwater Body (ES), Nice metropolitan area (FR), Bievres-Liers-Valloire rural area (FR), Thames estuary (rural and urban) (UK), Rotterdam (NL), Copenhagen (DK), Lodz (PL), Glinscica catchment-border of Lubljiana municipality (SI), Lowe Danube (RO)

Other interesting projects are *ThinkNature*⁴ and EKLIPSE⁵. The first (one of the funded projects by DG RTD) will develop a multi-stakeholder dialogue platform and a “*think tank*” to promote innovation with Nature Based Solutions. The second (a H2020 project on an EU mechanism for a SPI on biodiversity) aims to develop a “*self-sustaining mechanism*” for supporting better environmental decisions. We should liaise with these two projects whenever possible.

⁴ http://cordis.europa.eu/project/rcn/206223_en.html

⁵ http://www.eklipse-mechanism.eu/about_eklipse

6 General management & organization

The project will be led by a small project team comprising Joachim Maes and Grazia Zulian (JRC), and Martijn Thijssen (ORG-ID, The Netherlands). They will be working as a team, but each with specific responsibilities. Joachim Maes will be overall responsible for the project management. Grazia Zulian will be first contact for the testing and the implementation of the MAES-framework, and Martijn Thijssen will be first contact for the networking and information flows and the Science-Policy Interface. The project team will work in close cooperation with the individual cities. The cities themselves are responsible for the execution of the local assessments in concert with the local organization and –where applicable- the implementation of the results into local policies. The client is Julie Raynal of DG ENV of the European Commission. She will approve the results, and be responsible for the exchange with DG ENV, DG REGIO, DG CLIMA and DG RTD of the Commission, as well and with the communication towards the European Parliament.

The MAES working group and the working group on GI and Restoration established under the Common Implementation Framework of the EU Biodiversity Strategy to 2020 will function as advisory boards. To enable this, the project will report progress on a regular basis, either in person at the meeting of the working groups or by mail in case there is a specific item that cannot wait for the next meeting.

The project will seek for synergies with research programs such as ESMERALDA, OPPLA and possibly the projects mentioned in Table 3. There are also clear relations with the urban agenda. These relations will be taken care of by the project team. These relationships are summarised in the diagram presented in Figure 3.

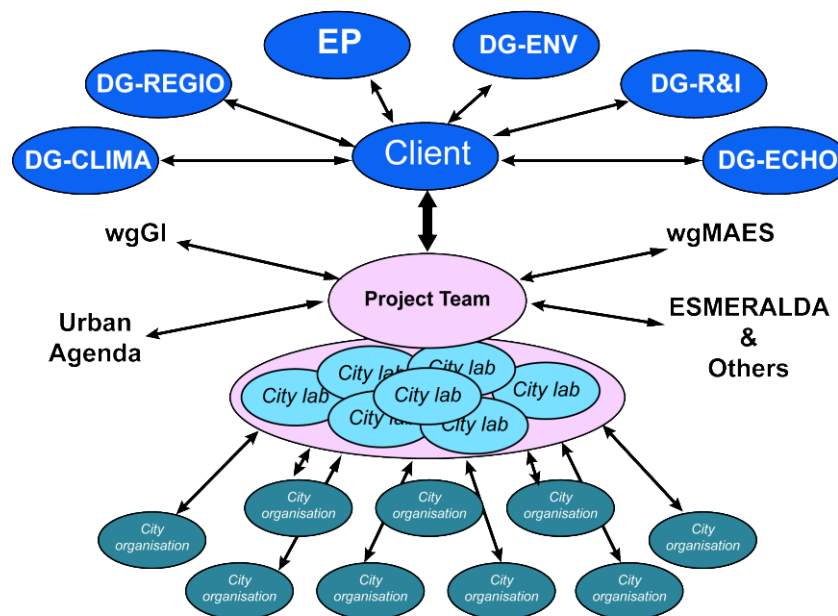


Figure 3: relationships within the project.

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Annex: Rolling plan (to be updated regularly).

Date	Project management	Communication (Project Team)	Workshops and meetings	Assessments	Science policy interface	Networking
Responsible	Joachim Maes	Project team and Julie Raynal	Joachim Maes	Grazia Zulian	Martijn Thijssen	Martijn Thijssen
01/12/2016	Start of the project					
31/12/2016				Invitations sent to the cities		
January 2017	Inception report ready	Discussion on communication (website, folder)		Announcement of the Kick-off meeting	Open Internet research on initiatives related to the Science-policy interface	
10/01/2017	Meeting with Malta representative to organise the Malta event					
30/01/2017	Inception report meeting					
28/02/2017		Proposal for a folder ready	Announcement of the Malta meeting			
07-8/03/2017			Kick off meeting with the city experts in Rome		Structure of the narrow survey ready (project team)	
March 2017	Preparing contracts for the experts				Open narrow survey	Draft proposal for networking (Options)
16/ March /2017	First update presentation ready		MAES working group meeting			
May/July 2017			Malta workshop (13 and 14 June)		Discussio on broad survey	
13/ September /2017	Second update presentation ready		MAES working group meeting			
September 2017					Open broad survey	
Q3 2017			Tallinn event (likely with NBS event)	Draft European assessment ready		
February 2018					Close broad survey	
					Close the narrow survey	
Q1 2018			Technical workshop with the results of the city assessments	European assessment ready; City assessments ready		
Q2 2018			Event in Bulgaria			
	Final report					
Q4 2018			Event in the EP			

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Working in close cooperation with policy Directorates-General, the JRC addresses key societal challenges while stimulating innovation through developing new methods, tools and standards, and sharing its know-how with the Member States, the scientific community and international partners.

*Serving society
Stimulating innovation
Supporting legislation*

