CALL FOR TENDERS BY OPEN PROCEDURE
N° 2012.CE.16.BAT.066
IN VIEW OF AWARDING A CONTRACT

TENDER SPECIFICATIONS

1. TITLE OF THE CONTRACT


2. CONTEXT AND OBJECTIVE OF THE CONTRACT

2.1. Introduction to GMES services

Environmental information is of crucial importance. It helps to understand how our planet and its climate are changing, the role played by human activities in these changes and how these will influence our daily lives. The well-being and security of future generations are more than ever dependent on everyone's actions and on the decisions being made today on environmental policies. To take the right actions, decision makers, businesses and citizens must be provided with reliable and up-to-date information on how our planet and its climate are changing. As a vast majority of the population lives in an urban environment, the need for information on urban zones, being a specific kind of hotspots on the earth’s surface, continues to gain in importance,

The European Earth monitoring program GMES (Global Monitoring for Environment and Security) provides this information. Users will be provided with information through services dedicated to a systematic monitoring and forecasting of the state of the Earth's subsystems. Six thematic areas are developed: marine, land, atmosphere, emergency, security and climate change.

The Land monitoring service of the Global Monitoring of Environment and Security (GMES) led by DG ENTR\(^1\) of the European Commission, has entered its Initial Operation (GIO) phase following the entry into application of Regulation (EU) n°911/2010 of 22 September 2010 of the European Parliament and the Council on the European Earth monitoring programme (GMES) and its initial operations (2011 to 2013).

The initial operations (2011-2013) of the Land Monitoring service focus on the priority for multi-purpose information common to a large community of users, i.e. land cover/land cover change at various scale and periodicity, bio-geophysical variables for dynamic land monitoring, improved access to reference data. On this basis, four components have been identified for the Land service in GIO: (i) a pan-European Land Cover component, (ii) a Global component producing biophysical variables at global scale (iii) a 'Local' component providing very high resolution information on specific areas of interest and (iv) access to a

\(^1\) Directorate General Enterprise and Industry
reference data component building on INSPIRE architecture and useful for several GMES services.

The **local component** of the Land monitoring service started with the production of a European Urban Atlas, with reference year 2006+/-1, and was based on very high resolution ortho-rectified satellite imagery. This service yielded 305 urban land cover/use datasets, spread over the EU27, and addressing the Larger Urban Zones (LUZ) as defined in the Urban Audit. The Urban Atlas provides the first European wide urban land cover/use database that allows for comparison of over 300 larger urban zones on a harmonised single land cover/use nomenclature. As such, it contributes to a sound information basis to underpin European regional policies at large.

Europe's cities are its centres of economic activity, innovation and employment, yet they face a number of challenges. The trend to sub-urbanisation, the concentration of deprivation and unemployment in urban neighbourhoods, increasing congestion – complex problems such as these require integrated answers in transport, housing, and training and employment schemes, which must be tailored to local needs. European regional and cohesion policies address these challenges, and are able to use the Urban Atlas information to underpin, support and evaluate these policies.

### 2.2. Urban Atlas

The Urban Atlas is part of the implementation of the Global Monitoring of Environment and Security (GMES) service. Its first version was financed with the support of 1 M€ from the European Regional Development Fund (ERDF) and became gradually available from 2010 onwards, via the EEA data service.

Due to economies of scale, a mapping cost of EUR +/-2.45 per km² could be obtained, which yielded a manifold reduction of costs compared to other mapping methodologies. The Urban Atlas maps provide a pan-European classification of city zones, allowing for comparable information on density of residential areas, commercial and industrial zones, extent of green areas, exposure to flood risks and monitoring of urban sprawl which is important for public transport planning in suburban areas.

The first edition of the Urban Atlas covered all EU capitals and a large sample of large and medium-sized cities participating in the European Urban Audit, basically all cities with over 100,000 inhabitants. The Urban Atlas is meant to complement the statistical information from the Urban Audit exercise with a geospatial component.

Right from the outset with the Urban Atlas 2006, it has been planned to produce regular updates, in this case towards the reference year 2012 in order to build a time series, which will enable long term monitoring of the evolution of major urban agglomerations in Europe.

Following the experiences with the first Urban Atlas, minor improvements to the nomenclature are being proposed for the UA2012 exercise.

An extension of the number of LUZs is included in the UA2012 exercise, in order to cover all European LUZs costs and available budget permitting.

This call for tender is a combined project of DG Regional Policy (DG REGIO) and the European Environment Agency (EEA).
3. **SUBJECT OF THE CONTRACT**

The contract is a service contract for the delivery of an update of the Urban Atlas 2006 land use/cover maps of major European urban agglomerations towards the reference year 2012. The work consists of the serial production of land-use/cover change and update maps of larger urban zones (LUZ) as defined in the Urban Atlas 2006, and extended with a list of additional LUZ, provided as provided in annex 1. The work shall be based on the Urban Atlas 2006 datasets and the Very High Resolution (VHR) satellite images of the reference year 2012+1 that are made available by the EC through the ESA GMES data warehouse (DWH). The output of the work shall be under the form of GIS compatible vector maps of the urban agglomerations above.

The contract comprises a distinct set of tasks to be executed by the contractor in order to provide the full Urban Atlas 2012 service. The tasks are listed individually in this section. However, for reasons of production efficiency, the contractor is free to propose an approach in which 2 or more tasks are executed simultaneously.

The tasks shall be performed by applying a mixture automatic classification routines and visual interpretation. Automatic classifications, such as segmentation, clustering, etc... may be applied whenever appropriate.

Compliance with the specifications from the Mapping Guide for a European Urban Atlas v.2 (annex 2), complemented with the nomenclature changes as proposed in annex 3 and with the specifications of this call for tender, is obligatory. The latter overrule the exceptional differences as compared to the mapping guide (e.g. accuracy).

All output data from the tasks below have to be delivered in a GIS compatible vector format. All vector datasets should be provided in ESRI file geodatabase or personal geodatabase format, or as ESRI shapefile. All geographic vector data must be referenced in the spatial reference system ETRS89 – Lambert Azimuthal Equal Area (LAEA) (EPSG code 3035 - ESRI ETRS_1989_LAEA.


The service provider shall apply an internal accuracy assessment on the information products yielded from the individual subtasks. The service provider shall describe in detail his validation procedure as integral part of the offer, and shall make available all material used in the actual assessment process to EEA.

Statistical cross validation will be used by EEA to determine the accuracy of results from the sections below, with an independent assessment (subject to a separate contract). Accuracy assessment will be performed using Very High Resolution (VHR) data (e.g. aerial photography, LUCAS\(^2\) data, other satellite data, thematic maps, etc.) within a stratified sampling design based on the different land cover/use classes and their occurrences.

Any extension of the contract is in particular conditional on satisfactory validation results.

\(^2\) The Land Use/Cover Area frame Survey, managed and operated by DG Eurostat.
3.1. Description of the revised Urban Atlas 2006

The service provider shall produce a version of the Urban Atlas 2006 in which following types of changes are introduced:

- Replacement of the actual LUZ delineation with the updated version of the LUZ boundaries file. Following the application of the new boundary file, the areas situated in the difference between both delineations, and inside the 2012 delineations will be interpreted according to the Urban Atlas mapping guide, and taking into account the minor nomenclature changes as listed in annex 3.
- The changes in nomenclature as listed in annex 3 will be applied for all urban classes on the Urban Atlas 2006 data. i.e. the changes related to cemeteries, military airports and burnt areas.
- Too complex road-network polygons shall be split into GI-technical manageable units.

Remark: No re-analysis of the rural nomenclature changes, as proposed in annex 3 is requested for this task.

3.2. Description of Urban Atlas 2006-2012 change detection

The service provider shall produce a change layer using the VHR ortho rectified satellite imagery 2006 and 2012 in an image-to-image change detection process, and from which changes as compared to the Urban Atlas 2006 have to be mapped.

Change detection will apply a Minimum Mapping Unit (MMU) of 0.25 ha for urban classes and 1 ha for rural classes.

3.3. Description of the Urban Atlas 2012 update

The service provider shall provide updated land cover/use datasets, towards the reference year 2012. The Urban Atlas 2012 shall be produced by combining the new Urban Atlas 2006 datasets (cfr. 3.1) with the Urban Atlas 2006-2012 change datasets (3.2).

For the execution of the service, the service provider shall apply the rules defined in the version 2 of the Urban Atlas mapping guide, but extended with the changes in nomenclature as indicated in annex 8. This includes urban nomenclature changes.

Nomenclature changes on the rural classes shall be considered optional (cfr. annex 8, rural classes, Optional UA 2012 rural and (semi-)natural classes)

Furthermore, the service provider shall ensure that too complex road-network polygons be split into GI-technical manageable units, preferably as close as possible to the split applied on the revised UA2006.

Automated buffering of road axes in secondary roads shall be reduced to delimitations that better correspond with reality (as compared to the UA2006), and to the extent that this is feasible without becoming a major cost driver. The service provider shall include a detailed description of his approach, including examples, and taking into account the diversity of road classifications over the EU27, into his offer.
3.4. **The overall accuracy shall be >=85% for the urban classes (classes 1.x.y), and >=80% for the rural classes (classes 2 – 5) (cfr. annex 3). Positional pixel accuracy shall be < 5m.**

Description of the Urban Atlas 2012 extension to new LUZs

The service provider shall produce the Urban Atlas 2012 dataset for a series of new LUZs, as listed in annex 1. The production of the Urban Atlas 2012 for those LUZs shall be based on the VHR 2012 satellite images, using the Urban Atlas mapping guide (v2) methodology and nomenclature. However, the changes in nomenclature as mentioned in annex 3, on urban classes, shall be taken into account and prevail on the mapping guide nomenclature.

Nomenclature changes on the rural classes shall be considered optional.

Furthermore, the service provider shall ensure that too complex road-network polygons be split into GI-technical manageable units.

Automated buffering of road axes in secondary roads shall be reduced to delimitations that better correspond with reality (as compared to the UA2006), and to the extent that this is feasible without becoming a major cost driver. The service provider shall include a detailed description of his approach, including examples, and taking into account the diversity of road classifications over the EU27, into his offer.

The overall accuracy shall be >=85% for the urban classes (1.x.y), and >=80% for the rural classes (2 – 5) (cfr. annex 3). Positional pixel accuracy shall be < 5m.

3.5. **Feedback through linking with expertise from regional and local authorities**

The service provider shall contact regional and/or local authorities in view of complementing in-situ ancillary information, needed to perform the tasks. Whenever doing so, the contractor shall encourage regional and local experts to consult the Urban Atlas 2006 data available on EEA’s Eye on Earth platform, in view of getting feedback on potential misinterpretations in the UA2006 data.

To that purpose, EEA includes the full UA2006 dataset into its Eye on Earth platform, and will provide similar functionality as is available for bathing water quality and air quality themes: i.e. the possibility for the addressed professional stakeholders in regional and local authorities to provide localised feedback on potential remnant misinterpretations in the UA2006 dataset. Feedback will be limited to the location of zones of misinterpretation, and an indication of the correct LC/LU class, using a predefined pop-up list comprising the classes of the Urban Atlas nomenclature.

EEA will inform in due time its Eionet stakeholders, i.e. the National Focal Points (NFP) and the National Reference Centres Land Cover (NRC-LC) on the objectives, execution status and feedback possibilities to the project.

The contractor shall keep track of his contacts with these authorities on the UA2006 data in a separate report, comprising in annex a list of established contacts. The report shall contain a comprehensive overview of most commonly encountered remarks, as well as suggestions for further improvements of the Urban Atlas time series.
4. **INPUT DATA**

4.1. **Satellite input data and use conditions**

The work shall be produced on the basis of the satellite imagery that will be made available through the ESA GMES satellite image Data Warehouse (DWH).

In summary, the work shall be produced on the basis of the following Very High Resolution (VHR) multi-spectral satellite data, acquired primarily in the reference year 2012 (+/-1 year), under the title “DWH_MG2b_CORE_03 – Optical VHR2 coverage over EU 2011-2013” in the ESA GMES DWH:

- SPOT-5: VNIR, ortho-rectified using the LAEA-ETRS89 projection, 2,5 m pansharpened
- Formosat-2: VNIR, ortho-rectified using the LAEA-ETRS89 projection, 2 m pansharpened.

The service provider shall verify the quality of the images in terms of geometric precision, max. cloud coverage of 5%, and absence of haze.

To a limited extent, the service provider can also use VHR imagery as available in the DWH under the additional datasets, i.e. the CORE_11 and CORE_12 type of data. The use of these data should however be strictly limited to situations in which the CORE_03 data prove to be cumbersome for classification/interpretation, e.g. due to cloud cover or other technical reasons that oblige and justify a multi-sensor approach. As an indication: >85% of the Urban Atlas 2006 coverage could be produced with a single sensor image input.

The Very High Resolution (VHR) images will be geometrically corrected towards the European Lambert Azimuthal Equal Area projection, based on the European Terrestrial Reference System 1989, and with a geo-locational accuracy of < 5m RMSE.

The availability of the VHR images is made on a per country basis in the DWH. At the end of 2012, a complete coverage of the EU27 is expected to be in the DWH. However, if gaps are still detected at the end of the 2012 acquisition window, supplementary acquisitions may continue in 2013 in order to fully complete the required coverage. Note as well that other backup missions may be addressed to ensure gap filling. This may affect the LUZ delivery plan, and should therefore be taken into account when drafting this plan.

ESA provides the ortho-rectified images to the service provider along with a detailed products description (scenes size, algorithms used, format description, etc.) through its GMES Data Warehouse. Full specifications of the data that are available as basis input data for this project and can be found in the following document:

“GMES Space Component Data Access Portfolio: Data Warehouse 2011-2014”, available at the following URL:

http://gmesdata.esa.int/web/gsc/dap_document

Attention is drawn to the fact that minor updates of the document may become available on the above mentioned URL, and shall be taken as guiding reference for the input data throughout the project.
The service provider shall comply with the general licensing conditions (established in the frame of this Data Warehouse) for the use of the data, prior to delivery. These conditions are available in the following document:

“Multiple-User and -Usage Sub-licence for EO Data from the GSCDA, Terms & Conditions”,

available at the following URL:

http://gmesdata.esa.int/web/gsc/terms_and_conditions

Additionally, access to the 2006 and 2009 satellite imagery, for change analysis purposes, are made available.

The use of the data by the service provider shall be limited to the GMES Initial Operations Land Monitoring service contract and these data shall be returned to EEA or ESA upon completion of the work.

4.2. Supporting GMES datasets

In first instance, and as the main reference for the work to be carried out, EEA will grant the service provider with access to the Urban Atlas 2006 original vector data, including INSPIRE compliant metadata, as well as PDF files of the complete LUZ and PDF files of a selected downtown area within each LUZ. Delivery reports are available as well, comprising accuracy assessment information of this first UA exercise.

For the production of the Urban Atlas, it is essential to have the imperviousness datasets available as a supporting dataset from which to derive densities of urban fabric.

For that purpose, EEA provides 2 imperviousness datasets:

- Imperviousness 2009 data, which has been produced in the framework of the Geoland2 project, and which is made available by the FP7 project consortium for any other GMES service production. However, these data shall not be used for any other commercial purpose outside the context of this contract.
- Imperviousness 2012 data, which is produced in the framework of the GMES Initial Operations 2012 High Resolution Layers of the pan-European component of the land services. However, by the start of this contract, only partial coverage of this dataset will be available (estimated at 30% of the EEA39 coverage; depending on the on-going production rhythm of the GIO land pan-European component).

As a consequence, the Urban Atlas 2012 shall be produced with imperviousness 2012 data wherever available, to be complemented with imperviousness 2009 data for the remaining areas.

EEA will grant the service provider access to all available series of imperviousness data, i.e. the reprocessed 2006 series, the 2009 and 2012 versions.

The service provider shall respect the general licensing conditions, in line with the GMES data & information policy, and associated with the use of these data.
4.3. In-situ ancillary data

In-situ data as defined by GMES comprise all non-space-borne data with a geographic dimension. Access to existing in-situ data is subject to Art 9.2 of the GMES Initial Operations Regulation.

In-situ data in the context of this open call for tenders will be needed mainly for 3 purposes:

1. To support the classification/interpretation of the VHR satellite data, including the detection of transport networks.
2. To support the distinction between land cover and land use categories;
3. To provide ground truth data for the validation process.

The service providers are fully responsible for getting access to (and procuring when appropriate) the necessary ancillary data. However, the Commission strongly encourages service providers to investigate with the local authorities in the EU countries in order to explore to which extent access to regional and local in-situ data can be provided for this open call for tender.

At European level, EEA will provide access to the following datasets:

- The Corine Land Cover datasets with reference year 2006 (36 countries)
- The Larger Urban Zones 2006 and 2012

All EEA datasets will be accessible through its data-service at following URL:


Furthermore, the service provider can use on-line available datasets, such as:

- Google Earth/Map, provided that these are based on sufficiently recent imagery to be of use in the production process.
- COTS navigation datasets
- Local city maps

Access to such datasets is under the full responsibility of the service provider.

4.4. Geographic coverage

The products to be delivered are covering LUZs in all EU27 member countries, and do cover the following specific schema:

- Revised UA2006 (new LUZs boundaries and nomenclature update): all LUZs covered by the UA2006 service.
- UA2006-2012 change layer: all LUZs covered by the UA2006 service.
- UA2012 update: all LUZs covered by the UA2006 service.
- UA2012 extension: the list of new LUZs to be mapped as mentioned in annex 9. The extension mainly includes following areas:
  - The LUZs of Croatia, expected to join the EU mid 2013;

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The major cities of the EFTA countries Norway, Switzerland and Iceland; European cities above a 50,000 inhabitants threshold.

The area covered by the UA2006 service is approximately, 585,000 km². The area covered by the UA2012 extension is estimated at approximately 430,000 km².

The indicative delineation of all LUZs is available at: https://circabc.europa.eu/sd/d/3c02201a-02d4-4df4-8c69-f36b96fe4736/LUZ%202011.zip

The exact delineation of all LUZs is provided as an ancillary dataset for the production of the UA2012, and will be made available via the EEA ftp service. Please note that a limited number of LUZs may still change in early 2013.

**Remark:** improvements have been made as compared to the LUZ delineation dataset used for UA2006 (and originating from the Urban Audit), in order to correct geometry issues, mainly in water surfaces (e.g. port areas), comprising a LUZ boundary line. Furthermore, a limited number of LUZs have been slightly extended in surface as well. The service provider shall use the improved LUZ delineation dataset as reference for the LUZ area to be covered.

5. **REPORTS AND DOCUMENTS**

The service provider shall provide following reports and documents as part of the overall tasks described in this contract:

5.1. **Management plan**

The project management plan shall be the controlling document for the project, permitting to define, organize and monitor all the activities. The project management plan shall provide a feasible and effective breakdown of the activities and shall include the following items:

- Description of methodology;
- QA/QC methodology and procedures;
- Staffing Plan and Key Personnel;
- Interfaces with the EEA and other parties involved;
- Tasks breakdown and content with deliverables and delivery milestones (production planning);
- Facilities and Resources;
- Project schedule and reporting;
- Risk analysis and mitigation measures.

5.2. **LUZ Delivery plan**

The service provider shall provide for each subset of the service, i.e. the UA2012 update, the UA2006-2012 change layer, the UA2012 extension to new LUZs, a “LUZ delivery plan” to be agreed upon by the service provider, the EEA and DG REGIO. This plan shall provide the schedule of provision per country and per year. The order of delivery shall take into account:

- The availability of VHR 2012 image data;
- The availability of imperviousness 2012 data.
To the extent feasible, as much as possible UA2012 data shall be using imperviousness 2012 data, which is therefore a guiding element in the establishment of the LUZ delivery plan.

Deliveries of LUZ data will be organised on a monthly basis, using the online file exchange facilities provided by EEA.

5.3. LUZ Delivery reports

A LUZ delivery report (which should be a concise and short document), shall be delivered along with each land cover/use dataset and shall provide, at least, the following information:

- Source data with reference date used for the production;
- Methods applied and problems encountered in processing and classification;
- Output format description;
- Meta-information corresponding to INSPIRE and international metadata standards;
- Estimated accuracy of the data.

LUZ delivery reports shall be provided alongside with the delivery of the datasets themselves.

5.4. Overall Urban Atlas delivery report

The Overall Urban Atlas delivery report shall be a compilation of all UA2012 datasets and LUZ delivery reports. It shall be built gradually by generating a version every 6 months, which is subject to EEA approval. The version of the report to be delivered 6 months after the beginning of the period shall include at least 40% of the LUZs to be mapped over the period. The final version shall be delivered at latest 2 weeks after the last LUZ delivery.

5.5. Urban Atlas 2012 final report

The final report shall contain:

- A critical assessment of the method applied and recommendations for improvement for future updates as well as the evolution of the Urban Atlas as a whole;
- Statistics to document the accuracy of the results;
- Feedback obtained from local users or partners;
- Recommendations as to interesting downstream products and services

The final report shall be presented at the final project meeting.

The consolidated version of the final report shall be delivered at latest 2 months after the last LUZ delivery.

6. Deliverables, Meetings and Reports linked to payments

The table below describes the required minimum level of deliverables to be provided for the tasks described in section 6:
## 6.1. Deliverables

<table>
<thead>
<tr>
<th>DELIVERABLES – Year 1</th>
<th>PAYMENTS</th>
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<tr>
<td><strong>Task No</strong></td>
<td><strong>Deliverables</strong></td>
</tr>
<tr>
<td>All tasks (cfr. 5.1)</td>
<td>Deliverable 1 Draft management plan</td>
</tr>
<tr>
<td>All tasks (cfr. 5.2)</td>
<td>Deliverable 2 LUZ delivery plan</td>
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<tr>
<td>All tasks (cfr. 5.3)</td>
<td>Deliverable 3 Draft LUZ delivery report template</td>
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<td>All tasks (cfr. 5.1)</td>
<td><strong>Deliverable 4</strong> Final project management plan</td>
</tr>
<tr>
<td>Task 3.1</td>
<td>Deliverable 5 305 revised Urban Atlas 2006 datasets</td>
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<tr>
<td>Task 3.2</td>
<td>Deliverable 6 305 Urban Atlas 2006-2012 change detection layers</td>
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<tr>
<td>Task 3.3</td>
<td>Deliverable 7 305 Urban Atlas 2012 update datasets</td>
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<tr>
<td>Task 3.4</td>
<td>Deliverable 8 393 Urban Atlas 2012 extension to new LUZs</td>
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<tr>
<td>All tasks (cfr. 5.3)</td>
<td>Deliverable 9 LUZ delivery reports</td>
</tr>
<tr>
<td>All tasks (cfr. 5.5)</td>
<td><strong>Deliverable 10</strong> Draft Urban Atlas 2012 Final report</td>
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<td>All tasks (cfr. 5.4)</td>
<td>Deliverable 11 Overall Urban Atlas delivery report</td>
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<tr>
<td>Task 3.5</td>
<td>Deliverable 12 Feedback report (collected from Regional &amp; local authorities)</td>
</tr>
<tr>
<td>All tasks (cfr. 5.5)</td>
<td><strong>Deliverable 13</strong> Urban Atlas 2012 Final report + presentation</td>
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In case of renewal

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<tr>
<th>DELIVERABLES – Year 2 (idem Year 3)</th>
<th>PAYMENTS</th>
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<tbody>
<tr>
<td><strong>Task No</strong></td>
<td><strong>Deliverables</strong></td>
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<tr>
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<td>Deliverable 1 Draft updated management plan year 2</td>
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<tr>
<td>All tasks (cfr. 5.2)</td>
<td>Deliverable 2 LUZ delivery plan</td>
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<tr>
<td>All tasks (cfr 5.1)</td>
<td>Deliverable 3 Final updated project management plan</td>
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<tr>
<td>Task 3.1</td>
<td>Deliverable 4 305 revised Urban Atlas 2006 datasets (continued)</td>
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<tr>
<td>Deliverable 8 LUZ delivery reports</td>
<td>Starting 3 months after contract signature and until the last LUZ delivery</td>
</tr>
<tr>
<td>All tasks (cfr. 5.3)</td>
<td>Deliverable 9 Draft Urban Atlas 2012 Final report</td>
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<td>Deliverable 10 Overall Urban Atlas delivery report</td>
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## 6.2. Meetings

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<th>Estimated date</th>
<th>Comments</th>
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</tr>
<tr>
<td>All tasks</td>
<td>Midterm progress meeting</td>
<td>Halfway the contract execution period</td>
<td>To be held at the EEA or via video conference</td>
</tr>
<tr>
<td>All tasks</td>
<td>Final project meeting</td>
<td>Within 1 month after the last LUZ delivery</td>
<td>To be held at EEA premises in Copenhagen</td>
</tr>
<tr>
<td>All tasks</td>
<td>Ad hoc presentations (min. 2, max. 4)</td>
<td>During the contract execution period</td>
<td>On specific request by DG REGIO or EEA.</td>
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In case of renewal

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6.3. Acceptance conditions

Specific acceptance conditions for reports
All reports will be submitted in English.

Each report will be examined by the Commission, which may ask for additional information or propose changes in order to redirect the work if necessary. Reports must be approved by the Commission. The Commission shall have 30 days from receipt to approve or reject a report, and the Contractor shall have 30 days in which to submit additional information or a new report. Requests for payment are admissible if the report and the previous deliverables (datasets) have been approved by the Commission.

Specific acceptance conditions for datasets

- After delivery of each (intermediate) product to DG REGIO and the EEA, the data will undergo an acceptance check. Whenever possible, this will be done with support from EIONET under supervision of the EEA. This acceptance check will be based on standard ISO criteria for geospatial data quality as reported on the EEA Data Service.
- The acceptance process is composed of two stages:
  1. Check-up of completeness, logical consistency, geometric accuracy and metadata of the data;
  2. Check-up of the thematic accuracy based on randomly selected samples within each country covered.
- DG REGIO shall have 2 months from receipt to check and accept or reject the data and the service provider(s) shall have 1 month in which to submit additional information or a new set of data.

7. Duration

The duration of the tasks will not exceed 15 months starting from signature of the contract and can be renewed twice, each for the period of 12 months.

8. Place of performance

The place of performance will be the Contractor's premises (apart from the meetings that will be based in the Commission's premises in Brussels and at the EEA in Copenhagen (see section 6.2). The service provider shall have videoconferencing tools to organise virtual meetings requested on short notice or of a short duration.

Intermediate and final products shall be delivered at EEA’s premises in Copenhagen, Kongens Nytorv No 6, 1050 Copenhagen K, Denmark. Digital products will be uploaded to the servers of the EEA, according to specifications to be agreed upon during the kick-off meeting.

9. Participation in the tendering procedure

The competition is open to all natural and legal persons coming within the scope of the Treaties and any natural or legal person from a third country which has concluded with the
Communities a specific agreement in the area of public procurement, under the conditions laid down in that agreement.

The Multilateral Agreement on Government Procurement (GPA) concluded within the WTO applies and the contract is open to nationals of States that have ratified this Agreement, under the conditions provided for therein. The GPA does not cover all contracts awarded by the Institutions of the EC. Appendix I to the GPA sets out which contracts are covered. The full text of the GPA and its appendices can be found on:

http://www.wto.org/english/tratop_e/gproc_e/gp_gpa_e.htm

As a rule subcontracting is allowed. Consortia of economic operators are authorised to tender.

10. DOCUMENTATION PROVIDED FOR TENDERERS

N.A.

11. MEETING/INFORMATION SESSION

N.A.

12. VARIANTS

In case access to the 2006 and 2009 satellite imagery (section 4.1), crucial for the execution of

- Production of the revised UA2006 datasets;
- Production of UA2006-2012 change layers;

appears unavailable, the contracting authority may decide to suspend or reduce the contract.

13. VOLUME OF CONTRACT

The maximum total volume for the contract is EUR 550 000 (lump sum, including fees, travel expenses and other costs), with the possibility of two extensions, each for a period of 12 months. The total value of the contract is estimated at EUR 1 600 000 over a maximum of 39 months.

14. PRICE

The attention of the tenderer is drawn to the following points in relation to the price:

- Prices must be quoted per task as described under section 3 above. The minimum production steps for which a breakdown of the price per task must be quoted are:
Production of the revised UA2006 datasets;

− Production of UA2006-2012 change layers;

− Production of UA2012 updates;

− Production of UA2012 extension to new LUZs;

− Prices per km² for each of the tasks shall be given as well, thereby distinguishing between the 0,25 ha MMU in the core urban areas and the 1ha in the rural urban fringes.

− Prices shall be given for the adaptation to the extended rural nomenclature in urban fringe areas and for the detection of street trees for the production of the UA2012 updates, as well as for the UA2012 extension to new LUZs. Here as well, prices per km² will be given separately.

− Prices must be fixed amounts inclusive of all costs and expressed in euros, even for countries outside the euro zone. For tenderers from such countries, the prices may not be subsequently revised to reflect movements in the exchange rate. The choice of which exchange rate to use lies with the tendering party, who accepts both the risks and opportunities of any fluctuations in this rate.

− The tender must include a separate estimate of travel and subsistence expenses. This estimate must be based on the standard Commission rules. It includes possible travel necessary to meet Commission staff and represents, at all events, the maximum amount of travel and subsistence expenses payable for all services under the contract. These expenses are part of the price and will not be reimbursed separately.

− Under Articles 3 and 4 of the Protocol on Privileges and Immunities of the European Communities, the Community is exempt from any duties, taxes or charges, including VAT, and these should not, therefore, be taken into account when calculating the price quoted. Nevertheless, the VAT amount must be indicated separately.

− All costs incurred for the preparation of the tender are at the tenderer’s expense and will not be reimbursed.

15. TERMS OF PAYMENT

The Contractor shall submit requests for all payment, expressed in euros, to the Commission.

Payments under the contract shall be made as follows:

a) A first interim payment equal to 30% of the total amount within 30 days of the date on which a valid request for payment is registered following approval by the Commission of the final project management plan (Deliverable 4).

b) A second interim payment equal to 40% of the total amount within 30 days of the date on which a valid request for payment is registererd following approval of the Draft
c) Payment of the balance equal to 30% of the total amount within 30 days of the date on which a valid request for payment is registered following the approval of the Urban Atlas 2012 Final report (Deliverable 13 – Deliverable 12 in case of renewal) by the Commission, approval of the previous deliverables and presentation of the final report.

16. CONTRACTUAL CONDITIONS AND GUARANTEES

For contractual conditions, see the contractual conditions in the attached draft contract.

17. EXCLUSION CRITERIA

A. Exclusion from participation in the procedure:

Tenderers are excluded from participating in a procedure if

a. they are bankrupt or being wound up, are having their affairs administered by the courts, have entered into an arrangement with creditors, have suspended business activities, are the subject of proceedings concerning those matters, or are in any analogous situation arising from a similar procedure provided for in national legislation or regulations;

b. they have been convicted of an offence concerning professional conduct by a judgment which has the force of res judicata;

c. they have been guilty of grave professional misconduct proven by any means which the contracting authorities can justify;

d. they have not fulfilled their obligations relating to the payment of social security contributions or the payment of taxes in accordance with the legal provisions of the country in which they are established, or with those of the country of the contracting authority or those of the country where the contract is to be carried out;

e. they have been the subject of a judgement which has the force of res judicata for fraud, corruption, involvement in a criminal organisation or any other illegal activity detrimental to the Communities’ financial interests;

f. they have, following another procurement procedure or grant award procedure financed by the Community budget, been declared to be in serious breach of contract for failure to comply with their contractual obligations.

Evidence:

1) Tenderers shall provide a declaration on their honour, duly signed and dated, stating that they are not in one of the situations described above (annex III to Tender Specifications).

2) The tenderer to whom the contract is to be awarded shall provide, within 10 days preceding the signature of the contract, the evidence referred to in the following paragraph, confirming the declaration referred to in the previous paragraph.

3) The contracting authority will accept, as satisfactory evidence that the tenderer to whom the contract is to be awarded is not in one of the situations described in points
A) a) b) or e), a extract from the judicial record or, failing that, an equivalent document issued by a judicial or administrative authority in the country of origin or provenance, showing that those requirements are satisfied.

The contracting authority will accept, as satisfactory evidence that the tenderer is not in one of the situations described in point A d), a certificate issued by the competent authority of the Member State concerned.

Where no such document or certificate is issued by the country concerned and for other cases of exclusion referred to in cases c) and f) above, it may be replaced by a sworn or, failing that, a solemn statement made by the interested party before a judicial or administrative authority, a notary or a qualified professional body in his or her country of origin or provenance.

These documents or certificates must be valid on the closing date for receipt of tenders, and in any case, they must have been delivered less than 12 months before this closing date.

Depending on the national legislation of the country in which the tenderer is established, the documents referred to in points 1 and 3 above must relate to legal persons and natural persons including, where considered necessary by the contracting authority, company directors or any person with powers of representation, decision-making or control in relation to the tenderer.

B. Exclusion from award of the contract:

No contract will be awarded to tenderers who, at the time when contracts are being awarded under this procedure:

a) have a conflict of interest. The Commission must ensure that the tenderer does not, at the time of submitting a tender, have any conflict of interest in connection with this call for tenders, a conflict of interest possibly arising in particular as a result of economic interests, political or national affinities, family or emotional ties, or any other relevant connection or shared interest. The Commission reserves the right to assess whether a conflict of interest exists.

To that end tenderers are asked to state whether their payroll, staff or shareholders include:

- any former European officials, contract staff, temporary staff or auxiliary staff who have worked for the European Communities in the last three years preceding this call for tenders;
- any European officials on leave;
- any former agents on secondment within the European institutions having worked to the European Communities during three years preceding this call for tender;
- any former trainees who have completed a placement at the EC during the year preceding this call for tenders.

Tenderers are also asked to declare:

- that they have not made and will not make any offer of any type whatsoever from which an advantage can be derived under the contract;
- that they have not granted and will not grant, have not sought and will not seek, have not attempted and will not attempt to obtain, and have not accepted and will not accept, any advantage, financial or in kind, to or from any party whatsoever,
constituting an illegal practice or involving corruption, either directly or indirectly, as an incentive or reward relating to the award of the contract;

- that they will inform the contracting authority, without delay, of any situation constituting a conflict of interest or which could give rise to a conflict of interest.

b) have been guilty of misrepresentation in supplying the information required by the contracting authority as a condition of participation in the contract procedure or have failed to supply that information.

Evidence:

The contracting authority will accept, as satisfactory evidence that the tenderer is not in one of the situations described in points B a) and b), a declaration on honour signed by the tenderer using the model shown in annex 4 to the Tender Specifications. However, the Commission reserves the right to verify the information.

C. Tenders submitted by consortia

Where the tender is submitted by a consortium or by a contractor intending to subcontract part of the work or have it performed by another economic operator, the exclusion criteria defined above have to be fulfilled by each economic operator involved in the tender.

Evidence:

In the case of tenders submitted by consortia or groups of service providers, every economic operator in the tender, must provide a declaration on honour to prove that none of the exclusion criteria for participation or award of contracts applies to it.

The tenderer to whom the contract is to be awarded shall provide, within 10 days preceding the signature of the contract, the evidence referred to above, confirming the declaration on honour for every economic operator part of the consortia or group of service providers.

In the case of tenders involving subcontracting, the contractor to whom the contract is to be awarded shall provide, within 10 days preceding the signature of the contract, the evidence referred to above for the exclusion criteria for participation or award of contracts, confirming the declaration on honour for every subcontractor for which the Commission will request it.

18. SELECTION CRITERIA

(1) Legal position – means of proof required

(a) Where the tenderer needs a specific authorisation or must be a member of a specific organisation in order to provide the services concerned in his country of origin, he must prove that he holds this authorisation or that he belongs to this organisation.

(b) The tenderer is required to furnish proof of his enrolment on the professional or trade register, or a sworn statement or certificate in accordance with the conditions laid down in the Member State in which he is established.

(2) Economic and financial capacity – means of proof required

The economic operators must have at their disposal the resources necessary for performance of the contract.
Proof of financial and economic standing must be provided by one or more of the following:

(a) Bank declarations;

(b) Balance sheets or summarised balance sheets covering at least the last two years for which the accounts have been closed;

(c) A statement of general turnover or turnover relating to the services in question, covering the last three financial years.

(3) Technical and professional capacity – means of proof required

Technical capacity will be assessed with regard in particular to expertise, knowledge, efficiency, experience and reliability in the field of image processing and/or urban land use mapping, data production flows, data management and accuracy assessment.

The evidence of the technical and professional capacity should be provided on the basis of the following documents:

(a) The educational and professional qualifications of the service provider or contractor and/or those of the firm’s managerial staff and, in particular, those of the persons responsible for providing the services or carrying out the works (including CVs). A minimum of 8 CVs should be submitted, concerning staff with a minimum of five years of experience in the field of image processing and/or urban land use mapping, data production flows, data management and accuracy assessment.

(b) A list of the principal services provided and supplies delivered in the areas of image processing and/or land use mapping, in the past three years, with the sums, dates and recipients, public or private.

(c) A description of the technical equipment, tools and plant to be employed by the firm for performing a service or works contract. A minimum of 8 workstations, dedicated to specialised tasks of image processing, geo-data management and mapping, should be available.

(d) A statement of the average annual manpower and the number of managerial staff of the service provider or contractor in the last three years.

(e) Proportion of the contract which the tenderer may intend to subcontract.

19. AWARD CRITERIA

The contract will be awarded to the tender that is most economically advantageous. This will be determined in the light of the price and the quality of the tender. The successful tender will be one providing a high level of quality (for which it will be given a mark) with the lowest ratio of total cost to the quality mark achieved. Tenders with a quality mark below 50% of available points will not be considered.

The quality of the tender will be assessed as a function of the following criteria:
Understanding of the objectives (10%)

Tenders will be evaluated in terms of their appreciation and understanding of the aims and context of the work to be undertaken as documented in a short description (max. 3 A4 pages), and their overall quality, completeness and presentation.

Methodological approach (45%)

The methodological approach as documented by means of proposed image processing, classification and interpretation methods, applied definitions, data management, accuracy assessment, including a comprehensive, detailed and documented workflow scheme.

Strategy to optimise the production process over the various tasks (15%)

The proposed strategy to benefit economies of scale in combination of the tasks listed in section 3.

Proposed management plan (15%)

The proposed management plan, including the optimisation aspects of the workflow, the breakdown of content in tasks with deliverables and delivery milestones, completeness of documentation, quality assurance, risk analysis and mitigation approach, composition and complementarities of the proposed team.

Data quality of the test area (15%)

Tenders shall provide a representative example of the final products of each task for a test area at their own choice.

The final products for the test area shall be fully compliant to the required tender specifications, and accompanied by INSPIRE compliant metadata.

All examples of the final products on a test area shall be provided together with a printout at scale 1:10.000 of the final product, and together with the corresponding VHR satellite image extract.

Any test area, to be freely chosen by the tenderer, shall be of approximately 2.5 km x 3.5 km, situated within the EU27 countries, and covering an area with a representative transition for the range of nomenclature classes in the UA mapping guide.

The tenderer shall ensure that the method applied to the test area is representative for the proposed methodological approach.

The example on the proposed options shall be provided over the same area, but only comprising the application of the full UA2012 nomenclature, including the optional extension for rural classes. No change products are required for the options in the nomenclature.

20. TENDER TO BE SUBMITTED BY THE TENDERER

Tenderers must include the following information in their replies:
− All the information and documentation needed to enable the contracting department to appraise tenderers/tenders on the basis of the exclusion, selection and award criteria.

− The price.

− Any other information and documentation required in the tendering documents.

− Tenders may be written in any of the official EU languages.

− Tenders from the consortia of companies or groups of service providers must specify the role, qualifications and experience of each member or group. In case of tenders involving subcontractors, a letter of intent must be supplied by each subcontractor stating its unambiguous undertaking to collaborate with the tenderer if he wins the contract and the extent of the resources that it will put at the tenderer disposal for the performance of the contract.

21. OPENING OF TENDERS

Tenders will be opened on 22/01/2013 at 11.00 o’clock a.m. at Beaulieu 1, avenue de Beaulieu 1, 1160 Auderghem, Belgique. Tenderers may be present at the opening of tenders. Each tenderer may take part or send a representative.