



European Environment Agency



## ANNEX I – TENDER SPECIFICATIONS

- Title:** Framework service contract for the GMES Initial Operations/Copernicus Land monitoring services – Validation of products (2 lots)
- Scope:** Validation services for the geospatial products of the Copernicus land Continental and local components including in-situ data (lot 1)
- Technical support for the improvement of Pan-European and local component products including in-situ data, in view of their integration in a fully operational and high quality Copernicus land service (lot 2)
- Reference:** Open call for tenders EEA/MDI/14/010
- Closing date:** 2.12.2014

### 1. Introduction to EEA

The European Environment Agency (EEA) is a European Union public body governed by Regulation (EC) No 401/2009 of the European Parliament and of the Council of 23 April 2009<sup>1</sup>. The EEA role is to support the European Union in the development and implementation of environmental policy by providing relevant, reliable, targeted and timely information on the state of the environment and future prospects. The EEA also provides the necessary independent scientific knowledge and technical support to enable the Union and the member countries to take appropriate measures to protect and improve the environment as laid down in the Treaty and by successive Community action programmes on the environment and sustainable development.

The EEA is the hub of the European Environment Information and Observation Network (Eionet), a network of around 350 organisations across Europe, through which it collects and disseminates environment-related data and information, including European Topic Centres. The EEA and Eionet contribute to the European Shared Environmental Information System (SEIS), a distributed, integrated, web-enabled information system based on a network of public information providers sharing environmental data and information. It builds on existing e-infrastructure, systems and services in the Member States and EU institutions.

Copernicus, previously known as GMES (Global Monitoring for Environment and Security), is the European Programme for the establishment of a European capacity for Earth Observation. EEA has been delegated the implementation of the pan-European and local components of the Copernicus Land monitoring service. The objective of the Copernicus land monitoring service is to provide users in the field of environment and other terrestrial applications with information based on space data combined with other sources. It addresses a wide range of policies such as environment, agriculture, regional development, transport and energy at EU level, and European commitments to International Conventions.

Further information about the work of EEA can be obtained on its website:  
<http://www.eea.europa.eu>.

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<sup>1</sup> OJEU L 126 of 21.5.2009, p. 13.

## 2. Presentation of the tender

Tenders shall be submitted in accordance with the **double envelopes system**:

The outer envelope or parcel should be sealed with adhesive tape and signed across the seal and carry the following information:

- The call for tenders reference No **EEA/MDI14/010**
- The contract title **“Framework service contract for the GMES Initial Operations/Copernicus Land monitoring services – Validation of products (2 lots)”**
- The number and subject of the lot
- The name of the tenderer
- The indication **“Tender – Not to be opened by the internal mail services”**
- The address for submission of tender (as specified in the letter of invitation to tender)
- The date of submission shall be legible on the outer envelope of parcel

The outer envelope or parcel must contain three inner envelopes, i.e. Envelopes No 1, 2 and 3, corresponding to the following three sections: administrative section, technical offer and financial offer.

**(a) Envelope No 1 – Administrative section** shall include the following:

- The Tender submission form drawn up in accordance with the template in annex 1
- The declaration on exclusion criteria as required under section 10.1.2 drawn up in accordance with the template in annex 2
- The legal entity form as required under section 10.2.1 drawn up in accordance with the template in annex 3
- The financial identification form drawn up in accordance with the template in annex 4
- The evidence and documentation demonstrating the fulfilment of the selection criteria as required under sections 10.2.2 (economic and financial capacity) and 10.2.3 (technical and professional capacity)

**(b) Envelope No 2 – Technical offer** shall include the following:

The technical offer providing all information requested under sections 6, 7 and 10.3.1 including, where appropriate, information relevant to subcontracting as requested under section 4.3

**(c) Envelope No 3 – Financial offer** shall include the following:

The financial offer providing all information requested under sections 9 and 10.3.2, drawn up in accordance with the template in annex 5.

Tenders shall be drafted in one of the official languages of the European Union, **preferably in English** (supporting evidence does not need to be translated) and submitted **in triplicate** (one signed original unbound and two copies).

It is important that tenders be presented in the correct format and include all documents necessary to enable the evaluation committee to assess them. Failure to respect these requirements will constitute a formal error and may result in the rejection of the tender.

Tenderers shall observe precisely the indications in points 2, 3, 4 and 6 of the letter of invitation to tender to ensure their tender is admissible. Late delivery will lead to the non-admissibility of the tender and its rejection from the award procedure for this contract. Tenders sent by e-mail or by fax will also be non-admissible and discarded. Envelopes found opened at the opening session will also lead to non-admissibility of the tender. Consequently, tenderers must ensure that their tender is packed in such a way as to prevent any accidental opening during its mailing.

### **3. Confidentiality and protection of personal data**

For the processing of this tendering procedure, the EEA observes the rules set in Regulation (EC) No 45/2001 on the protection of individuals with regard to the processing of personal data by Community institutions and bodies and on the free movement of such data (OJEU L 8 of 12.1.2001, p. 1).

For further detailed information please refer to the privacy statement available on the EEA external website at the following address: <http://www.eea.europa.eu/about-us/tenders/privacy-statement>.

### **4. Participation in the tendering procedure**

Submission of a tender implies acceptance of the terms and conditions set out in the invitation to tender, in these tender specifications and in the draft framework service contract attached to the latter (see annex 6) and, where appropriate, waiver of the tenderer's own general or specific terms and conditions. It is binding on the tenderer to whom the contract is awarded for the duration of the contract.

#### **4.1. Eligibility**

This call for tenders is open on equal terms to all natural and legal persons from one of the 33 EEA member countries and to all natural and legal persons established in a third country which has a special agreement with the European Union in the field of procurement on the conditions laid down in that agreement<sup>2</sup>.

As proof of eligibility tenderers must indicate in the tender submission form (see annex 1) in which country they have their headquarters, registered office or residence, and provide the necessary supporting documents in accordance with their national law. If the tenderer is a natural person, he/she must provide a copy of identity card/passport or driving license and proof that he/she is covered by a social security scheme as a self-employed person.

#### **4.2. Application**

All eligible natural and legal persons (as per above) or groupings of such persons (consortia) may apply.

A consortium may be a permanent, legally established grouping or a grouping, which has been constituted informally for a specific tender procedure. If awarded the contract, the members of the consortium (i.e. the leader and all the other partners) will have an equal standing towards the EEA in executing the framework service contract and they will be jointly and severally liable to the EEA.

The participation of ineligible natural or legal person will result in the automatic exclusion of that person. In particular, if that ineligible person belongs to a consortium, the whole consortium will be excluded.

The EEA will not request consortia to have a given legal form in order to be allowed to submit a tender, but reserves the right to require a consortium to adopt a given legal form before the contract is signed if this change is necessary for proper performance of the contract. This can take the form of an entity with or without legal personality but offering sufficient protection to the EEA contractual interests (depending on the member countries concerned, this may be for instance, incorporation or

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<sup>2</sup> At this point in time, tenderers established in one of the following countries are eligible: EEA member countries, i.e. EU-28, Iceland, Liechtenstein, Norway, Switzerland and Turkey; and under the stabilisation and association agreements: the former Yugoslav Republic of Macedonia, Albania, Montenegro and Serbia.

partnership or a temporary association). Consortia must identify one of their members as coordinator who will interface with the EEA.

Each member of a consortium must fulfil the conditions for participation mentioned in this section and section 4.1 above and provide the required documents listed in these tender specifications under sections 10.1 and 10.2 below. Therefore, each member of a consortium shall specify his role, qualifications and experience.

#### **4.3. Subcontracting**

A contractor may subcontract part of the services.

Tenderers must state what part of the work, if any, they intend to subcontract, and to what extent (for instance % of the total contract value), specifying the names, addresses and legal status of the subcontractors. If subcontracting is **not** envisaged, tenderers shall clearly state so in the tender submission form (see annex 1).

Legal persons must provide a document containing a list of the professional qualifications of the subcontractors and statement of the means of confidentiality when subcontractors are used. If awarded the contract, the contractor may not choose subcontractors other than those mentioned in the bid unless he obtains the prior written authorisation of the EEA. The overall responsibility of the work remains with the contractor.

Tenderers shall acknowledge (see annex 1) that the EEA reserves the right to request them at a later stage to provide documentation in relation to exclusion and selection criteria for any proposed subcontractors (see sections 10.1 and 10.2 below).

If awarded the contract, the contractor must ensure that Article II.17 of the draft framework service contract (see annex 6) can be applied to subcontractors. Once the contract has been signed, Article II.12 of the above-mentioned draft framework service contract shall govern subcontracting.

### **5. Contractual terms**

In drawing up their bid tenderers should bear in mind the provisions of the standard framework service contract and standard specific contract attached to these tender specifications (annex 6).

### **6. Subject of contract**

#### **6.1. Context of the contract**

EEA plays a key role in the development of the Copernicus services, in particular in the technical coordination of the Copernicus Land Monitoring Service. Use of the Copernicus services is an integrated part of EEA's strategy to improve environmental information. Copernicus also plays an important role in the implementation of the principles of the Shared Environmental Information System (SEIS), and has the potential to make effective use of existing infrastructures in accordance with the INSPIRE directive. In the global context, Copernicus is an integral part of the Global Earth Observation System of Systems (GEOSS).

EEA is the coordinator of the Pan-European, Local and Reference Data Access component (RDA) of the Copernicus Land Monitoring service. Cross service in-situ coordination will also be delegated to the EEA under the Copernicus programme in 2014-2020. In situ data have been defined for the Copernicus programme as: *"all non-space-born data with a geographic dimension, including 'observation data from ground-, sea- or air-borne sensors as well as reference and ancillary data licensed or provided for use in Copernicus"*.

The **Land monitoring service** of the Copernicus programme, managed by Directorate General for Enterprise and Industry<sup>3</sup> of the European Commission, is about to finalise the implementation of its Initial Operations (GIO) phase as arranged for by Regulation (EU) No 911/2010 of 22 September 2010 of the European Parliament and the Council on the European Earth monitoring programme (GMES/Copernicus) and its initial operations (2011 to 2013)<sup>4</sup>. With the publication of Regulation (EU) No 377/2014 of 3 April 2014 of the European Parliament and the Council, establishing the Copernicus Programme and repealing Regulation (EU) No 911/2010<sup>5</sup>, the European Union Earth Observation programme entered its full operational phase.

## **6.2. Scope and purpose of the contract**

The purpose of this call for tender is to establish one or two framework service contract(s) with (an) economic operator(s) who can provide to EEA geo-statistical validation services and GIS consultancy services for the further improvement and fine-tuning of the products in the Copernicus land pan-European and local components, as well as in the Reference Data Access component.

## **6.3. Description of the services**

### **6.3.1. Lot 1: Validation services for the geospatial products of the Copernicus land Continental and local components including in-situ data**

#### **6.3.1.1. The scope of products subject to validation**

The pan-European component of GIO land includes:

- The image mosaics covering the EEA39 countries (+/- 6M km<sup>2</sup>), using the High Resolution (HR) satellite imagery of the ESA/GMES data warehouse as specified under CORE001, i.e. coverage 1 (mainly IRS-P6 and Resourcesat-2, complemented by SPOT 4 & 5), and coverage 2 (Rapid Eye data). Mosaics have been radiometrically smoothed and optimised.
- The image mosaics covering the EEA39 countries (+/- 6 Mkm<sup>2</sup>), using the Very High Resolution (VHR) satellite imagery of the ESA/GMES data warehouse as specified under CORE003, i.e. a combination of SPOT-5 & 6 and Formosat-2 pan-sharpened data. Mosaics have been radiometrically smoothed and optimised by the Joint Research Centre (JRC).
- The production of 5 High Resolution layers (HRLs). The HRLs were produced by Service Providers (SP) (20m pixels, national projection), and were verified and enhanced by the Eionet member countries (or by SPs in case a country was not interested in performing the enhancement). The final products are generated by SPs in 100m grid cells and in a European projection.
- The Corine Land Cover 2012 (CLC) product. CLC is being implemented by the participating countries (EEA39). This meant mapping CLC changes between the previous CLC reference year 2006 and 2012 and deriving the updated CLC layer for 2012. National results are integrated into CLC products in European projection.

The local component of the Copernicus land services comprises:

- The Urban Atlas 2012 (UA2012), a detailed and tailored land cover mapping of over 695 Functional Urban Areas (FUAs)<sup>6</sup> (previously called: Larger Urban Zones (LUZs)). The UA2012

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<sup>3</sup> Directorate General Enterprise and Industry

<sup>4</sup> OJEU L 276 of 20.10.2010, p.1.

<sup>5</sup> OJEU L 122 of 24.4.2014, p.44.

<sup>6</sup> <http://www.oecd.org/gov/regional-policy/Definition-of-Functional-Urban-Areas-for-the-OECD-metropolitan-database.pdf>

includes a change mapping as compared to the Urban Atlas 2006 (UA2006), which was produced over 305 European LUZs (basically all European agglomerations having over 100.000 inhabitants). The UA2012 applies an extended nomenclature, providing more detail in the so called “rurban fringe” (= rural to urban transition zone).

- The Riparian Zones (RZ) local component is providing a detailed and tailored land cover mapping of +/- 500.000 km<sup>2</sup> riparian zones along European river systems. The LC/LU mapping is in line with the requirements set out by the Mapping and Assessing Ecosystem Services (MAES) group<sup>7</sup>, and the requirement to provide basic information layers allowing reporting on the status of biodiversity. A second product under this service consists of a detailed delineation of Riparian Zone extents, based on a set of pedological, geomorphological, bio-geographical and ecological variables and including pan-European Flood Hazard map, produced by the JRC<sup>8</sup>.
- The first set of Natura2000 sites in this local component will comprise similar LC/LU maps as the Riparian Zones product, however with a stronger focus on change detection, including retrospective evolution of LC/LU in a selected set of Natura2000 sites, and addressing the satellite image archives over the selected sites.

The pan-European Reference Data Access (RDA) component consists of:

- The EU-DEM product, i.e. a pan-European product based on the fusion of SRTM v3 data, Aster GDEM data and complemented with freely accessible and existing in-situ DEM data above 60° North. Version 1 of this product is available for download, and will shortly be subject to an upgrade, thereby addressing some shortcomings as highlighted in the validation report of the product<sup>9</sup>.
- The EU-hydro product, i.e. a pan-European hydrographical database, derived essentially from a combination of HR satellite imagery and DEM based run-off modelling, and complemented by freely accessible and existing in-situ data.

As the Copernicus land services are deemed to be a dynamic and evolving process, ensuring continuity for longstanding flagship products such as CLC, and extending the portfolio following the consultation of a broad group of European stakeholders under the land service evolution tasks, it is likely that the above summarised portfolio will be extended with new products. A pan-European product on Green Linear Elements (GLE) is one of the candidate products whose feasibility is under study, and which is expected to provide complementary information to the HRL forestry (tree cover density and forest types), thus enabling a better assessment of potential ecological corridors in a pan-European context. Other extensions may follow, depending on consolidated user requirements and feasibility.

More information on most of the above products can be found on the GIO land portal under: <http://land.copernicus.eu>.

### **6.3.1.2. The purpose of validation**

The purpose of the validation is to provide an independent and geo-statistically sound assessment of various aspects of data quality in view of its fitness for purpose for the end-user, including a neutral check to its initial specifications. The validation can address the full scope of product characteristics and QA/QC procedures, such as:

- positional accuracy
- logical consistency (format, topology, labelling, attributes...)

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<sup>7</sup>[http://ec.europa.eu/environment/nature/knowledge/ecosystem\\_assessment/pdf/MAESWorkingPaper2013.pdf](http://ec.europa.eu/environment/nature/knowledge/ecosystem_assessment/pdf/MAESWorkingPaper2013.pdf)

<sup>8</sup> <http://onlinelibrary.wiley.com/doi/10.1002/hyp.9947/abstract>

<sup>9</sup> <http://land.copernicus.eu/user-corner/technical-library/eu-dem-2013-report-on-the-results-of-the-statistical-validation>

- thematic accuracy (classification correctness)
- completeness (omission / commission)
- temporal accuracy
- ...

The validation work will be decided on a case by case basis and could cover the full range of validation activities, including amongst other:

- Stratification and sampling scheme
- Design and perform a quality check of intermediate products
- Selection of appropriate statistical approach
- Selection and access to the most appropriate ground truth data
- Compliance to international specifications (e.g. INSPIRE, OGC) and standards (e.g. CEN, ISO) for geospatial data quality
- Quality reporting
- Reporting the validation results
- ...

Validation of GIO land products is needed:

1. To plan the next steps of Copernicus land services;
2. To inform users about the data quality in order to allow for an appropriate application of the GIO land products and services in downstream applications and services.

An independent estimation shall entail as well that:

1. The data used in validation were not used in the production and
2. The experts validating the data were not involved in the production.

### **6.3.1.3. Geographic coverage**

The Copernicus land services aim to cover the EEA39 (about 6 Mkm<sup>2</sup>), which includes the following countries: the EU28, additional EEA member countries and countries of the Western Balkan, namely:

- EU28: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.
- Additional EEA member countries: Liechtenstein, Iceland, Norway, Switzerland, Turkey.
- Cooperating countries: Albania, Bosnia and Herzegovina, Former Yugoslav Republic of Macedonia, Kosovo under UNSCR 1244/99, Montenegro, Serbia.

Local component products aim to cover so called hotspots in the EU28, or by extension the EEA39. By way of guidance, the UA2012 covers +/- 1 M km<sup>2</sup>, whereas the extent of the Riparian Zones service has been estimated approximately to 500 K km<sup>2</sup>.

#### **6.3.1.4. Definition of products**

Technical specifications of each of the products in the GIO land services portfolio are:

- either already available in the technical library of the GIO land portal:  
<http://land.copernicus.eu/user-corner/technical-library>  
(CLC, HRLs, UA, EU-DEM)
- or are available in draft versions through their call for tender specifications:  
(RZ, EU-hydro) as published on the same portal under contract opportunities:  
<http://land.copernicus.eu/user-corner/contract-opportunities>

The tenderer shall carefully consider the specifics of each of the products in the Copernicus land service portfolio, and in particular the differences in the nature of its products that require differences in choice of geo-statistical validation method. In fact a broad range of products have to be validated, dealing with differences such as:

- HR and VHR resolutions
- Raster, grid and vector data structures
- Different data models
- Discrete and continuous information content
- Different distribution curves
- Status layers and change layers

#### **6.3.1.5. "Ground truth" data for validation**

The reference data used in validation should be timely (reference year 2012  $\pm$  1y) and have a resolution better than those data that have been used in production of the land service product under consideration. Consequently, the ideal validation materials would be in-situ observations and recently taken orthophotos. However, to expect such datasets for 39 countries is not realistic (e.g. LUCAS2012 is only available over the EU), hence complementary data-sources have to be considered, however whilst taking into account the limitations of the characteristics of such ancillary data sources.

To facilitate the contractors work, EEA has in place image services<sup>10</sup> including the following WMS services, and with relevance to one or more of these validation activities:

- IRS coverage-1 High Resolution (HR) (20m, 2012  $\pm$  1 year) mosaic
- RapidEye (RE) coverage-2 HR (5m, 2012  $\pm$  1 year) mosaic
- Very High Resolution (VHR) SPOT and Formosat mosaic (2,5m)

In addition Google Earth (or equivalent) can be used if the image acquisition date is known.

#### **6.3.1.6. Stratification and sampling**

Due to the heterogeneity of Europe especially because of climatic and bio-geographical reasons a stratified validation shall be applied. In some products, classes that comprise only a small percentage of the total area of interest, a high number of samples is required in order to correctly assess

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<sup>10</sup> <http://land.copernicus.eu/pan-european>

omission errors (e.g. HRLs imperviousness, or wet land or permanent water bodies). From this entails that separate validations shall be carried out for different biogeographic strata. As an indication the bio-geographical regions of Europe map produced by the EEA can be used. <http://www.eea.europa.eu/data-and-maps/figures/biogeographical-regions-europe-2001>. In case of a duly and scientifically justified underpinning this map is eligible for simplification or aggregation.

Sampling strategies have to be proposed for each of the validation exercises. The number of samples shall be a compromise between accuracy (statistical representativity) and workload, whilst taking into account that the workload shall be a secondary consideration as compared to the requirement of ensuring a sound level of statistical representativity.

**6.3.2. Lot 2: Technical support for the improvement of Pan-European and local component products including in-situ data, in view of their integration in a fully operational and high quality Copernicus land service**

It is, as well, intended to cover any additional related services that may arise during the duration of the contract, and in relation to the need to further improve or correct the quality of the geospatial products in the portfolio, for the purpose of full operational use of the land service. Such situations may relate to:

- Changes in satellite imagery, for instance, the need to include gap filling based on imagery with clearly different image characteristics;
- Merging of different kinds of geospatial products from the Copernicus land services portfolio;
- Nomenclature refinements;
- Further in-depth classification of specific LC/LU classes in relation to their function as a core multipurpose land product;
- Changes in aggregation or integration of full resolution products into generalised products in view of reaching the required thematic accuracy;
- Re-analysis of HRLs in a time series in view of re-establishing consistency over the whole of a time series, both relative and absolute;
- Geospatial data production, management, correction and maintenance tasks, including geometric corrections, removal of topological errors, attribute restructuring, editing and completion, gap filling using complementary satellite data sources;
- Geospatial data model transformations to INSPIRE compliant data models;
- INSPIRE compliant metadata provision for geospatial data and services;
- Integration of geospatial datasets;
- Support in the selection and underpinning of appropriate geo-statistical methodological approaches.

Tasks under lot 2 shall include amongst other the following typical situations (non-exhaustive list):

- Given an accumulation of processing steps on the Copernicus land products, how would the service provider approach a gap filling in a density layer product whilst maintaining consistency of the overall product and in particular with the adjacent grid cells of the gap to be filled?
- What's the service providers' approach to ensuring repeatability of HRL product production with new time stamps in view of the establishment of a coherent time series?

- What's the service providers' approach to handling large amounts of HR or VHR image data from different sensors in view of optimising the end user visual experience of an improved image mosaic?
- What's the service providers' approach in handling cross-border integration of national datasets towards a European coverage, both dealing with differences encountered in vector data and in grid data?

#### **6.4. Submission of tenders**

Tenderers may place an offer for one or both lots based on their expertise and experience. In case tenderers submit offers for both lots, they are requested to submit their bids separately for each individual lot, specifying the number and subject of the lot and comprising a section giving the technical offer (envelope No 2) and a section giving the financial offer (envelope No 3) for each individual lot. The administrative section (envelope No 1) providing information as to the legal, economic and financial, professional and technical capacity of the tenderer and including annexes 1 to 4 to these tender specifications need though to be submitted only once. In this respect and owing to the variety of services required, tenderer may choose presenting the evidence related to their technical and professional capacity in one or more sub-sections for all lots for which they want to submit an offer.

Tenders will be evaluated separately for each lot, as to their merits (see section 10.3 below). A framework contract will be awarded for each lot (maximum 1 per lot). If both lots are awarded to the same tenderer, a single framework contract covering those lots will be signed.

### **7. General obligations of the tenderer/mandatory requirements**

#### **7.1. Deliverables and schedules**

Types of deliverables depend on the specific tasks and may include technical reports, geospatial datasets of a specified format, metadata, etc...

As a typical minimum for lot 1 tasks, the key deliverable will consist of a validation report, explaining the rationale for the applied geo-statistical method, a comprehensive level of detail of the validation results, as well as its interpretation, and whenever appropriate recommendations for further improvement of the product, and where deemed appropriate the required corrective actions. A second deliverable will typically consist of the full validation dataset, comprising all essential details in order to enable third parties to re-iterate the same exercise and obtain exactly the same results. One other kind of deliverable will be a quality check report of intermediate products meant for acceptance or rejection of a product/deliverable.

Deliverables under lot 2 will in essence consist of improved, corrected, upgraded, merged, edited... datasets, including a technical report describing the workflow applied for the activity, as well as the quality assessment of the activity undertaken.

The detailed description, intermediate (where appropriate) and final deliverables of each task, internal quality assessment procedures, where applicable, and agreed schedules shall be the subject of the respective specific contracts to be established under the framework contract(s). The estimated number of specific contracts is expected to be in the range of the number of products in the portfolio, with the duration of each specific contract varying from 1 to 6 months. The content of each specific contract shall be initiated by a request for services, followed by an offer responding to this request, and to be agreed upon between EEA and the contractor for inclusion in the specific contract.

#### **7.2. Project management**

Key elements of project management shall be part of the offer following a request for services, permitting to define, organize and monitor activities. These shall provide a feasible and effective breakdown of the activities and shall include the following items:

- Staff planning and proposed key personnel relevant for the tasks at stake;
- Tasks breakdown and content with deliverables and delivery milestones (production plan);
- Facilities and resources;
- QA/QC procedures;
- Risk analysis and mitigation measures.

### **7.3. Meetings**

For each specific agreement there will be at least two physical meetings organised at EEA premises – a kick-off meeting to discuss the details of tasks and deliverables and the meeting where the final deliverables of the respective specific contract are presented, and 2 to 3 video- or phone conferences to discuss progress or technical issues. In addition to that, participation to 2 to 3 Copernicus ad-hoc meetings organised by the EEA or the European Commission (e.g. coordination meeting with other Copernicus services, consultations with the national data providers etc.) may be required in the overall context of the framework contract.

### **7.4. Place of performance of the services**

The services shall be performed at the contractor’s premises (extra-muros) or at the EEA’s premises in Copenhagen, (intra-muros), depending on the requirements of the specific contract. Travel to other locations, may be required on an ad-hoc basis in which case travel and subsistence costs will be paid according to EEA standard rules and rates (see annex 7). The number of travels is expected to be limited.

## **8. Type and volume of contract**

The successful tenderer(s) will be awarded one or two framework contract(s) for an initial period of 24 months, starting from the date of signature, with the possibility of two renewals for 12 months each. The services will be implemented through specific contracts depending on the EEA’s demand. Based on the EEA’s current level of activities and anticipated future demand the total value of the contracts is estimated at maximum EUR 6.000.000 over a maximum period of 48 months covering all services and travel specified above.

The estimated budget is split between lots as follows (the breakdown below is merely indicative and may be revised in line with the EEA’s actual needs):

<b>EUR 6.000.000</b>	
Max. EUR 4.000.000	Lot 1
Max. EUR 2.000.000	Lot 2

It should be noted that the first specific contracts (mainly GIO related work) may amount for a total of EUR 3.000.000 over the first 12 months period.

## **9. Price**

Tenderers are required to quote prices for the services to be provided as follows:

- Prices must be quoted in compliance with the requirements specified in section 10.3.2 below.
- Prices quoted must be **all-inclusive** (i.e. inclusive of all costs involved in the performance of the contract (e.g. administrative and travel costs, with the exception specified in section 7.4 above in regard to travel to destinations other than Copenhagen)) and expressed in **euro**, including for tenderers established in countries that are not part of the Eurozone. For tenderers in countries that do not belong to the Eurozone, the price quoted may not be revised in line with exchange rate movements. It is for the tenderers to select an exchange rate and assume the risks or the benefits deriving from any variation.
- Prices must be quoted as follows:
  - For the tasks under sections 6.3.1 and 6.3.2:
    - Senior consultants working intra-muros at the EEA for an extended period of time (typically longer than 1 week) (Daily rate = 8 hours);
    - Senior consultants working extra-muros at the contractor's premises (or elsewhere) (Daily rate = 8 hours);
    - Junior consultants working intra-muros at the EEA for an extended period of time (typically longer than 2 weeks) (Daily rate = 8 hours);
    - Junior consultants working extra-muros at the contractor's premises (or elsewhere) (Daily rate = 8 hours).
- No additional expenses incurred in the performance of the services will be reimbursed separately by EEA.
- The price quoted must be fixed and not subject to revision during the first year of duration of the contract.

From the beginning of the second year of duration of the contract, 80% of the prices may be revised upwards or downwards each year, where such revision is requested by one of the contracting parties by registered letter no later than 3 (three) months before the anniversary of the date on which it was signed.

The EEA shall purchase on the basis of the price in force on the date on which specific contracts are signed. Such prices shall not be subject to revision.

The revision shall be determined by the trend in the harmonised indices of consumer price (HICP) published by the European Commission on Eurostat web page at [http://epp.eurostat.ec.europa/portal/statistics/search\\_database](http://epp.eurostat.ec.europa/portal/statistics/search_database) (Theme 2 – Economy and Finance; Price; HICP – Harmonised Indices of Consumer Prices; HMIDX – Monthly data (index); GEO – Euro area (EA11-2000, EA12-2006, EA13-2007, EA15-2008, EA16-2010, EA17); COICOP – cp00).

Revision shall be calculated in accordance with the following formula:

$$Pr = Po \times (0,2 + (0,8 \times Ir/Io))$$

Where:

Pr = revised price;

Po = price in the original tender;

Io = index for the month in which the validity of the tender expires;

Ir = index for the month corresponding to the date of receipt of the letter requesting a revision of prices.

Under Articles 3 and 4 of the Protocol on the Privileges and Immunities of the European Communities and the Headquarters Agreement between the Agency and the Government of Denmark of 17 August 1995, the Agency is exempt from all charges, taxes and dues, including value

added tax; such charges may not therefore be included in the calculation of the price quoted; the VAT amount must be indicated separately.

The costs incurred in preparing and submitting tenders are borne by the tenderers and cannot be reimbursed.

## **10. Criteria**

### **10.1. Exclusion criteria**

#### **10.1.1. Exclusion from participation and award in the procurement procedure**

To be eligible to participate in this contract award procedure, tenderers must not be in any of the exclusion situations referred to in Articles 106 and 107 of the financial rules applicable to the general budget of the European Union<sup>11</sup>.

#### **10.1.2. Evidence to be provided by the tenderers**

When submitting their bids, each tenderer (including any subcontractor or any member of a consortium) must provide a declaration on their honour in accordance with the form attached as annex 2, duly signed and dated, stating that they are not in any of the situations mentioned under section 10.1.1 above.

The tenderer to whom the contract is to be awarded will be required, prior to the signature of the contract, to provide the evidence specified in the penultimate paragraph of the declaration of honour mentioned above (see annex 2).

### **10.2. Selection criteria**

#### **10.2.1. Legal capacity**

Any tenderer is required to prove that he is authorised to perform the contract under national law, as evidenced by inclusion in a trade or professional register, or a sworn declaration or certificate, membership of a specific organisation, express authorisation, or entry in the VAT register.

To that effect, each tenderer (including any subcontractor or any member of a consortium) is required to submit a legal entity form (see annex 3) duly filled out and signed, accompanied by a copy of inscription in trade register and/or a copy of inscription in VAT register, where applicable. However the subcontractor(s) shall not be required to fill out or provide those documents when the services provided represent less than 20 % of the contract.

#### **10.2.2. Economic and financial capacity**

Evidence of economic and financial capacity shall be furnished by one (**or more**) of the following documents:

- Appropriate statements from banks or evidence of professional risk indemnity insurance; OR
- The presentation of balance sheets or extracts from balance sheets for at least the last 2 (two) years for which account have been closed, where publication of the balance sheet is required under the company law of the country in which the tenderer is established; OR

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<sup>11</sup> Regulation (EU, Euratom) No 966/2012 of the European Parliament and of the Council of 25.10.2012, OJEU L 298/1 of 26.10.2012.

- A statement of overall turnover and turnover concerning the services covered by the contract during the last 2 (two) financial years.

If, for some exceptional reason, which the EEA considers justified, a tenderer is unable to provide the references requested above, he may prove his economic and financial capacity by any other means which the EEA considers appropriate.

A tenderer may, where appropriate and for a particular contract, rely on the capacities of other entities, regardless of the legal nature of the links, which it has with them. He must in that case prove to the EEA that he will have at his disposal the resources necessary for performance of the contract, for example by producing an undertaking on the part of those entities to place those resources at his disposal.

### **10.2.3. Technical and professional capacity**

Tenderers should show their degree of technical and professional capacity to carry out the requested tasks by providing information on the criteria described below. If several service providers or subcontractors are involved in the tender, the selection criteria for the technical and professional capacity will be assessed in relation to the combined capacities of the service providers and subcontractors, as a whole, to the extent that service providers or subcontractors put their resources at the disposal of the tenderer for performance of the contract.

Tenderers shall provide the following documentation:

- **Human resources:**

Tenderers shall provide the following documents:

CVs detailing the educational and professional qualifications and language skills of the firm's managerial staff as well as those of the staff designated to provide the services indicating the required professional experience as follows:

- Firm's managerial staff: Minimum 3 (three) CVs documenting a minimum of 5 (five) years' relevant experience;
- Staff designated to provide the services:
  - Senior consultants: Minimum 4 (four) CVs documenting a minimum of overall 5 (five) years' relevant professional experience;
  - Junior consultants: Minimum 5 (five) CVs documenting a minimum of overall 2 (two) years' relevant professional experience
- In addition:
  - CVs detailing the educational and professional qualifications of additional 3 (three) consultants who can potentially take over responsibility for providing the services in case of busy periods;
  - CVs detailing the educational and professional qualifications of relevant supporting specialists who will not be working full time on the contract.

- **Past contracts:**

Tenderers shall provide details of contracts awarded to them relevant to the services required by the EEA, indicating the value, dates, brief description of the services provided and recipients of the services (public or private), under the following two categories: (1) contracts currently undertaken; and (2) contracts that have been undertaken over the last 3 (three) years;

- **Quality control:**

Tenderers shall provide details of any quality assurance accreditation that they hold. If no accreditation held, tenderers shall provide an outline of any quality assurance policy specifying the status of implementation (e.g. measures employed to ensure the quality of services such as web services, delivered products, derived data and source code), and details of any quality assurance accreditations for which they have applied.

In the event of a joint offer submitted by a consortium, each member of the consortium shall provide the requested description.

o **Environmental policy:**

Tenderers shall provide a description of their environmental policy specifying the status of implementation.

In the event of a joint offer submitted by a consortium, each member of the consortium shall provide the requested description.

**10.3. Award criteria**

The assessment method that will be used to determine the choice of the tender will be based on the criteria given below, on the basis of the economically most advantageous tender in terms of:

- o The quality of the tender (Technical merit – TM)
- o The financial value of the tender (Price –P)

**10.3.1. Technical merit (TM) (max. 70, min. 45 points)**

Tenders will be evaluated following the award criteria and weights outlined below, producing a total potential score of 70 points.

Tenderers shall elaborate on all criteria referred to below in order to score as many points as possible. The mere repetition of mandatory requirements set out in these tender specifications, without going into details or without giving any added value will only result in a low score. If essential elements of these tender specifications are not expressly addressed in the tender, the EEA may decide to give a zero mark for the relevant quality criterion. It is important that the technical offer is presented in a simple and clear structure, following the numbering and the headings of the award criteria outlined below to enable the evaluation committee to assess them.

**Lot 1: Validation services for the geospatial products of the Copernicus land Continental and local components including in-situ data**

No	Award criteria	Maximum points (70)	Minimum points (45)
1.1	Understanding of the objectives of the contract and the work to be carried out. Tenderers shall provide a short description (max 2 A4 pages) of the problem statements related to the required services and tasks to be carried out.	10	7
1.2	Proposed methodological validation approach(es) to cover the variability of characteristics in the Copernicus land products	40	25

	portfolio (max. 10 A4 pages).		
1.3	Proposed approach for collection and access of essential ground truth data.	10	7
1.4	Project management structure including approach to risk management, reporting and communication.	10	6

**Lot 2: Technical support for the improvement of Pan-European and local component products including in-situ data, in view of their integration in a fully operational and high quality Copernicus land service**

No	Award criteria	Maximum points (70)	Minimum points (45)
2.1	Proposed methodological approach to improve, edit and correct the Copernicus land products portfolio, taking into account the different types of products (raster, e.g. mosaics; grid, e.g. HRLs (discrete and continuous), vector (e.g. CLC, RZ, UA). (max. 10 A4 pages).	35	25
2.2	Proposed QA/QC methodology. Tenderers shall provide a description of the way the quality of the work will be guaranteed, including approach to documentation of the workflow, detailed product specifications, user documentation, etc.	25	15
2.3	Project management structure including approach to risk management, reporting, risk management, and communication. Tenderers shall describe as well how agile their approach will be in carrying out the required services and tasks, in particular how the company would address high volumes of work in a short time frame. This includes responsiveness to EEA requests, flexibility to cope with unforeseeable technical challenges, methodological challenges, etc.	10	5

Only tenders which obtain the indicated minimum number of points, both for each award criterion and in total, will be considered for the next stage, which involves determining the financial value of the tender (price index) and for the final assessment.

**10.3.2. Price (P) (max. 30 points)**

Tenderers are requested to submit a financial offer, giving the **all-inclusive** (i.e. include all relevant costs and all expenditure (e.g. management and administrative costs, travel costs for consultants working intra-muros at the EEA, etc...)) for the services outlined below.

For that purpose, tenderers shall complete the price quotation attached as annex 5 to these tender specifications. Tenderers shall bear in mind that all fields are compulsory and non-compliance will lead to exclusion of the tender from the award process.

Price	Services	Price (EUR)	Weighting factor
P <sub>1</sub>	Senior consultants working intra-muros at the EEA for an extended period of time (typically longer than 1 week) (Daily rate = 8 hours)		30%
P <sub>2</sub>	Senior consultants working extra-muros at the company's premises (or elsewhere) (Daily rate = 8 hours)		35%
P <sub>3</sub>	Junior consultants working intra-muros at the EEA for an extended period of time (typically longer than 2 weeks) (Daily rate = 8 hours)		15%
P <sub>4</sub>	Junior consultants working extra-muros at the company's premises (or elsewhere) (Daily rate = 8 hours)		20%

**For each category above**, tenders meeting all mandatory requirements including the minima for technical merit will score points in function of the following formula:

$Ps = (Ps_{min} / Ps_0) \times 30 \times \text{weighting factor}$ , where

Ps = Price Score for price of service,

Ps<sub>min</sub> = the lowest price offered among the tenders received,

Ps<sub>0</sub> = the price of the tender being considered,

30 = the maximum number of points that can be awarded under this award criterion.

The price score for the provision of consultancy services (P) is the sum of the four Ps.

### **10.3.3. Final assessment**

A framework contract will be awarded to the tenderer whose tender achieves the highest total score for technical merit and price (TM + P). Should tenders obtain the same final score and tie for first place, the winning tender will be decided on the basis of the highest score achieved for price.

## **11. Performance**

Competence in both selection and award criteria must be maintained throughout the framework contract. Should the contractor fail to do this during the validity of the framework contract, the EEA reserve the right to refuse any consultant if performance is not satisfactory and/or to choose another vender from the tenders.

## **12. Environmental Considerations**

The EEA runs a certified environmental management system (EMAS) and aims to minimise the environmental impact of all its activities, including those carried out under contract. The future

contractor will, therefore, be requested to consider the EEA environmental management guidelines in the implementation of the contract, in particular, those relating to business travel, electronic means of communication, paper and energy consumption. Further information on the EMAS system can be found on the EEA homepage:

<http://www.eea.europa.eu/documents/emas>.

Moreover, it is strongly recommended that tenders are submitted in an environmentally friendly way, e.g., by choosing a simple and clear structure (list of contents and consecutive page numbering), double-sided printing, limiting attachments to what is required in the technical specifications (no additional material) and avoiding plastic folders or binders.

### 13. Timetable

The timetable for this call for tenders and signature of the resulting contract is as follows:

	Date	Comments
Call for tenders launch date	16.10.2014	Dispatch of the contract notice to the Office of Publication
Deadline for requests for clarifications	21.11.2014	
Last date on which clarifications are issued by EEA	25.11.2014	
Time limit for submission of tenders	2.12.2014	At 16:00 in case of hand delivery or 23:59 in case of mail delivery
Opening session	9.12.2014	At 10:00 local time in the EEA premises
Evaluation of tenders	From 9.12.2014 to 12.12.2014	Estimated
Award decision and notification of evaluation results	15.12.2014	Estimated
Contract signature	30.12.2014	Estimated
Implementation of contract		Immediately after contract signature

### 14. Annexes

Annex 1: Tender submission form

Annex 2: Declaration on exclusion criteria

Annex 3: Legal entity form

Annex 4: Financial identification form

Annex 5: Price quotation

Annex 6: Draft framework contract and draft specific contract

Annex 7: Rules for the reimbursement of travel expenses