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Institute for Environment and Sustainability
Land Resource Management Unit

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FRAMEWORK SERVICE CONTRACT
for
GROUND BASED OBSERVATION COLLECTION (GBOC) for
COPERNICUS GLOBAL LAND PRODUCTS VALIDATION

Administrative Annex

Procedure N JRC/IPR/2015/H.5/0027/OC

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1. EVALUATION PROCEDURE

Offers received in conformity with the submission modalities of the call (as per the letter of invitation to tender) are evaluated according to the procedure detailed below, which is divided into two phases: *exclusion/selection of tenderers* and *award of the contract*.

1.1. PHASE 1: EXCLUSION/ SELECTION

The purpose of this phase is to assess the eligibility of the tenderer to take part in the procedure, checks having been carried out on the possible grounds for exclusion.

This section also assesses the capacity of the tenderers to take part in the procedure, from an economic/ financial and a technical/ professional perspective.

The eligibility and capacity will be assessed on the basis of the criteria detailed below.

1.1.1. The eligibility of the tenderer to take part in the procedure

It should be noted that, in accordance with point III.2.1 of contract notice, tenderers will be excluded from participation in the procurement procedure if they are in any of the situations covered by the Regulation referenced at said point III.2.1 of contract notice. These situations are explicitly described in the Declaration on Honour on Exclusion Criteria enclosed with the tendering documents.

1.1.2. Economic and financial capacity and the technical and professional capacity

Such capacity is assessed on the basis of:

- a. The Economic and financial criteria, listed under point III.2.2 of the contract notice;
- b. The Technical and professional criteria, listed under point III.2.3 of the contract notice.

1.1.3. Modalities of proof

For the purpose of the present procurement procedure, tenderers shall:

- a) Join to their offer the Declaration on Honour on Exclusion Criteria enclosed with the tendering documents, duly completed, dated and signed by their legal representative (point 1 of section III.2.1 of contract notice);
- b) Join to their offer the evidence satisfying all the criteria of sections III.2.1 point 2 of contract notice;
- c) Join to their offer the evidence satisfying all the criteria of sections III.2.2 and III.2.3 of contract notice;

The contracting authority accepts no copies, only recent original documents or true copies certified by the competent authority.

Only tenderers that have fully satisfied these two modalities a), b) and c) will be considered in the award phase.

Should the contract be awarded, then the winning tenderer shall produce the supporting documents as required in Article 143(3) of the Rules of Application and as described in the Declaration on

Honour on Exclusion Criteria attached to the present administrative annex, upon receipt of a written request by the JRC before contract signature and at short notice. Should the winning tenderer fail to provide the supporting documents then his offer will be discarded and the second best offer will be retained under the same conditions.

1.2. **PHASE 2: AWARD**

1.2.1. **Best value for money**

The contract will be awarded to the offer showing the best value for money on the basis of the following criteria:

1. Technical quality (TQ) (max. **40 points**)
2. Price (P) (max. **60 points**)

The sum of the above criteria will determine the total score (TS) of an offer:

$$TS = TQ + P$$

The highest total score TS will determine the offer with the best value for money. A maximum of 100 points can be obtained.

Offers shall be ranked according to best value for money i.e. the highest value for money shall be first, the second best value for money shall be ranked second, etc.

1.2.2. **Technical quality TQ**

The **technical quality** criterion **TQ** is evaluated on the basis of the sub-criteria indicated in the table below.

The Technical Quality points TQ will be given by the sum of the points achieved in each sub-criterion TQ1 to TQ3. A maximum of 40 TQ points can be obtained.

Offers achieving a TQ of less than 20 points (50% of the maximum TQ points) will be excluded.

TQ	Technical Quality sub-criteria	Maximum score	Scoring rule
TQ1	Description of the methodology for selecting sites (both existing/new) ¹	10/40	The offer will be assessed according to how well it describes the selection of the sites proposed for GBO collection, referring both to the existing sites and additional ones, in terms of: a. Clarity: (max 3 points); b. Exhaustiveness: (max 3 points); c. Relevance: (max 4 points).
TQ2	Adequacy of the proposed solution	20/40	The offer will be assessed according to how the proposed list of sites and measurements is adequate for EO global land product validation. Namely, the following point will

¹ See 2.3.1 and 2.3.2 of the Technical Specifications

			be considered: a. The overall number of existing sites for each of the sixteen RM ² : max8 points; b. The geographic distribution of the existing sites, across the continents and across latitudes and type of land surfaces ³ : max 4 points; c. The overall number of additional sites for each RM: max 5 points; d. The impact of the additional sites in improving the coverage, in terms of geographic and land surfaces representation: max 3 points.
TQ3	Quality of instrumentation for additional sites ⁴	10/40	The offer will be assessed according to the performances of the proposed instrumentation for equipping additional sites, namely: their spectral resolution: max 3 points the angular resolution max 2 points the accuracy: max 5 points

1.2.3. **Price P**

The **price** criterion **P** is evaluated as follows:

A maximum of 60 points will be obtained by the offer with the lowest price. The other offers will be ranked linearly according to the following formula:

$$P = (P_{\min}/P_o) \times 60$$

where

P: price points of each offer

P_o: price of each offer

P_{min}: price of the lowest price offer

60: maximum price points obtainable

The price points will be rounded to the nearest whole number.

The price that will be considered in the evaluation (**P_o**) is the total price of the offer, covering all the requirements of the tender specifications (all inclusive). P_o shall be calculated as the sum of the prices components P_{c1}, P_{c2} and P_{c3} defined as follow (Table 4):

$$P_o = P_{c1} + 4 \times (P_{c2} + P_{c3})$$

Table 1: Price P_{c1} (Component 1 - Ground-based measurements from existing sites).

² See Table 1 in 3.1.1.2 Technical Specification Appendix A

³ See 3.1.4.2 and 3.1.4.3 of the Technical Specification Appendix A

⁴ See 2.3.2 of the Technical Specifications

Item	Quantity	Price
RM-1 (Direct/Diffuse visible radiation) (hourly/daily measurements)	20 sites for 5 years	
RM-2 (Direct/Diffuse thermal radiation) (hourly/daily measurements)	20 sites for 5 years	
RM-3 (Atmospheric properties) (hourly/daily measurements)	20 sites for 5 years	
RM-4 (Roughness) (daily measurements)	5 sites for 5 years	
RM-5 (Transmission through canopy) (daily measurements)	20 sites for 5 years	
RM-6 (Soil BRP) (hourly/daily measurements)	10 sites for 5 years	
RM-7 (Soil BHR/DHR) (hourly/daily measurements)	10 sites for 5 years	
RM-8 (FIPAR) (hourly/daily measurements)	30 sites for 5 years	
RM-9 (Leaf Scattering Albedo) (daily measurements)	5 sites for 5 years	
RM-10 (LAI) (daily measurements)	20 sites for 5 years	
RM-11 (LAD) (daily measurements)	5 sites for 5 years	
RM-12 (Structural knowledge) (daily measurements)	5 sites for 5 years	
RM-13 (LSE) (daily measurements)	10 sites for 5 years	
RM-14 (Ground and Surface Temperature) (hourly/daily measurements)	10 sites for 5 years	
RM-15 (Soil moisture) (hourly/daily measurements)	10 sites for 5 years	
RM-16 (Meteo properties) (hourly/daily measurements)	50 sites for 5 years	
LP-1 (Surface Reflectance) (12 match-up per site/year) ⁵	20 sites for 5 years	
LP-2 (Surface Albedo) (12 match-up per site/year)	20 sites for 5 years	
LP-3 (LAI) (12 match-up per site/year)	20 sites for 5 years	
LP-4 (FAPAR) (12 match-up per site/year)	20 sites for 5 years	
LP-5 (Fcover) (12 match-up per site/year)	10 sites for 5 years	
LP-6 (Soil moisture) (12 match-up per site/year)	20 sites for 5 years	
LP-7 (LST) (12 match-up per site/year)	20 sites for 5 years	
HR data for up-scaling (at cost price)	4 x 10 sites x 5 years	
	Total = Pc1	

⁵ The matchups, obtained through up-scaling of the RM measurement, have to be temporally distributed to represent the seasonal variability.

Table 2: Price Pc2 (Component 2 - Ground-based measurements from additional sites).

Item	Quantity	Price
RM-1 (Direct/Diffuse visible radiation) (hourly/daily measurements)	10 sites for 1 year	
RM-2 (Direct/Diffuse thermal radiation) (hourly/daily measurements)	10 sites for 1 year	
RM-3 (Atmospheric properties) (hourly/daily measurements)	10 sites for 1 year	
RM-4 (Roughness) (daily measurements)	5 sites for 1 year	
RM-5 (Transmission through canopy) (daily measurements)	10 sites for 1 year	
RM-6 (Soil BRF) (hourly/daily measurements)	5 sites for 1 year	
RM-7 (Soil BHR/DHR) (hourly/daily measurements)	5 sites for 1 year	
RM-8 (FIPAR) (hourly/daily measurements)	10 sites for 1 year	
RM-9 (Leaf Scattering Albedo) (daily measurements)	5 sites for 1 year	
RM-10 (LAI) (daily measurements)	10 sites for 1 year	
RM-11 (LAD) (daily measurements)	5 sites for 1 year	
RM-12 (Structural knowledge) (daily measurements)	5 sites for 1 year	
RM-13 (LSE) (daily measurements)	5 sites for 1 year	
RM-14 (Ground and Surface Temperature) (hourly/daily measurements)	5 sites for 1 year	
RM-15 (Soil moisture) (hourly/daily measurements)	5 sites for 1 year	
RM-16 (Meteo properties) (hourly/daily measurements)	10 sites for 1 year	
LP-1 (Surface Reflectance) (12 match-up per site/year) ⁶	10 sites for 1 year	
LP-2 (Surface Albedo) (12 match-up per site/year)	10 sites for 1 year	
LP-3 (LAI) (12 match-up per site/year)	10 sites for 1 year	
LP-4 (FAPAR) (12 match-up per site/year)	10 sites for 1 year	
LP-5 (Fcover) (12 match-up per site/year)	5 sites for 1 year	
LP-6 (Soil moisture) (12 match-up per site/year)	10 sites for 1 year	

⁶ The match-up, obtained through up-scaling of the RM measurement, should be distributed to represent the seasonal variability.

LP-7 (LST) (12 match-up per site/year)	10 sites for 1 year	
HR data for up-scaling (at cost price)	4 x 5 sites x 1 year	
	Total = Pc2	

Table 3: Price Pc3 (Component 3 - Data access and distribution).

Definition	Quantity	Price
Data distribution (through web-portal)	1 year of operation – all the data sets mentioned in this price scenario	
Organization and participation in Meeting review (incl. document management and organization of meetings)	2 Meetings	
	Total = Pc3	

Table 4: Price Po

$$P_o = P_{c1} + 4 \times (P_{c2} + P_{c3})$$

NOTE: the four price tables of this section are for the sole purpose of price evaluation.

2. OCCUPATIONAL HEALTH AND SAFETY (OHS)

The contract is to be executed off the JRC Ispra site hence no OHS risks are identified in relation to the JRC Ispra site.

3. STRUCTURE OF THE OFFER

Offers shall be structured as follows.

3.1. Cover letter:

- With tender reference;
- Signed by the legal representative of the tendering organisation;
- Confirming validity of the offer;
- Giving contract details and email address.

3.2. Administrative information

- Declaration on Honour required to pass the Exclusion criteria (point 1 of section III.2.1 of contract notice);
- Evidence of authorisation of the legal representative to sign on behalf of the tendering organisation;

- Other information and documents required to pass the Selection criteria (point 2 of section III.2.2 of contract notice, section III.2.2 and III.2.3 of the contract notice);

3.3. Technical offer:

The technical offer must contain all the information necessary for being assessed in depth as regards to its conformity with the technical specifications and for being evaluated according to the technical merit criteria listed in this Administrative Annex.

Chapter 1: Introduction and problem understanding.

Chapter 2: Detailed description of the proposed methodology for selecting and ranking existing measurements over multiple sites. In particular in the section:

- 1) The tenderer must demonstrate in the offer that they are able to collect and make available the raw ground-based measurements for validating at least 5 of the seven 1st priority EO land products (see paragraph 3.1.1.2 of TA Appendix 3.1) over at least 20 sites;
- 2) The tenderer must demonstrate their experience in performing ‘up-scaling’ from raw GBO to land product match-up;
- 3) The tenderer must demonstrate in the offer that each of the proposed existing GBO site respects the technical specifications described in the technical annex, paragraph 3.1.4;
- 4) The tenderer must demonstrate in the offer that none of the proposed existing sites is covered by legal protection or data policy in such a way that it would hinder access from Contractor, Contracting Authority or final users;
- 5) The tenderer must demonstrate in the offer its capability to collect and make available the GBO for operation within 6 months from the time of contract signature;
- 6) The tenderer must demonstrate in the offer that output data will have the data structure for the ground based measurements as described in the Technical Annex, section 3.1.4.4;
- 7) The tenderer must demonstrate in the offer that they will be able to timely deliver the GBO and ancillary data as defined in section 3.1.4.6 “time definition”, of the technical annex.

Chapter 3: Detailed description of the proposed methodology for selecting additional sites for collecting GB measurements. In particular in the section:

- 1) The tenderer must demonstrate in the offer that they are able to establish or upgrade at least 5 sites for collecting raw ground-based measurements for validating at least 5 of the seven 1st priority EO land products;
- 2) The tenderer must demonstrate in the offer that the selection of the additional sites will improve the representativeness of the dataset in terms of surface cover heterogeneity and geographic coverage. An option would be to perform a gap analysis on the sites identified in Component 1, and show that the additional sites fulfil the emerged needs;
- 3) The tenderer must demonstrate in the offer that each of the proposed existing GBO site

respects the technical specifications described in the technical annex, paragraph 3.1.4;

- 4) The tenderer must demonstrate in the offer that none of the proposed additional sites is covered by legal protection or data policy in such a way that it would hinder access from Contractor, Contracting Authority or final users;
- 5) The tenderer must demonstrate in the offer its capability to collect and make available the GBO for operation within 9 months from the time of contract signature;
- 6) The tenderer must demonstrate in the offer that output data will have the data structure for the ground based measurements as described in the Technical Annex, section 3.1.4.4;
- 7) The tenderer must demonstrate in the offer that they will be able to timely deliver the GBO and ancillary data as defined in section 3.1.4.6 “time definition”, of the Technical Annex.

Chapter 4: Description of the tenderer from an institutional and general point of view including organization and activities. If the tenderer is a consortium the description is to be provided for each of the entities of the consortium.

Chapter 5: provide key staff CVs.

Chapter 6: Description of specific organization set up by the tenderer to carry out the activities described in the technical specifications and its appendix A. Who (which entity) does what, who (which key staff) is responsible of what.
The description shall provide a level of detail in line with the description of activities provided in Technical Annex section 2.3 “Collection and distribution of ground-based measurements” and should not be redundant with chapter 8.

Chapter 7: Explicit declaration that the tenderer offer and activities to be carried out under the possible contract to be signed are and will be fully conform to the content of the technical annex and its appendix 3.1.

Chapter 8: Description of the HW-SW infrastructure and organization for day-to-day operations for data access and distribution (see 2.3.3 of the TA). In particular in the section:

- 1) The tenderer must demonstrate in the offer that they will be able to distribute the GBO datasets and ancillary data through a web based application;
- 2) The tenderer must demonstrate in the offer that they are able to ensure timely access GBO datasets and ancillary data through web based application;
- 3) The tenderer must demonstrate in the offer that they are able to ensure the mirroring of GBO datasets and ancillary data to an external site;
- 4) The tenderer must demonstrate in the offer that they are able to implement web-based INSPIRE-compliant user registration procedures that allow the implementation of the Copernicus data distribution policy;
- 5) The tenderer must demonstrate in the offer that they are able to operate the data-distribution infrastructure within 6 months from the time of contract signature;

- 6) The tenderer must demonstrate in the offer that they are able to operate a user help service to answer user questions on data access and data use;
- 7) The tenderer must demonstrate in the offer that they are able to monitor data and service quality as defined in sections 3.1.9 “ data and service quality monitoring” of Appendix A of Annex 1 Technical Specifications.

3.4. Financial offer

Chapter 1: Price list as follows, for the execution of the framework contract:

- For component 1: as in Table 5 below
- For component 2: as in Table 6 below
- For component 3: as in Table 7 below

Table 5: Component 1 - Ground-based measurements from existing sites.

Item	Quantity	Price
RM-1 (Direct/Diffuse visible radiation) (hourly/daily measurements)	1 site for 1 year	
RM-2 (Direct/Diffuse thermal radiation) (hourly/daily measurements)	1 site for 1 year	
RM-3 (Atmospheric properties) (hourly/daily measurements)	1 site for 1 year	
RM-4 (Roughness) (daily measurements)	1 site for 1 year	
RM-5 (Transmission through canopy) (daily measurements)	1 site for 1 year	
RM-6 (Soil BRF) (hourly/daily measurements)	1 site for 1 year	
RM-7 (Soil BHR/DHR) (hourly/daily measurements)	1 site for 1 year	
RM-8 (FIPAR) (hourly/daily measurements)	1 site for 1 year	
RM-9 (Leaf Scattering Albedo) (daily measurements)	1 site for 1 year	
RM-10 (LAI) (daily measurements)	1 site for 1 year	
RM-11 (LAD) (daily measurements)	1 site for 1 year	
RM-12 (Structural knowledge) (daily measurements)	1 site for 1 year	
RM-13 (LSE) (daily measurements)	1 site for 1 year	
RM-14 (Ground and Surface Temperature) (hourly/daily measurements)	1 site for 1 year	
RM-15 (Soil moisture) (hourly/daily measurements)	1 site for 1 year	
RM-16 (Meteo properties) (hourly/daily measurements)	1 site for 1 year	

LP-1 (Surface Reflectance) (12 match-up per site/year) ⁷	1 site for 1 year	
LP-2 (Surface Albedo) (12 match-up per site/year)	1 site for 1 year	
LP-3 (LAI) (12 match-up per site/year)	1 site for 1 year	
LP-4 (FAPAR) (12 match-up per site/year)	1 site for 1 year	
LP-5 (Fcover) (12 match-up per site/year)	1 site for 1 year	
LP-6 (Soil moisture) (12 match-up per site/year)	1 site for 1 year	
LP-7 (LST) (12 match-up per site/year)	1 site for 1 year	

Table 6: Component 2 - Ground-based measurements from additional sites.

Definition	Quantity	price
RM-1 (Direct/Diffuse visible radiation) (hourly/daily measurements)	1 site for 1 year	
RM-2 (Direct/Diffuse thermal radiation) (hourly/daily measurements)	1 site for 1 year	
RM-3 (Atmospheric properties) (hourly/daily measurements)	1 site for 1 year	
RM-4 (Roughness) (daily measurements)	1 site for 1 year	
RM-5 (Transmission through canopy) (daily measurements)	1 site for 1 year	
RM-6 (BRF) (hourly/daily measurements)	1 site for 1 year	
RM-7 (DHR/BHR) (hourly/daily measurements)	1 site for 1 year	
RM-8 (FIPAR) (hourly/daily measurements)	1 site for 1 year	
RM-9 (Leaf Scattering Albedo) (daily measurements)	1 site for 1 year	
RM-10 (LAI) (daily measurements)	1 site for 1 year	
RM-11 (LAD) (daily measurements)	1 site for 1 year	
RM-12 (Structural knowledge) (daily measurements)	1 site for 1 year	
RM-13 (LSE) (daily measurements)	1 site for 1 year	
RM-14 (Ground and Surface Temperature) (hourly/daily measurements)	1 site for 1 year	
RM-15 (Soil moisture) (hourly/daily measurements)	1 site for 1 year	
RM-16 (Meteo properties) (hourly/daily measurements)	1 site for 1 year	

⁷ The matchup, obtained through up-scaling of the RM measurement, have to be temporally distributed to represent the seasonal variability.

LP-1 (Surface Reflectance) (12 match-up per site/year) ⁸	1 site for 1 year	
LP-2 (Surface Albedo) (12 match-up per site/year)	1 site for 1 year	
LP-3 (LAI) (12 match-up per site/year)	1 site for 1 year	
LP-4 (FAPAR) (12 match-up per site/year)	1 site for 1 year	
LP-5 (Fcover) (12 match-up per site/year)	1 site for 1 year	
LP-6 (Soil moisture) (12 match-up per site/year)	1 site for 1 year	
LP-7 (LST) (12 match-up per site/year)	1 site for 1 year	

Table 7: Component 3 - Data access and distribution

Definition	quantity	Price
Data distribution (through web-portal)	1 year of operation – all the data sets mentioned in this price scenario	
Organization and participation in Meeting Review (incl. document management and organization of meetings)	1 Meeting Review	

For the purpose of full consistency between the Price Evaluation (Tables 1, 2 and 3) and the Financial Offer (Tables 5, 6 and 7) prices shall be fully consistent between both chapters.

All prices shall be fixed, all-inclusive, expressed in Euro and VAT exempt.

3.5. Draft contract

Draft Contract duly completed (with related annexes), dated and signed by a Legal Representative.

3.6. Legal Entity and Financial Identification forms

Legal Entity and Financial Identification forms duly filled in and signed.

4. REJECTION OF OFFERS

The Contracting Authority reserves the right to reject offers that:

- are not submitted in conformity with the modalities indicated in the letter of invitation;
- do not satisfy the exclusion and selection criteria;
- do not explicitly comply with the technical specifications, this administrative annex or with the draft contract;
- contain an incomplete or inconsistent financial offer (see section 3.4 above).

⁸ The match-up should be distributed to represent the seasonal variability.