

**Title:** GMES/Copernicus land services pan-European component – HRL imperviousness change and CLC based land take datasets; inter-calibration of indicators: Differences, commonalities, complementarity, added value and use recommendations

**Reference:** Negotiated procedure EEA/MDI/14/019

The European Environment Agency (EEA) envisages awarding a contract to a service provider for exploring complementarities and differences between the High Resolution Layer (HRL) imperviousness and the existing Corine Land Cover (CLC) based land take data, including the elaboration of indicator(s) highlighting potential relationships between both datasets.

**Type of contract:**

Service contract for a duration of 3 months as from the date of its signature.

**Estimated value:**

EUR 40 000 excluding VAT covering all services.

**Place of delivery or of performance:**

At the contractor's premises.

**Description of the services to be procured:**

Data and indicators on the extent of and change in “land take”<sup>1</sup>, as well as in the HRL imperviousness (formerly called soil sealing) are important for a number of highly policy-relevant issues. Changes in imperviousness and land take can document land use intensification or land-cover/land-use change due to urban or industrial development, and related increases in traffic infrastructure. All these changes have potentially strong implications for biodiversity, soil functions, ecosystem services provision and nature conservation. Until recently, the only European dataset available to document changes in land take was Corine Land Cover (CLC)<sup>2</sup>, now also part of the Copernicus land monitoring service portfolio. The associated existing indicator is ‘land take’. The imperviousness indicator (under preparation and based on the time series of the HRL imperviousness 2006, 2009 and 2012), supplements the valuable ‘land take’ indicator with an indicator with a higher spatial resolution, based on a more direct measurement of imperviousness, with a shorter data update cycle than CLC. However the details of the differences, commonalities and complementarity of the two different data sets remains to be explored in view of an inter-calibration between both datasets in the GMES/Copernicus land monitoring portfolio. A bi-directional calibration via indicators derived from both land products is essential to enable full use of and exploitation of both complementary sources of information.

---

<sup>1</sup> Land take: a measure of how much land covered by agriculture, forests and semi-natural land, wetlands and water is converted to land cover for urban (including the creation of green urban areas over previously undeveloped land), commercial, industrial, infrastructure, mining or construction purposes; following the [EEA Land take indicator \(CSI 014/LSI 001\) specification](http://www.eea.europa.eu/data-and-maps/indicators/land-take-2/) (<http://www.eea.europa.eu/data-and-maps/indicators/land-take-2/>).

<sup>2</sup> <http://land.copernicus.eu/pan-european/corine-land-cover/view>

The services to be procured shall explore and document, in detail, the differences, commonalities and complementarity of the two data sets. Results shall be applied and incorporated into a use case, from where to derive some “best practices” or use recommendations that are accessible to non-technical users. The requested setting for a use case of the data sets shall answer the question: what are the extent, degree, dynamics and spatial pattern of land take in general, and surface sealing (imperviousness) in particular, and what are their interrelations?

The relation between GMES/Copernicus land products shall be explored at both pan-European scale, as well as at a local to regional scale (by means of a small number of regional (use) cases). Ideally these regional examples would be placed in areas with very different dynamics with regards to land take and soil sealing (urban densification, low-density urban sprawl<sup>3</sup>, increases/decreases in the dynamic interface between urban and rural (peri-urban), rural low changes, etc.) allowing to explore a range of typical situations. The usage perspective should ideally also take account of and interpret both products and their relation within the spatial planning context in which the selected land take and soil sealing patterns are documented/explored.

The service is to produce a detailed report, providing a methodology for inter-calibration of both datasets, as well as documenting the findings and recommendations for use. The report is to include illustrative graphs, tables and figures, as well as a range of maps.

**Scheduled starting date of contract (indicative):**

1 March 2015

**Registration of interest:**

Interested candidates shall register their interest by email to [procurement@eea.europa.eu](mailto:procurement@eea.europa.eu) by **16.1.2015** at the latest, quoting the title and reference No of this negotiated procedure in the subject field of the message and providing the following information:

- Name (of individual or organisation/company)
- Address (of individual or organisation/company)
- Contact person
- E-mail
- Description of main area of business / expertise (max. 500 words)

Your personal information above will be processed solely for the purpose of this negotiated procedure in accordance with 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 8/1 of 12.1.2001). 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>

**Description of the tendering procedure:**

---

<sup>3</sup> Urban sprawl: unplanned incremental urban development, characterised by a low density mix of land uses on the urban fringe (EEA, 2006: [http://www.eea.europa.eu/publications/eea\\_report\\_2006\\_10](http://www.eea.europa.eu/publications/eea_report_2006_10))

On the basis of the pre-assessment of the information provided, the EEA will draw up a list of the most suitable candidates and will forward to all or some of them (at least three candidates) by e-mail an invitation to submit a tender in accordance with the tender specifications by a set deadline. The tender submitted will be evaluated in accordance with the criteria specified in the tender specifications. During the negotiation phase after the submission of the tenders, selected candidates may be required to adapt their tender to the requirements set in the tender specifications in order to find the solution offering the best value for money.

Candidates shall note that registration of interest to participate in the above-mentioned procedure entails no obligation on the part of the EEA to send an invitation to tenders to candidates or to award them a contract.

Please note that no replies will be sent to unselected candidates.