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DIRECTORATE-GENERAL
REGIONAL AND URBAN POLICY
Policy

CALL FOR TENDERS

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Projecting global population grids to 2100

TENDER SPECIFICATIONS

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1. INFORMATION ON TENDERING

1.1. Participation

Participation in this procurement procedure is open on equal terms to all natural and legal persons coming within the scope of the Treaties, as well as to international organisations.

It is also open to all natural and legal persons established in a third country which has a special agreement with the Union in the field of public procurement on the conditions laid down in that agreement. Where the plurilateral Agreement on Government Procurement¹ concluded within the World Trade Organisation applies, the participation to this procedure is also open to all natural and legal persons established in the countries that have ratified this Agreement, on the conditions it lays down.

For tenderers from the UK:

Please be aware that after the UK's withdrawal from the EU, the rules of access to EU procurement procedures of economic operators established in third countries will apply to tenderers from the UK depending on the outcome of the negotiations. In case such access is not provided by legal provisions in force tenderers from the UK could be rejected from the procurement procedure.

1.2. Contractual conditions

The tenderer should bear in mind the provisions of the draft contract which specifies the rights and obligations of the contractor, particularly those on payments, performance of the contract, confidentiality, and checks and audits.

1.3. Compliance with applicable law

The tender must comply with applicable environmental, social and labour law obligations established by Union law, national legislation, collective agreements or the international environmental, social and labour conventions listed in Annex X to Directive 2014/24/EU².

1.4. Joint tenders

A joint tender is a situation where a tender is submitted by a group of economic operators (natural or legal persons). Joint tenders may include subcontractors in addition to the members of the group.

In case of joint tender, all members of the group assume joint and several liability towards the Contracting Authority for the performance of the contract as a whole, i.e. both financial and operational liability. Nevertheless, tenderers must designate one of the economic operators as a single point of contact (the leader) for the Contracting Authority for administrative and financial aspects as well as operational management of the contract.

¹ See http://www.wto.org/english/tratop_E/gproc_e/gp_gpa_e.htm

² Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC (OJ L 94, 28.3.2014, p. 65).

After the award, the Contracting Authority will sign the contract either with all members of the group, or with the leader on behalf of all members of the group, authorised by the other members via powers of attorney.

1.5. Subcontracting

Subcontracting is permitted but the contractor will retain full liability towards the Contracting Authority for performance of the contract as a whole.

Tenderers are required to identify all subcontractors whose share of the contract is above 10 %.

During contract performance, the change of any subcontractor identified in the tender or additional subcontracting will be subject to prior written approval of the Contracting Authority.

1.6. Structure and content of the tender

The tenders must be presented as follows:

Part A: Identification of the tenderer (see section 1.7)

Part B: Non-exclusion (see section 4.1)

Part C: Selection (see section 4.2)

Part D: Technical offer

The technical offer must cover all aspects and tasks required in the technical specifications and provide all the information needed to apply the award criteria. Offers deviating from the requirements or not covering all requirements may be rejected on the basis of non-compliance with the tender specifications and will not be evaluated.

Part E: Financial offer

The price for the tender must be quoted in euro. Tenderers from countries outside the euro zone have to quote their prices in euro. The price quoted may not be revised in line with exchange rate movements. It is for the tenderer to bear the risks or the benefits deriving from any variation.

Prices must be quoted free of all duties, taxes and other charges, including VAT, as the European Union is exempt from such charges under Articles 3 and 4 of the Protocol on the privileges and immunities of the European Union. The amount of VAT may be shown separately.

The quoted price must be a fixed amount which includes all charges (including travel and subsistence). Travel and subsistence expenses are not refundable separately.

1.7. Identification of the tenderer

The tender must include a cover letter signed by an authorised representative presenting the name of the tenderer (including all entities in case of joint tender) and identified subcontractors if applicable, and the name of the single contact point (leader) in relation to this procedure.

In case of joint tender, the cover letter must be signed either by an authorised representative for each member, or by the leader authorised by the other members with powers of attorney. The signed powers of attorney must be included in the tender as well. Subcontractors that are identified in the tender must provide a letter of intent signed by an authorised representative stating their willingness to provide the services presented in the tender and in line with the present tender specifications.

All tenderers (including all members of the group in case of joint tender) must provide a signed Legal Entity Form with its supporting evidence. The form is available on:

[http://ec.europa.eu/budget/contracts_grants/info_contracts/legal_entities_en.cfm](http://ec.europa.eu/budget/contracts_grants/info_contracts/legal_entities/legal_entities_en.cfm)

Tenderers that are already registered in the Contracting Authority's accounting system (i.e. they have already been direct contractors) must provide the form but are not obliged to provide the supporting evidence.

The tenderer (or the leader in case of joint tender) must provide a Financial Identification Form with its supporting documents. Only one form per tender should be submitted. No form is needed for subcontractors and other members of the group in case of joint tender.

The form is available on:

http://ec.europa.eu/budget/contracts_grants/info_contracts/index_en.cfm

The tenderer (and each member of the group in case of joint tender) must declare whether it is a Small or Medium Sized Enterprise in accordance with [Commission Recommendation 2003/361/EC](#). This information is used for statistical purposes only.

In the course of the procedure tenderers may be requested to register and provide a Participant Identification Code (PIC, 9-digit number), serving as the unique identifier of their organisation in the Participant Register. Tenderer(s) will receive instructions on how to create a PIC in due time.

Upon communication of the tenderer's/applicant's PIC, the EU Validation Services (Research Executive Agency Validation Services) will contact the tenderer (via the messaging system embedded in the Participant Register) and request the latter to provide the supporting documents necessary to prove the legal existence and status and the economic and financial capacity of the organisation. All necessary details and instructions will be provided via this separate notification.

2. TECHNICAL SPECIFICATIONS

2.1. General background

This study will support the development of a global, people-based definition of cities and settlements. The new global definition will provide new insights into the level and changes of urbanisation in the world.

2.2. Objectives of the assignment

The objective of the assignment is threefold:

- Create a set of projected population grids to support the analysis of urbanisation in the future.
- Create a set of projected built-up area grids.
- Provide two population grids for India.

2.3. Scope of the contract

The geographic scope of this work is global.

2.4. Approach and methodology

The global population and built-up grids should have units of 1km by 1km. The time period to cover is 2010 to 2100 in intervals of ten years. The projections should take into account the population and built-up grids produced by the Joint Research Centre for the reference years 1975, 1990, 2000 and 2010. (<http://ghsl.jrc.ec.europa.eu>)

The set of projections should consist of

- A business-as-usual scenario using the IASA national level population projections for the IPCC scenario SSP2.
- Three scenarios where the spatial distribution of population and built-up areas converges to three different types of urban development (high, moderate and low density cities). These types should be based on the patterns in actual cities. For example, Asian, European and North-American cities could be used to identify the parameters for the three types.

The projection of the built-up grid should be produced in a semi-independent way from the population projections. This should ensure that the relationship between population and built-up changes over time in a meaningful way. For example, it could be done by estimating separately the amount of changes in built-up with no population change and the impact of the population change on built-up.

The projections should be based on empirical relationships at multiple geographical scales. In other words, the character of the grids in the vicinity of a grid cell should influence the change of population and built-up of that cell.

The two population grids for India should be produced as follows. Both grids should be based on population data from the latest census using the finest geographical breakdown available. Both grids should use units of 250m by 250m.

1. The first grid should distribute population equally within the spatial unit

2. The second grid should distribute population in proportion to the built-up area within the unit. Built-up area information should be based on the latest GHSL release (ghsl.jrc.ec.europa.eu)

2.5. Tasks

This assignment consists of four tasks:

1. Describe the proposed methodology to project population and built-up grids,
2. Produce the two population grids for India,
3. Produce the global projected population and built-up grids,
4. Document and comment the final grids.

The population grids should be provided as a series of georeferenced grid datasets with a 1 sqkm grid cell resolution, defined using a worldwide equal-area projection system. The datasets should be delivered in a raster format directly useable (without transformations or import operations) in an ESRI ArcGIS Desktop environment.

The European Commission will publish the results of this study providing free access to the data and the study. Data can be re-used on the condition of including a reference the study as the source of the data.

2.6. Work organisation

The tender will include an overview of how the work will be distributed and coordinated.

2.7. Duration and time schedule

The duration of the tasks is **18 months** starting from the signature of the contract. The deliverables and their timing are specified below.

Reports and meetings required

End Month	Output	Meeting
1	Deliverable 1: Inception report	
2		Kick-off meeting
3	Two population grids for India	
6	Deliverable 2: Draft global population grids	
12	Deliverable 3: Draft final report	
14		Concluding meeting
18	Deliverable 4: Final report	

The Contractor is expected to be available for two scheduled meetings (see table above). The meetings will be organised by the Commission. There is no need for the contractors to travel to Brussels as the **meetings can be held as video conferences**.

2.8. Deliverables

The deliverables of this study will be:

Deliverable 1: Inception report

Deliverable 2: Draft global population grids

Deliverable 3: Draft final report

Deliverable 4: Final report

3. CONTENT, STRUCTURE, QUALITY ASSESSMENT AND GRAPHIC REQUIREMENTS OF THE DELIVERABLES

The contractor must deliver the study and other deliverables as indicated below.

All reports will be submitted in English in an easily accessible style. Detailed information on the format is provided.

3.1. Content

3.1.1. Content of the Final study report

The final study report must include:

- an abstract of no more than 200 words and an executive summary of maximum 6 pages, in English, French and German;
- specific identifiers which must be incorporated on the cover page provided by the Contracting Authority;
- the following disclaimer:

“The information and views set out in this study are those of the author(s) and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission’s behalf may be held responsible for the use which may be made of the information contained therein.”

3.1.2. Content of the publishable executive summary

The publishable executive summary must be provided in English, French and German and must include:

- specific identifiers which must be incorporated on the cover page provided by the Contracting Authority;
- the following disclaimer:

“The information and views set out in this study are those of the author(s) and do not necessarily reflect the official opinion of the Commission. The Commission does not guarantee the accuracy of the data included in this study. Neither the Commission nor any person acting on the Commission’s behalf may be held responsible for the use which may be made of the information contained therein.”

3.1.3. Requirements for publication on Internet

The Commission is committed to making online information as accessible as possible to the largest possible number of users including those with visual, auditory, cognitive or physical disabilities, and those not having the latest technologies. The Commission supports the Web Content Accessibility Guidelines 2.0 of the W3C.

For full details on the Commission policy on accessibility for information providers, see: http://ec.europa.eu/ipg/standards/accessibility/index_en.htm

For the publishable versions of the study, abstract and executive summary, the contractor must respect the W3C guidelines for accessible pdf documents as provided at: <http://www.w3.org/WAI/>.

3.2. Graphic requirements

The contractor must deliver the study and all publishable deliverables in full compliance with the corporate visual identity of the European Commission, by applying the graphic rules set out in the European Commission's Visual Identity Manual, including its logo. The graphic rules, the Manual and further information are available at:

http://ec.europa.eu/dgs/communication/services/visual_identity/index_en.htm

An electronic version of Methodological Report and both Interim Reports with annexes are required. For the Final Report, three hard copies and an electronic version (three CD, Word format and PDF format or equivalent application compatible with MS Office) are required.

4. EVALUATION AND AWARD

The evaluation is based solely on the information provided in the submitted tender. It involves the following:

- Verification of non-exclusion of tenderers on the basis of the exclusion criteria
- Selection of tenderers on the basis of selection criteria
- Verification of compliance with the minimum requirements set out in these tender specifications
- Evaluation of tenders on the basis of the award criteria

The contracting authority may reject abnormally low tenders, in particular if it established that the tenderer or a subcontractor does not comply with applicable obligations in the fields of environmental, social and labour law.

The Contracting Authority will assess these criteria in no particular order. The successful tenderer must pass all criteria to be awarded the contract.

4.1. Verification of non-exclusion

All tenderers must provide a declaration on honour (see Annex 1), signed and dated by an authorised representative, stating that they are not in one of the situations of exclusion listed in that declaration on honour.

In case of joint tender, each member of the group must provide a declaration on honour signed by an authorised representative.

In case of subcontracting, all subcontractors whose share of the contract is above 10 % must provide a declaration on honour signed by an authorised representative.

The Contracting Authority reserves the right to verify whether the successful tenderer is in one of the situations of exclusion by requiring the supporting documents listed in the declaration of honour.

The successful tenderer must provide the documents mentioned as supporting evidence in the declaration on honour before signature of the contract and within a deadline given by the contracting authority. This requirement applies to each member of the group in case of joint tender and to all subcontractors whose share of the contract is above 10 %.

The obligation to submit supporting evidence does not apply to international organisations.

A tenderer (or a member of the group in case of joint tender, or a subcontractor) is not required to submit the documentary evidence if it has already been submitted for another procurement procedure and provided the documents were issued not more than one year before the date of their request by the contracting authority and are still valid at that date. In such cases, the tenderer must declare on its honour that the documentary evidence has already been provided in a previous procurement procedure, indicate the reference of the procedure and confirm that there has been no change in its situation.

A tenderer (or a member of the group in case of joint tender, or a subcontractor) is not required to submit a specific document if the contracting authority can access the document in question on a national database free of charge.

4.2. Selection criteria

Tenderers must prove their legal, regulatory, economic, financial, technical and professional capacity to carry out the work subject to this procurement procedure.

The tenderer may rely on the capacities of other entities, regardless of the legal nature of the links which it has with them. It must in that case prove to the Contracting Authority that it will have at its 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 its disposal.

The tender must include the proportion of the contract that the tenderer intends to subcontract.

4.2.1. Declaration and evidence

The tenderers (and each member of the group in case of joint tender) and subcontractors whose capacity is necessary to fulfil the selection criteria must provide the declaration on honour (see Annex 1), signed and dated by an authorised representative, stating that they fulfil the selection criteria applicable to them individually. For the criteria applicable to the tenderer as a whole, the tenderer (sole tenderer or leader in case of joint tender) must provide the declaration on honour stating that the tenderer, including all members of the group in case of joint tender and including subcontractors if applicable, fulfils the selection criteria for which a consolidated assessment will be carried out.

This declaration is part of the declaration used for exclusion criteria (see section 4.1) so only one declaration covering both aspects should be provided by each concerned entity.

The Contracting Authority will evaluate selection criteria on the basis of the declarations on honour. Nevertheless, it reserves the right to require evidence of the legal and regulatory, financial and economic and technical and professional capacity of the tenderers at any time during the procurement procedure and contract performance. In such case the tenderer must provide the requested evidence without delay. The Contracting Authority may reject the tender if the requested evidence is not provided in due time.

After contract award, the successful tenderer will be required to provide the evidence mentioned below before signature of the contract and within a deadline given by the contracting authority. This requirement applies to each member of the group in case of joint tender and to subcontractors whose capacity is necessary to fulfil the selection criteria.

A tenderer (or a member of the group in case of joint tender, or a subcontractor) is not required to submit the documentary evidence if it has already been submitted for another procurement procedure and provided the documents were issued not more than one year before the date of their request by the contracting authority and are still valid at that date. In such cases, the tenderer must declare on its honour that the documentary evidence has already been provided in a previous procurement procedure, indicate the reference of the procedure and confirm that there has been no change in its situation.

A tenderer (or a member of the group in case of joint tender, or a subcontractor) is not required to submit a specific document if the contracting authority can access the document in question on a national database free of charge.

4.2.2. Legal and regulatory capacity

Tenderers must prove that they are allowed to pursue the professional activity necessary to carry out the work subject to this call for tenders. The tenderer (including each member of the group in case of joint tender) must provide the following information in its tender if it has not been provided with the Legal Entity Form:

- For legal persons, a legible copy of the notice of appointment of the persons authorised to represent the tenderer in dealings with third parties and in legal proceedings, or a copy of the publication of such appointment if the legislation applicable to the legal person requires such publication. Any delegation of this authorisation to another representative not indicated in the official appointment must be evidenced.
- For natural persons, if required under applicable law, a proof of registration on a professional or trade register or any other official document showing the registration number.

4.2.3. Economic and financial capacity criteria

The tenderer must have the necessary economic and financial capacity to perform this contract until its end. In order to prove their capacity, the tenderer must comply with the following selection criteria.

Turnover of the last two financial years above EUR 200 000; this criterion applies to the tenderer as a whole, i.e. the combined capacity of all members of a group in case of a joint tender.

Evidence (to be provided on request):

- Copy of the profit and loss accounts and balance sheet for the last two years for which accounts have been closed from each concerned legal entity;
- Failing that, appropriate statements from banks.

If, for some exceptional reason which the Contracting Authority considers justified, a tenderer is unable to provide one or other of the above documents, it may prove its economic and financial capacity by any other document which the Contracting Authority considers appropriate. In any case, the Contracting Authority must at least be notified of the exceptional reason and its justification. The Commission reserves the right to request any other document enabling it to verify the tenderer's economic and financial capacity.

4.2.4. Technical and professional capacity criteria and evidence

A. Criteria relating to tenderers

Tenderers (in case of a joint tender the combined capacity of all members of the group and identified subcontractors) must comply with the criteria listed below. The evidence must be provided only on request.

The project references indicated below consist in a list of relevant services provided in the past three years, with the sums, dates and clients, public or private, accompanied by statements issued by the clients.

- **Criterion A1:** The tenderer must prove a high level of expertise with demographic data, projections and geographic information systems.
- **Evidence A1:** The tenderer must provide references for two reports or articles projects delivered in these fields in the last three years and academic and professional qualifications held by the service provider and, in particular, by the person(s) to be responsible for the services.
- **Criterion A2:** The tenderer must prove capacity to draft reports in English.
- **Evidence A2:** The tenderer must provide one document of at least 10 pages (report, study, etc.) in this language that it has drafted and published or delivered to a client in the last two years. The verification will be carried out on 5 pages of the document.

B. Criteria relating to the team delivering the service:

The team delivering the service should include, as a minimum, the following profiles.

Evidence will consist in CVs of the team responsible to deliver the service. Each CV should indicate the intended function in the delivery of the service.

- **Criterion B1:** Team for data collection and analysis (1-2 people): collectively the team of people should have proven experience of six years in data analysis.
- **Evidence B1:** CVs

4.3. Award criteria

The contract will be awarded based on the most economically advantageous tender, according to the 'best price-quality ratio' award method. The quality of the tender will be evaluated based on the following criteria. The maximum total quality score is 100 points.

- **Quality of the proposed methodology** (50 points - – minimum score 25)

This criterion will assess the appropriateness of the methodology of the whole exercise and of the specific methodology for each task.

- **Organisation of the work and resources** (50 points – minimum score 25)

This criterion will assess how the roles and responsibilities of the proposed team and of the different economic operators (in case of joint tenders, including subcontractors if applicable) are distributed for each task. It also assesses the global allocation of time and resources to the project and to each task or deliverable, and whether this allocation is adequate for the work. The tender should provide details on the allocation of time and human resources and the rationale behind the choice of this allocation. Details should be provided as part of the technical offer. It is not a budget requested as part of the financial offer.

Tenders must score minimum 50% for each criterion and minimum 50 % in total. Tenders that do not reach the minimum quality levels will be rejected and will not be ranked.

4.4. Ranking of tenders

Having examined the tenders from a technical point of view, the evaluation committee will proceed considering which is the economically most advantageous tender, i.e. the tender offering the best price-quality ratio determined in accordance with the formula below. A weight of 70/30 is given to quality and price respectively.

score for tender X	=	cheapest price	*	100	*	price weighting (in %)	+	total quality score (out of 100) for all award criteria of tender X	*	quality criteria weighting (in %)
		price of tender X								

The tender ranked first after applying the formula will be awarded the contract.

ANNEX

Annex 1: Declaration of Honour