



**T02/2012**

19<sup>th</sup> June 2012

To all prospective bidders,

Ref. No. T02/2012 - **Service tender for a Soil Baseline Survey**

**CLARIFICATION 1**

Reference is made to the above-mentioned tender, for which the deadline for submission is on the 6<sup>th</sup> July 2012, at 10:00am

Hereunder, please find a set of clarifications raised during the clarification meeting held on the 12th June 2012, which are construed to form an integral part of the Tender Document.

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**Question 1:** Is it possible that one Key Expert covers two or more roles, as requested in the tender document, if he/she has all the qualifications needed to cover these roles?

**Answer 1:** Yes, as long as the designated person meets all the respective key expert specifications required in Section 6.1.2 of Volume 1 Section 1 - Instructions to Tenderers.

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**Question 2:** MEPA or the bidder will be establishing the selection of 32 points (location of sampling points)?

**Answer 2:** MEPA will provide the preliminary locations for the sampling points, distinguishing between the locations for general, basic or biodiversity sampling. The precise final locations will be discussed and agreed with the winning bidder in the course of the project. To note that a minimum of 36 sampling points are envisaged (20 Basic, 4 Biodiversity, and 12 General)

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**Question 3:** Is the Soil map (Landscape Map - 2003) available to scale?

**Answer 3:** The bidders are to check with the Ministry for Resources and Rural Affairs (MRRA) as this exercise was conducted with resources from the Agriculture Department during the implementation of the LIFE-funded project Maltese Soil Information System (MALSIS).

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**Question 4:** Can the 1960 Soil Map (prepared by D.M. Lang) be updated to reflect current situation in terms of soil conservation?

**Answer 4:** That document provides a spatial snapshot of soil formations and associated series following a soil survey. The soil series identified by Lang were designed to fit the landscape and lithology and hence were mappable (these were named after the localities where Lang had originally encountered them) and was completed through the adoption of a methodology comprising aerial photographs using landscape boundaries. A close relationship can be traced between this map and the geology map as a result of the fact that Maltese soils are mostly derived from local rocks that are highly calcareous and closely related chemically. Soil horizon differentiation is not so clear in calcareous soils under the present climatic conditions of Malta.

The boundaries of some series and complexes defining the aforementioned map are not compatible with the 2003 Landscape Map as the latter was established following different criteria and assumptions adopted during the implementation of MALSIS project.

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**Question 5:** What are the sampling depths?

**Answer 5:** Sampling points will be chosen according to criteria and international standards, which are indicated for the various indicators within the Tender document.

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**Question 6:** Will the same testing be made irrespective of location? Can the requirement to test for certain heavy metals be waived for samples that are in areas where there is no industrial use and contamination is not expected?

**Answer 6:** A minimum of 36 points (20 Basic, 4 Biodiversity, 12 General) are to be tested. Samples taken from 'General' sampling locations do not require testing for contaminants. However samples taken from the 'Basic' sampling locations must be analysed for the list of contaminants as indicated in the tender document. It should be noted that an aim of the soil survey is to help establish background levels of certain contaminants in the Maltese Islands.

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**Question 7:** Kindly clarify the point with regards to the Key Expert - Experience in Geological References.

**Answer 7:** The Key Expert must have already conducted research on (academic /non-academic) issues/ studies addressing Maltese geology. Moreover, the Key Expert has to be conversant with main aspects and processes which define Maltese geology.

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**Question 8:** The Calcium carbonate content is not mentioned in the soil testing, this is an important parameter and we suggest it should be included.

**Answer 8:** Generally, technical personnel must fill out a "form" (template). This form will include a detailed description of the nature of the sampled soil or rock (which includes a quantitative/ qualitative appraisal of its physio-chemical composition/ structure, and so on) being reviewed in accordance with the project's specifications. Technical personnel must also take into account the

indications described for each sampling point. This information will be established following a closer assessment of the existing large-scale geological map of Malta and Gozo. The latter process will include a further analysis of any information supporting the aforementioned map. Eventually, all indications extrapolated from a closer scrutiny of this map would be refined further following the proposed particle size analysis carried out in terms of requirements stipulated in this Tender.

For example, the recognition of a carbonate rock will be derived, in an indirect manner, following a closer understanding of basic information (currently available from the geology map), *and* data gathered during the field sampling procedure that is, soil/rock sample's colour, collected samples tested for HCL, and so on, as described in this Tender. This activity (the compilation of a customized form template) would be an important tool contributing towards the successful implementation of this project, because it will enable prospective users, utilising this soil assessment, to associate information provided for any type of rock / soil. It would also help them determine whether potentially critical and/ or other external factors are shaping the rock/ soil structure under review.

Tenderers are to abide to all the technical specifications as specified in Section 4.2 Specific Activities of the tender's Terms of Reference (Volume 3 Section 1).

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All other tender documents, conditions and requirements, which are not superseded by this Clarification, remain in place.

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**DIRECTORATE CORPORATE SERVICES**  
**Malta Environment and Planning Authority**