Brussels, 23/03/2010
ENER/A.2/MSA/D(2010) 54645

INVITATION TO TENDER No. ENER/A2/33-2010

(open procedure)

Dear Sir/Madam,

1. The European Commission invites tenders for a service contract regarding the following project: **Collection of Data and Other Services for the Energy Market Observation System**

    This invitation to tender follows the publication of:

    - the contract notice in OJEU 2010/S 57-083950 of 23/03/2010

2. If you are interested in this contract, you must submit a tender in **triplicate**, in one of the official languages of the European Union.

    Tenders must be:

    (a) either sent by registered mail or by private courier

    The tender must be sent by registered mail or by private courier, dispatched not later than 30/04/2010 (the postmark or the receipt issued by the courier service serving as proof of the dispatch) to the following address:

    By registered mail

    European Commission
    Directorate-General Energy
    DM 28 - 0/110 - Archives
    B-1049 Brussels
    Belgium

    By private courier

    European Commission
    Directorate-General Energy
    Avenue du Bourget, 1
    B-1140 Brussels (Evere)
    Belgium

(b) **or delivered by hand**

Tenders must be delivered by hand at the **Central Mail of the European Commission** by 30/04/2010 **not later than 4 p.m.** (Brussels time), at the following address:

European Commission
Directorate-General Energy
Avenue du Bourget, 1
B-1140 Brussels (Evere)
Belgium

In this case, a receipt must be obtained as proof of submission, signed and dated by the official in the Commission's central mail department who took delivery. The department is open from 08.00 to 17.00 Monday to Thursday, and from 8.00 to 16.00 on Fridays. It is closed on Saturdays, Sundays and Commission holidays.

3. Tenders must be placed inside two sealed envelopes, one inside the other. **The inner envelope should be marked:**

> **Call for tenders No. ENER/A2/33-2010**
>
> **not to be opened by the internal mail department**
>
> **DM 28 0/110 – Archives**

If self-adhesive envelopes are used, they must be sealed with adhesive tape and the sender must sign across this tape.

The non-compliance with these formal conditions will entail the rejection of the bids at the opening session.

4. Tenders will be opened at 10 a.m. on 07/05/2010, at 24 Rue De Mot (Directorate-General Energy, third floor, office 58, 1040-Brussels).

This opening session will be public. Each tenderer may be represented by not more than one person. At the end of the opening session, the Chairman of the opening committee will indicate the name of the tenderers and the decision concerning the admissibility of each offer received. The prices mentioned in the bids will not be communicated.

5. The specification, listing all the documents that must be produced in order to tender, including supporting evidence of economic, financial, technical and professional capacity and the draft contract are attached.

6. Tenders must be signed by the tenderer or his duly authorised representative and perfectly legible so that there can be no doubt as to words and figures.

7. Validity period of the tender: six months as from the final date for submission of tenders mentioned under point 2 above.

8. Submission of a tender implies acceptance of all the terms and conditions set out in this invitation to tender, in the specification, in the draft contract and, where applicable, waiver of the tenderer's own general or specific terms and conditions. The terms and conditions are

binding on the tenderer to whom the contract is awarded during the performance of the contract.

9. Contacts between the awarding authority and tenderers are prohibited throughout the procedure except in exceptional circumstances and under the following conditions only:

Before the closing date for submission of tenders

- At the request of the tenderer, the awarding authority may provide additional information solely for the purpose of clarifying the nature of the contract.

  Requests for additional information must be sent in writing not later than five working days before the closing date for submission of tenders to the following address:

  Mr. Mathieu SAMYN
  DG ENER
  European Commission
  DM 24-3/095
  B-1049 Brussels
  Belgium

  Fax (+ 32 2) 296 4337
  E-mail: Mathieu.Samyn@ec.europa.eu

- The Commission may, on its own initiative, inform interested parties of any error, inaccuracy, omission or any other material shortcoming in the text of the tender documents.

Further information will be sent simultaneously to all tenderers who have requested the specification in writing, where this is appropriate. Tenderers who have downloaded the documents from the Directorate-General Energy website (DG ENER) are invited to consult this site regularly until the deadline for submission.

After the opening of tenders

If a tender requires clarification, or if there is a need to correct material errors which have occured in the drafting of the tender, the Commission may take the initiative and contact the tenderer(s). Such contact shall not lead to the conditions of the tender being altered in any way.

10. This invitation to tender is in no way binding on the Commission. A commitment will come about only when a contract with the successful tenderer has been signed.

    Until a contract is signed, the awarding authority may decide not to award a contract or to cancel the tendering procedure, without the candidates or tenderers being entitled to claim any compensation. Where appropriate, the decision will be substantiated and brought to the attention of the tenderers.

11. Tenderers will be informed of whether their tenders have been accepted or rejected.

12. The follow-up of your response to the invitation to tender will require the recording and further processing of personal data (i.e. name, address, CV, etc.). This data will be processed in accordance with the requirements of Regulation (CE) 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. Unless if otherwise stated, replies to questions

and personal data requested are necessary for the purpose of assessing your tender (according to the specifications of the invitation to tender) and will only be processed within DG ENER as data controller, for this purpose. You may, upon request, have your personal data sent to you and rectify any inaccurate or incomplete particulars. Should you have any queries concerning the processing of your personal data, please address them to the entity acting as data controller within DG ENER. As regards the processing of your personal data, you have the right to bring the matter before the European Data Protection Supervisor at any time.

13. You are informed that for the purposes of safeguarding the financial interest of the Union, your personal data may be transferred to internal audit services, to the Court of Auditors, to the Financial Irregularities Panel and/or to the European Anti-Fraud Office (OLAF).

    Data of economic operators which are in one of the situations referred to in Articles 93, 94, 96(1)(b) and 96(2)(a) of the Financial Regulation may be included in a central database and communicated to the designated persons of the Commission, other institutions, agencies, authorities and bodies mentioned in Article 95(1) and (2) of the Financial Regulation. This refers as well to the persons with powers of representation, decision making or control over the said economic operators. Any party entered into the database has the right to be informed of the data concerning it, up on request to the accounting officer of the Commission.
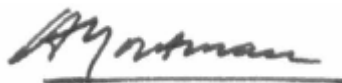
    Candidates or tenderers and, if they are legal entities, persons who have powers of representation, decision-making or control over them, are informed that, should they be in one of the situations mentioned in:

    - the Commission Decision of 16.12.2008 on the Early Warning System (EWS) for the use of authorising officers of the Commission and the executive agencies (OJ, L 344, 20.12.2008, p. 125), or

    - the Commission Regulation of 17.12.2008 on the Central Exclusion Database – CED (OJ L 344, 20.12.2008, p. 12),

    their personal details (name, given name if natural person, address, legal form and name and given name of the persons with powers of representation, decision-making or control, if legal person) may be registered in the EWS only or both in the EWS and CED, and communicated to the persons and entities listed in the above-mentioned Decision and Regulation, in relation to the award or the execution of a procurement contract or a grant agreement or decision.

Yours faithfully,

Anne Houtman

<u>TENDER SPECIFICATIONS</u>
<u>ATTACHED TO THE INVITATION TO TENDER</u>

Invitation to tender No. ENER/A2/33-2010 concerning

Collection of Data and Other Services for the Energy Market Observation System

TABLE OF CONTENTS

1 SPECIFICATIONS

1.1 Introduction

In the context of facilitating the further effective integration of the EU internal energy market and of ensuring the security of energy supplies, the European Commission has established an energy market observation system (EMOS), in order to support energy markets observation activities of the European Commission. Information on EMOS is available on the website of DG ENER: http://ec.europa.eu/energy/observatory/emos/emos_en.htm.

Through this call for tender, DG ENER wishes to obtain energy related databases covering all energy sectors, to be able to assist – in the first place – the European Commission in its decision making process aimed at ensuring the short, medium and long term security of energy supplies in the EU and the achievement of a functioning EU energy market.

This call for tender is divided in different lots, and will imply significant IT efforts for the European Commission in order to integrate the data procured under the different lots. For that reason, a detailed technical description is provided below to ensure that the terms of the contract are well understood. The tender should include a detailed description of the database of the tenderer. The attention of tenderers is drawn to the point that DG ENER will seek compensations if the technical requirements are not met along the whole execution of the contract. This concerns in particular technical issues impeding data feeds.

1.2 Purpose of the contract

1.2.1 Description of the lots

This call for tender shall consist in the acquisition of *databases* related to the following lots:

Lot 1. World Oil and Coal markets;

Lot 2. World Gas markets;

Lot 3. European Gas and Power markets;

Lot 4. Hydrocarbon Resources and Infrastructure data related to oil and gas (and their substitutes);

Lot 5. Infrastructure data related to electricity;

Lot 6. Renewable Energy Sources and Energy Efficiency;

Lot 7. Meteorological data.

Unless specified, the geographical coverage shall include the EU27 countries, Norway, Iceland, Switzerland, Liechtenstein, the contracting parties and observers of the Energy Community (Croatia, Serbia, Bosnia and Herzegovina, Kosovo pursuant UNSCR 1244, Montenegro, FYR of Macedonia, Albania, Moldova, Ukraine, Turkey and Georgia), Morocco, Algeria, Tunisia, Libya, Egypt, all CIS countries and the Middle East countries.

A tenderer may submit an offer for one or more lots, with one tender per lot. If tenders are submitted for more than one lot, each lot will be evaluated separately.

In addition to providing the database in the format specified in Section 1.2.2 (cfr. Technical Specifications), the tenderer will grant at least one access to its online services whenever

available. This will help the European Commission to better understand the use of the database by the data provider as well as to have access to all online documentation and to check the correct implementation of the database into EMOS.

For some lots, market intelligence services are requested and denominated "Peer-Review and advisory service". These relate e.g. to analytical publications described in the respective lot (newsletters, daily reports…).

1.2.1.1 World Oil and Coal markets

In a <u>first lot</u>, DG ENER would like to purchase as a whole package (A+B) the following:

A/ **Price[1] and volume[2] (if available) information** of the *wholesale markets[3]* of each Member State or region covering all contracts and products[4] from the forward curve:

for Oil

- Daily or weekly assessments of international crude prices at the main pricing locations with Incoterms;

- Intercontinental Exchange (ICE) Crude Light futures;

- ICE Crude Light (Brent and Brent Weighted Averages) futures;

- ICE Gasoil futures;

- New York Mercantile Exchange (NYMEX) Heating Oil futures;

- NYMEX Crude Oil futures;

- NYMEX Unleaded Gasoline futures;

- NYMEX Access (the after-hours trading system on NYMEX) Unleaded Gasoline Futures by months;

- NYMEX Access Crude Light Futures by months;

for Coal

- Daily and weekly Steam Coal prices and volumes (CIF ARA and other coal swaps markets);

- Daily and weekly international FOB prices and freight rates to ARA;

- Coal indices or other applicable forwards for Steam Coal;

- Coking coal international prices and volumes and, if available futures;

- Supply outlook for hard coal and lignite;

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[1] Prices and assessments
[2] Total volumes and number of transactions
[3] The most representative trading venue for the corresponding Member State: voluntary Power Exchange, mandatory pools, OTC, brokers' platforms…
[4] By *traded products* we mean: the forwards, options and swaps. It also includes supporting indicators such as spark and dark spreads, and liquidity and volatility indicators.

- Monthly coal statistics on production, exports and imports (for the main countries, and for steam and coaking coal).

B/ Peer-Review and advisory service; in addition, if possible, (i) the actual and forecast production from EU producers of hard coal and lignite (with information on mines/projects with status, mining method and capacities), and (ii) the development of the international steam coal market (demand, supply, prices and freights) including a ten year forecast and country by country analysis for the major producer and consumer countries.

1.2.1.2 World Gas Markets

In a second lot, DG ENER would like to purchase in a whole package (A+B+C) the following

A/ a database of European supply and demand quantities for natural gas (LNG or pipe) under long term contractual obligations, covering the historical and forecast supply and demand gas volumes for each of the EU27 and EU candidate countries.

For each country, the database should cover:

- Annual contracted supply volumes (historical and forecasted long-term supply contracts);
- Medium and long-term gas supply data outlook based on identified gas infrastructure projects, supply contracts and stated assumptions regarding GDP and gas for power demand growth.
- Supply detail per country/contract and supply year;

B/ a global relational database relative to **LNG**, covering the world's major and mid-sized producing/importing countries in the following categories:

- Contracted volumes between liquefaction and regasification terminals;
- LNG carriers, existing and on order;
- European, US and Asia-Pacific monthly or annual volume and pricing assessments by exporter country;
- Trade (in volume by exporter and importer countries);

The data above should cover the widest possible time range, with the most recent data possible.

C/ Peer-Review and advisory service

1.2.1.3 European Gas and Power markets

In a third lot, DG ENER would like to purchase in a whole package (A+B) the following:

A) **Price[5] and volume[6] (if available) information** related to the *wholesale markets[7]* of each Member State or region covering all contracts and products[8] from the forward curve:

For European Physical and Forward gas markets

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[5] Prices and assessments

[6] Total volumes and number of transactions

[7] The most representative trading venue for the corresponding Member State: voluntary Power Exchange, mandatory pools, OTC, brokers' platforms…

[8] By *traded products* we mean: for the physical market, the balancing market, DA hourly and block contracts; for the financial market, the forwards, options and swaps. It also includes supporting indicators such as spark and dark spreads, and liquidity and volatility indicators.

- Gas prices (OTC and exchange prices): daily, day(s)-ahead and, where applicable, for future month(s) or quarter(s), seasons, gas years, for the main European hubs;

- ICE natural gas futures;

For reference prices of relevance for some EU gas markets

- NYMEX Natural Gas futures;

- Henry-Hub;

- JCC;

For Physical and Forward Electricity markets

- Daily electricity prices (and trade volumes) on Europe's main power exchanges;

- Base-load and peak-load OTC electricity prices: daily, day(s)-ahead and, where applicable, for future month(s) or quarter(s), for a maximum number of EU Member States;

For Physical and Forward CO$_2$ markets

- EU CO$_2$ spot price assessment and, if available,

- year(s)-ahead contracts

B/ Peer-Review and advisory service

1.2.1.4   Hydrocarbon Resources and Infrastructure data related to oil and gas (and their substitutes);

In a fourth lot, DG ENER would like to purchase in a whole package (A+B+C+D) the following:

A/ A relational database, focused on **reserves**, **exploration and production of oil and gas**, covering the world's major and mid-sized producing countries:

- Production by year (with on/off shore detail);
- Reserves (with on/off shore detail);
- Exploration activity by year;
- Exploration performance by year
- Licensing activity per year

The data above should cover the widest possible time range, with the most recent data possible.

B/ A geographical database **on infrastructure relative to oil, its derivatives and its substitutes**, containing information relating to the following items:

- Pipelines of Oil (and its derivative energy products) including among others, data on the pipeline name, name of the constructor, name of the operator(s), third party access and who has access, year of operation / construction, costs of investment, installed capacity, length and diameter, capacity of the cross-border points, leakages (difference between in and out).
- LPG plants, including among others data, the name of the plants, intake and/or output capacities, commissioning year, operator, year of operation / construction, costs of investment, nominal annual capacity, maximum hourly capacity, storage capacity;
- Methanol and Olefin plants, including among others data, the name of the plants intake and/or output capacities, commissioning year, operator, year of operation / construction,

costs of investment, nominal annual capacity, maximum hourly capacity, storage capacity;

- Refineries, including among others data, the name of the refinery, intake and/or output capacities, commissioning year, operator, capacity by refining process, year of operation / construction, costs of investment, nominal annual capacity, maximum hourly capacity, storage capacity;
- Major storage facilities located outside the refineries;
- Main information on ports handling energy products.

The geographic data must have precision equivalent to the scale 1:500 000 or larger. The information must have a temporal resolution of one year or better. Others requirements for the geographical data are described in paragraph 1.2.2.2.3.

C/ A geographical database **on gas infrastructures** (gas terminals, gas storage sites, gas compressor and gas grid) as specified below:

- The gas pipeline infrastructure over 12" in diameter (or less if applicable) including among others data on its length (with cross-border points), its name, name of the operator(s), third party access and who has access, year of operation / construction, costs of investment, installed capacity, length, compression station (installed capacity), diameter, capacity of the cross-border points, leakages (difference between in and out).
- The location of gas compressors, gas storage sites, LNG liquefaction and regasification terminals as well as LNG carriers including among others data on:
  - For LNG (worldwide geographical coverage): Name of the infrastructure, name of the constructor , name of the operator(s), name of the user(s), year of operation / construction, costs of investment, nominal annual capacity, maximum hourly capacity, ship class size (maximum), storage capacity, type of LNG: strategic / operational / degasification / liquefaction
  - For storages: name of the storage, name of the constructor, name of the operator(s), year of operation / construction, costs of investment, working capacity, redraw capacity, volume received per year, storage per year, type of storage: aquifer, gas field, salt cavity, etc.

The geographic data must have precision equivalent to the scale 1:500 000 or larger. The information must have a temporal resolution of one year or better. Others requirements for the geographical data are described in paragraph 1.2.2.2.3.

D/ Peer-Review and advisory service

1.2.1.5   Infrastructure data related to electricity;

In a <u>fifth lot</u>, DG ENER would like to purchase in a whole package (A+B) the following:

A/ A geographical database[9] on **all power generation units** and **the power grid**. This should include all power generation sites with a capacity of at least 50MW (and less if possible for certain countries), and all power lines with a voltage above 110 kV (or less if possible).

The infrastructure on high voltage overhead lines, cables and submarine cables would include among others data, the name of the lines, name of the constructor, name of the operator, year

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[9] A relational database that includes spatial information (spatial coordinates). Coordinate Reference System and others requirements for the geographical data are described in detail in paragraph 1.2.2.2.3.

of operation / construction, costs of investment, voltage (kV), capacity (MW), length (km), type (single / double circuit, AC/DC, overhead/underground), etc.

The location of electric devices would include among others data, the name of the device, the name of the constructor, name of the operator, year of operation / construction, costs of investment, type (phase shifters, phase transformers, capacitor batteries, etc.), annual emissions and allowances, eventual CO_2 infrastructure, etc.

The geographic data must have precision equivalent to the scale 1:500 000 or larger. The information must have a temporal resolution of one year or better. Others requirements for the geographical data are described in paragraph 1.2.2.2.3.

B/ Peer-Review and advisory service

1.2.1.6 Renewable Energy Sources and Energy Efficiency

In a sixth lot, DG ENER would like to purchase as a whole package (A+B+C) the following:

A/ Renewable Energy Sources

- **Production Capacity** (total for each technology, plant numbers for size categories) and auxillary production fuel type for biofuel/bioliquid plants;

- **Generation** of electricity (MWh) by technology, and **production** of biofuels (including average national blends), of bioliquids, of biomass (mtoe/tonnes) and of biogas;

- **Imports** of biofuels, bioliquids and biomass (by country of origin);

- **Price[10], tariff, premium or green certificate and volume[11] where applicable** for each tariff category (e.g. plant size) for

  The electricity generated from

    o co-firing power plants,
    o onshore/offshore wind,
    o biomass (wood, chips, pellets),
    o biogas (landfill, anerobic digestion, gasification, other),
    o solar (Photovoltaïc, Concentrated Solar Power),
    o marine (ocean, tidal),
    o geothermal, hydro (large and small),
    o biofuels and bioliquids (bioethanol, biodiesel, other, including any premium for biofuel fulfilling EU sustainability criteria), and for

  The following fuels

    o biomass (wood, chips, pellets),
    o biogas (landfill, anerobic digestion, gasification, other),
    o biofuels (bioethanol, biodiesel, other, including any premium for biofuel fulfilling EU sustainability criteria),

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[10] Prices and assessments
[11] Total volumes and number of transactions

- **Supply outlook** (for each technology).

B/ Energy Efficiency

- Indicators and historical data set per Sector at the most disaggregated possible level (Industry, Transport, Residential, Services and Agriculture) for the 27 EU Member States;

- White certificates (prices, quantities).

C/ Peer-Review and advisory services

1.2.1.7 Meteorological data

In a seventh lot, DG ENER would like to purchase in a whole package (A to E) the following:

(Historical) measurements *and* (historical) forecasts of

A/ Daily average temperatures,

B/ Wind daily average direction and intensity,

C/ Precipitations and Hydro reserves,

D/ Solar radiation.

The data will cover the whole Europe, i.e. EU27 plus Switzerland, Norway and the contracting parties of the Energy Community.

1.2.2 Technical specification

1.2.2.1 Basic Concept of the EMOS System

Global Architecture

The global architecture of the EMOS system has been chosen based on the functional and technical needs and constraints related to the gathering and data dissemination processes.

EMOS is built using a data warehouse architecture model as depicted hereunder. In short, a data warehouse is a database geared towards the business intelligence of an organisation. In the framework of the EMOS project, its role shall consist of integrating and storing data from a variety of sources. The data ought to be cleansed, conform and released only when it is fit for the user consumption. Therefore, the data in the warehouse must be primarily credible.

In other words, the EMOS data warehouse is a system that extracts, cleans, conforms and delivers source data into a dimensional data store and then supports and implements querying and analysis for the purpose of the EC users.

As illustrated in the figure hereafter, the EMOS data warehouse architecture is composed of four distinct components to be considered, namely:

- Data Source Providers
- Data Stating Area
- Data Presentation Area

- Data Access Tools

EMOS Data Warehouse
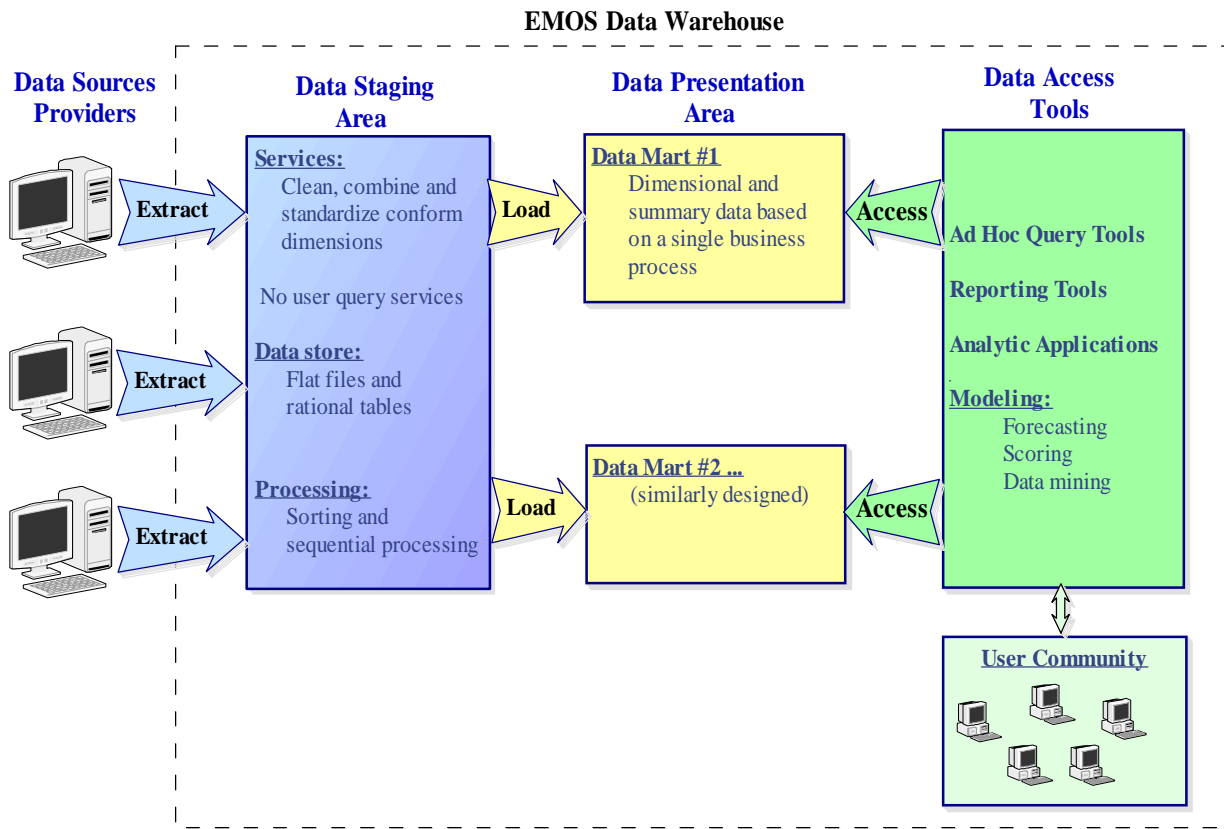
Brief introduction to the EMOS components

Data Sources Providers:

The various data providers supply their respective data sources to EMOS at regular intervals of time and, for some of them, in different data formats. Their systems should be thought of as outside the EMOS data warehouse because presumably we have no control over the content and format of their data.

However, due to the diversity and heterogeneity of the incoming data formats usually supported by the data providers, the European Commission intents to narrow down this number in specifying the types of formats recognised and accepted as such so as to facilitate the download and data extraction process in the EMOS system.

Data profiling is a necessary precursor to designing the EMOS system to use that data. It is therefore a systematic examination of the quality scope and context of the data sources to allow the EMOS system to be built. At the one hand, a very clean data source that has been well maintained before it arrives at the EMOS data warehouse requires minimal transformation and human intervention to load directly into the EMOS database, on the other hand, a dirty data source may require additional workload aiming at:

- Eliminating of some input fields or even data completely;
- Flagging of missing data and generation of special surrogate keys;
- Best-guess automatic replacement of corrupted values;
- Human intervention at the record level;
- Development of a full-blown normalised representation of the data

To mitigate this potential risk factor and because of resources constraints relative to extracting, transforming and loading the incoming data sources into the EMOS database, only the following two data formats can be accepted:

- The Comma Separated Value (CSV) File Format
- XML Data Sets

The awarded data providers will be free to choose one of these two formats; it is worth noting that any other format will be discarded by the EMOS system.

Further explanations are given hereinafter with regard to the supported data formats as well as their internal structure.

Data Staging Area

The Data Staging Area (DSA) of the EMOS data warehouse is both a storage area and a set of processes commonly referred to as Extract-Transformation-Load (ETL). The DSA is to be considered as an interface between the data provider sources systems and the Data Presentation Area.

In this context, raw operational data coming from the external source systems are transformed into a warehouse deliverable fit for user query and consumption.

In short, the DSA can be split in four staging steps when incoming data is received from a given data provider, namely:

Extracting process:

Extracting means reading and understanding the source data and copying the data needed for EMOS into the DSA for further manipulation. The fact of supporting the 3 types of structured data format specified above (i.e. CSV file, XML or Rational DBMS format) will enable the original extraction to be as simple and as fast as possible and will allow greater flexibility to restart the extraction process in the event an interruption should occur.

Cleaning process:

Once the data is extracted to the staging area, there are numerous potential transformations, such as cleansing the data (correcting misspellings, resolving domain conflicts, dealing with missing elements, or parsing into standard formats), combining data from multiple sources, de-duplicating data, and assigning warehouse keys. These transformations are all precursors to loading the data into the EMOS data warehouse presentation area. In most cases, the level of data quality acceptable for the source systems is different from the quality required by the data warehouse.

Conforming process:

Data conformation is required whenever two or more data sources are merged in the EMOS data warehouse. Separate data sources cannot be queried together unless some or all of the textual labels in these sources have been made identical and unless similar numeric measures have been mathematically rationalized so that differences and ratios between these measures make sense. Data conformation is a significant step which ought to be perceived as more than simple data cleaning.

Delivering process:

The role of the DSA is to make the received data ready for querying. The final and crucial step is structuring physically the data into a set of simple, symmetric schemas known as dimensional models or equivalently, star schemas. These schemas will significantly reduce query times and simplify the EMOS application development.

In summary, this first stage described above consists in feeding the presentation layer of the dimensionally modelled tables that are directly accessed by query tools used by the end-users.

Data Presentation Area

The Data Presentation Area (DPA) is where data is organized, stored, and made available for direct querying by users, report writers, and other analytical applications. The presentation area can be regarded as a series of integrated data marts. A data mart is a wedge of the overall presentation area pie. In its most simplistic form, a data mart presents the data from a single business process. These business processes cross the boundaries of organisational functions.
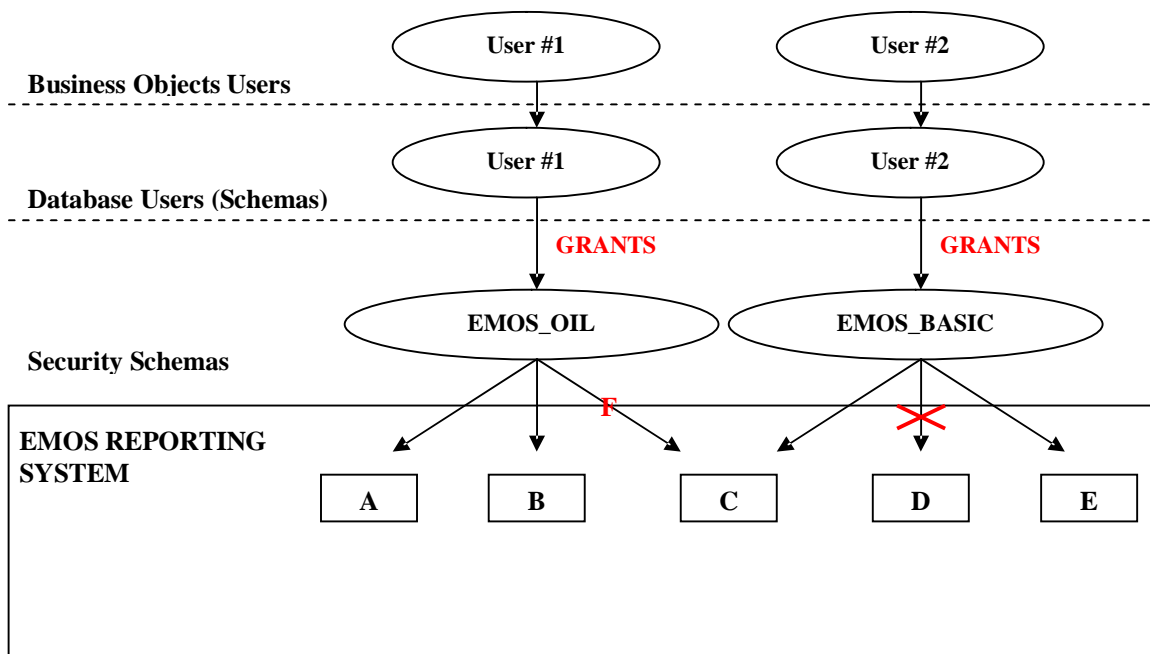
Data Access Tools

The final major component of the data warehouse environment is the *data access tool(s)*. The term tool refers to the variety of capabilities that can be provided to business users to leverage the presentation area for analytic decision making. By definition, all data access tools query the data in the data warehouse's presentation area. Therefore, querying should be considered as the main point of using the EMOS data warehouse.

Data Access Restrictions

According to the above description, the EMOS database is organized in different schemas. In order to restrict the access to some part of the database, "security schemas" have been developed. An "*EMOS_A*" security schema would for instance contain a set of Oracle views on provider A's data, in addition to publicly available data. An "*EMOS_B*" schema with the corresponding views on the provider B's data (together with access to publicly available data) could also created. A high level of flexibility is ensured, since we could as well create an "*EMOS_AB*" security schema with access to both data of Provider A and B. Each user has its own schema, to which a role related to the relevant security schema for that user is assigned. This architecture allows for a high flexibility in data access and protection. Data protection is therefore at the very heart of EMOS.

The following picture depicts an example of the data access:

Business Objects Users

Database Users (Schemas)

GRANTS   GRANTS

Security Schemas

EMOS_OIL   EMOS_BASIC

F

EMOS REPORTING SYSTEM

A   B   C   D   E

Details:

§ The User #1 has the role related to the EMOS_OIL security schema. When he connects to the EMOS interface (BusinessObjects), the application automatically connects the database using the User #1 schema. This database schema received the GRANT SELECT access rights on the EMOS_OIL security layer, which has full access on business views "A" and "B", but has a restricted access on "C" (F=Filter). This means that EMOS_OIL schema has a restricted "WHERE" clause in the view limiting the returned data record of the business table "C".

§ The User #2 has the role related to the EMOS_BASIC security schema. When he connects to the EMOS interface (BusinessObjects), the application automatically connects the database using the User #2 schema. This database schema received the GRANT SELECT access rights on the EMOS_BASIC security layer, which has full access on business views "C" and "E", but has a no access on "D" (X).

This system will allow DG ENER to make part of the data contained in EMOS available, in different stages and on specific conditions, to a larger public. Such diffusion would take place after necessary aggregation and/or processing and would be in full compliance with copyrights and license restrictions.

1.2.2.2 Technical requirements for the awarded data providers

Use and configuration of the Web (respectively FTP) Server

In a data access strategy context, it is important to establish a common software technology. To access and download the required data sources, the data provider will have the choice to set up a software architecture either based on the use of a Web Server configured in HTTP mode or instead, a FTP server, both available and accessible through the Internet network.

In both cases, the access to the information will be restricted and protected by a username/password created for that purpose, which will enable the European Commission to gain access to this restricted area. It must be stressed that the SFTP and HTTPS protocols are not accepted in the current framework.

The user account will be managed by the data provider and sent to the functional EMOS e-mail address (ENER-EMOS@ec.europa.eu) right after the signature of the contract between both parties.

It is worth noting that it will be under the responsibility of the European Commission to perform the data synchronisation with the intended provider, meaning that the data will be exchanged and transferred in one direction and shall always be initiated from the EMOS system but in no case, the other way around.

If the provider is willing to provide its data through its Web (resp. FTP) Server, the following configuration will have to be deployed in its premises: a private root folder called EMOS will be created on the Web (resp. FTP) Server which will be protected by a username/password account with the access restricted to the European Commission. In this folder, the provider will ensure the transfer and export of the corresponding data sources for download by the EMOS system.

The data files must be compatible with one of the two formats described below, namely: CSV or XML, and compliant with the presented internal structure.

The provider will create one file per type of data sources, i.e. per table. The file will be archived in ZIP or GZ format to ensure the integrity of the file while transferred to the European Commission, to speed up the download and optimise file storage.

The file names should not contain any reference to a particular date, whether the file contains time-dependent data or not. For instance, the electricity grid could be one table in the file "electricitygrid.xml", archived in the zip file "electricitygrid.zip" (or "electricitygrid.gz"). Similarly, assuming that the data corresponds to "Oil Product prices" on the 15th of May 2010, and that the file format is CSV, the filename syntax of the archive will be "oilproductprices.csv" while the file actually stored in the "/EMOS/current/" folder will be "oilproductprices.zip" or "oilproductprices.gz".

The last data files uploaded on the Web (resp. FTP) Server shall be kept available for a period equal to the elapsed time between two data uploads and then withdrawn and archived in the folder /EMOS/historic/ for a period of 1 months (or more in case of quarterly/annual data uploads). Subfolders will be created to ensure a proper archiving of the files. Taking the above example, the file "oilproductprices.gz" will be archived in the /EMOS/historic/20100515/ folder. After that, the files can be removed by the Contractor. In addition, for time-dependent data, since newer files often contain corrections to older files, a third folder called /EMOS/full_history/, will contain all the files corresponding to the whole history of the time series which are part of the tender. These files will be refreshed every quarter as well as on demand. Their format and structure should be strictly identical to the format and structure of the files saved in the other two folders. These two "historic" and "full_history" folders are important in case of download failures for a certain period of time. It will enable the Commission to retrieve previous data without loss in time series, for instance.

Whenever new data are updated by the provider and made available on its Web (resp. FTP) Server and for data refreshed on a monthly basis or within a longer period of time, the provider shall send a notification message by e-mail to the European Commission (ENER-EMOS@ec.europa.eu) informing that new files are ready to be downloaded. To that respect, in the body message, the provider shall indicate the list of filenames, the type of data and the type of energy sector updated and uploaded.

At the signature of the Contract, the provider shall provide the URLs syntaxes (resp. FTP address) of its website (resp. FTP server) pointing to the EMOS root structure as to enable the European Commission to register it in its download scripts. The URL syntax must resemble the following: *http://<dataprovider_web_address>/EMOS*. Similarly, the FTP address syntax must resemble the following: *<data_provider_ftp_server_address>/EMOS*.

Please note that the URL (resp. FTP address) must remain static and may not be changed over the duration of the contract without prior consent of the Commission.

After every export procedure and prior to notifying the European Commission, the provider shall proceed to a thorough check in order to make sure that the stored data are accurate, reliable,

consistent and viable. Furthermore, it shall guarantee that its data are identical on both sides, that is between the data persisting in its relational database and its local files. The Commission shall seek financial compensation in case it can be proven that the Contractor has not respected the above general recommandations.

In this context, the Contractor's responsibility and duty is to ensure on the one hand the proper functioning of its export facility tool (i.e. Web Server or FTP Server) aimed at collecting the required information in the framework of the EMOS project and, on the other hand, guaranteeing that all the requirements expressed by the European Commission and specified in this technical chapter shall be duly fulfilled without any constraint.

Requirements related to the Provider's database

The Contractor will extract its database in the form of data files each containing a table. The complexity of the energy sector implies the use of *dimension* tables along with the *fact* tables. The tender may be rejected if the structure of the database shows that dimensions are not properly managed in separate tables, except if the dimension is universal (time, for instance). The tender may also be rejected if it appears that the Contractor exports its data from non database environments like Excel sheets.

Requirements related to Supported Data Formats

Commercial data providers support a wide diversity the data formats. However, in order to automate the handling of the incoming data in the EMOS system and reduce the probability of errors during the data transfer, the data provider will have to stick to a set of predefined rules in the preparation of their required data sources and the access to this information. In the same logic, the development of any ad hoc export facility from non database environments should also be discarded and replaced by the creation of a database *prior* to the export of the data in the data formats defined hereunder.

As stated previously, the data provider will have to replicate and export its respective data (*dimension* and *fact* tables) among one of the 2 supported formats recognised by the EMOS system. It is up to the provider to come up with the most appropriate data format to be used for exchanging its data with EMOS. Nevertheless, whatever the data format chosen, the provider shall refer to the appropriate section hereinafter so as to be aware of the predefined rules to be respected upon the creation of the files and its embedded internal structure:

- The Comma Separated Value (CSV) File Format
- XML Data Sets

As illustrated in the table below, the 'n' first columns specify the occurrences of the 'n' *dimension codes* comprising as well the Currency and/or the Unit of Measure *code(s)*. The dimension tables should map these codes with the real dimensions. In the cells, the corresponding facts values to be provided by the data provider are shown as an example.

DIM_1 **Time Period Code**	DIM_2 **Product Code**	. . .	DIM_n **Country Code**	**Unit of Measure code**	**Currency code**	**Values**
Time_Period_Code_1	Product_Code_1	. . .	Country_Code_5	xxx	EUR	####.##
Time_Period_Code_1	Product_Code_2		Country_Code_27	xxx	GBP	#####.##
Time_Period_Code_1	Product_Code_3		Country_Code_1	xxx	EUR	-####.##
. . .	. . .	. . .	. . .	…		. . .
Time_Period_Code_n	Product_Code_n		Country_Code_41	xxx	EUR	###.##

In short, the data available in EMOS are requested and reported by use of predefined axes of analysis. Those predefined axes called 'Dimensions' of the system are either common or specific to a given field of interest. The common Dimensions can be summarised as follows and are presented by decreasing order of generality:

- The "Time" hierarchy which constitutes the most obvious axes of analysis;
- The "Country" based hierarchies which are almost always generalised also by the geographical and the geopolitical hierarchy; the mapping between the fact table and the dimension table could, for instance, be; CY (fact table) for Cyprus (dimension table).
- The "Product" hierarchy which is specific to the Energy context (i.e. Oil, Gas or Electricity); the mapping could be 100100 (fact table) for Crude oil (dimension table).
- The "Sector" hierarchy which is traditionally in relation with macro-economic statistical issues (e.g. production or transformation of Energy commodities, transport, households, etc); the mapping could be 200 (fact table) for Industry (dimension table).

It must be pointed out that for EMOS, the columns' order is not important in this context but in any case, it must be stable and the data format must be respected as described below. The following elements must also be taken into consideration in the data format structure, namely:

- The periodicity values must be constant within the same Data Source. In a nutshell, no combination is allowed between monthly and yearly data in the same data file
- The nomenclatures corresponding to the Dimensions must be given and *documented*, for instance: ID Code, Designation, Comment, Currency and/or Unit of Measure, etc. (cfr § I.2.4).

In addition, those specifications must be part of the chosen data format and systematically updated if change should occur in order to re-synchronise them in the EMOS database and to match them accordingly. Dimension tables should be available for download at any time and always correspond to the content of the fact tables.

It is important to define, for the transmitted data values, their respective "Status" from the provider, which may be:

- *Not Applicable*
- *Provisional*
- *Estimated, etc.*

This "Status", which is also a dimension, will be inserted and reproduced as such in the EMOS database.

1.2.2.2.1 CSV Data Format

When data is stored in columns and rows within a file on the file system to emulate a database table, it is referred to as flat or sequential file. The CSV file format comprises in addition specific delimiters to separate fields and records. CSV is often used to exchange data between disparate applications. Moreover, this latter format has become a de facto industry standard. The main benefit of this format is that it can be read and processed much faster than database tables.

In the creation of the CSV files, the data provider will have to be compliant with the following rules:

I. *Each record is one line:*

A record separator may consist of a line feed (i.e. ASCII/LF=0x0A), or a carriage return and line feed pair (i.e. ASCII/CRLF=0x0D 0x0A)

II. *Fields must be separated with commas or semi-columns:*

Example: *J*ohn, Doe, 120 any st.,"Anytown, WW", 08123*

III. *Leading and trailing space-characters adjacent to comma field separators are ignored:*

Example: *John, Doe…* resolves to *"John" and "Doe",* etc.

Space characters can be spaces or tabs.

IV. *Fields with embedded commas must be delimited with double-quote characters:*

Example: *J*ohn, Doe, 120 any st.,"Anytown, WW", 08123*

In this example, *"Anytown, WW"* had to be delimited in double quotes because it had an embedded comma.

V. *Fields that contain double quote characters must be surrounded by double-quotes, and the embedded double-quotes must each be represented by a pair of consecutive double quotes:*

Example: *John "Da Man" Doe* would convert to *"John ""Da Man """,Doe, …*

VI. *The number of columns cannot vary over the updated data files. This means that for each data file, the same number is required and must remain static.*

VII. *There must <u>always</u> be a <u>header line</u>, identifying uniquely and concisely each column.*

VIII.In case non ASCII characters are used, the file <u>must</u> be saved in UTF-8 format.

Remark: The CSV file described and required in the export of data is not the most technically elegant method by any means, but it is the one supported and used by the world's largest software development companies. For this reason, it is essential to stick to these formatting rules so as to avoid any data mismatch, or manual intervention at the record level. At this stage, it is worth recalling that the aim is to automate as much as possible the download process to be performed by the EMOS system.

1.2.2.2.2 XML Markup Language Data Format

Extensible Markup Language (XML) is a standard for data sharing. It is a universal language for exchanging data between enterprises, reason why it is part of the EMOS data warehouse architecture. In view of processing the XML data in the EMOS system, it will be important to allow for the two fundamental elements explained below in the creation of the XML files, namely:

- Character sets
- XML Metadata

A. Character Sets:

Character sets are groups of unique symbols used for displaying and printing computer output. The default character set for most relational database management systems has switch from ISO8859-15 (Latin 9) to UTF-8, which supports languages and alphabets

from all over the world, not just the Western world. Therefore, <u>the UTF-8 character set will be used in the respective XML data files</u> to preserve the basic ASCII encoding standard method.

It is to be pointed out that many problems may arise if the source XML document and the EMOS data warehouse are not based on the same character set, hence the importance of defining the encoding method in the header of each XML document. The main benefit of UTF-8 is that it supports most of the languages and alphabets worldwide.

To avoid this potential problem, an advisable approach for XML data files consists in tagging the document with the appropriate metadata to indicate the character set being used by an organisation. For instance, the following standard tag can be used:

<?xml version="1.0" encoding="UTF-8" ?>

This indicates that the XML document is encoded using the UTF-8 character set, resulting in all specific characters that may be part of the data files being correctly interpreted and stored in the EMOS database.

B. XML Metadata (XSD file):

XML metadata consists of tags unambiguously identifying each item in an XML document. To process an XML document, the structure of the document must be known beforehand. This structure is usually provided in a separate file. This section presents the unique metadata file supported in the framework of the EMOS system that must accompany the XML data and provide the structure of the XML document (data files). It is defined as XML Schema, also called XSD for XML Schema Definition file.

It is the unique language used and required by EMOS based on the W3C Recommendation for describing the structure and constraining the contents of XML data files to be supplied. The schema shall include the following information:

- All the elements clearly defined in the XML document
- All the attributes clearly defined in the XML document
- The number and order of child elements
- Data types of elements and attributes
- Default and fixed values for elements and attributes

Support of namespaces: In this circumstance, the namespaces shall indicate where to get the whole definition of the embedded elements and attributes to facilitate the data extraction in the EMOS data warehouse.

Also, the XSD files should not encapsulate information in any of "Annotation" and "Documentation" elements, since these are not supported by the EMOS' ETL tool.

1.2.2.2.3 Geographical data

In addition, requirements for geographical data are specified below.

A. Coordinate Reference System and geographical data format:

The geographical data has to be delivered in geographical coordinates with at least two decimals.   The coordinate reference system preferred is the European Terrestrial

Reference System 1989 (ETRS89). If the geometric accuracy of the geographic data is inferior to 1m, WGS84 can also be accepted. Additionally geographic data delivered in latitude/longitude in decimal degrees (DD) could be accepted if delivered with at least two decimals to have an acceptable position on the objects. Latitude/longitude in Degrees/minutes/seconds (DMS) will not be accepted as DMS format is not suitable for GIS systems.

For items for which the geographical representation is a point (information defined by a pair of x,y coordinates), each row in the geographical database will at least includes two columns with X, Y coordinates expressed in one of the accepted coordinate reference system.

For items for which the geographical representation is a line (a shape defined by a connected series of unique x,y coordinate pairs. A line may be straight or curved), each unique x,y coordinate pairs will be recorded on a separate row in the geographic database with a specific ID. Each unique x,y coordinate must also be described by a unique line_ID, so it will be possible for the Commission to reconstruct each line based on the specific ID and the line ID. For example, for pipelines, the file would contain a 'point ID', for each unique x,y coordinate representing the shape of the pipeline and a pipeline ID defining each pipeline (if the pipeline is cut into sections, a section ID will have also to be provided in the database).

For items for which the geographical representation is a polygon (closed shape defined by a connected sequence of x,y coordinate pairs, where the first and last coordinate pair are the same and all other pairs are unique), the same rules as for lines apply, but the first coordinate and the last one will be the same.

B. Metadata and documentation requirements

Metadata for discovery has to be available for the geographic data.

The geographic data should be documented preferably in line with the INSPIRE Implementing Rules on Metadata (Commission Regulation (EC) No 1205/2008 of 3 December 2008)[12] and the INSPIRE Metadata Implementing Rules: Technical Guidelines based on EN ISO 19115 and EN ISO 19119[13]. Metadata for discovery must be available preferably in XML encoding as described in the INSPIRE technical guidelines on metadata.

In addition each geographical data delivery will be accompanied by a number of documents:

- Data model showing the relations between features and tables
- Feature catalogue explaining all the attributes, data formats, domain values, code lists, etc
- Technical user guide describing the usage of the data.

All these documents must be updated for each major release of the data.

C. Data quality

The quality of the geographic and attribute data must be documented. The documentation of data quality must be included in the metadata description.

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[12] http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:326:0012:0030:EN:PDF
[13] http://inspire.jrc.ec.europa.eu/reports/ImplementingRules/metadata/MD_IR_and_ISO_20090218.pdf

The thematic data must be described in a detailed feature catalogue with data formats, completeness of attributes, precision of attributes where applicable etc.

In addition further documentation on the topological consistency checks (if relevant) and the methods on how information is collected and how unicity of key field is maintained must be provided. Further quality requirements are also described in the two following paragraphs of this tender specification.

D. Resolution

The data must have a resolution corresponding to a scale level of minimal 1: 500 000 or larger. It is commonly accepted that the accuracy for a same level of 1:500 000 is about 250 meters. In any case, the resolution of the data provided will be described.

E. Topological rules

The contractor will describe whether the geographic data is organised topologically or not and if it could be used for modelisation.

General rules to be observed

Rule 1 - Guaranteed Access Rules:

All the data shall be accessible without any ambiguity, meaning that once the data structure is predefined and validated by both parties (i.e. fieldname, field length, field types, etc), the provider shall not apply any change. In the event a change would occur for specific and justified reasons, a notification message shall be sent to the European Commission by e-mail two months beforehand by mentioning the type(s) of change, the reason(s) and its impact(s) so that European Commission can take all the appropriate measures to fit the modification in the EMOS system in due time.

Rule 2 – Systematic Treatment of NULL values:

A field should be allowed to remain empty. This involves the support of null value, which is distinct from an empty string or a number within a value of zero. However, attention should be drawn to the fact that most databases support the concept of a non-null field constraint that prevents null values in a specific table column.

Rule 3 – Duplicate rows and referential integrity:

Duplicate rows will be avoided by a proper design of the database, in particular the definition of the unique key. The referential integrity will also be ensured.

Rule 4 – Dimensions:

The Contractor will take a conservative and coherent approach regarding the dimension tables. In particular, the Contractor will modify its conventions only if needed for the good functioning of the system and will use one and only one term for a particular meaning.

Rule 5 – Real needs:

Following the award of a contract to a provider, a kick off meeting shall be convened to fix the technical details of data/information transfer, based on the needs of the Commission set out in

the Technical specification, Chapter I.2. For a matter of performance of the EMOS system, the provider(s) should do their best to supply only the necessary data sets or information agreed to during this meeting. Specifically, they shall ensure their data files do not in any case return more or less columns than agreed.

1.2.3 Use of data and information

The Commission wants to create manuals, maps, papers, reports, documents and other materials. These documents could be made available to the public under the conditions detailed in paragraph 1.2.3.3.

The Commission will not use the Contractor's Data nor any derivatives it creates to produce a commercial product.

DG ENER will use the data under the following conditions:

1.2.3.1   Licensing

The Commission prefers to hold a perpetual license[14] for the use of the data or information.

When the tenderer intends to differentiate prices depending on the number of user licenses for accessing to the data or information, DG ENER will consider two types of licenses:

- Named license:

Under a named license, a single user is granted access to the complete source data for any type of processing, manipulation or analysis. The tender should include a pricing list for 10, 20 and 50 licenses.

- Enterprise license:

Under an enterprise license, any person of the Commission is granted access to the complete source data for any type of processing, manipulation or analysis.

When a Lot includes geographical information, DG ENER will consider the following *additional* or *complementary* licence:

- Web map license:

Under the web map license, end users can have limited access[15] to the data through a web map service. It excludes any publication of vector data in the web map service. The web map service could be used on the Intranet or the internet. The web map license has to cover a defined number (100, 200 and 500) of named Commission users or an unlimited number thereof. Commission prefers an unlimited web map license. The web map license has to cover the use on the intranet (with or without control access) and the internet (with or without controlled access). The offer has to indicate prices for each of these uses. It shall be the choice of the Commission where to install

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[14] A perpetual license implies that the license to use the already provided data does not expire after a certain time period.

[15] at any time, the end user can only access a web map service displaying an image (in jpeg, png or gif format); the end user could also obtain attribute information of features (by "identifying" features) on the map; but at no point can the end user access the original dataset nor download the whole or partial dataset;

named users licenses. The allocation of the web map license may change during the duration of the validity period of the license.

The tender has further to describe possible ways of reducing or increasing the functional scope of the web map license.

The management of licenses within the Commission and its contractors is handled by the Commission. The data distributed to contractors may be the subject to a follow-up by the Contractor, in order to ensure the correct use of the data. A non-disclosure agreement is signed by the Commission and by its contractors. The non-disclosure agreement may be sent on request to the tenderer for information.

The Commission will not transfer in any way its licence(s) to any third party without prior written consent of the Contractor.

1.2.3.2   Data property and access

Title to the Data, all property rights, including all the tangible and intangible intellectual property rights therein, and all materials supplied to the Commission shall be and remain the sole and exclusive property of the Contractor (or the third party from whom the Contractor has obtained access rights).

The Commission will maintain the Contractor Data in strict confidence. The Commission will take all reasonable steps to ensure that no unauthorized persons shall have access to the Contractor Data and that all authorized persons having access to the Contractor Data shall refrain from any data disclosure, duplication or reproduction.

1.2.3.3   Acknowledgement of source, copyrights and branding

The data and information that will be collected through this tender will be subject to copyrights and to restrictions with regards to its diffusion.

Reports, documents, manuals, maps, papers and other materials of the Commission that are made available to the public may contain the Contractor Data provided that they contain enhancements, modifications, aggregations, manipulated results of analysis or other features not contained in the Contractor Data.

It is suggested that the credit to the Contractor will be the following: "Copyright (publication year)" followed by the name of the Contractor; when datasets of one provider are combined with datasets from other providers or in-house datasets, copyrights and branding will be displayed as above only if the dataset represents the most relevant data in the map, table or other presentation item. In the other case, a link (for online maps) and an acknowledgement text will refer to copyrights and branding of all contributing datasets.

1.2.3.4   Specific use of geographical data

Regarding geographic data, the Commission is authorised to use the data:

- As geographic reference, i.e. creating a geographical context for other data;
- For network analysis and other types of spatial analysis;
- For flow analysis;
- For deriving new geographical datasets by applying data manipulation procedures, e.g. combining different geographic datasets, generalisation procedures, including smoothing and dropping of spatial features, adding new attribute information. An

example of derived geographic data is the Trans European Network of Energy (TEN-E).

- For the production of web map services (**see I.2.3.1.**).

- For the production of maps, publications, posters for print and in electronic form, using the original data and derived data, and for free distribution of these products provided that the user of these products cannot extract the original data from them and provided that source and copyright of the provider will always be visibly displayed on the mapframe.

- For distributing the metadata via a data catalogue service within the Commission and to the public where appropriate without any restriction in accordance with the provisions of INSPIRE[16].

1.3 Reports and documents to produce - Timetable to observe

Execution of the tasks begins after the date on which the Contract enters into force.

A **kick-off meeting** will take place in Brussels, at the latest 15 days following the signature of the contract, in order to settle all the details of the work to be undertaken.

1.3.1 Interim reports

Not applicable

1.3.2 Final report

Not applicable

1.3.3 Report format and publication

Not applicable

1.4 Duration of the tasks

The duration of the tasks shall not exceed 12 months, and can be subject to up to three renewals of 12 months each. This period is calculated in calendar days.

1.5 Place of performance

The tasks will be performed on the Contractor's premises. However, meetings between the contractor and the Commission may be held on Commission premises in Brussels.

1.6 Estimate of the amount of work involved

Not applicable

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[16] Infrastructure for Spatial Information in Europe - http://inspire.jrc.ec.europa.eu/

2 TERMS OF CONTRACT

In drawing up his offer, the tenderer should bear in mind the provisions of the draft contract attached to this invitation to tender (Annex 5). <u>Any limitation, amendment or denial of the terms of contract will lead to automatic exclusion from the procurement procedure</u>.

The Commission may, before the contract is signed, either abandon the procurement procedure or cancel the award procedure without the tenderers being entitled to claim any compensation.

2.1 Terms of payment

Payments shall be made in accordance with the provisions specified in Annex 5, the draft service contract

2.2 Financial guarantees

Guarantee on pre-financing

For any pre-financing higher than 150,000 EUR, a financial guarantee equivalent to the amount of the pre-financing will be requested.

Depending on the financial situation of the tenderer, the Commission may ask for the financial guarantee for amounts lower than 150,000 EUR.

2.3 Subcontracting

If the tenderer intends to subcontract part of the service, he shall indicate in his offer which part will be subcontracted and to what extent (% of the total contract value).

Tenderers must ensure that Article II.17 of the contract (Annex 5) can be applied to subcontractors. Once the contract has been signed, Article II.13 of the above-mentioned contract shall govern the subcontracting.

2.4 Legal form to be taken by the grouping of service providers to whom the contract is awarded (if applicable)

Groupings, irrespective of their legal form, may submit bids. Tenderers may, after forming a grouping, submit a joint bid on condition that it complies with the rules of competition. Such groupings (or consortium) must specify the company or person heading the project and must also submit a copy of the document authorising this company or person to submit a bid. If awarded, the contract will be signed by the company or the person heading the project, who will be, vis à vis the Commission, the only contracting party responsible for the performance of this contract. Tenders from a consortium of firms or groups of service providers, contractors or suppliers must specify the role, qualifications and experience of each member of the consortium or group. Each member must provide <u>all the necessary documents</u> for assessing the bid as a whole with regard to the exclusion criteria, selection criteria (in their entirety) and award criteria.

3 FORM AND CONTENT OF THE TENDER

3.1 General

Tenders must be written in **one of the official languages** of the European Union.

Tenders must be clear and concise, with continuous page numbering, and assembled in a coherent fashion (e.g. bound or stapled, etc…). Since tenderers will be judged on the content of their written bids, they must make it clear that they are able to meet the requirements of the specifications.

3.2 Structure of the tender

All tenders must include three sections i.e. an administrative, a technical and a financial proposal.

3.2.1 Section One: <u>administrative proposal</u>

This section must provide the following information, set out in the standard identification forms attached to these tender specifications (Annexes 1, 2 and 3):

- Tenderers' identification (Annex 1)

  – All tenderers must provide proof of **registration,** as prescribed in their country of establishment, on one of the **professional or trade registers** or provide a declaration or certificate.

  – If the tenderer is a natural person, he/she must provide a copy of the identity card/passport or driving licence and proof that he/she is covered by a social security scheme as a self-employed person.

  Each tenderer (including subcontractor(s) or any member of a consortium or grouping) must complete and sign the identification forms in Annex 1 and also provide above-mentioned documents. However, the subcontractor(s) shall not be required to fill in or provide those documents when the services represent less than 20% of the contract.

- Financial identification (Annex 2)

  The **bank identification form** must be filled in and signed by an authorised representative of the tenderer and his/her banker. A standard form is attached in Annex 2 and a specific form for each Member State is available at the following Internet address:

  http://ec.europa.eu/budget/execution/ftiers_en.htm

  In the case of a grouping, this form must only be provided by the person heading the project.

- Legal entities (Annex 3)

  The legal entity form in Annex 3 must be filled in and should be accompanied by a number of supporting documents, available on the Web site:

  http://ec.europa.eu/budget/execution/legal_entities_en.htm

  In the case of a grouping, this form must only be provided by the person heading the project.

The Commission reserves the right, however, to request additional evidence in relation to the bid submitted for evaluation or verification purposes within a time-limit stipulated in its request.

3.2.2   Section Two: *Technical proposal*

This section is of great importance in the assessment of the bids, the award of the contract and the future execution of any resulting contract.

The technical proposal must provide all the information needed for the purpose of awarding the contract. Therefore it shall contain:

- A document called: "EMOS project" which will be broken down in three chapters as outlined below and containing the comprehensive information with regard to:

  In Chapter 1:

  A detailed documentation that will provide

  1. the type of data format chosen for the export of the data (i.e. CSV or XML)

  2. The whole **database schema** with the <u>**detailed** description of each table</u> and **each column** of the table:

     2.1. Type of each field (*date*, *number* or *varchar* for instance)

     2.2. Comments

     2.3. Constraints (in particular, unique keys, primary keys, foreign keys)

     2.4. All other relevant information on the content of each table;

  3. A **complete** business **description** of the **tables content** (commercial brochures do not constitute a description of tables; extensive metadata of each table is required);

  4. An indication on the **type of table** (Dimension table or Fact table);

  5. A list of all **redundancies** in the database, if any (copy of same column in several tables);

  6. A **list** of **all dimensions** and their associated **codes**;

  7. A volume for each table (number of rows), in order to estimate the size of the tables while developing EMOS, for a better optimization;

  8. Regarding geographic data, the deliverables provided by the tenderer will at least cover the following items:

8.1. Geographic datasets according to the above requirements (see I.2.1.4, I.2.1.5, I.2.2.2.3-Geographic data). The data must be delivered on electronic media (DVD) or through ftp in the data formats specified in I.2.2.2.3.-Geographic Data – C.).

8.2. Data description, feature catalogue and technical user guide as specified in I.2.2.2.3 – Geographic data - B.

8.3. Metadata files as specified in I.2.2.2.3.-Geographic Data – B.

In Chapter 2:

1. The type of software technology chosen for gaining access to the required data sources (i.e. Web Server or FTP Server)
2. The defined user account and the corresponding access rights
3. The complete URL syntax names or FTP address to access the information
4. The location of the created data files and their numbers, for instance (if the provider wishes to create subfolders in the EMOS folder):
   4.1. in the "Gas" subfolder: 3 data files available with their names
   4.2. in the "Oil" subfolder: 0 data file
   4.3. in the "Electricity" subfolder: 5 data files available with their names
5. The system availability in which the provider will indicate the time frame thereby the data are accessible for download (e.g. every working day from 08 AM to 06 PM)
6. The exact upload time on the Web Server or FTP Server, to allow the European Commission to schedule downloads.

In Chapter 3:

The provider shall indicate the phone and e-mail address of its support team who can be contacted by the European Commission at any time during business hours for obtaining aid and assistance in connection with the required data and the export facility set up. He will also give the contact details (name, e-mail address and phone number) of the IT and business department staff in charge of dealing with this project in the premises of the provider.

- For each table (or set of tables if appropriate) listed in chapter 1 of the "EMOS Project" described above:

1. A detailed description of the data, including geographical coverage, market coverage, historical/future time ranges;

2. Frequency of updates, types of primary sources of the data and data collection methodology (within the limits of business secrecy), accuracy of data (f.e margins of uncertainty) and of spatial coordinates (for geo-referenced data);

3. Privacy and/or legal conditions related to the data, stating, *inter alia*, which of the data or information and on which conditions could become subject to public dissemination after aggregation or processing by the Commission services (cfr. I.4);

4. Data format and data extraction/transfer method.

3.2.3 *Section Three: Financial proposal*

All tenders must contain a financial proposal. The tenderer's attention is drawn to the following points:

- Prices must be quoted in **euros**, including the countries which are not in the euro-area. As far as the tenderers of those countries are concerned, they cannot change the amount of the bid because of the evolution of the exchange rate. The tenderers choose the exchange rate and assume all risks or opportunities relating to the rate fluctuation.

- A price shall be quoted separately **for each lot** specified in the Section I.2.

- The tenderer is requested to provide, for each lot, a quotation for each of the following licensing options (cfr. § 1.2.3.1 on licensing standards):

  - *Named license:* the tender should include a pricing list for 10, 20 and 50 licenses.

  - *Enterprise license*

  - *Web map license:* if a lot contains geographical information, the tender will indicate prices for each of the following uses: web map service on the Intranet or the Internet, for 100, 200 and 500 named (Commission) users or an unlimited number of users.

- As referred to in section I.2.3.1, and when applicable, a price should also be quoted for **a web map license** for at least the number of users specified hereabove. The tenderer shall then specify the scope of data that could be covered by this web map licence (part or all of the data).

- **Prices should be quoted free of all duties, taxes and other charges, i.e. also free of VAT**, as the European Union is exempt from such charges in the EU under Articles 3 and 4 of the Protocol on the Privileges and Immunities of the European Union of 8 April 1965 (OJ L 152 of 13 July 1967). Exemption is granted to the Commission by the governments of the Member States, either through refunds upon presentation of documentary evidence or by direct exemption. For those countries where national legislation provides an exemption by means of a reimbursement, the amount of VAT is to be shown separately. In case of doubt about the applicable VAT system, it is the tenderer's responsibility to contact his or her national authorities to clarify the way in which the European Union is exempt from VAT;

- **Prices shall be** fixed and not subject to revision during the performance of the contract;

Bids involving more than one service provider (consortium) must specify the amounts indicated above for each provider.

4 ASSESSMENT AND AWARD OF THE CONTRACT

The assessment will be based on each tenderer's bid.

All the information will be assessed in the light of the criteria set out in these specifications. The procedure for the award of the contract, which will concern only admissible bids, will be carried out in three successive stages.

The aim of each of these stages is:

1) to check on the basis of the exclusion criteria, whether tenderers can take part in the tendering procedure;

2) to check on the basis of the selection criteria, the technical and professional capacity and economic and financial capacity of each tenderer;

3) to assess on the basis of the award criteria each bid which has passed the exclusion and selection stages.

4.1 Exclusion criteria (exclusion of tenderers)

4.1.1 Exclusion criteria (Article 93 Financial Regulation[17])

1.   To be eligible for participating in this contract award procedure, tenderers must not be in any of the following situations:

(a)   they are bankrupt or being wound up, are having their affairs administered by the courts, have entered into an arrangement with creditors, have suspended business activities, are the subject of proceedings concerning those matters, or are in any analogous situation arising from a similar procedure provided for in national legislation or regulations;

(b)   they have been convicted of an offence concerning their professional conduct by a judgement which has the force of res judicata;

(c)   they have been guilty of grave professional misconduct proven by any means which the contracting authority can justify;

(d)   they have not fulfilled obligations relating to the payment of social security contributions or the payment of taxes in accordance with the legal provisions of the country in which they are established or with those of the country of the contracting authority or those of the country where the contract is to be performed;

(e)   they have been the subject of a judgement which has the force of res judicata for fraud, corruption, involvement in a criminal organisation or any other illegal activity detrimental to the Union's financial interests;

(f)   they are currently subject to an administrative penalty referred to in Article 96(1) of the Financial Regulation[18] for being guilty of misrepresentation in supplying the

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[17]   Council Regulation (EC, Euratom) No 1605/2002 of 25 June 2002 on the Financial Regulation applicable to the general budget of the European Communities (OJ L 248 of 16.9.2002)

information required by the contracting authority as a condition of participation in a contract procurement procedure or by the authorising officer as a condition of participation in a grant award procedure, for failing to supply this information or for having been declared to be in serious breach of their obligations under contracts or grants covered by the Union budget.

2.   The cases referred to in point IV.1.1. e) above shall be the following:

a)   cases of fraud as referred to in Article 1 of the Convention on the protection of the European Communities' financial interests established by the Council Act of 26 July 1995 (OJ/C 316 of 27.11.1995, p. 48);

b)   cases of corruption as referred to in Article 3 of the Convention on the fight against corruption involving officials of the European Communities or officials of Member States of the European Union, established by the Council Act of 26 May 1997 (OJ/C 195 of 25.6.1997, p. 1);

c)   cases of involvement in a criminal organisation, as defined in Article 2(1) of Joint Action 98/733/JHA of the Council (OJ/L 315 of 29.12.1998, p. 1);

d)   cases of money laundering as defined in Article 1 of Council Directive 91/308/EEC (OJ/L 166 of 28.6.1991, p.77).

4.1.2 *Other cases of exclusion (Article 94 Financial Regulation)*

Contracts will not be awarded to tenderers who, during the procurement procedure:

a)   **are subject to a conflict of interest;**

Tenderers must declare:

- that they do not have any conflict of interest in connection with the contract; a conflict of interest could arise in particular as a result of economic interests, political or national affinities, family or emotional ties, or any other relevant connection or shared interest;

- that they will inform the contracting authority, without delay, of any situation constituting a conflict of interest or which could give rise to a conflict of interest;

- that they have not made and will not make any offer of any type whatsoever from which an advantage can be derived under the contract;

- that they have not granted and will not grant, have not sought and will not seek, have not attempted and will not attempt to obtain, and have not accepted and will not accept, any advantage, financial or in kind, to or from any party whatsoever, constituting an illegal practice or involving corruption, either directly or indirectly, as an incentive or reward relating to the award of the contract.

The Commission reserves the right to check the above information.

b)   **are guilty of misrepresentation** in supplying the information required by the contracting authority as a condition of participation in the procurement procedure or fail to supply this information.

c)   find themselves in one of the **situations of exclusion**, referred to in paragraph IV.1.1. above for this procurement procedure.

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[18] Council Regulation (EC, Euratom) n° 1605/2002 of 25 june 2002 on the Financial regulation applicable to the general budget of the European Communities, OJ L 248 of 16 September 2002, p. 1, amended by Council Regulation (EC, Euratom) n° 1995/2006 of 13 December 2006, OJ L 390 of 30 December 2006, p.1.

4.1.3 *Evidence to be provided by the tenderers*

1. When submitting their bids, each tenderer (including subcontractor(s) or any member of a consortium or grouping) shall provide a declaration on their honour, duly signed and dated, stating that they are not in one of the situations mentioned above (cf. IV.1.1 and VI.1.2). For that purpose, they must complete and sign the form attached in Annex 4. Where the tenderer is a legal entity, they shall, whenever requested by the Commission, provide information on the ownership or on the management, control and power of representation of the legal entity.

2. The tenderer to whom the contract is to be awarded shall provide, within 15 calendar days after notification of the results of the procurement procedure and in any case before the signature of the contract, the following evidence, confirming the declaration referred to above:

    The Commission shall accept, as satisfactory evidence that the tenderer is not in one of the situations described in point IV.1.1 (a), (b) or (e) above, a recent extract from the judicial record or, failing that, an equivalent document recently issued by a judicial or administrative authority in the country of origin or provenance showing that those requirements are satisfied.

    The Commission accepts, as satisfactory evidence that the tenderer is not in the situation described in point IV.1.1 (d) above, a recent certificate issued by the competent authority of the State concerned.

    Where no such document or certificate is issued in the country concerned, it may be replaced by a sworn or, failing that, a solemn statement made by the interested party before a judicial or administrative authority, a notary or a qualified professional body in his country of origin or provenance.

3. Depending on the national legislation of the country in which the candidate or tenderer is established, the documents referred to in paragraph 1 and 2 above shall relate to legal and/or natural persons including, if applicable with regard to points b) and e), company directors or any person with powers of representation, decision-making or control in relation to the tenderer.

4. When the subcontracted part is above 20% of the contract value, the subcontractor(s) must also provide the above-mentioned declaration on honour. In case of doubt on this declaration on the honour, the contracting authority may also request the evidence referred to in paragraphs 2 and 3 above.

5. The Commission reserves the right to request any other document relating to the proposed tender for evaluation and verification purpose, within a delay determined in its request.

Remark:

The tenderers will be waived of the obligation to submit the documentary evidence above mentioned if such evidence has already been submitted for the purposes of another procurement procedure launched by Directorate General for Energy and provided that the documents are not more than one year old starting from their issuing date and that they are still valid. In such a case, the tenderer shall declare on his honour that the documentary evidence has already been provided in a previous procurement procedure, specifying the

reference of the call for tender for which the documents have been provided, and confirm that no changes in his situation have occurred.

4.1.4   Administrative and financial penalties

Without prejudice to the application of penalties laid down in the contract, candidates or tenderers and contractors who have been found guilty of misrepresentation in supplying the information required by the contracting authority as a condition of participation in the procurement procedure or have failed to supply this information or have been declared to be in serious breach of their obligations under contracts covered by the Union budget may be subject to administrative or financial penalties, in accordance with Article 96 of the Financial Regulation and Articles 134b and 133a of the Implementing Rules.[19]

4.2   SELECTION CRITERIA (SELECTION OF TENDERERS)

To be eligible, the tenderers must have the economic and financial capacity as well as the technical and professional capacity to perform the tasks required in this call for tender.

4.2.1   Economic and financial capacity – References required

Tenderers must provide proof of their financial and economic capacity by means of the following documents: the balance sheets or extracts from balance sheets for the last three financial years, and a statement of overall turnover and turnover relating to the relevant services for the last three financial years.

This rule applies to all service providers, regardless of the percentage of tasks they intend to execute, once they have chosen to submit a tender. However, if the tender includes subcontractors whose tasks represent less than 20% of the contract, those subcontractors are not obliged to provide evidence of their economic and financial capacity.

4.2.2   Technical and professional capacity – References required

Tenderers must provide proof of their professional and technical capacity by means of a description containing the following:

- brief history of their activities (or the activities of the members of the grouping or consortium),
- number of employees linked to providing data services,
- number of years of experience in providing data services,
- a listing of the methods used for collecting data/information they provide (within limits ensuring business secrecy),
- a description of their IT department involved in this call for tender.

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[19] Commission Regulation (EC, Euratom) n° 2342/2002 of 23 December 2002 laying down detailed rules for the implementation of Council Regulation (EC, Euratom) No 1605/2002 on the Financial Regulation applicable to the general budget of the European Communities, OJ L 357 of 31 December 2002, p. 1, last amended by Commission Regulation (EC, Euratom) n° 478/2007 of 23 April 2007, OJ L 111 of 28 April 2007, p.1.

In order for a tenderer to be eligible, it must stem out from the above that his experience in providing data services should be of at least 4 years.[20]

If several service providers/subcontractors are involved in the bid, each of them must have and show that they have the professional and technical capacity to perform the tasks assigned to them.

Tenderers should provide with their offer detailed curriculum vitae of each staff member responsible for carrying out the work, including his or her educational background, degrees and diplomas, professional experience, research work, publications and linguistic skills.

The CV's shall be presented, preferably, in accordance to the Commission Recommendation on a common European format for curricula vitae, published in OJ L79 of 22 March 2002, p. 66.

4.3 EVALUATION OF TENDERS – AWARD CRITERIA

The contract will be awarded according to the criteria given below, on the basis of the economically most advantageous tender.

Only bids that have reached a total score of a minimum of 70% and a minimum score of 60 % for each criterion will be taken into consideration for awarding the contract.

a) Technical evaluation criteria in their order of importance as weighted by percentage

N°	Award Criteria	Weighting
1	Completeness (f.i. geographic coverage, market coverage, historic/future time ranges…),	35
2	Accuracy and viability (f.i. accuracy of data and of spatial coordinates (for geo-referenced data), frequency related to updates, primary sources, data collection methodology)	30
3	Flexibility allowed for the dissemination by the Commission of processed/aggregated data, perpetual licensing possibility and multi-user access possibility (including, where applicable, web map licensing)	20
4	Detailed description of the database	10

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[20] Changes in legal status/ownership shall not affect the assessment of the minimum period in question.

5	Newsletters & Advisory services	5
Total number of points		**100**

b) Total price

A contract will be awarded for each lot to the tenderer which offers the best quality/price ratio for the said lot.

For the purpose of the evaluation, a license covering a broader range of users shall be considered as a 100 users' license for the enterprise license and 500 users' license for web map licenses covering an unlimited number of users, yet the multi-user access possibility of these enterprise and web map licenses will be taken into account in the Award criterium no.3.

Named and Enterprise licenses: for the purpose of the evaluation, an average price will be calculated as the weighted average price based on quotations for a 10, 20, 50 users licences and the 100 users license corresponding to the enterprise license.

Web map license: for the purpose of the evaluation, an average price will be calculated as the weighted average price based on quotations for a 100, 200, 500 users licences and the 500 users license corresponding to the unlimited users' license.

The price to be taken into consideration, for establishing the quality/price ratio, shall be a weighted average of the combined Named and Enterprise, and Web map license, where the former term has 80% weight and the latter term has 20% weight.

4.4 INFORMATION FOR TENDERERS

The Commission will inform tenderers of decisions reached concerning the award of the contract, including the grounds for any decision not to award a contract or to recommence the procedure.

Upon written request, the Commission will inform the rejected tenderers of the reasons for their rejection and the tenderers having submitted an admissible tender of the characteristics and relative advantages of the selected tender and the name of the successful tenderer.

However, certain information may be withheld where its release would impede law enforcement or otherwise be contrary to the public interest, or would prejudice the legitimate commercial interests of economic operators, public or private, or might prejudice fair competition between them.

5 ANNEXES

1. Identification of the Tenderer
2. Financial Identification
3. Legal Entity Form
4. Declaration by the Tenderer (relating to the exclusion criteria)
5. Draft Service Contract

ANNEX 1

IDENTIFICATION OF THE TENDERER

(Each service provider, including subcontractor(s) or any member of a consortium or grouping, must complete and sign this identification form)

Call for tender ENER xx/A2/2010

Identity
Name of the tenderer
Legal status of the tenderer
Date of registration
Country of registration
Registration number
VAT number
Description of statutory social security cover (at the level of the Member State of origin) and non-statutory cover (supplementary professional indemnity insurance)[21]

Address
Address of registered office of tenderer
Where appropriate, administrative address of tenderer for the purposes of this invitation to tender

Contact Person
Surname:
First name:
Title (e.g. Dr, Mr, Ms) :
Position (e.g. manager):
Telephone number:
Fax number:
E-mail address:

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[21] For natural persons

Legal Representatives
Names and function of legal representatives and of other representatives of the tenderer who are authorised to sign contracts with third parties	

Declaration by an authorised representative of the organisation[22]
I, the undersigned, certify that the information given in this tender is correct and that the tender is valid.

Surname: Signature:

First name:

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[22] This person must be included in the list of legal representatives; otherwise the signature on the tender will be invalidated.

ANNEX 2

(to be completed by the tenderer and his or her financial institution)

A specific form for each Member State is available at the following Internet address:

http://ec.europa.eu/budget/execution/ftiers_en.htm

FINANCIAL IDENTIFICATION

ACCOUNT NAME

ACCOUNT NAME[1]	
ADDRESS	
TOWN/CITY	POSTCODE
COUNTRY	

CONTACT	
TELEPHONE	FAX
E - MAIL	

BANK

BANK NAME	
BRANCH ADDRESS	
TOWN/CITY	POSTCODE
COUNTRY	
ACCOUNT NUMBER	
IBAN[2]	

REMARKS:

BANK STAMP + SIGNATURE OF BANK REPRESENTATIVE (Both Obligatory)[3]	DATE + SIGNATURE ACCOUNT HOLDER : (Obligatory)
	DATE

[1] The name or title under which the account has been opened and not the name of the authorized agent

[2] If the IBAN Code (International Bank account number) is applied in the country where your bank is situated

[3] It is preferable to attach a copy of recent bank statement, in which event the stamp of the bank and the signature of the bank's representative are not required. The signature of the account-holder is obligatory in all cases.

ANNEX 3

Legal entity form

Complete the legal entity form, which should be accompanied by a number of supporting documents, available on the Web site:

http://ec.europa.eu/budget/execution/legal_entities_en.htm

Please note that we can only accept either original documents or certified copies, which must be less than 6 months old.

In the case of a grouping, this form must only be provided by the person heading the project.

ANNEX 4

DECLARATION BY THE TENDERER

<u>Each service provider, including subcontractor(s) or any member of a consortium or grouping, must sign this declaration</u>

1. In accordance with Article 93 of the Financial Regulation[23], I declare on my honour that I am not in any of the following situations which would exclude me from participating in this procurement procedure:

   a) I am not bankrupt, being wound up or having my affairs administered by the courts, I have not entered into an arrangement with creditors, I have not suspended business activities, I am not the subject of proceedings concerning any such matters, and I am not in any similar situation arising from a similar procedure provided for in legislation or regulations;

   b) I have not been convicted of an offence concerning my professional conduct by a judgment which has the force of res judicata;

   c) I have not been found guilty of grave professional misconduct proven by any means which the contracting authority can justify;

   d) I have not failed to fulfil obligations relating to the payment of social security contributions or the payment of taxes in accordance with the legal provisions of the country in which I am established or with those of the country or the contracting authority or those of the country where the contract is to be performed;

   e) I have not been the subject of a judgment which has the force of res judicata for fraud, corruption, involvement in a criminal organisation or any other illegal activity detrimental to the Union's financial interests;

   f) I am currently not subject to an administrative penalty referred to in Article 96(1) of the Financial Regulation for being guilty of misrepresentation in supplying the information required by the contracting authority as a condition of participation in a contract procurement procedure or by the authorising officer as a condition of participation in a grant award procedure, for failing to supply this information or for having been declared to be in serious breach of their obligations under contracts or grants covered by the Union budget.

2. In addition, the undersigned declares on his or her honour:

   a) that on the date of submission of the tender, the company or organisation I do represent and the staff proposed for this tender are not subject to a conflict of interests in the context of this invitation to tender; I undertake to inform the Commission without delay of any change to this situation after the date of submission of the tender.

   b) that the information provided to the Commission within the context of this invitation to tender is accurate, sincere and complete.

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[23] Council Regulation (EC, Euratom) n° 1605/2002 of 25 june 2002 on the Financial regulation applicable to the general budget of the European Communities, OJ L 248 of 16 September 2002, p. 1, amended by Council Regulation (EC, Euratom) n° 1995/2006 of 13 December 2006, OJ L 390 of 30 December 2006, p.1.

Done at ……………………………. on…………………………………
Name …………………………………...
Title ………………………………….
Signature:

ANNEX 5

EUROPEAN COMMISSION
DIRECTORATE GENERAL ENERGY

Directorate A – General Policy
Unit A2 – Energy Observatory, Economic Analysis & Impact Assessment

DRAFT SERVICE CONTRACT

CONTRACT NUMBER – **[complete]**

The European Union (hereinafter referred to as "the Union"), represented by the European Commission (hereinafter referred to as "the Commission"), which is represented for the purposes of the signature of this contract by Mrs Houtman, Director in the Directorate-General for Energy, Directorate A

of the one part,

and

[official name in full]

[*official legal form*]

[statutory registration number]

[official address in full]

[*VAT registration number*]

(hereinafter referred to as "the Contractor"), represented for the purposes of the signature of this contract by [name in full and function,]

of the other part,

HAVE AGREED

the **Special Conditions** and the **General Conditions** below and the following Annexes:

Annex I – Tender Specifications (Invitation to Tender No [*complete*] of [*complete*]) and Monitoring

Annex II – Contractor's Tender (No [*complete*] of [*complete*])

which form an integral part of this contract (hereinafter referred to as "the Contract").

The terms set out in the Special Conditions shall take precedence over those in the other parts of the Contract. The terms set out in the General Conditions shall take precedence over those in the Annexes. The terms set out in the Tender Specifications (Annex I) shall take precedence over those in the Tender (Annex II).

Subject to the above, the several instruments forming part of the Contract are to be taken as mutually explanatory. Ambiguities or discrepancies within or between such parts shall be explained or rectified by a written instruction issued by the Commission, subject to the rights of the Contractor under Article I.7 should he dispute any such instruction.

I – <u>SPECIAL CONDITIONS</u>

ARTICLE I.1 - SUBJECT

I.1.1. The subject of the Contract is the collection of data and other services for the Energy Market Observation System, Lot n°..., of the Market Observatory for Energy.

I.1.2. The Contractor shall execute the tasks assigned to him in accordance with the Tender Specifications annexed to the Contract (Annex I).

ARTICLE I.2 - DURATION

I.2.1. The Contract shall enter into force on the 1st of December 2010.

I.2.2. Execution of the tasks may under no circumstances begin before the date on which the Contract enters into force.

I.2.3. The duration of the tasks shall not exceed 12 *months*. This period and all other periods specified in the Contract are calculated in calendar days. Execution of the tasks shall start at the date of entry into force of the Contract. The period of execution of the tasks may be extended only with the express written agreement of the parties before such period elapses.

I.2.4. The Contract may be renewed up to 3 times, each time for a period of execution of tasks of 12 months, and with the express written agreement of the parties, indicating the date on which execution of the tasks shall start. Renewal does not imply any modification or deferment of existing obligations.

ARTICLE I.3 – CONTRACT PRICE

I.3.1. The maximum total amount to be paid by the Commission under the Contract shall be EUR [EUR complete amount in figures and in words] covering all tasks executed.

I.3.2 *[Not applicable]*

ARTICLE I.4 – PAYMENT PERIODS AND FORMALITIES

Payments under the Contract shall be made in accordance with Article II.4. Payments shall be executed only if the Contractor has fulfilled all his contractual obligations by the date on which the invoice is submitted. Payment requests may not be made if payments for previous periods have not been executed as a result of default or negligence on the part of the Contractor.

I.4.1. Pre-financing:

Not applicable.

I.4.2 Interim payment:

Requests for interim payment by the Contractor shall be admissible if accompanied by the relevant invoices indicating the reference number of the Contract to which they refer, provided that

    a) the data/information transferred since the beginning of the execution of tasks corresponds at least to 50% of the total data transfer to be submitted during the execution of the contract,

and

    b) a period of at least 1 month has elapsed since the first data transfer.

All data/information concerned must have been accepted by the Commission as fulfilling the specifications annexed herewith. In this respect, the Commission shall have forty-five days from a data/information transfer to reject the latter, and the Contractor shall have 20 days in which to correct the situation in case of a rejection. A data/information transfer shall be deemed as accepted when the Commission has not rejected it within the period required.

When the conditions specified above are met, within 30 days from the date when the last data or information transfer has been accepted by the Commission, an interim payment corresponding to 50% of the total amount referred to in Article I.3.1 shall be made.

I.4.3. Payment of the balance:

After completion of the present Contract, the request for payment of the balance of the Contractor shall be admissible if accompanied by the relevant invoices indicating the reference number of the Contract to which they refer, provided all data or information transferred under this Contract have been accepted by the Commission as fulfilling the specifications annexed herewith.

In this respect, the Commission shall have forty-five days from a data/information transfer to reject the latter, and the Contractor shall have 20 days in which to correct the situation in case of a rejection. A data/information transfer shall be deemed as accepted when the Commission has not rejected it within the period required.

When the conditions specified above are met, within 30 days from the date when the last data or information transfer has been accepted by the Commission, a payment of balance corresponding to 50% of the total amount referred to in Article I.3.1 shall be made.

The request for payment of the balance of the Contractor shall be admissible if accompanied by

[For Contractors established in Belgium, the provisions of the Contract constitute a request for VAT exemption No 450, provided the Contractor includes the following statement in his invoice(s): "Exonération de la TVA, article 42, paragraphe 3.3 du code de la TVA" or an equivalent statement in the Dutch or German language.]

[For Contractors established in Italy, the provisions of the Contract constitute a request for VAT exemption, provided the Contractor includes the following statement in his invoice(s): "Operazione non imponibile ai sensi dell'articolo 72, comma 3) paragrafo 3 del D.P.R. n. 633 del 26/10/1972 come modificato da ultimo dal D.L. n. 323 del 20/06/1996 convertito in Legge n. 425 dell'8/8/1996".]

ARTICLE I.5 – BANK ACCOUNT

Payments shall be made to the Contractor's bank account denominated in euro, identified as follows:

Name of bank: [complete]
Address of branch in full: [complete]
Exact designation of account holder: [complete]
Full account number including codes: [complete]
[IBAN code: [complete]

ARTICLE I.6 – GENERAL ADMINISTRATIVE PROVISIONS

Any communication relating to the Contract shall be made in writing and shall bear the Contract number. Ordinary mail shall be deemed to have been received by the Commission on the date on which it is registered by the department responsible indicated below. Communications shall be sent to the following addresses:

Commission:

European Commission
Directorate-General for Energy
[Directorate [complete]
[Unit [complete]
B-1049 Bruxelles

Contractor:

Mr/Mrs/Ms [complete]
[Function]
[*Company name*]
[Official address in full]

ARTICLE I.7– APPLICABLE LAW AND SETTLEMENT OF DISPUTES

I.7.1. The Contract shall be governed by Union law complemented, where necessary, by the national substantive law of Belgium.

I.7.2. Any dispute between the parties resulting from the interpretation or application of the Contract which cannot be settled amicably shall be brought before the courts of Belgium.

ARTICLE I.8 – DATA PROTECTION

Any personal data included in the Contract shall be processed pursuant to Regulation (EC) No 45/2001 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data. It shall be processed solely for the purposes of the performance, management and follow-up of the Contract by the entity acting as data controller within DG ENER without prejudice to possible transmission to internal audit services, to the Court of Auditors, to the Financial Irregularities Panel and/or to the European Anti-Fraud Office (OLAF) for the purposes of safeguarding the financial interests of the Union. The

Contractor shall have the right of access to his personal data and the right to rectify any such data that is inaccurate or incomplete. Should the Contractor have any queries concerning the processing of his personal data, he shall address them to the entity acting as data controller within DG ENER. The Contractor shall have right of recourse at any time to the European Data Protection Supervisor.

ARTICLE I.9 – TERMINATION BY EITHER CONTRACTING PARTY

Either contracting party may, of its own volition and without being required to pay compensation, terminate the Contract by serving 2 months formal prior notice. Should the Commission terminate the Contract, the Contractor shall only be entitled to payment corresponding to part-performance of the Contract. On receipt of the letter terminating the Contract, the Contractor shall take all appropriate measures to minimise costs, prevent damage, and cancel or reduce his commitments. He shall draw up the documents required by the Special Conditions for the tasks executed up to the date on which termination takes effect, within a period not exceeding sixty days from that date.

II – <u>GENERAL CONDITIONS</u>

<u>ARTICLE II.1 – PERFORMANCE OF THE CONTRACT</u>

II.1.1. The Contractor shall perform the Contract to the highest professional standards. The Contractor shall have sole responsibility for complying with any legal obligations incumbent on him, notably those resulting from employment, tax and social legislation.

II.1.2. The Contractor shall have sole responsibility for taking the necessary steps to obtain any permit or licence required for performance of the Contract under the laws and regulations in force at the place where the tasks assigned to him are to be executed.

II.1.3. Without prejudice to Article II.3 any reference made to the Contractor's staff in the Contract shall relate exclusively to individuals involved in the performance of the Contract.

II.1.4. The Contractor must ensure that any staff performing the Contract have the professional qualifications and experience required for the execution of the tasks assigned to him.

II.1.5. The Contractor shall neither represent the Commission nor behave in any way that would give such an impression. The Contractor shall inform third parties that he does not belong to the European public service.

II.1.6. The Contractor shall have sole responsibility for the staff who execute the tasks assigned to him.

The Contractor shall make provision for the following employment or service relationships with his staff:

- staff executing the tasks assigned to the Contractor may not be given orders direct by the Commission;

- the Commission may not under any circumstances be considered to be the staff's employer and the said staff shall undertake not to invoke in respect of the Commission any right arising from the contractual relationship between the Commission and the Contractor.

II.1.7. In the event of disruption resulting from the action of a member of the Contractor's staff working on Commission premises or in the event of the expertise of a member of the Contractor's staff failing to correspond to the profile required by the Contract, the Contractor shall replace him without delay. The Commission shall have the right to request the replacement of any such member of staff, stating its reasons for so doing. Replacement staff must have the necessary qualifications and be capable of performing the Contract under the same contractual conditions. The Contractor shall be responsible for any delay in the execution of the tasks assigned to him resulting from the replacement of staff in accordance with this Article.

II.1.8. Should any unforeseen event, action or omission directly or indirectly hamper execution of the tasks, either partially or totally, the Contractor shall immediately and on his own initiative record it and report it to the Commission. The report shall include a description of the problem and an indication of the date on which it started and of the remedial action taken by the Contractor to ensure full compliance with his obligations under the Contract. In such

event the Contractor shall give priority to solving the problem rather than determining liability.

II.1.9. Should the Contractor fail to perform his obligations under the Contract in accordance with the provisions laid down therein, the Commission may - without prejudice to its right to terminate the Contract - reduce or recover payments in proportion to the scale of the failure. In addition, the Commission may impose penalties or liquidated damages provided for in Article II.16.

ARTICLE II.2 – LIABILITY

II.2.1. The Commission shall not be liable for damage sustained by the Contractor in performance of the Contract except in the event of wilful misconduct or gross negligence on the part of the Commission.

II.2.2. The Contractor shall be liable for any loss or damage caused by himself in performance of the Contract, including in the event of subcontracting under Article II.13. The Commission shall not be liable for any act or default on the part of the Contractor in performance of the Contract.

II.2.3. The Contractor shall provide compensation in the event of any action, claim or proceeding brought against the Commission by a third party as a result of damage caused by the Contractor in performance of the Contract.

II.2.4. In the event of any action brought by a third party against the Commission in connection with performance of the Contract, the Contractor shall assist the Commission. Expenditure incurred by the Contractor to this end may be borne by the Commission.

II.2.5. The Contractor shall take out insurance against risks and damage relating to performance of the Contract if required by the relevant applicable legislation. He shall take out supplementary insurance as reasonably required by standard practice in the industry. A copy of all the relevant insurance contracts shall be sent to the Commission should it so request.

ARTICLE II.3 - CONFLICT OF INTERESTS

II.3.1. The Contractor shall take all necessary measures to prevent any situation that could compromise the impartial and objective performance of the Contract. Such conflict of interests could arise in particular as a result of economic interest, political or national affinity, family or emotional ties, or any other relevant connection or shared interest. Any conflict of interests which could arise during performance of the Contract must be notified to the Commission in writing without delay. In the event of such conflict, the Contractor shall immediately take all necessary steps to resolve it.

The Commission reserves the right to verify that such measures are adequate and may require additional measures to be taken, if necessary, within a time limit which it shall set. The Contractor shall ensure that his staff, board and directors are not placed in a situation which could give rise to conflict of interests. Without prejudice to Article II.1 the Contractor shall replace, immediately and without compensation from the Commission, any member of his staff exposed to such a situation.

II.3.2. The Contractor shall abstain from any contact likely to compromise his independence.

II.3.3. The Contractor declares:
- that he has not made and will not make any offer of any type whatsoever from which an advantage can be derived under the Contract,
- that he has not granted and will not grant, has not sought and will not seek, has not attempted and will not attempt to obtain, and has not accepted and will not accept, any advantage, financial or in kind, to or from any party whatsoever, where such advantage constitutes an illegal practice or involves corruption, either directly or indirectly, inasmuch as it is an incentive or reward relating to performance of the Contract.

II.3.4. The Contractor shall pass on all the relevant obligations in writing to his staff, board, and directors as well as to third parties involved in performance of the Contract. A copy of the instructions given and the undertakings made in this respect shall be sent to the Commission should it so request.

ARTICLE II.4 – PAYMENTS

II.4.1. Pre-financing :

Where required by Article I.4.1, the Contractor shall provide a financial guarantee in the form of a bank guarantee or equivalent supplied by a bank or an authorised financial institution (guarantor) equal to the amount indicated in the same Article to cover pre-financing under the Contract. Such guarantee may be replaced by a joint and several guarantee by a third party.

The guarantor shall pay to the Commission at its request an amount corresponding to payments made by it to the Contractor which have not yet been covered by equivalent work on his part.

The guarantor shall stand as first-call guarantor and shall not require the Commission to have recourse against the principal debtor (the Contractor).

The guarantee shall specify that it enters into force at the latest on the date on which the Contractor receives the pre-financing. The Commission shall release the guarantor from its obligations as soon as the Contractor has demonstrated that any pre-financing has been covered by equivalent work. The guarantee shall be retained until the pre-financing has been deducted from interim payments or payment of the balance to the Contractor. It shall be released the following month. The cost of providing such guarantee shall be borne by the Contractor.

II.4.2. Interim payment:

At the end of each of the periods indicated in Annex I the Contractor shall submit to the Commission a formal request for payment accompanied by those of the following documents which are provided for in the Special Conditions:

Ø an interim technical report in accordance with the instructions laid down in Annex I;
Ø the relevant invoices indicating the reference number of the Contract to which they refer;
Ø statements of reimbursable expenses in accordance with Article II.7.

If the report is a condition for payment, on receipt the Commission shall have the period of time indicated in the Special Conditions in which:

Ø to approve it, with or without comments or reservations, or suspend such period and request additional information; or

Ø to reject it and request a new report.

If the Commission does not react within this period, the report shall be deemed to have been approved. Approval of the report does not imply recognition either of its regularity or of the authenticity, completeness or correctness of the declarations or information enclosed.

Where the Commission requests a new report because the one previously submitted has been rejected, this shall be submitted within the period of time indicated in the Special Conditions. The new report shall likewise be subject to the above provisions.

II.4.3. Payment of the balance:

Within sixty days of completion of the tasks referred to in Annex I the Contractor shall submit to the Commission a formal request for payment accompanied by those of the following documents which are provided for in the Special Conditions:

Ø a final technical report in accordance with the instructions laid down in Annex I;
Ø the relevant invoices indicating the reference number of the Contract to which they refer;
Ø statements of reimbursable expenses in accordance with Article II.7.

If the report is a condition for payment, on receipt the Commission shall have the period of time indicated in the Special Conditions in which:

Ø to approve it, with or without comments or reservations, or suspend such period and request additional information; or

Ø to reject it and request a new report.

If the Commission does not react within this period, the report shall be deemed to have been approved. Approval of the report does not imply recognition either of its regularity or of the authenticity, completeness or correctness of the declarations and information enclosed.

Where the Commission requests a new report because the one previously submitted has been rejected, this shall be submitted within the period of time indicated in the Special Conditions. The new report shall likewise be subject to the above provisions.

ARTICLE II.5 – GENERAL PROVISIONS CONCERNING PAYMENTS

II.5.1. Payments shall be deemed to have been made on the date on which the Commission's account is debited.

II.5.2. The payment periods referred to in Article I.4 may be suspended by the Commission at any time if it informs the Contractor that his payment request is not admissible, either because the amount is not due or because the necessary supporting documents have not been properly produced. In case of doubt on the eligibility of the expenditure indicated in the payment request, the Commission may suspend the time limit for payment for the purpose of further verification, including an on-the-spot check, in order to ascertain, prior to payment, that the expenditure is eligible.

The Commission shall notify the Contractor accordingly by registered letter with acknowledgment of receipt or equivalent. Suspension shall take effect from the date of dispatch of the letter. The remainder of the period referred to in Article I.4 shall begin to run again once the suspension has been lifted.

II.5.3. In the event of late payment the Contractor shall be entitled to interest, provided the calculated interest exceeds EUR 200. In case interest does not exceed EUR 200, the Contractor may claim interest within two months of receiving the payment. Interest shall be calculated at the rate applied by the European Central Bank to its most recent main refinancing operations (*"the reference rate"*) plus seven percentage points (*"the margin"*). The reference rate in force on the first day of the month in which the payment is due shall apply. Such interest rate is published in the C series of the Official Journal of the European Union. Interest shall be payable for the period elapsing from the calendar day following expiry of the time limit for payment up to the day of payment. Suspension of payment by the Commission may not be deemed to constitute late payment.

ARTICLE II.6 – RECOVERY

II.6.1. If total payments made exceed the amount actually due under the Contract or if recovery is justified in accordance with the terms of the Contract, the Contractor shall reimburse the appropriate amount in euro on receipt of the debit note, in the manner and within the time limits set by the Commission.

II.6.2. In the event of failure to pay by the deadline specified in the request for reimbursement, the sum due shall bear interest at the rate indicated in Article II.5.3. Interest shall be payable from the calendar day following the due date up to the calendar day on which the debt is repaid in full.

II.6.3. The Commission may, after informing the Contractor, recover amounts established as certain, of a fixed amount and due by offsetting, in cases where the Contractor also has a claim on the Union that is certain, of a fixed amount and due. The Commission may also claim against the guarantee, where provided for.

ARTICLE II.7 - REIMBURSEMENTS

II.7.1. Where provided by the Special Conditions or by Annex I, the Commission shall reimburse the expenses which are directly connected with execution of the tasks on production of original supporting documents, including receipts and used tickets.

II.7.2. Travel and subsistence expenses shall be reimbursed, where appropriate, on the basis of the shortest itinerary.

II.7.3. Travel expenses shall be reimbursed as follows:

   a) travel by air shall be reimbursed up to the maximum cost of an economy class ticket at the time of the reservation;

   b) travel by boat or rail shall be reimbursed up to the maximum cost of a first class ticket;

   c) travel by car shall be reimbursed at the rate of one first class rail ticket for the same journey and on the same day;

   d) travel outside Union territory shall be reimbursed under the general conditions stated above provided the Commission has given its prior written agreement.

II.7.4. Subsistence expenses shall be reimbursed on the basis of a daily allowance as follows:

a) for journeys of less than 200 km (return trip) no subsistence allowance shall be payable;

b) daily subsistence allowance shall be payable only on receipt of a supporting document proving that the person concerned was present at the place of destination;

c) daily subsistence allowance shall take the form of a flat-rate payment to cover all subsistence expenses, including accommodation, meals, local transport, insurance and sundries;

d) daily subsistence allowance, where applicable, shall be reimbursed at the rate specified in Article I.3.3.

II.7.5. The cost of shipment of equipment or unaccompanied luggage shall be reimbursed provided the Commission has given prior written authorisation.

ARTICLE II.8 – OWNERSHIP OF THE RESULTS - INTELLECTUAL AND INDUSTRIAL PROPERTY

Any results or rights thereon, including copyright and other intellectual or industrial property rights, obtained in performance of the Contract, shall be owned solely by the Union, which may use, publish, assign or transfer them as it sees fit, without geographical or other limitation, except where industrial or intellectual property rights exist prior to the Contract being entered into force.

ARTICLE II.9 – CONFIDENTIALITY

II.9.1. The Contractor undertakes to treat in the strictest confidence and not make use of or divulge to third parties any information or documents which are linked to performance of the Contract. The Contractor shall continue to be bound by this undertaking after completion of the tasks.

II.9.2. The Contractor shall obtain from each member of his staff, board and directors an undertaking that they will respect the confidentiality of any information which is linked, directly or indirectly, to execution of the tasks and that they will not divulge to third parties or use for their own benefit or that of any third party any document or information not available publicly, even after completion of the tasks.

ARTICLE II.10 - USE, DISTRIBUTION AND PUBLICATION OF INFORMATION

II.10.1. The Contractor shall authorise the Commission to process, use, distribute and publish, for whatever purpose, by whatever means and on whatever medium, any data contained in or relating to the Contract, in particular the identity of the Contractor, the subject matter, the duration, the amount paid and the reports. Where personal data is concerned, Article I.8 shall apply.

II.10.2. Unless otherwise provided by the Special Conditions, the Commission shall not be required to distribute or publish documents or information supplied in performance of the Contract. If it decides not to publish the documents or information supplied, the Contractor

may not have them distributed or published elsewhere without prior written authorisation from the Commission.

II.10.3. Any distribution or publication of information relating to the Contract by the Contractor shall require prior written authorisation from the Commission and shall mention the amount paid by the Union. It shall state that the opinions expressed are those of the Contractor only and do not represent the Commission's official position.

II.10.4. The use of information obtained by the Contractor in the course of the Contract for purposes other than its performance shall be forbidden, unless the Commission has specifically given prior written authorisation to the contrary.

ARTICLE II. 11 – TAXATION

II.11.1. The Contractor shall have sole responsibility for compliance with the tax laws which apply to him. Failure to comply shall make the relevant invoices invalid.

II.11.2. The Contractor recognises that the Commission is, as a rule, exempt from all taxes and duties, including value added tax (VAT), pursuant to the provisions of Articles 3 and 4 of the Protocol on the Privileges and Immunities of the European Union.

II.11.3. The Contractor shall accordingly complete the necessary formalities with the relevant authorities to ensure that the goods and services required for performance of the Contract are exempt from taxes and duties, including VAT.

II.11.4. Invoices presented by the Contractor shall indicate his place of taxation for VAT purposes and shall specify separately the amounts not including VAT and the amounts including VAT.

ARTICLE II.12 – FORCE MAJEURE

II.12.1. Force majeure shall mean any unforeseeable and exceptional situation or event beyond the control of the contracting parties which prevents either of them from performing any of their obligations under the Contract, was not due to error or negligence on their part or on the part of a subcontractor, and could not have been avoided by the exercise of due diligence. Defects in equipment or material or delays in making it available, labour disputes, strikes or financial problems cannot be invoked as force majeure unless they stem directly from a relevant case of force majeure.

II.12.2. Without prejudice to the provisions of Article II.1.8, if either contracting party is faced with force majeure, it shall notify the other party without delay by registered letter with acknowledgment of receipt or equivalent, stating the nature, likely duration and foreseeable effects.

II.12.3. Neither contracting party shall be held in breach of its contractual obligations if it has been prevented from performing them by force majeure. Where the Contractor is unable to perform his contractual obligations owing to force majeure, he shall have the right to remuneration only for tasks actually executed.

II.12.4. The contracting parties shall take the necessary measures to reduce damage to a minimum.

ARTICLE II.13 – SUBCONTRACTING

II.13.1. The Contractor shall not subcontract without prior written authorisation from the Commission nor cause the Contract to be performed in fact by third parties.

II.13.2. Even where the Commission authorises the Contractor to subcontract to third parties, he shall none the less remain bound by his obligations to the Commission under the Contract and shall bear exclusive liability for proper performance of the Contract.

II.13.3. The Contractor shall make sure that the subcontract does not affect rights and guarantees to which the Commission is entitled by virtue of the Contract, notably Article II.17.

ARTICLE II.14 – ASSIGNMENT

II.14.1. The Contractor shall not assign the rights and obligations arising from the Contract, in whole or in part, without prior written authorisation from the Commission.

II.14.2. In the absence of the authorisation referred to in 1 above, or in the event of failure to observe the terms thereof, assignment by the Contractor shall not be enforceable against and shall have no effect on the Commission.

ARTICLE II.15 – TERMINATION BY THE COMMISSION

II.15.1. The Commission may terminate the Contract in the following circumstances:

(a)   where the Contractor is being wound up, is having his affairs administered by the courts, has entered into an arrangement with creditors, has suspended business activities, is the subject of proceedings concerning those matters, or is in any analogous situation arising from a similar procedure provided for in national legislation or regulations;

(b)   where the Contractor has been convicted of an offence concerning his professional conduct by a judgment which has the force of *res judicata*;

(c)   where the Contractor has been guilty of grave professional misconduct proven by any means which the contracting authority can justify;

(d)   where the Contractor has not fulfilled obligations relating to the payment of social security contributions or the payment of taxes in accordance with the legal provisions of the country in which he is established or with those of the country applicable to the Contract or those of the country where the Contract is to be performed;

(e)   where the Commission seriously suspects the Contractor of fraud, corruption, involvement in a criminal organisation or any other illegal activity detrimental to the Union's ' financial interests;

(f)   where the Contractor is in breach of his obligations under Article II.3;

(g) where the Contractor was guilty of misrepresentation in supplying the information required by the Commission as a condition of participation in the Contract procedure or failed to supply this information;

(h) where a change in the Contractor's legal, financial, technical or organisational situation could, in the Commission's opinion, have a significant effect on the performance of the Contract;

(i) where execution of the tasks has not actually commenced within three months of the date foreseen, and the new date proposed, if any, is considered unacceptable by the Commission;

(j) where the Contractor is unable, through his own fault, to obtain any permit or licence required for performance of the Contract;

(k) where the Contractor, after receiving formal notice in writing to comply, specifying the nature of the alleged failure, and after being given the opportunity to remedy the failure within a reasonable period following receipt of the formal notice, remains in serious breach of his contractual obligations.

II.15.2. In case of force majeure, notified in accordance with Article II.12, either contracting party may terminate the Contract, where performance thereof cannot be ensured for a period corresponding to at least to one fifth of the period laid down in Article I.2.3.

II.15.3. Prior to termination under point e), h) or k), the Contractor shall be given the opportunity to submit his observations.

Termination shall take effect on the date on which a registered letter with acknowledgment of receipt terminating the Contract is received by the Contractor, or on any other date indicated in the letter of termination.

II.15.4. Consequences of termination:

In the event of the Commission terminating the Contract in accordance with this Article and without prejudice to any other measures provided for in the Contract, the Contractor shall waive any claim for consequential damages, including any loss of anticipated profits for uncompleted work. On receipt of the letter terminating the Contract, the Contractor shall take all appropriate measures to minimise costs, prevent damage, and cancel or reduce his commitments. He shall draw up the documents required by the Special Conditions for the tasks executed up to the date on which termination takes effect, within a period not exceeding sixty days from that date.

The Commission may claim compensation for any damage suffered and recover any sums paid to the Contractor under the Contract.

On termination the Commission may engage any other contractor to complete the services. The Commission shall be entitled to claim from the Contractor all extra costs incurred in making good and completing the services, without prejudice to any other rights or guarantees it has under the Contract.

ARTICLE II.16 – LIQUIDATED DAMAGES

Should the Contractor fail to perform his obligations under the Contract within the time limits set by the Contract, then, without prejudice to the Contractor's actual or potential liability incurred in

relation to the Contract or to the Commission's right to terminate the Contract, the Commission may decide to impose liquidated damages of 0.2% of the amount specified in Article I.3.1 per calendar day of delay. The Contractor may submit arguments against this decision within thirty days of notification by registered letter with acknowledgement of receipt or equivalent. In the absence of reaction on his part or of written withdrawal by the Commission within thirty days of the receipt of such arguments, the decision imposing the liquidated damages shall become enforceable. These liquidated damages shall not be imposed where there is provision for interest for late completion. The Commission and the Contractor expressly acknowledge and agree that any sums payable under this Article are in the nature of liquidated damages and not penalties, and represent a reasonable estimate of fair compensation for the losses that may be reasonably anticipated from such failure to perform obligations.

ARTICLE II.17 – CHECKS AND AUDITS

II.17.1. Pursuant to Article 142 of the Financial Regulation applicable to the general budget of the European Communities, the Court of Auditors shall be empowered to audit the documents held by the natural or legal persons receiving payments from the budget of the Union from signature of the Contract up to five years after payment of the balance.

II.17.2. The Commission or an outside body of its choice shall have the same rights as the Court of Auditors for the purpose of checks and audits limited to compliance with contractual obligations from signature of the Contract up to five years after payment of the balance.

II.17.3. In addition, the European Anti Fraud Office may carry out on-the-spot checks and inspections in accordance with Council Regulation (Euratom, EC) No 2185/96 and Parliament and Council Regulation (EC) No 1073/1999 from signature of the Contract up to five years after payment of the balance.

ARTICLE II.18 – AMENDMENTS

Any amendment to the Contract shall be the subject of a written agreement concluded by the contracting parties. An oral agreement shall not be binding on the contracting parties.

ARTICLE II.19 – SUSPENSION OF THE CONTRACT

Without prejudice to the Commission's right to terminate the Contract, the Commission may at any time and for any reason suspend execution of the tasks under the Contract or any part thereof. Suspension shall take effect on the day the Contractor receives notification by registered letter with acknowledgment of receipt or equivalent, or at a later date where the notification so provides. The Commission may at any time following suspension give notice to the Contractor to resume the work suspended. The Contractor shall not be entitled to claim compensation on account of suspension of the Contract or of part thereof.

SIGNATURES

For the Contractor,   For the Commission,
[*Company name*/forename/surname/function]   [forename/surname/function]

signature[s]: _____   signature[s]:_____

Done at [Brussels], [date]   Done at [Brussels], [date]

In duplicate in English.

ANNEX I

Tender Specifications and Monitoring

The purpose of this Annex is to enable the Commission to conduct, throughout the duration of the Contract, an accurate appraisal of whether the Contractor is executing the tasks assigned to him in accordance with the provisions of the Contract.

So that the Commission can regularly identify the progress made in execution of the tasks in accordance with the Tender Specifications, appropriate monitoring, assessment, and supervisory procedures shall be set up. For these purposes, this Annex shall include all necessary details, in particular, where relevant, the following:

(i) *schedule of interim and final reports – terms for approval, structure and content (where provision is made for such reports and a specific annex is not necessary);*

(ii) *schedule of audits to be carried out in accordance with Article II.17 of the Contract.*

All details on Monitoring and Reporting are to be indicated and included in the Tender Specifications.

ANNEX II

Contractor's Tender