



**EUROPEAN COMMISSION**  
DIRECTORATE-GENERAL FOR ENERGY

Directorate C - Renewables, Research and Innovation, Energy Efficiency  
**C.2 - New energy technologies, innovation and clean coal**

## **FREQUENTLY ASKED QUESTIONS**

**INVITATION TO TENDER NO. ENER/C2/2013-463**

**"SMART CITIES INFORMATION SYSTEM"**

**CONTRACT NOTICE: OJEU 2014/S 090-156172 OF 10/05/201**

**Last update: 11/06/2014**

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### **Question 1:**

Question 1 a) Will the successful tenderer have to provide hosting services for the website? If not, who will be providing this service and what kind of access to the infrastructure will the tender have? (i.e. administrator rights etc....)

#### **Answer:**

Yes, the successful tenderer will have to provide hosting services for the website.

Question 1 b) What is the architecture and technology behind the Concerto website and TMD? Specifically, could please specify any CMS components, database engines (MySQL, Oracle, etc.), or any other technology relevant for the maintenance and evolution of the website and TMD.

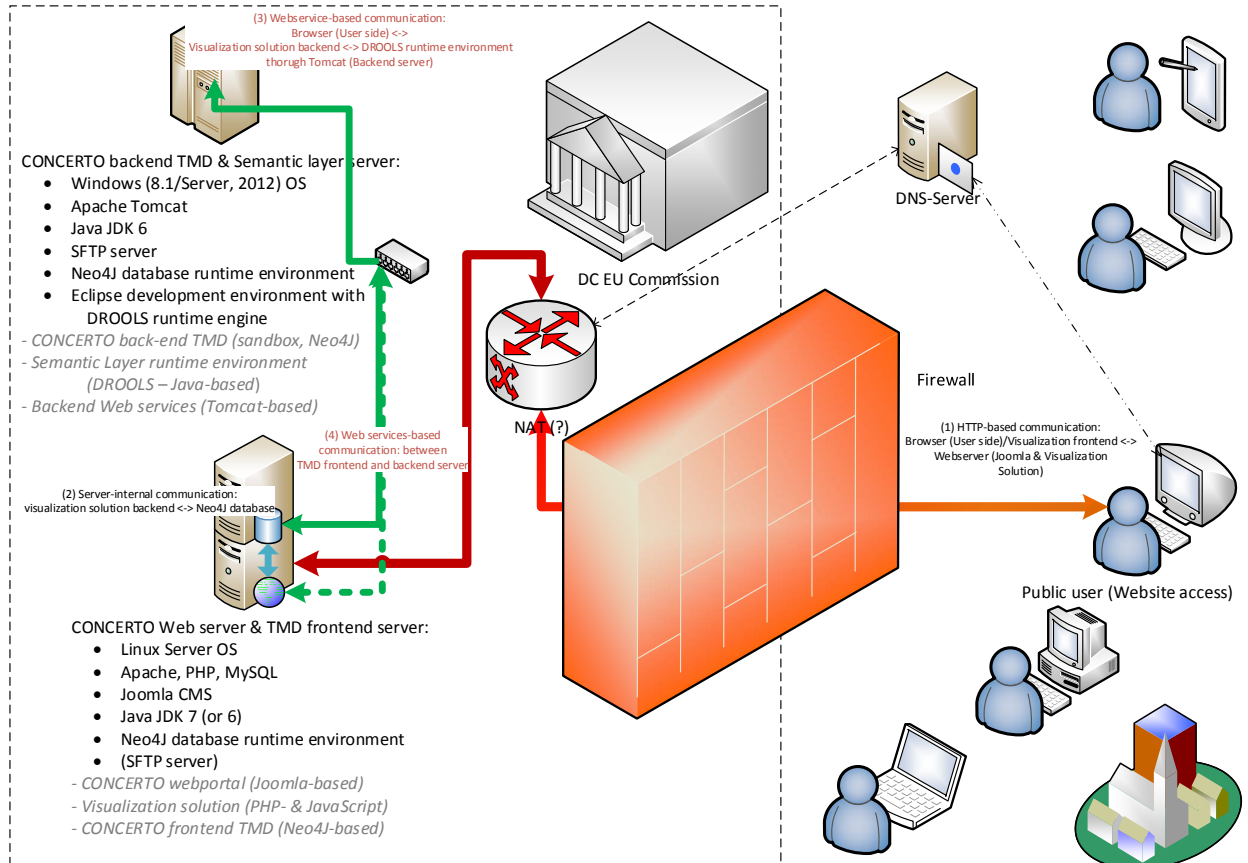
#### **Answer:**

Please find below a component diagram and flow diagrams (public and administrative access) of the CONCERTO web solution, which the selected tenderer will have to take over and build on. The text also includes a listing of the tasks to be performed in order to install this web solution in a new server environment.

An additional task to be performed in order to install the web solution on the new servers is to reconfigure the A-records (and possibly also C-records) at the provider of the (Commission-owned) concerto.eu-domain provider accordingly.

# CONCERTO Premium web solution description

## 1.1. Components and Workflow description – public access and usage



The CONCERTO Premium web solution consists of three servers, physically installed on two server machines:

1. CONCERTO web server
2. CONCERTO TMD frontend database server
3. CONCERTO TMD backend database and DROOLS semantic layer server.

Server 1 and 2 are physically installed on the same machine, and only server 1 is accessible from the internet. A machine-internal communication occurs between server 1 and 2. The more, server 1 and server 3 as well as server 2 and server 3 communicate.

Server 1 and 2: CONCERTO web server and TMD frontend server:

- Linux OS
- Apache, PHP, MySQL
- Joomla CMS
- Java JDK 7 (or 6)
- Neo4J database runtime environment
- (SFTP server)

The first physical server (server 1 and 2) is hosting:

- The CONCERTO Premium web portal (Joomla-based, using Apache, PHP and MySQL server component; server 1)
- The CONCERTO Visualization solution (PHP-and JavaScript-based, using Apache and PHP; server 1)
- The CONCERTO frontend TMD (Neo4J-based, using the Neo4J database installation and the JDK; server 2).

Server 3: CONCERTO backend TMD and semantic layer server:

- Windows (8.1 or server 2012) OS
- Apache Tomcat
- Java JDK 6 (compulsory, due to compatibility issues!)
- Neo4J database runtime environment
- Eclipse development environment with DROOLS runtime engine

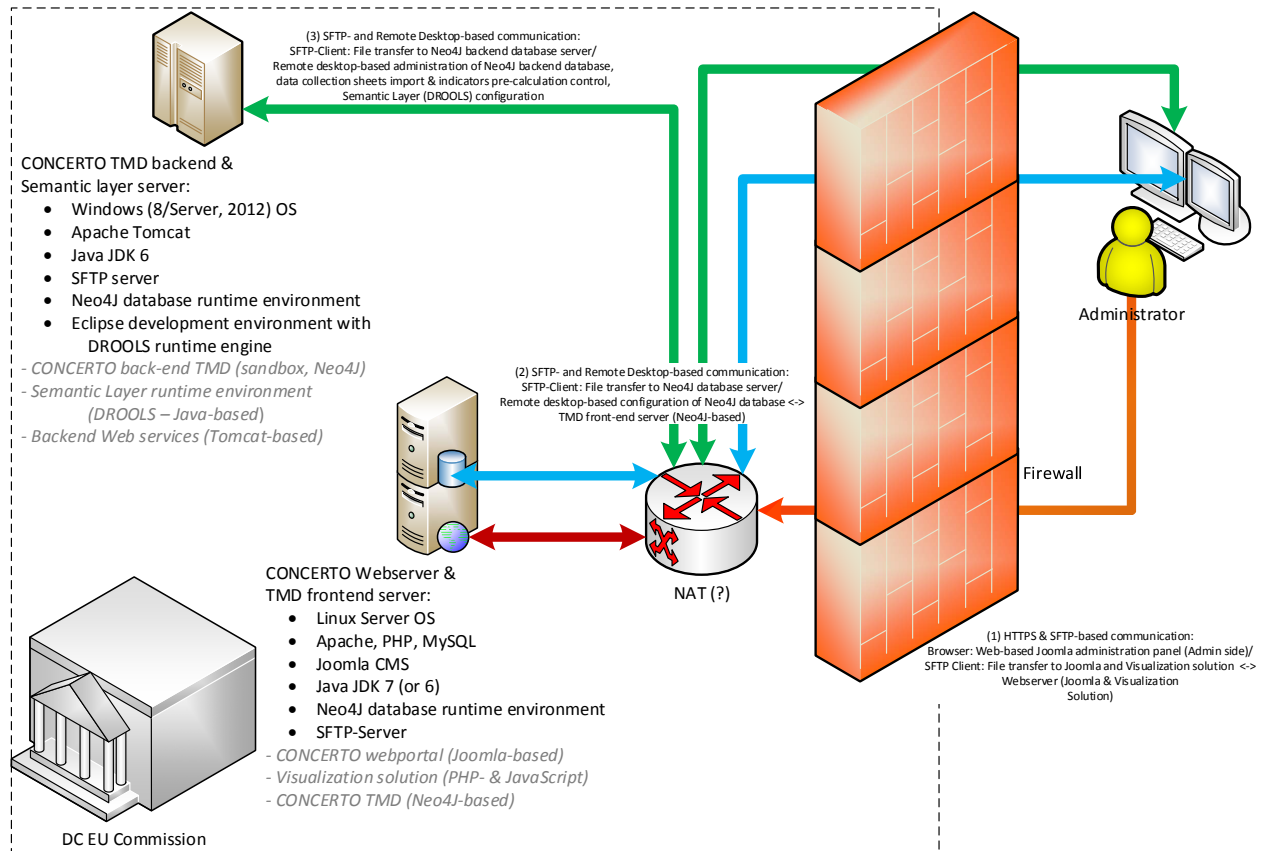
The second physical server (server 3) is hosting:

- The CONCERTO backend TMD (Neo4J-based, using the Neo4J database installation and the JDK)
- The semantic layer runtime environment (Java/Eclipse development environment based, including the DROOLS engine)
- Web services for communication and control of the semantic layer runtime environment (using Apache Tomcat).

There are four communication paths occurring for the public access and usage of this solution:

1. Browser – Webserver communication: http-based, using ports 80 (and 443).  
This is the only internet-based (external) communication.  
The user accesses by browser the Joomla-based CONCERTO website and the visualization solution (JavaScript running locally in the browser).
2. Server-internal communication (inside physical server 1):  
Communication between the visualization solution backend (PHP) and the Neo4J database (through Cypher-queries)
3. Visualization solution backend – DROOLS runtime environment communication: DC-internal communication between 2 (physical) servers through (Apache Tomcat-based) web services.  
This interaction is determined by the user interaction through the visualization frontend (JavaScript running in the browser). However, the communication is performed by the backend, the user's frontend only receives an "answer".
4. Web services based communication between TMD frontend and TMD backend server: DC-internal communication between 2 (physical) servers through (Apache Tomcat-based) web services. Data transfer through SFTP from backend to frontend server.

## 1.2. Components and Workflow description – administration usage



There are three administration modes necessary:

1. Browser-based administration of the Joomla-based CONCERTO web portal: https-based, the administrator (and web site designers) access the backend of the Joomla-based portal through the web browser, to administer the web site.  
SFTP (using the SFTP server installed on server 1) is required for transfer of large data sets. The visualization solution (which is integrated in the Joomla file system, but not part of the Joomla installation) is administered/updated exclusively through SFTP access to server 1.
2. SFTP- and Remote Desktop-based administration of the frontend TMD:  
New versions of the Neo4J database content (Neo4J-specific database “dump”) are uploaded via SFTP to the server.  
Administration of the database backend is performed exclusively through Remote Desktop – the server OS must therefore have a GUI and a browser installed, to be accessed ONLY through localhost.
3. SFTP- and Remote Desktop-based administration of the backend TMD and the semantic layer:
4. New versions of the Neo4J database content (Neo4J-specific database “dump”) and new data collection Excel sheets are uploaded via SFTP to the server, to be processed there.  
Administration of the database backend and semantic layer (re)-configuration, as well as data collection sheets import and indicators values pre-calculation is performed exclusively through Remote Desktop – the server OS must therefore have a GUI and a browser installed, to be accessed ONLY through localhost.

### **1.3. Porting of the CONCERTO Premium web solution to a new hardware environment**

*It is strongly advisable to use the same hardware/software configuration in the ported CONCERTO web solution as described above: 2 physical servers - one machine (Linux server OS) as web-/visualization server and Neo4J frontend database server, one machine (Windows 8.1/2012 server OS) as backend Neo4J database server and semantic layer runtime environment.*

The following components are to be ported:

1. Joomla-based web portal
2. Visualization solution (integrated in website)
3. Frontend TMD (Neo4J)
4. Backend TMD (Neo4J)
5. Eclipse-based (including DROOLS runtime engine) semantic layer.

Preparatory tasks: servers OS installations, including GUI, SFTP server and remote desktop component

The following tasks are to be performed for components 1 and 2:

- Linux server OS preparatory steps: installation of PHP, MySQL and Apache server components (XAMPP is not to be used, due to compatibility issues with Joomla)
- Configuration of Apache and MySQL server component, import of CONCERTO database dump
- Installation of Joomla 2.5.17 CMS
- Import of CONCERTO website content and visualization solution into the Joomla CMS (preferably by using Akeeba Backup Pro), configuration of the Joomla CMS to host the website

The following tasks are to be performed for component 3 and 4 (on both servers):

- Installation of JDK 6 or 7 and of Neo4J 1.9.x community edition runtime environment
- Import of CONCERTO Neo4J database “dump”

The following tasks are to be performed for component 5:

- Installation of JDK 6
- Porting of the Eclipse-based (DROOLS-containing) Semantic Layer development and runtime environment
- Configuration of the backend Neo4J database and semantic layer runtime environment

Additionally, the A-records for the concerto.eu domain (owned by the European Commission) has to be configured at the domain name provider of this domain, to point to the new webserver.

Towards end of 2014 the latest, it is necessary to port the CONCERTO portal (content, as well as third party extensions) onto a Joomla 3.5.x (or newer) CMS installation.

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**Question 2:** Does the fact that a possible tenderer is also a holder and applicant of EU grants in the areas to be covered by the Smart Cities Information System is to be considered a conflict of interest that excludes the possible tenderer?

**Answer:**

As a rule, no. See also the tender specifications, which state:

#### 2.2. *Exclusion criteria*

*"[...] The fact that a tenderer is also beneficiary in one or several of the monitored projects is not per se considered a conflict of interest. Tenderers shall in the proposal be transparent with regard to their participation in monitored projects and propose measures how to avoid conflicts of interest where these could arise."*

On the other hand, tenderers must, while submitting the tender, clearly and transparently report all cases of possible conflicts of interest. The presence of a situation of conflict of interest will be assessed by the evaluation committee on a case-by-case basis.

**Question 3:**

Can you provide the following information concerning the Technical Monitoring Database established in the CONCERTO Premium project?:

- 1) size of the underlying dataset;
- 2) average unique views per day;
- 3) average bandwidth consumption per day;
- 4) average number of data extractions per day;
- 5) average time spent per user on the TMD.

**Answer:**

Unfortunately we cannot provide this information as we have not determined these figures.

**Question 4:**

In Annex 1 - Identification of the tenderer, there is a line requesting a "Description of statutory social security cover (at the level of the Member State of origin) and non-statutory cover (supplementary professional indemnity insurance)". What does it mean in practical terms? What type of information should the tenderer provide?

**Answer:**

The tenderers must describe those systems applicable to them according to the law of the Member State of their origin.

**Question 5:**

Will the European Commission consider extending the deadline for submission of the tenders?

**Answer:**

No. The set deadline complies with the European Commission's rules for public procurement and the European Commission will not extend it.

**Question 6:**

The question is related to Article I.4 - payment arrangements, which says

*"I.4.1 Pre-financing:*

*Following signature of the contract by the last party and its receipt by the contacting authority, a pre-financing payment of EU (amount in figures and in words) equal to (complete) % of the total amount referred to in Article I.3.1 shall be made within 30 days of the receipt of an invoice."*

What is the pre-financing payment percentage of the total amount referred to in Article I.3.1 that will be made within 30 days of the receipt of an invoice?

**Answer:**

The pre-financing will be 30%. Please see the Corrigendum 1.

**Question 7:**

The e-mail address given in the "Invitation to tender" (ENER-SCIS@ec.europa.eu) bounces back, the e-mail address given in the "Contract notice" (ener.scis@ec.europa.eu) works. Which one is the correct address?

**Answer:**

The correct e-mail address is indeed ener.scis@ec.europa.eu, as published in the "Contract notice" in the Official Journal. Please see the Corrigendum 1.

**Question 8:**

On 2.3.2. "Technical and professional capacity criteria and evidence", point b) "Criteria relating to the team delivering the service:"

Does the project manager have to comply with the requirement of *experience in project of a size at least 2 000 000e and geographical coverage of at least half of the one subject to this tender (thus 14 European member states)* in a same project? Or can these requirements be covered by two or more different projects? E.g. one project at least size of 2 000 000e and other project that is less than 2 000 000e but has coverage of the geographical scope at least half of the one subject to this call for tender?

**Answer:**

The requirements can be covered by experience from *different* projects, e.g. the criterion is met if the project manager can document that s/he has managed one project of at least €2 000 000 and another one of the required geographical scope.

**Question 9:**

What is the scope for changing the technology stack for the CONCERTO website (back-end and front-end)?

**Answer:**

In principle the EC does not prescribe the application of a specific technology stack. However, as in general it is an efficient use of resources to build on the work already carried out and to make good use of the existing work, tenderers are encouraged to

- put forward convincing arguments in the tender if it proposes to allocate significant resources to changing the technology stack.
- explain the reasons for and advantages of the proposed changes also in a language that is accessible to readers without a specific IT background.

**Question 10:**

Would the EC be open to suggestions to use proprietary (i.e. Microsoft) technologies to deliver the data visualisation element?

**Answer:**



The EC is open to all suggestions submitted by tenderers in their tenders. Tenders should

- bear in mind possible intellectual property rights issues and, where appropriate, present solutions to these. See also the draft contract's ARTICLE 1.8 - EXPLOITATION OF THE RESULTS OF THE CONTRACT, and there see also I.8.2 Pre-existing rights and transmission of rights.
- put forward convincing arguments in the tender if it proposes to allocate significant resources to changing the existing solution.

**Question 11:**

Under the 2.3.2.a) Criteria relating to tenderers, the requirements for editors under No 11. states: *"proficiency in the language of the deliverable, that is an academic degree obtained with the language as the working language, and at least four years of experience in proofreading and editing texts at the interface between science and policy, and knowledge of the deliverable's subject."*

Does this mean that if the editor is editing text in English, he/she has to have a degree obtained in English and has to have the relevant proofreading experience (4 years) as well as knowledge of the subject of the contract, i.e. in the energy/climate change area?

**Answer:**

Yes.

**Question 12:**

Question 12 A): Further to the FAQs published in relation to the tender in the subject, in view of the answers to some of the technical questions presented by the tenderers, such as for instance the answer to question 1b which is giving further technical details on the architecture and technology behind the Concerto website, details which were not comprised in the initial information indicated by the tender dossier, we would like to ask whether it is possible for the Commission to extend the tender's due date by 7-10 working days.

The extension would give the proper time to all the tenderers to prepare at best their technical proposals, on equal informational base in terms of the technical details further specified by the FAQs.

**Answer:**

No. The set deadline complies with the European Commission's rules for public procurement and the European Commission will not extend it.

The information provided in the initial Tender Specification is sufficient to enable to submit a complete tender serving the purpose of the contract– the information provided through Q&A serves only as a supplementary guidance.

Question 12 B)

We would also kindly like to ask for a confirmation on whether all the new technical details indicated as per the previous paragraph have been included in the tender's budget estimation.

**Answer:**

Yes. Please see the previous response.

**Question 13:**

Question 13 A)

How many delegates are likely to attend the training sessions? Is there a maximum number at each or can this be determined by the contractor? Smaller groups are preferable for ensuring effective knowledge transfer.

**Answer:**

The tenderer shall propose the group sizes of the training sessions. Actual participation will depend on availability of the target audiences. In particular for the training sessions for stakeholders/multipliers effective strategies will be needed to attract the participants.

Question 13 B)

Is there a requirement as to the standard of venue that should be used for hosting trainings? Are these required to be in a 4 Star or 5 star hotel for example? Likewise, for the conferences under work package 4, what standard of venue is expected? (This has an impact on the budget.)

**Answer:**

There are no required standards. The tenderer shall propose appropriate venues and standards.

Question 13 C)

The contractor assumes that all trainings will be delivered in English. Is there any requirements for provision of consecutive/ or simultaneous interpretation at any event?

**Answer:**

There are no interpretation requirements from the side of the Commission.

For your information: Concerto Premium events did not have interpretation, reasoning also that for bilateral exchange among participants English skills are necessary anyway; in Concerto Plus there was EN, DE and FR interpretation at the final conference. It is for the tenderer to propose languages regimes of the events.

**Question 13 D)**

Will the trainings to EC staff be expected to take place at a neutral venue or on the office premises of the European Commission in Brussels? If so, will sufficient training facilities be provided by the EC?

**Answer:**

Training to Commission staff can be expected to take place on the premises of the European Commission. The Commission can provide meeting rooms of different sizes with a beamer, as well as one training room with 8 computers.

**Question 14**

Could the Commission clarify what business continuity and disaster recovery measures are required for the Concerto Technical Monitoring Database?

**Answer:**

The tenderer shall propose business continuity and disaster recovery measures.

**Question 15**

On the basis of the clarifications received from the Commission, in order to complete the tendered services, it is important that tendering parties be able to estimate the costs and effort of the handover from the current service provider. To this end, could the Commission provide the technical specifications of the underlying TMD Database, specifically information regarding how NEO4J and DROOLS code have been used to design Concerto's back end. Alternatively, could the Commission provide contact details for the current service provider of Concerto TMD?

**Answer:**

The Commission could not obtain any additional information on the technical specifications of the underlying TMD Database.

The past service provider (the contract ended on 31 January 2014) was Steinbeis-Europa-Zentrum, <http://www.steinbeis-europa.de/> switchboard on +49 711 1234010, email: [info@steinbeis-europa.de](mailto:info@steinbeis-europa.de)