



Annex 2

Tender Procedure No: EIOPA/OP/07/2012

“Service provision for the development and auditing of information systems, including XBRL-related developments”

TERMS OF REFERENCE

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I Introduction

These Terms of Reference:

- Describe the required services;
- Describe EIOPA's procedures;
- Give a description of the lots;
- Give a description of the staff profiles that are required in the different lots.

The Terms of Reference are fully applicable in all contracts linked to this procurement procedure.

I.1 EIOPA's IT & data strategy implementation programme

The European Insurance and Occupational Pensions Authority (EIOPA) started to be operational on January 1st 2011 and is currently in the process of developing its information system (IS) environment.

To this end, an IT & data strategy was adopted. The implementation plan, which is based on this strategy, includes projects in the following domains:

- Change management, quality assurance and design
- XBRL taxonomy modelling and software tool developments
- Operational database and data warehouse developments
- Business intelligence system developments
- Document management system developments
- Web content management system developments
- Information system audits

I.2 EIOPA's technical environment

EIOPA's technical infrastructure is currently based at its premises in Frankfurt/Main.

EIOPA occupies four floors in the Westhafen Tower in Frankfurt. Three rooms in this building are dedicated to hosting IT equipment. These rooms hold the existing EIOPA IT infrastructure which is listed below.

- Network infrastructure (LAN), including firewalls
- sTesta network access node (private network of the European Commission)
- E-mail protection gateways
- Telecommunication system
- Microsoft Windows environment

- Storage and backup devices
- Desktop environment (desktops, laptops, printers)
- Applications, including e-mail

New external data centres will probably become operational in 2013. All applications will be hosted in these data centres.

EIOPA currently uses the following information systems, software products and development environment:

- Individual PCs and Laptops predominantly run on MS Windows 7 (some still use Windows XP)
- Microsoft Office 2010 Professional, including Microsoft Visio and Microsoft Project
- Microsoft SharePoint 2010 for collaboration and document management
- Microsoft SQL Server 2008
- Microsoft Exchange 2010
- Microsoft Windows Deployment Services
- Microsoft Visual Studio 2010

It is of the utmost importance to exploit this technical environment for future developments, ensuring continuous high availability, interoperability and security.

II Service description

The goal of this call for tenders is to establish multiple Framework Contracts with a group of suppliers that will support EIOPA's IT strategy implementation programme. EIOPA is looking for a high level of integration with existing internal IT processes and wishes to establish long-term relationships with the selected suppliers.

The services required are organised into **4 distinct lots**.

- **Lot 1:** Service provision for information technology architecture, software development, quality assurance and project management support
- **Lot 2:** Service provision for XBRL taxonomy modelling
- **Lot 3:** Service provision for XBRL software development
- **Lot 4:** Service provision for information technology audits and studies

III Ordering process

Services shall be provided on the basis of two different kinds of orders:

- Time & Means (TM) orders, which correspond to the order of a number of days for defined profiles;
- Fixed-price (FP) orders, which correspond to the order of a defined work.

The ordering process is initiated by EIOPA via a request form sent to the Contractor describing the required service. On receipt, the Contractor must, within a given time period, either decline the request or make a proposal to EIOPA for the execution of the request. The process culminates in the signature of a Specific Contract (i.e. an order), or in the withdrawal of the request form. The request forms are attached in the annex to this document.

The chosen Contractor must have the capacity to carry out several individual orders in parallel, starting immediately after the Framework Contracts are in place. The Contractor must be capable of providing the services ordered rapidly and with a high degree of quality.

III.1 Time & Means orders

Time & Means orders (TM) are mainly executed on EIOPA's premises (called 'on-site' or 'intra-muros').

In a Time & Means order EIOPA specifies the **workload** (e.g. person-days) and its specific **needs for requested profiles**.

The following conditions relating to Time & Means (TM) orders apply:

- The Contractor must present proposals meeting the requirements as specified in the request forms and associated documents. The Contractor's proposed staff must match the requested profile description and the specific needs indicated in the request form.
- The Contractor must be able to propose per requested profile at least two qualified persons to choose from, and supply CVs for these persons.
- Pre-defined CV forms must be used (see annex). All information indicated in the CV has to be correct and validated by the Contractor.
- Persons proposed must be available at the start of the project.
- Work is normally performed at EIOPA's premises.
- In some exceptional cases, and on EIOPA's request, trips outside the normal location can be required.
- On EIOPA's demand, the Contractor must replace personnel who prove incapable of carrying out the specified tasks to the required standards. The replacement candidate will be given sufficient training during an adequate handover period, so that he/she may be immediately operational when the original candidate is

withdrawn. Any such replacement and training, if required, will be carried out at no additional cost to EIOPA.

- When the total duration of the Specific Contract is more than 3 months the Contractor shall give a month's notice to EIOPA if any personnel leave before the end of a Specific Contract.
- If the original person is no longer able to carry out the work, the Contractor is obliged to immediately inform EIOPA, provide a competent replacement person and arrange sufficient training (during a handover period where possible) to guarantee continuity of the service provided to EIOPA. Any such replacement will be effected at no additional cost to EIOPA.
- In case of replacement, the Contractor should propose a minimum of two replacement persons with the required qualifications and experience for the profile. If the Contractor does not propose suitable replacement staff, EIOPA may immediately terminate the contract with a penalty of 10 days free of charge.
- In case of replacement, the handover period must normally be at least 10 days, free of charge for EIOPA. If no handover is possible and additional training is needed for the replacement person, at least 15 days (free of charge for EIOPA) must be performed by the replacement person. The days free of charge will be the first working days of the replacement person.
- When a person is no longer available before the start of a new contract, the Contractor is obliged to inform EIOPA immediately. If the Specific Contract is not yet signed by both parties, the Contractor is not authorised to propose new candidates. If the Specific Contract is signed, EIOPA can cancel the contract.
- Only in case of "force majeure" (like an accident or a serious illness) or if the replacement is on EIOPA's demand the penalty may not apply. However, the necessary training and information to guarantee the continuity of service have to be carried out at the Contractor's expense.
- On EIOPA's demand, during holidays or other periods of planned absence by the person employed, the Contractor may be required to provide an adequate replacement. The replacement person will be given sufficient training and provided with all information necessary to guarantee continuity of the service provided to EIOPA. All such training and handover work will be carried out at the Contractor's expense.
- The invoicing is based on the number of days performed. The minimum unit is a half-day.
- When a replacement procedure is on-going the Contractor cannot invoice 10 days on the Specific Contract until the replacement is effectively done.

Remarks:

- One full year corresponds in principle to an effective workload of 220 days.
- The request form can combine different profiles, with the requested quantity and workload for each profile.

III.2 Fixed Price orders

Fixed Price orders (FP) are generally executed outside EIOPA's premises (i.e. 'off-site' or 'extra-muros').

In a Fixed Price order EIOPA specifies the **deliverables** corresponding to the work to be delivered within defined deadlines.

The following conditions relating to Fixed Price orders apply:

- The Contractor must present proposals meeting the requirements as specified in the request forms and associated annexes (specifications, work packages, deliverables, activities, deadlines etc.).
- The offer must include a technical analysis based on the requirements.
- The offer must include a project plan. It has to indicate the proposed activities, the team structure, profiles, roles, responsibilities and workloads.
- A methodology agreed by EIOPA has to be used for the calculation of the workload of the different tasks. Based on this, the financial offer must be based on the estimation of the number of days for each activity and the prices quoted for the profiles used.
- Work is normally performed off-site, typically on the Contractor's premises. The Contractor shall provide the necessary infrastructure on his premises for the successful execution of the work.
- The deliverables must be on time, and conform to the specifications as described in the Specific Contract.
- The invoicing is based on the acceptance of the deliverables by EIOPA (and not on the effective workload).
- Technical intra-muros interventions can be foreseen on EIOPA's premises for specific tasks like installations, configurations, acceptance tests, technical analysis or maintenance tasks.
- Extra-muros interventions with delivery outside the normal place of delivery can be foreseen for specific tasks like end user training, participation in conferences, installations, configurations, acceptance tests, technical analysis or maintenance tasks.
- EIOPA can combine different modes of delivery (extra-muros, extra-muros interventions with delivery outside Frankfurt/Main and intra-muros interventions) under the same request.
- Meetings at the location of delivery with members of the team can be required without any additional cost by EIOPA.
- A warranty applies to the deliverables accepted by EIOPA.

III.3 Extensions

An extension is a prolongation based on the initial request and the initial proposal when all the requested tasks have not been achieved by the previous Specific Contracts.

The extension results in a new Specific Contract.

III.3.1 Time & Means

If the amount of days foreseen in the request form has not been covered completely by corresponding Specific Contracts, EIOPA can conclude another Specific Contract without having to send again a request form and follow the complete order cycle.

To extend a Time & Means Specific Contract:

- EIOPA checks if the days on the corresponding initial request form have been used up. If they have not, a new Specific Contract can be concluded on the basis of the initial request form. If the number of days specified in the initial request form is reached, it is not possible to request an extension and the normal procedure applies.
- EIOPA asks for an offer from the Contractor for the period they want an extension for, making a reference to the original request form sent, and including a technical annex related to the extension. The offer delivered by the supplier should contain the name of the person(s) executing the service and price.
- Profiles, projects and tasks defined in the initial request form must not change for the extension.
- EIOPA prepares the new Specific Contract.
- In case of non-availability of a person for a future extension, the Contractor has to inform EIOPA as soon as possible.
- If the initial person is no longer available and a suitable replacement is accepted by EIOPA, the replacement conditions are applicable.

III.3.2 Fixed Price

Two cases are foreseen:

1. The initial request form contains a list of tasks (modules, work packages) corresponding to deliverables. The Contractor has made a proposal according to this request. The Specific Contract may have covered only a part of the project corresponding to some deliverables. In this case, EIOPA can conclude one or more new Specific Contracts for the remaining work without having to send again a request form and follow the complete order cycle.

The new Specific Contracts have to cover tasks included in the initial request under the conditions of the original offer. The technical annex can be updated if necessary, but the global conditions (including defined deliverables and price) cannot be modified. The total price of the project may not exceed the price quotation given in the initial offer (except for indexation).

2. In case additional tasks are deemed necessary to complete the work on the same project and in conformance with the initial request, extensions are possible for a maximum of 50% of the amount of the accepted original proposal. In such a case the Contractor provides a new offer for the additional tasks described in a new technical annex prepared by EIOPA.

Typically, each extension results in a new Specific Contract.

IV Delivery for all types of orders

IV.1 Languages

All required services must be provided in English. Official project documentation (e.g. manuals, reports) must be provided by staff with a very good command of English.

IV.2 Place of work

Depending on the request, work can be executed on EIOPA's premises (so-called on-site or intra-muros work) or on the Contractor's premises (so-called off-site or extra-muros work). EIOPA indicates on the request form where and how the work has to be delivered.

In exceptional cases, extra-muros interventions with delivery outside EIOPA's premises can be foreseen.

IV.2.1 For Time & Means services

Time & Means services are to be rendered mainly on EIOPA's premises in Frankfurt/Main, Germany (i.e. intra-muros). In exceptional cases, and on EIOPA's request, trips outside the normal location can be required. The infrastructure will usually be provided by EIOPA, except if a Specific Contract reflects a different approach. The personnel providing the service will use only the standard software packages in use at EIOPA, and no other software may be installed or used without the written authorisation of EIOPA.

IV.2.2 For Fixed Price services

Fixed price services are usually executed on the Contractor's premises (i.e. extra-muros). Project meetings are typically held in Frankfurt/Main, Germany. Deliverables have to be formally submitted at this location. Travel costs to the place of delivery are not reimbursed. The Contractor shall provide all deliverables in the form and format specified in the order and shall guarantee their integration into the target informatics environment.

In the case of extra-muros interventions, delivery will be necessary outside Frankfurt/Main, Germany. Travel costs to the place of delivery are not reimbursed.

In the case of intra-muros interventions, the work will be performed on EIOPA's premises.

IV.3 Normal working hours

For Time & Means delivery, a normal working day corresponds to 7 hours 30 minutes per day (37 hours 30 minutes per week). The daily working time frame is between 8:00 and 18:30 and presence is normally required between 9:30 and 12:00 and between 15:00 and 16:30 (16:00 on Fridays).

The periods of on-site presence by service providers have to be agreed by EIOPA. No overtime is possible.

In exceptional cases of extended services (e.g. continuous support service between 8:00 and 18:30), specific time frames can be requested from EIOPA (e.g. from 8:00 to 16:00 and from 10:30 from 18:30 with a pause of 30 minutes).

IV.4 Work outside of normal working hours

As an exception, EIOPA may request delivery of services outside of the normal working hours, as defined in the General Terms and Conditions for the Framework Contract. For these situations, the following surcharges will be added to the applicable day rates:

- For normal working days before 8:00 and after 18:30: 50 %
- For weekends and holidays: 100 %

The surcharge will only apply if at least 3 hours 45 minutes (half a person day) of service is delivered outside of normal working hours.

IV.5 Acceptance of work

For orders, official acceptance of the work carried out will take place at milestones during and at the end of each order execution using a procedure agreed to at the beginning of the order. Invoices may be issued only for executed orders and tasks that have been completed and duly accepted.

IV.6 Training

As a rule, EIOPA will not take charge of the training of the Contractor's staff. When needed, training courses must be followed outside EIOPA's premises.

IV.7 Security and confidentiality

The Contractor shall comply with EIOPA's security rules¹. The Contractor's staff working for EIOPA will be requested to sign a confidentiality agreement. For sensitive tasks, EIOPA may exceptionally request personnel working for EIOPA to provide a certificate of

¹ EIOPA manages information security to meet the rules set out as follows:

- European Commission, Commission Decision of 29 November 2001 (2001/844/EC, ECSC, Euratom), 2001
- European Commission, Commission Decision of 2 August 2006 amending Decision 2001-844-EC, ECSC, Euratom (2006-548-EC, Euratom), 2006
- European Commission, Information System Security Policy; Guidelines on Asset Classification; Version 2 of 02/09/2011

good conduct or equivalent (e.g. criminal records). In such a case, EIOPA will specify this requirement in the request form.

IV.8 Audits

The Framework Contract shall provide for the possibility for EIOPA to conduct audits (security or other) on the Contractor's deliverables by third parties.

IV.9 Service Level Agreements (SLAs)

The Framework Contract shall include a Service Level Agreement.

Additional Service Level Agreements shall be included in the Specific Contracts when needed (e.g. covering the provision of user support after an application has been developed).

V The cascading mechanism

This call for tenders will provide multiple Framework Contracts with a "cascading mechanism".

Where more than one Contractor is nominated, the following rules shall apply to requests for the supply of services.

1. For each case, EIOPA shall determine the specifications of the services required, hereinafter referred as project, and the relevant response time. The Contractor shall make an offer in response to EIOPA's specifications within this time limit.
2. When requesting an offer to supply services, EIOPA shall initially address its request to the Contractor who has been nominated in first place on the basis of the results of the evaluation of the call for tenders cited in the Contract. If this first Contractor meets the criteria for response time and fulfils the specifications, then he shall be awarded the project in question.
3. If the first Contractor does not meet either of these criteria, he shall be regarded as being unable to supply the services requested. In this case, EIOPA shall then address the same request to the Contractor who has been nominated in second place on the basis of the results of the evaluation of the call for tenders cited in the Contract. If this second Contractor is in a position to meet the criteria for response time and specifications, then he shall be awarded the project in question.
4. If this second Contractor is unable to meet either of these criteria, then he shall be considered unable to supply the services requested. In that event, EIOPA shall repeat this process with the Contractor who has been nominated in third place.
5. This process will terminate either with the award of the project in question to one of the Contractors who has been nominated, or with the failure to award

the project to any Contractor. In the event of failure EIOPA may redefine the project or start the procedure again on the same project at a later time.

6. The inability of the Contractor to supply the services for a project, requested under the conditions (1) – (5), shall not be considered as such to afford grounds for terminating the Framework Contract, nor shall it affect the order in which the Contractor is to be addressed for subsequent projects.

During the cascade mechanism the request form specifications may not change (e.g. profiles and/or technical annexes must remain the same).

VI Conflict of interest

In the event that a Contractor is awarded a Framework Contract for two or more lots, EIOPA may conclude that a specific project in the first area and specific project in the second area cannot be carried out by the same Contractor (or group member or subcontractor). In this case, the Contractor will not be asked to provide the services related to the second project and will not be part of the cascade for this specific request.

VII Reporting

The Contractor offering services must provide monthly reports to the responsible service manager at EIOPA.

The report, with complete and accurate information at the end of the previous month, must be delivered at least on the 16th of the on-going month.

The monthly report will include:

- A summary of the activities;
- Data on the request processing and Specific Contracts from the start of the Framework Contract;
- The values of SLA quality indicators (as calculated by the Contractor);
- The risks identified and the problems encountered.

The content and layout of the report shall be proposed by the Contractor and approved by EIOPA at the start of each project.

VIII Lots

As mentioned in the service description above, the services required are organised into 4 distinct **lots**. This section provides more information on these lots.

VIII.1 General remarks applying to all lots

As part of its IT governance framework, EIOPA aims to apply IT methodologies based on industry best practice. The following table sets out industry standard methodologies that EIOPA IT processes should use:

IT Process	Methodology	Reference
IT business case development	ISACA VAL IT framework	http://www.isaca.org/Knowledge-Center/Val-IT-IT-Value-Delivery-/Pages/Val-IT1.aspx
IT Strategy	ISACA Control Objectives for Information and related Technology (COBIT) Version 4	http://www.isaca.org/Knowledge-Center/COBIT/Pages/Overview.aspx
IT Architecture	The Open Group Architecture Framework (TOGAF) Version 9	http://www.opengroup.org/togaf/
IT Service Management	Information Technology Infrastructure Library (ITIL) Version 3	http://www.itil-officialsite.com/
IT Project and Programme Management	Project Management Body of Knowledge (PMBOK Guide)	http://www.unipi.gr/akad_tmhm/biom_dioik_tech/files/pmbok.pdf
IT Security	SO/IEC 27001: Information Security Management System (ISMS) standard	http://en.wikipedia.org/wiki/ISO/IEC_27001

EIOPA uses Microsoft Office for office automation and Microsoft Project for project scheduling.

EIOPA's software environment is based to a great extent on solutions provided by Microsoft. All provided services may require the use of technologies used at EIOPA (see also chapter I.2).

VIII.2 Lot 1: Service provision for information technology architecture, software development, quality assurance and project management support

VIII.2.1 Description

Services in this lot shall be executed by the Contractor's staff on the basis of Time & Means or Fixed Price orders.

This lot covers the design of information systems, their implementation, quality assurance and maintenance.

Typical examples of activities include, but are not limited to:

- Development and constant improvement of the business, data, application and technology architectures for EIOPA;
- Design and development of database management systems and related tools;
- Design and development of data warehouses, data marts and related tools;
- Design and development of business intelligence solutions;
- Design and development of document and content management systems;
- Design and development of collaboration platforms;
- Design and development of portals and web sites (external web sites, extranets and intranets);
- Design and development of desktop applications and Windows services;
- Quality assurance and support;

Typical services to be provided include, but are not limited to:

Enterprise architecture

- Analysis of information systems portfolios
- Analysis and modelling of business processes
- Analysis of organisational structures
- Cost/benefit analysis
- Development and enhancement of information system architectures
- Assistance with the implementation of the architecture
- Architecture maturity assessment
- Data flow analysis

Information system (IS) requirements analysis

- Development of vision documents and business cases
- Business case modelling
- Design of information systems
- Risk analysis

Technical implementation

1. Project management and consulting
2. Analysis
3. Prototyping
4. Design
5. Programming
6. Testing
7. Deployment and configuration
8. Hand-over
9. Take-over
10. Customisation
11. Corrective maintenance
12. Technical support
13. Technical documentation
14. Technical and end-user training

This lot may require expertise in the following technologies (non-exhaustive lists):

Languages and protocols:

1. SQL, PL/SQL
2. C# and VB.NET, .NET Entity Framework, LINQ, ASP, VBA
3. HTML, CSS, JavaScript
4. C, C++
5. XML, XSLT

6. SOAP
7. UML
8. BPMN

Products²:

1. Microsoft SQL Server 2008 and above
2. Microsoft SharePoint 2010 and above
3. Microsoft Power Pivot
4. Microsoft Excel 2010
5. Oracle RDBMS

When work is performed on the Contractor's premises, the Contractor shall provide the necessary infrastructure. Technical interventions can be foreseen on EIOPA's premises or its data centres for specific tasks like installations, configurations, acceptance tests, technical analysis or maintenance.

Depending on the project, expertise in particular products or tools could be required.

Specific infrastructure could be needed for extra-muros projects.

VIII.2.2 Profiles

The profiles needed in this lot are listed in the matrix available in IX.2 Profiles per lot.

VIII.3 Lot 2: Service provision for XBRL modelling**VIII.3.1 Description**

Services in this lot shall be executed by the Contractor's staff on the basis of Time & Means or Fixed Price orders.

This lot covers the data modelling, quality assurance and constant updating of XBRL³ taxonomies in the context of EIOPA's Solvency II projects⁴⁵.

Typical examples of activities include, but are not limited to:

- XBRL project management;

² EIOPA could update products when new versions become available.

³ eXtensible Business Reporting Language. More information at <http://www.xbrl.org>.

⁴ <https://eiopa.europa.eu/activities/insurance/solvency-ii/index.html>

⁵ Current version of the Quantitative Reporting Templates:
<https://eiopa.europa.eu/consultations/consultation-papers/2011-closed-consultations/november-2011/draft-proposal-on-quantitative-reporting-templates-and-draft-proposal-for-guidelines-on-narrative-public-disclosure-supervisory-reporting-predefined-events-and-processes-for-reporting-disclosure/index.html>

- Modelling, development and improvement of XBRL taxonomies, based on constantly evolving harmonised Quantitative Reporting Templates;
- Writing technical documentation;
- Taxonomy quality assurance and reviews;
- Training key users in EIOPA and the National Supervisory Authorities;
- Assisting at EIOPA's internal meetings, public events and EIOPA's collaborative networks⁶.

Typical services to be provided include, but are not limited to:

1. Project management and consulting
2. XBRL and Data Point Modelling (DPM) analysis
3. Prototyping
4. Design of data models and XBRL taxonomies
5. Implementation of data models and XBRL taxonomies
6. Testing
7. Preparation for publication
8. Technical documentation
9. Technical and end user training
10. Presentations and public events
11. Technical reviews and quality check
12. Support

This lot may require expertise in the following technologies (non-exhaustive lists):

Languages, protocols and standards:

1. XBRL 2.1 and XBRL Dimensions 1.0, including formulas, table linkbases and related concepts
2. XML
3. Database modelling

⁶ EBA and EIOPA collaborative public network: <http://www.eurofiling.info/>
 EIOPA – Westhafenplatz 1 – 60327 Frankfurt am Main – Germany
 Email: procurement@eiopa.europa.eu; Website: www.eiopa.europa.eu

Products⁷:

1. XBRL platform solutions, e.g. Fujitsu Interstage XWand, Arelle, UBMatrix Taxonomy Designer or Altova MissionKit
2. Microsoft SQL Server 2008 and above
3. Microsoft Excel 2003 and above
4. Oracle RDBMS 11g

In addition to the above-mentioned expertise, this lot requires a deep understanding of the Solvency II framework as well as other financial frameworks like Corep, Finrep and IFRS.

VIII.3.2 Profiles

The profiles needed in this lot are listed in the matrix available in IX.2 Profiles per lot.

VIII.4 Lot 3: Service provision for XBRL software development

VIII.4.1 Description

Services in this lot shall be executed by the Contractor's staff on the basis of Time & Means or Fixed Price orders.

This lot covers the modelling, quality assurance and constant updating of XBRL⁸ based software and components in the context of EIOPA's Solvency II projects⁹.

Typical examples of activities include, but are not limited to:

- Managing and executing the whole life cycle of a specific software solution to easily create, complete and validate XBRL instances in order to help companies without XBRL knowledge to implement Solvency II harmonized quantitative reporting in XBRL;
- Designing, developing, testing, maintaining, supporting and deploying other XBRL-based software solutions in the financial reporting chain¹⁰;
- Developing, maintaining and promoting open source solutions;
- Training key users from the National Supervisory Authorities and EIOPA on how to use, maintain and upgrade the solutions;
- Providing technical support.

⁷ EIOPA could update products when new versions become available.

⁸ eXtensible Business Reporting Language. More information at <http://www.xbrl.org>.

⁹ <https://eiopa.europa.eu/activities/insurance/solvency-ii/index.html>

¹⁰ This includes components and solutions for creation, transmission, processing, analysing (business intelligence) and publication of XBRL information. For example: XBRL viewers, taxonomy editors and repositories, XBRL validation services, etc.

Typical services to be provided include, but are not limited to:

1. Project management and consulting
2. Analysis
3. Prototyping
4. Design
5. Programming
6. Testing
7. Preparation for publication
8. Customisation
9. Technical documentation
10. Technical and end user training
11. Presentations and public events
12. Reviews
13. First and second level support

This lot may require expertise in the following technologies (non-exhaustive lists):

Languages, protocols and standards:

1. XBRL 2.1 and XBRL Dimensions 1.0
2. XML
3. C# and VB.NET, .NET Entity Framework, LINQ, ASP, VBA
4. Python
5. J2EE
6. SQL, PL/SQL
7. UML
8. Unified Process (Rational Unified Process and/or Eclipse Open UP)

Products¹¹:

1. Microsoft Excel 2007 and above
2. Microsoft Power Pivot
3. Microsoft Visual Studio .Net 2010 and Mono Project
4. XBRL platform solutions, e.g. Fujitsu Interstage XWand, Arelle, UBMatrix Taxonomy Designer or Altova MissionKit
5. Microsoft SQL Server 2008 and above
6. Oracle RDBMS 11g

In addition to the above-mentioned expertise, this lot requires a good understanding of the Solvency II framework.

Depending on the project, expertise in particular products or tools could be required.

Specific infrastructure could be needed for extra-muros projects.

VIII.4.2 Profiles

The profiles needed in this lot are listed in the matrix available in IX.2 Profiles per lot.

VIII.5 Lot 4: Service provision for information technology audits and studies

VIII.5.1 Description

Services in this lot shall be executed by the Contractor's staff on the basis of Time & Means or Fixed Price orders.

The lot covers audits and studies related to all types of information systems used and processes applied by EIOPA.

Typical examples of activities include, but are not limited to:

Information systems (IS) quality management

1. Develop and maintain IS quality plans;
2. Perform IS functional and quality tests;
3. Perform IS development cycle quality control and evaluation;
4. Conduct quality assessments;
5. Elaborate and implement service level agreements;
6. Assist in the implementation of EIOPA's project management methodology;

¹¹ EIOPA could update products when new versions become available.

7. Assist change management control and evaluation.

IS studies and reviews to provide assurance that the practices applied for the acquisition, development, testing, and implementation of information systems comply with EIOPA's strategy and objectives

1. Evaluate business cases for proposed investments in information systems acquisition, development, maintenance and retirement;
2. Evaluate project management practices and controls;
3. Conduct reviews to determine whether a project is progressing in accordance with project plans, is adequately supported by documentation and status reporting is accurate;
4. Evaluate controls for information systems during the requirements, acquisition, development and testing phases for compliance with the organisation's policies, standards, procedures and applicable external requirements;
5. Evaluate the readiness of information systems for implementation and migration into production;
6. Conduct post-implementation reviews of systems.

IS studies and reviews to provide assurance that EIOPA's security policies, standards, procedures and controls ensure the confidentiality, integrity and availability of its information assets

1. Evaluate the information security policies, standards and procedures for completeness and alignment with generally accepted practices;
2. Evaluate the design, implementation and monitoring of system and logical security controls to verify the confidentiality, integrity and availability of information;
3. Evaluate the design, implementation, and monitoring of data classification processes and procedures for alignment with EIOPA's policies, standards, procedures, and applicable external requirements;
4. Evaluate the design, implementation and monitoring of physical access and environmental controls to determine whether information assets are adequately safeguarded;
5. Evaluate the processes and procedures used to store, retrieve, transport and dispose of information assets (e.g., backup media, offsite storage, hard copy/print data, and softcopy media) to determine whether information assets are adequately safeguarded.

IS audit services

Provide audit services in accordance with IT audit standards, with a particular emphasis on data security:

1. Develop and implement a risk-based IT audit strategy in compliance with IT audit standards;
2. Plan specific audits to determine whether information systems are protected, controlled and provide value to EIOPA;
3. Conduct audits in accordance with IT audit standards;
4. Report audit findings and make recommendations to key stakeholders;
5. Conduct follow-ups and prepare status reports.

A strong methodology for producing audits and studies is requested.

This lot may require expertise in the following fields (non-exhaustive lists):

1. Information technology audits, especially information security audits
2. Information security management system (ISMS) standards, in particular ISO/IEC 27001
3. Other industry-standard methodologies (see chapter VIII.1)
4. Enterprise architecture tools (e.g. Metis, MEGA)
5. Business process analysis tools (e.g. Aris, Casewire)
6. BPMN
7. UML (e.g. Rational Rose)
8. MS Office
9. MS Project

Depending on the project, expertise in particular products or tools could be required.

Specific infrastructure could be needed for extra-muros projects.

VIII.5.2 Profiles

The profiles needed in this lot are listed in the matrix available in IX.2 Profiles per lot.

IX Profiles

IX.1 Definition of the profiles

18 profiles are relevant for this call for tenders. Not all profiles are necessary for the service provision in each lot.

The minimum level of qualification mentioned in the profile descriptions has to be fulfilled by each person proposed for a given profile. It corresponds to a profile with **normal** expertise, independent of the technological, language or other requirements needed for particular tasks.

In addition, **senior** expertise is required for some profiles.

IX.2 Profiles per lot

The following table provides an overview of the required profiles per lot.

Profile	Lot 1 Architecture, software development, quality assurance and project management support	Lot 2 XBRL taxonomy modelling	Lot 3 XBRL software develop- ment	Lot 4 Audits and studies
1. Business Analyst	x			
2. IT Consultant	x			x
3. Project Manager	x	x	x	x
4. IS Architect	x			x
5. Solution Architect	x		x	
6. Business Intelligence / Data Warehouse Expert	x			
7. Analyst	x		x	
8. Analyst-Programmer	x		x	
9. Programmer	x		x	
10. Interface Designer	x			
11. Web developer	x			
12. IS Tester	x		x	x
13. IS User Assistant	x		x	
14. XBRL Consultant		x		
15. Financial Reporting Modelling Expert		x		
16. XBRL Development Consultant			x	
17. IS Audit Manager				x
18. IS Security Expert	x			x

IX.3 Description of the profiles

For each of these profiles the following information regarding requirements is provided:

Tasks and responsibilities: These are examples of the tasks that will be expected of a person proposed with the required profile in relation with the corresponding lot(s). This list is not exhaustive and is to be regarded as a good indication.

Education and experience: The minimal education qualifications and professional experience that are required for the profile.

Knowledge and skills: A list of the knowledge and skills that a person with this profile is expected to possess.

The descriptions below outline the requirements for the **normal level of expertise**.

A **senior level of expertise** in the context of this tender is defined as follows: A senior level of expertise is reached when a person's professional experience in the domain of the profile is 50% higher than the experience mentioned in the profile description, and when a person has reached a very good level of the knowledge and skills described.

Example: The profile description mentions 4 years of professional experience in a certain domain.

- When a staff member with a normal level of expertise is required by EIOPA, he/she must have a minimum of 4 years of professional experience. He must possess the knowledge and skills described.
- When a staff member with a senior level of expertise is required by EIOPA, he/she must have a minimum of 6 years of professional experience. He/she must also have a reached a very good level of the knowledge and skills described.

Note that senior expertise is not required for all profiles and/or all lots. Annexes 3b and 3e include overviews of the required levels.

IX.3.1 Business Analyst

Profile: **Business Analyst**

Tasks and responsibilities:

- Supports users in analysing user requirements
- Performs requirement engineering activities based on formal techniques and methods (analysing, capturing and managing requirements)
- Develops business cases and methodologies
- Models business processes
- Organises workshops and co-ordination of project stakeholders, taking into account the data and information required for this activity and the project schedule based on user requirements
- Establishes functional specifications and data modelling, co-ordinates user acceptance testing and supports the drafting of the business area's related documentation
- Formulates service management procedures and service level requirements based on end user input
- Ensures that the IT solution meets the user requirements and complies with existing IT principles and policies
- Assists the project manager in planning activities

Education and experience:

- University or college degree in computer science, computer engineering, business administration or related studies
- Minimum 6 years of professional experience in the field of business analysis

Knowledge and skills:

- Excellent knowledge in defining and documenting user requirements, both functional and non-functional
- Excellent knowledge of enterprise architecture concepts
- Knowledge in requirement engineering activities based on formal techniques and methods (comprising the analysis, capture and management of requirements)
- Knowledge of BPMN
- Experience in applying test methodologies
- Knowledge of IT Service Management processes and best practice (such as ITIL), in particular in the areas of service level management
- Analytical skills and a problem-solving orientation
- Knowledge of Microsoft applications, including Word, Excel, Power Point, Visio
- Strong interpersonal skills, customer orientation, self-motivation, and the ability to work in a small team are very important
- Very good command of English with proven drafting ability

IX.3.2 IT Consultant

Profile: IT Consultant

Tasks and responsibilities:

- Provision of advice and assistance in any area associated with the provision, delivery, maintenance, deployment, hosting and effective use of information systems and their environments.
- Provision of quality plans, service level agreements, quality control and evaluation, quality assessments or other quality matters associated with information systems projects
- Management of quality tests
- Assistance in the implementation of the project management methodology
- Provision of security studies, security assessments or other security matters associated with information system projects
- Functional requirements and business case analysis
- Elaboration of vision documents
- Risk analysis
- Provision of technical studies, technical expertise, technical evaluations in relation with information systems

Education and experience:

- University or college degree in computer engineering, computer science, physics or mathematics or a related discipline
- Minimum 6 years of proven experience in IT consulting
- Proven experience in the domain of studies (e.g. quality, security, requirements analysis, technical domain)
- Proven experience with quality procedures

Knowledge and skills:

- In-depth knowledge of information systems matters
- In-depth knowledge of IT consulting matters
- In-depth knowledge of software development methodologies (e.g. RUP)
- Capacity to prepare and write studies
- Capacity to give high level presentations
- Very good command of English with proven drafting ability

IX.3.3 Project Manager

Profile: **Project Manager**

Tasks and responsibilities:

- Defines and plans project deliverables and estimates the resources necessary to meet the goals in close co-operation with EIOPA's project manager
- Ensures the delivery by the project team of the agreed deliverables on time, in the agreed quality and within the approved budget
- Ensures that the relevant manager or group receives appropriate information and provides early warnings on critical issues, supporting the responsible staff in applying project a risk management methodology
- Elaborates proposals and advises on how issues critical to the success of the project could be resolved
- Maintains the project plan, managing parts of it and revising it as appropriate to meet changing needs in terms of scope and requirements
- Monitors and reports on timeline issues arising in the project to the relevant stakeholders with a particular focus on project dependencies and milestones on the critical path
- Acts as primary point of contact on project management related issues and liaises with relevant stakeholders on an on-going basis
- Supports relevant staff in assessing whether project deliverables meet specified acceptance criteria, and assists the project team coordinating their activities

Education and experience:

- University or college degree in computer science, computer engineering, business administration or related studies
- Minimum 6 years of professional experience in the field of project management in the specific services of the lot

Knowledge and skills:

- Proven experience with a common project management methodology as well as planning, estimation, budget management, performance monitoring, quality assurance and risk analysis
- Proven experience and broad IT background in the areas relevant to the lot
- Understanding of business requirements in the areas of financial markets and statistics
- Knowledge of MS Project and MS Office, in particular Word, Excel and PowerPoint
- Proven ability to generate a range of practicable and innovative solutions and to assess the implications of these solutions
- Strong interpersonal skills, including excellent communication, negotiation and conflict resolution skills, self-motivation and coordination ability
- Strong analytical and planning skills
- Very good command of English with proven drafting ability

IX.3.4 IS Architect

Profile: **IS Architect**

Tasks and responsibilities:

- Contributes to establishing and enhancing EIOPA's IT architecture (data, application and technology);
- Analyses business processes and organisational structures;
- Designs IT solutions that meet business requirements in line with the IT architectural principles;
- Participates in writing functional and technical specifications of applications;
- Participates in writing technical documentation for tender procedures;
- Works with peer colleagues and users to collect requirements, analyse and evaluate proposals, conduct negotiations and implement specifications according to defined architectural standards.

Education and experience:

- University or college degree in computer engineering, computer science, physics, mathematics or related studies
- Minimum 6 years of professional experience as an IT architect
- Minimum 3 years of professional experience with enterprise architecture tools
- Strong experience in consulting
- Microsoft certification (e.g. MCA)

Knowledge and skills:

- Excellent knowledge of state-of-the-art IT methodologies and tools
- Excellent knowledge of IT architectures in Microsoft environments
- Proven ability to translate technological issues into a business context
- Strong at identifying technical solutions for business requirements
- Very good analytical skills
- Strong capacity in writing and presenting studies
- Ability to work under pressure and to deliver in time
- Proven ability to generate a range of working and innovative solutions and to assess the implications of these solutions
- Good interpersonal skills, in particular communication and negotiation skills, and the ability to work in a team and co-ordinate own activities with others
- Very good command of English with proven drafting ability

IX.3.5 Solution Architect

Profile: **Solution Architect**

Tasks and responsibilities:

- Develops architectures and designs of new information systems
- Reviews of the architecture of existing systems
- Analyses the integration of different information systems
- Follows up on data analysis and data modelling
- Coordinates the implementation of the technical architecture
- Acts as the technical interface between the project leaders and the analysts
- Develops software architecture documents
- Participates in technical working groups, progress meetings and meetings with end users
- Assists in testing, technical documentation writing, deployment, evaluation and reporting

Education and experience:

- University or college degree in computer engineering, computer science, physics, mathematics or a related studies
- Minimum 6 years of professional IT experience
- Minimum 3 years of experience in IT architecture and design of information systems
- Experience with relational databases and data warehouse systems

Knowledge and skills:

- Good knowledge of enterprise architecture concepts
- In-depth knowledge of applications design
- In-depth knowledge of modelling tools (e.g. UML)
- Good knowledge of business process analysis
- Ability to give technical presentations
- Ability to apply high quality standards
- Ability to cope with fast changing technologies used in application architecture and design
- Very good command of English with proven drafting ability

IX.3.6 Business Intelligence / Data Warehouse Expert

Profile: Business Intelligence / Data Warehouse Expert

Tasks and responsibilities:

- Participates in IT projects for the development of IT application services from design to rollout of reports and universes
- Drafts technical specifications in line with the architectural design
- Develops solutions in line with the technical specifications, integrates systems and interfaces
- Performs technical testing and prepares the relevant technical documentation
- Supports acceptance tests
- Investigates, diagnoses and resolves defects during operations
- Develops appropriate scripts and procedures for databases and universes
- Reviews and implements security policies, ensuring data consistency and integrity
- Develops a working knowledge of business processes implemented in the data warehouse

Education and experience:

- University or college degree in computer engineering, computer science, physics or mathematics or related studies
- Minimum 6 years of professional experience in the domain of business intelligence and data warehousing

Knowledge and skills:

- Strong knowledge of data warehouse/OLAP concepts and of dimensional modelling, as well as of the use of common RDBMS at the database design and development level
- Exposure to complex dimensional data models
- Excellent knowledge of Microsoft SQL Server
- Good knowledge of SQL, PL/SQL, stored procedure programming and shell scripting
- Good knowledge of ETL tools
- Proven experience in reporting using common reporting tools and data model analysis
- Proven ability in the logical and physical design of relational databases
- Proven experience in working with multidimensional database schemas (virtual cubes, hypercubes and multicubes)
- Proven experience in the specification of performance tuning, administration and security requirements
- Good analytical skills and a problem-solving orientation
- Very good command of English with proven drafting ability

IX.3.7 Analyst

Profile: **Analyst**

Tasks and responsibilities:

- Analyses user requirements and models new information systems
- Produces use case, design, analysis and implementation models
- Data analysis, data modelling
- Follows up on software developments
- Acts as technical interface between the project leader, the solution architects and the developers
- Participates in technical working groups, progress meetings and meetings with the users
- Assists in testing, technical documentation writing, technical training, deployment, evaluation and reporting

Education and experience:

- University or college degree in computer engineering, computer science, physics, mathematics or related studies
or proven ability to perform the tasks commensurate with such a formal qualification
- Minimum 5 years of professional IT experience
- Minimum 4 years of experience in IT development
- Minimum 3 years of experience with UML or a similar modelling language
- Experience with relational databases and data warehouse systems

Knowledge and skills:

- In-depth knowledge of modelling tools (e.g. UML)
- Good knowledge of software development methodologies
- In-depth knowledge of development environments
- Good knowledge of relational database systems and data warehouse solutions
- Ability to cope with fast changing technologies used in application development
- Ability to apply high quality standards
- Very good command of English with proven drafting ability

IX.3.8 Analyst-Programmer

Profile: **Analyst-Programmer**

Tasks and responsibilities:

- Performs requirements analysis
- Develops prototypes
- Writes and maintains applications that reflect the specifications
- Develops test programs
- Defines and integrates technological components
- Integrates software components with other applications
- Produces technical documentation
- Assists in training administrators and users of systems
- Assists in the deployment and configuration of systems
- Assists in evaluating and testing products delivered by other teams to ensure that they conform to the requirements
- Participates in meetings with EIOPA

Education and experience:

- University or college degree in computer engineering, computer science, physics, mathematics or related studies
or proven ability to perform the tasks commensurate with such a formal qualification
- Minimum 4 years of professional IT experience
- Minimum 2 years of analysis and programming experience
- Minimum 2 years of experience with RDBMS (e.g. MS SQL Server)
- Experience with UML or case tools
- Experience with relational databases and data warehouse solutions
- Experience in internet application development

Knowledge and skills:

- In-depth knowledge of application development environments
- Good knowledge of the design and development of web and multi-tiered internet applications
- Good knowledge of modelling tools (e.g. UML)
- Good knowledge of relational database systems and data warehouse solutions
- Knowledge of software development methodologies
- Ability to cope with fast changing technologies used in application development
- Ability to apply high quality standards
- Very good command of English with proven drafting ability

IX.3.9 Programmer

Profile: **Programmer**

Tasks and responsibilities:

- Develops, integrates, tests and documents application software modules implemented in Microsoft-based environments to meet agreed business specifications
- Performs technical testing and prepares the relevant technical documentation
- Investigates, diagnoses and resolves bugs and incidents of applications
- Supports users in optimising their macros or VBA applications (e.g. in MS Access)
- Creates and maintains databases

Education and experience:

- University or college degree in computer engineering, computer science, physics, mathematics or related studies
or proven ability to perform the tasks commensurate with such a formal academic qualification
- Minimum 3 years of programming experience
- Minimum 2 years of experience with RDBMS (e.g. MS SQL Server)

Knowledge and skills:

- Excellent knowledge of developing applications based on .NET, ASP, CSS, XML, XSLT;
- Proven experience in application development in MS Office with VBA;
- Knowledge of MS SQL server, the .NET Entity Framework and LINQ;
- Knowledge of SQL and PL/SQL;
- Knowledge of current PC technologies and client/server architectures;
- Good analytical skills and a problem-solving orientation;
- Very good command of English with proven drafting ability.

IX.3.10 Interface Designer

Profile: **Interface Designer**

Tasks and responsibilities:

- Designs and develops user interfaces
- Defines and creates graphical layouts and content
- Writes guidelines and style guides
- Creates first prototypes in HTML
- Thrives to enhance and standardise user ergonomics throughout all applications

Education and experience:

- University or college degree in graphic design, user interface design, web design, information design or related studies
- Minimum 3 years of professional experience in user interface design

Knowledge and skills:

- In-depth knowledge of design and graphical tools
- In-depth knowledge of ergonomics and man/machine interfacing
- Excellent knowledge of web technologies and standards (e.g. HTML, XML, CSS)
- Good knowledge of next generation standards (HTML5, CSS3)
- Good knowledge of state of the art web techniques (responsive design)
- Very good understanding of usability and accessibility
- Experience in designing Master Pages for MS SharePoint 2010
- Ability to cope with fast changing technologies
- Ability to apply high quality standards
- Very good command of English with proven drafting ability

IX.3.11 Web developer

Profile: **Web developer**

Tasks and responsibilities:

- Builds and maintains web sites
- Ensures coherence between different web sites, web pages and navigation structures

Education and experience:

- University or college degree in computer engineering, computer science, physics, mathematics or related studies
- Minimum 3 years of experience as a web developer

Knowledge and skills:

- Excellent knowledge of web technologies (HTML, XML, CSS)
- Excellent knowledge of customising and extending Microsoft SharePoint 2010
- Good knowledge of next generation standards (HTML5, CSS3)
- Good knowledge of JS and common JS Frameworks (jQuery, Prototype, Ext JS)
- Good knowledge of implementing responsive designs
- Knowledge of MS SQL
- Proven conceptual understanding of content structuring, storage, access and presentation elements
- Ability to cope with fast changing technologies
- Ability to apply high quality standards
- Very good command of English with proven drafting ability

IX.3.12 IS Tester

Profile: **IS Tester**

Tasks and responsibilities:

- Participates in the requirements analysis
- Defines test plans
- Defines test cases
- Develops test scenarios and scripts
- Executes tests
- Coordinates tests and their execution
- Produces reports on test results
- Retests defects

Education and experience:

- University or college degree in computer engineering, computer science, physics, mathematics or related studies
or proven ability to perform the tasks commensurate with such a formal academic qualification
- Minimum 2 years of professional IT experience
- Minimum 2 years of IS testing experience

Knowledge and skills:

- Proven knowledge of testing methodologies, including unit-, integration-, system and system integration testing
- Proven knowledge of testing tools
- Ability to cope with fast changing technologies
- Ability to apply high quality standards
- Very good command of English with proven drafting ability

IX.3.13 IS User Assistant

Profile: **IS User Assistant**

Tasks and responsibilities:

- Provides assistance to end users
- Records and tracks incident information
- Organises and runs information system installations from the end user perspective
- Follows up on service quality
- Plans and writes user documentation for information systems
- Plans and provides training courses on information systems

Education and experience:

- University or college degree in computer engineering, computer science, physics, mathematics or related studies
or proven ability to perform the tasks commensurate with such a formal academic qualification
- Minimum 2 years of relevant professional experience in user support, training or documentation writing
- Experience in Windows environments

Knowledge and skills:

- Proven knowledge in end user assistance or support of information systems
- Ability to cope with fast changing technologies
- Ability to apply high quality standards
- Very good command of English with proven drafting ability

IX.3.14 XBRL Consultant

Profile: **XBRL Consultant**

XBRL Consultant

Tasks and responsibilities:

- Advises on, develops and integrates XBRL solutions
- Manages XBRL development projects
- Develops XBRL taxonomies in close cooperation with a wide range of business users, both internal and external to EIOPA
- Updates existing taxonomies when business needs change
- Performs reviews and quality assurance of implemented XBRL taxonomies
- Trains key users from EIOPA and National Supervisory Authorities on XBRL and financial data reporting
- Assists in EIOPA's internal meetings, public events and EIOPA's collaborative networks
- Writes documentation of processes and deliverables

Education and experience:

- University or college degree in economics, computer engineering, computer science, mathematics or related studies
- Minimum 4 years of proven experience on XBRL projects for Supervisory Authorities, the development of XBRL taxonomies, and the integration of XBRL in financial reporting solutions

Knowledge and skills:

- Excellent knowledge of the XBRL 2.1 specification and the XBRL dimension 1.0 specification
- Excellent knowledge of at least one of the European reporting frameworks (Solvency II, COREP, FINREP or IFRS)
- Good knowledge of software products used to create and maintain XBRL taxonomies
- Good analytical skills and a problem-solving orientation
- Strong communication skills with XBRL technical project teams and others, including communicating with the public
- Very good command of English with proven drafting ability

IX.3.15 Financial Reporting Modelling Expert

Profile: Financial Reporting Modelling Expert

Tasks and responsibilities:

- Develops data models based on the concept of Data Point Modelling¹² in close cooperation with a wide range of business users, both internal and external to EIOPA
- Updates existing models when business needs change
- Performs quality reviews of implemented models
- Assists in EIOPA's internal meetings, public events and EIOPA's collaborative networks
- Writes documentation of processes and deliverables

Education and experience:

- University or college degree in economics, computer engineering, computer science, mathematics or related studies
- Minimum 4 years of proven experience in Financial Reporting Modelling
- Minimum 3 concluded data modelling projects for other European or national authorities

Knowledge and skills:

- Knowledge of accounting, financial disclosure and reporting practices
- Excellent knowledge of creating data models, especially by applying the Data Point Modelling methodology
- Knowledge of the XBRL 2.1 specification and the XBRL dimension 1.0 specification
- Good analytical skills and a problem-solving orientation
- Strong communication skills with XBRL technical project teams and others, including communicating with the public
- Very good command of English with proven drafting ability

¹² Data Point modelling as described in <http://www.eurofiling.info/dpm/index.shtml>
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Email: procurement@eiopa.europa.eu; Website: www.eiopa.europa.eu

IX.3.16 XBRL Development Consultant

Profile: XBRL Development Consultant

Tasks and responsibilities:

- Provides advice and assistance in any area associated with the provision, delivery, maintenance, deployment, hosting and effective use of information systems and their environments
- Develops, implements and integrates XBRL solutions
- Assists in the development of XBRL taxonomies
- Performs XBRL solution and taxonomy quality assurance and reviews;
- Designs and develops business intelligence solutions oriented towards XBRL-based information
- Provides quality plans, service level agreements, quality control and evaluation, quality assessments or other quality matters associated with information systems projects
- Assists in the implementation of the project management methodology
- Assists at EIOPA's internal meetings, public events and EIOPA's collaborative networks.
- Trains key users in EIOPA and the National Supervisory Authorities;

Education and experience:

- University or college degree in economics, computer engineering, computer science, mathematics or related studies
or proven ability to perform the tasks commensurate with such a formal qualification
- Minimum 6 years of experience in developing Java, .NET, Python or related environments
- Minimum 3 years of experience in developing financial reporting applications
- Experience in developing and maintaining taxonomies
- Experience with UML or case tools
- Experience with relational databases and data warehouse solutions

Knowledge and skills:

- Excellent knowledge of the XBRL 2.1 specification and the XBRL dimension 1.0 specification
- Excellent knowledge of XBRL formulas and table linkbases
- Very good knowledge of software products used to create and maintain XBRL taxonomies
- Knowledge of MS SQL server and Oracle
- Good analytical skills and a problem-solving orientation
- Good command of English with proven drafting ability

IX.3.17 IS Audit Manager

Profile: IS Audit Manager

Tasks and responsibilities:

Provides audit services in accordance with IT audit standards to assist EIOPA in protecting and controlling information systems.

- Develops and implements a risk-based IT audit strategy in compliance with IT audit standards to ensure that key areas are included.
- Plans specific audits to determine whether information systems are protected, controlled and provide value to the organization.
- Conducts audits in accordance with IT audit standards to achieve planned audit objectives.
- Reports audit findings and makes recommendations to key stakeholders to communicate results and effect change when necessary.
- Conducts follow-ups and prepares status reports to ensure appropriate actions have been taken in a timely manner.

Provides assurance that the practices for the acquisition, development, testing, and implementation of information systems meet the organization's strategies and objectives.

- Evaluates the business case for the proposed investments in information systems acquisition, development, maintenance and subsequent retirement to determine whether it meets business objectives.
- Evaluates the project management practices and controls to determine whether business requirements are achieved in a cost-effective manner while managing risks to the organization.
- Conducts reviews to determine whether a project is progressing in accordance with project plans, is adequately supported by documentation and status reporting is accurate.
- Evaluates controls for information systems during the requirements, acquisition, development and testing phases for compliance with the organization's policies, standards, procedures and applicable external requirements.
- Evaluates the readiness of information systems for implementation and migration into production to determine whether project deliverables, controls and organization's requirements are met.
- Conducts post-implementation reviews of systems to determine whether project deliverables, controls and organization's requirements are met.

Provides assurance that EIOPA's security policies, standards, procedures and controls ensure the confidentiality, integrity and availability of information assets.

- Evaluates the information security policies, standards and procedures for completeness and alignment with generally accepted practices.
- Evaluates the design, implementation and monitoring of system and logical security controls to verify the confidentiality, integrity and availability of information.
- Evaluates the design, implementation, and monitoring of the data classification processes and procedures for alignment with the organization's policies, standards, procedures, and applicable external requirements.
- Evaluates the design, implementation and monitoring of physical access and environmental controls to determine whether information assets are adequately

Profile: IS Audit Manager

safeguarded.

- Evaluates the processes and procedures used to store, retrieve, transport and dispose of information assets (e.g., backup media, offsite storage, hard copy/print data, and softcopy media) to determine whether information assets are adequately safeguarded.

Education and experience:

- University or college degree in computer science, computer engineering, business administration or related studies
- Minimum 10 years of experience in information technology auditing
- Certified Information Systems Auditor (CISA)
- Holding at least one of the certifications below:
 - Certified Information Systems Security Professional (CISSP)
 - Certified Information Security Manager (CISM)
 - CompTIA Security+ Certified Professional

Knowledge and skills:

- Knowledge of ISACA IT Audit and Assurance Standards, Guidelines and Tools and Techniques, Code of Professional Ethics and other applicable standards
- Knowledge of audit planning and audit project management techniques, including follow-up
- Knowledge of environments based on technology provided by Microsoft
- Knowledge of CobiT
- Knowledge of risk assessment concepts, tools and techniques in an audit context
- Knowledge of fundamental business processes (e.g., purchasing, payroll, accounts payable, accounts receivable) including relevant IT
- Knowledge of evidence collection techniques (e.g., observation, inquiry, inspection, interview, data analysis) used to gather, protect and preserve audit evidence
- Knowledge of audit quality assurance systems and frameworks
- Knowledge of enterprise risk management
- Knowledge of the standards and procedures for the development and maintenance of the business continuity plan and testing methods
- Knowledge of IT architecture related to data, applications and technology (e.g., distributed applications, web-based applications, web services, n-tier applications)
- Knowledge of requirements analysis and management practices (e.g., requirements verification, traceability, gap analysis, vulnerability management, security requirements)
- Knowledge of control objectives and techniques that ensure the completeness, accuracy, validity and authorization of transactions and data
- Knowledge of testing methodologies and practices related to information systems development
- Knowledge of the techniques for the design, implementation, and monitoring of security controls, including security awareness programs
- Knowledge of processes related to monitoring and responding to security incidents (e.g., escalation procedures, emergency incident response team)
- Knowledge of logical access controls for the identification, authentication and

Profile: IS Audit Manager

restriction of users to authorized functions and data

- Knowledge of the security controls related to hardware, system software (e.g., applications, operating systems), and database management systems.
- Knowledge of the configuration, implementation, operation and maintenance of network security controls
- Knowledge of network and Internet security devices, protocols, and techniques
- Knowledge of information system attack methods and techniques
- Knowledge of detection tools and control techniques (e.g., malware, virus detection, spyware)
- Knowledge of security testing techniques (e.g., intrusion testing, vulnerability scanning)
- Knowledge of risks and controls associated with data leakage
- Knowledge of the evidence preservation techniques and processes followed in forensics investigations (e.g., IT, process, chain of custody)
- Knowledge of data classification standards and supporting procedures
- Knowledge of physical access controls for the identification, authentication and restriction of users to authorized facilities
- Knowledge of the processes and procedures used to store, retrieve, transport and dispose of confidential information assets
- Very good command of English with proven drafting ability

IX.3.18 IS Security Expert

Profile: IS Security Expert

Tasks and responsibilities:

- Contributes to establishing and enhancing the IT Security policy;
- Defines the security requirements for projects in line with the security policies and methodologies;
- Works closely with the Business Analyst and IT Architect in designing IT solutions that meet business requirements;
- Works closely with the IS Audit Manager when audits are conducted
- Participates in writing functional and technical specifications for security related topics;
- Performs security assessments and penetration tests, identifies security measures and informs the Project Manager and the system owners of any remaining risks prior to the live operation of the IT system or application;
- Works with peers, colleagues and users to collect requirements, analyse and evaluate proposals, conduct negotiations and implement specifications according to defined architectural standards.

Education and experience:

- University or college degree in computer engineering, computer science, physics, mathematics or related studies
- Minimum 6 years of proven experience in the domain of IS security
- Professional certification in IS security (e.g. CISSP, CISA, ISO 27001)
- Technical IS Security certification (e.g. GIAC, CEH, MCSE:Security)

Knowledge and skills:

- Experience in application development and database security, OS security, network security;
- Strong knowledge of state-of-the-art security techniques and methods such as internet security tools, IDS, PKI and encryption;
- Excellent knowledge of IT security requirements in Microsoft environments;
- Ability to perform penetration testing;
- Strong knowledge of state-of-the-art IT methodologies and tools;
- Proven ability in translating technological issues into a business context;
- Deep experience in documenting and writing technical and business papers;
- Identifying technical solutions for business requirements;
- Experience in team/group facilitation, project management and training;
- Very good analytical skills;
- Ability to work under pressure and to deliver to agreed deadlines;
- Proven ability to generate a range of feasible and innovative solutions, and to assess the implications of these solutions;
- Good interpersonal skills, in particular communication and negotiation skills, and the ability to work in a team and co-ordinate own activities with others;
- Very good command of English with proven drafting ability.

X Annexes

The following documents are annexed:

- Indicative Request Form templates for Time & Means contracts
- Indicative Request Form templates for Fixed Price contracts
- CV Form (to be used during the execution of the contract)

Note that all forms are **indicative** and can be modified during the execution of the framework contract.



REQUEST FORM
Time & Means (TM)

EIOPA/OP/07/2012

External service provision for the development and auditing of information systems, including XBRL-related developments

Request Form ID	.....
Framework Contract N°	.....
Lot N°	.....

To	Contractor:	Phone n°:
	Contact person:	Fax n°:
		E-Mail:

<i>Description of required service</i>	
Subject:	
General requirements / information:	
Reference to attached Technical Annex:	
Profile:	N° of days:
<input type="checkbox"/> Normal or <input type="checkbox"/> Senior with specific expertise in	
Profile:	N° of days:
<input type="checkbox"/> Normal or <input type="checkbox"/> Senior with specific expertise in	
Expected start date:	
Place of delivery: Frankfurt/Main, Germany	
Reply date (available/not available):	..... (dd/mm/yy)
Proposal date (candidate list) :	..... (dd/mm/yy)

From	EIOPA	Phone n°:
	Contact person:	FAX n°:
		E-Mail:.....
	Signature:	Date:

We wish to remind you that this Request Form does not constitute any firm order until such time as a contractual document, signed by EIOPA, has been received by you.



REQUEST FORM

Fixed Price (FP)

EIOPA/OP/07/2012

External service provision for the development and auditing of information systems, including XBRL-related developments

Request Form ID	.....
Framework Contract N°	.....
Lot N°	.....

To	Contractor:	Phone n°:
	Contact person:	Fax n°:
		E-Mail:

<i>Description of required service</i>	
Subject:	
General requirements / information:	
Reference to attached Technical Annex:	
Expected start date:	
Delay for delivery (e.g. in weeks):	
Place of delivery: Frankfurt/Main, Germany	
Reply date (available/not available):	..... (dd/mm/yy)
Proposal date (candidate list) :	..... (dd/mm/yy)

From	EIOPA	Phone n°:
	Contact person:	FAX n°:
		E-Mail:.....
	Signature:	Date:

We wish to remind you that this Request Form does not constitute any firm order until such time as a contractual document, signed by EIOPA, has been received by you.

CV FRONT PAGE (to be used during the execution of the contract)

Surname, first name :			
Date of last update :	"Paraphe" of the person, for approval :		
E-mail address:			
Date of birth:			
Type of contract:	Employer:	Date of recruitment:	
	Check the appropriate:	Number of months working for the tenderer: ... months	
	<input type="checkbox"/> Permanent		
	<input type="checkbox"/> Non-permanent		
	Comments:		
Current function :	(indicate the function in the company)		
Profile for which employee is proposed:	Check the appropriate(s):		
	<input type="checkbox"/> Business Analyst	<input type="checkbox"/> Interface Designer	
	<input type="checkbox"/> IT Consultant	<input type="checkbox"/> Web developer	
	<input type="checkbox"/> Project Manager	<input type="checkbox"/> IS Tester	
	<input type="checkbox"/> IT Architect	<input type="checkbox"/> IS User Assistant	
	<input type="checkbox"/> Solution Architect	<input type="checkbox"/> Senior XBRL Consultant	
	<input type="checkbox"/> Business Intelligence/Data Warehouse Expert	<input type="checkbox"/> Financial Reporting Modelling Expert	
	<input type="checkbox"/> Analyst	<input type="checkbox"/> XBRL Development Consultant	
	<input type="checkbox"/> Analyst-Programmer	<input type="checkbox"/> IS Audit Manager	
	<input type="checkbox"/> Programmer	<input type="checkbox"/> IT Security Expert	
Normal or Senior	<input type="checkbox"/> Normal	<input type="checkbox"/> Senior	
	According to Annex 2 IX.12, Definition of the profiles		
Highest relevant educational qualification:	Check the appropriate :	Certificate and/or diploma obtained :	Institute:
	<input type="checkbox"/> Master degree or equivalent (>=4 years)		Date:
	<input type="checkbox"/> Bachelor degree		
	<input type="checkbox"/> Secondary school		
	Number of (successful) years after secondary school:		
Languages: (indicate level of skill: from 1=basic to 5=excellent)	English:	Spoken	Written
	German:	---	---
	French:	---	---
	Other(s):	---	---
		---	---
		---	---
Professional experience	Date IT career started:	Number of years/months of experience (after the studies):	
Date available :			

CV Summary

(use this area to briefly indicate the major facts that should be known about this employee)

CV training page

Copy and number pages if more space is needed

TRAINING				
	Training name:	Company/institute organising the training:	Date(s) training followed:	Exams or certificates:
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

CV professional experience page

Copy and number pages if more space is needed

PROJECT EXPERIENCE	
Project name:	
Company (employer):	
Dates (start-end): Effective number of months achieved:	
Client (customer) :	
Project size:	
Project description :	
Employee's roles & responsibilities in the project:	
Technologies and methodologies used by the employee in the project:	