Publications Office
Publications.europa.eu

GENERAL INVITATION TO TENDER
No 10198

Production support services
for the SEI-BUD/AMD/CR systems

SPECIFICATIONS

CONTENTS

1.   PRELIMINARY INFORMATION CONCERNING THE INVITATION TO TENDER

Please see the invitation letter for information about the prior information notice and the contract notice published in the OJ S.

1.1.   PRESENTATION OF THE PUBLICATIONS OFFICE

The Office for Official Publications of the European Communities, hereinafter referred to as "the Publications Office", (2, rue Mercier, L-2985 Luxembourg) is the publishing house of the European institutions in the broadest sense, responsible for producing and distributing, on all media and by all means, all the publications of the European Union. The Publications Office, whose current organisation and operation are laid down by Decision 2000/459/EC, ECSC, Euratom (Official Journal of the European Communities, L 183, 22.7.2000, p. 12), is managed by a Management Committee in which each institution is represented by its Secretary-General. The Publications Office is administratively attached to the European Commission. More information can be found on the Publications Office website:

http://publications.europa.eu

As a publisher, the Publications Office has a duty to offer the highest quality service to its customers – the originating departments of the institutions and other bodies of the European Union and to its public – the people of the European Union and those throughout the world who are interested in European affairs. In the field of new technologies, the Publications Office must place itself in the forefront of the publishing profession.

Under the provisions of the Treaties establishing the European Communities, the publication of certain titles, such as the *Official Journal of the European Union* or the *General Report on the Activities of the European Union*, is a legal obligation.

The Publications Office can also be referred to as *the Office* in this document.

Useful web sites

Office for Official Publications	http://publications.europa.eu
EU-Bookshop: the Union's online bookshop	http://bookshop.europa.eu
EUROVOC: multilingual thesaurus	http://eurovoc.europa.eu
CORDIS: Community R&D Information Service	http://cordis.europa.eu
Eur-Lex: direct free access to European Union law	http://eur-lex.europa.eu
IDEA: Inter-institutional directory of the European Union	http://whoiswho.europa.eu
TED: supplement to the Official Journal of the European Union	http://ted.europa.eu
SIMAP: EU-information for public procurement	http://simap.europa.eu
DG MARKT: DG Internal Market	http://europa.eu/comm/internal_market
Other useful links	http://europa.eu/geninfo/info/index_en.htm

1.2. NATURE OF THE CONTRACT

The Contract is a framework Contract with the title: **AO 10198 "Production support services for the SEI-BUD/AMD/CR systems"**.

As exact implementing conditions, quantities and/or delivery times cannot be indicated in advance, the Commission intends to conclude a Framework Contract, which shall establish the basic terms for a series of Specific Contracts and/or Order Forms ("Orders") to be concluded over its duration. Framework contract do not give rise to any direct obligation to the Commission but only its implementation through Specific Contract and/or Order is binding on the Commission.

The Framework Contract shall be concluded with one economical operator provided that there is an economic operator who satisfies the selection criteria and/or eligible tender satisfying the award criteria.

1.3. SUBJECT AND ESTIMATED VALUE OF THE CONTRACT

The purpose of this call for tender is the selection of one economic operator for the provision of the production support services of the integrated SEI-BUD/AMD/CR systems used for the preparation and the editing of the Budget of the European Union.

The estimated, volume of the contract is EUR 1 300 000 for a period of its maximum duration (4 years).

Restriction in the offer(s)' submission:

The Contractors holding the contract 10185 lot 1 is not allowed to submit an offer
This restriction is applying equally at the level of sub-contracting and consortium.

1.4. STARTING DATE OF THE CONTRACT AND DURATION OF THE CONTRACT

The Contract shall enter into force following its signature by the Commission.

During the period from the signature of the Contract until 28/2/2009, only tasks related to the takeover phase may be requested by the Commission. From 01/03/2009, the Commission may request the execution of all the tasks as specified in the Tender Specification.

The Contract is concluded for an initial period of twenty-four (24) months with effect from 1/3/2009. The Contract shall be renewed automatically up to two (2) times, each time for twelve (12) months, under the same conditions, unless written notification to the contrary is sent by one of the contracting parties by registered mail and received by the other not later than six (6) months before its expiry.

1.5. PRICE

- **prices must be expressed in euro.** For tenderers in countries which are not part of the euro zone, the price quoted may not be revised in line with exchange rate movements;

- **prices should be quoted free of all duties, taxes and other charges, i.e. also free of VAT,** as the Communities are exempt from such charges in the EU under Articles 3 and 4 of the Protocol on the Privileges and Immunities of the European Communities of 8 April 1965 (OJ L 152 of 13 July 1967). Exemption is granted to the Publications Office by the governments of the Member States, either through refunds upon presentation of documentary evidence or by direct exemption;

For those countries where national legislation provides an exemption by means of a reimbursement, the amount of VAT is to be shown separately. In case of doubt about the applicable VAT system, it is the tenderer's responsibility to contact his or her national authorities to clarify the way in which the European Community is exempt from VAT;

- **prices shall** be fixed and not subject to revision. **Prices can only be revised according to Article I.3 of the Contract**. Please note that the price revision is conditional to a request which must be put in place at the latest three months before the anniversary date of the entry into force of the Contract. In case of a justified and timely request, the revised prices shall enter into force on the anniversary date of the entry into force of the Contract. The price revisions will be calculated with the same number of decimals as was accepted in the initial original price schedule and also the revised prices will have the same number of decimals (point 2.8.1).

1.6. TERMS OF PAYMENT

Payments shall be made in accordance with Article I.5 of the Draft Contract.

1.7. GUARANTEES

Not applicable.

1.8. PLACE OF PERFORMANCE

The place of performance of the tasks shall be Publication's Office premises, EU Institutions, bodies or its agents in Brussels, Luxembourg or Strasbourg, the contractor's premises, or any other premises indicated in the tender. Meetings between the Office and the successful contractor may be held on the premises of the Office.

1.9. GENERAL TERMS AND CONDITIONS FOR THE SUBMISSION OF TENDERS

Participation in the tendering procedure is open on equal terms to all natural and legal persons coming within the scope of the treaties and to all natural and legal persons in a third country which has a special agreement with the European Communities in the field of public procurement on the conditions laid down in that agreement.

Submission of a tender implies that the tenderer accepts all the terms and conditions set out in the invitation letter, in these specifications (including the annexes) and in the draft Contract and waives all other terms of business. Submission of a tender binds the tenderer to whom the Contract is awarded during performance of the Contract.

Once the Publications Office has accepted the tender, it shall become the property of the Publications Office and the Publications Office shall treat it confidentially.

The Publications Office shall not reimburse any costs incurred in preparing and submitting tenders.

The Protocol on the Privileges and Immunities or, where appropriate, the Vienna Convention of 24 April 1963 on Consular Relations shall apply to this invitation to tender.

1.10. PERIOD OF VALIDITY OF THE TENDER

The offer must remain valid for a period of 9 months following the final date for submitting tenders (see: the invitation letter). During this period, the tenderers must maintain all the conditions of their bids.

1.11. INFORMATION SESSION

Not applicable

1.12. DATE AND PLACE OF OPENING OF THE TENDERS

Tenders will be opened at 10h00 on 14/10/2008 at the following location:

Address of the Publications Office: Publications Office 2, rue Mercier L-2985 Luxembourg

An **authorised representative** of each tenderer may attend the opening of the bids. Companies wishing to attend are requested to notify their intention by sending a fax or e-mail at least 48 hours in advance to the address above. This notification must be signed by an authorised officer of the tenderer and specify the name of the person who will attend the opening of the bids on the tenderer's behalf.

Fax: (352) 2929-42672 E-mail: opoce-appels-offres@publications.europa.eu

2. THE TENDER AND THE EVALUATION

2.1. ASSESSMENT AND AWARD OF CONTRACT

The assessment of tenderers and offers will take place in three main stages:

The aims of each of these stages are:

- to check, in the first stage (exclusion criteria), whether tenderers can take part in the tendering procedure and, where applicable, be awarded the Contract;

- to check, in the second stage (selection criteria), the economic and financial capacity and the technical and professional capacity of each tenderer who has passed the first stage;

- to assess, on the basis of the award criteria, each bid which has passed the first and second stages.

The assessment procedure may end with the award of the Contract.

The assessment will be based on the tenderer's offer. The Publications Office reserves the right to request additional evidence in relation to the bid submitted for clarification or verification purposes within a time-limit stipulated in its request. All the information will be assessed against the criteria specified in this chapter.

Only the offers meeting the requirements of a stage will pass on to the next stage of the assessment.

2.2. FORM AND CONTENT OF THE TENDER

Tenders must be clear and concise and assembled in a coherent fashion (e.g. bound or stapled, etc.). The tenderer is also asked to provide a **completed list** indicating where to find the required documents (see: Annex 6.7). If the tender is divided into different files, it is advised to make a table of contents in each file.

Since tenderers will be judged on the content of their written bids, these must make it clear that they are able to meet the requirements of the specifications.

Information on the general requirements and on how to submit the bid is provided in the invitation letter.

Please pay attention to the fact, that the tender shall be **signed** by a person or persons who is/are entitled to represent the economic operator in accordance with extract from the commercial register, or by a person(s) who received power of attorney to do so from somebody who is mentioned in those documents. The documents showing that the person is entitled to represent the economic operator must be submitted as explained in point 2.4. The same rule is applicable to the person(s) designated to sign the Contract.

The tenderer shall sign:

(a) The cover letter,

(b) All the forms, which expressly require so (ex: Price Schedule and Estimation form).

2.3.   STRUCTURE OF THE TENDER

All tenders must be presented in the following five sections:

> *Section One:*   *Administrative information*
>
> *Section Two:*   *Documents relating to the exclusion criteria*
>
> *Section Three:* *Documents relating to the selection criteria*
>
> *Section Four:*   *Documents relating to the award criteria - technical bid*
>
> *Section Five:*   *Documents relating to the award criteria - financial bid*

Sections one to four on the one hand and Section five on the other hand must be submitted in two separate sealed envelopes, which together are placed in double sealed envelopes as described in the invitation letter. Each envelope must clearly indicate its contents ("technical" and "financial").

Please observe that all documentation has to be provided in triplicate (original and two copies), **in recto-verso where possible,** and that this also applies to any diskette, CD or similar medium that is part of the offer.

2.4.   SECTION ONE: ADMINISTRATIVE INFORMATION

In the first section, the tenderer must provide the following:

- A duly signed **cover letter**

- the completed **form for identification of the tenderer**, as provided in Annex 6.3, including the following information:
    - o   the tenderer's **name** and/or business name;
    - o   a clear description of the tenderer's **legal form**;
    - o   the **address** of the tenderer's registered office;
    - o   the tenderer's **telephone and fax numbers**, e-mail address and, where available, Internet address;
    - o   the **names of the legal representatives** (directors, etc) of the tenderer, authorised to sign contracts with third parties;
    - o   the name, address, telephone and fax numbers to a contact person in relation to the submission of the tender;
    - o   the tenderer's **VAT number** and trade-register entry number;
    - o   information concerning the **bank account;**
    - o   **contact persons;**
    - o   a **signed declaration** confirming the validity of the tender.

- a Financial Identification Form filled in and signed by an authorised representative of the tenderer and his or her banker. **In case of joint-bids only consortium leader shall provide it**. **This form shall not be provided, as well, by sub-contractor(s).** A specific form for each Member State is available at the following Internet address:

    http://europa.eu/comm/budget/execution/ftiers_fr.htm

- the Legal Entity Form, to be signed by a representative of the tenderer authorised to sign contracts with third parties. There is one for private entities and one for public entities. Specific forms in each Member state language are available at following Internet address

    http://europa.eu/comm/budget/execution/legal_entities_fr.htm

The Legal Entity Form must be supported by the following **documents** in order to prove the administrative information of the tenderer:

- o a proof of **registration,** as prescribed in their country of establishment (ex. extract from the Commercial Register), on one of the **professional or trade registers** or any other official document showing the registration number;

   If the most recent document submitted according to this previous paragraph is more then one year old at the time the offer is sent, a written confirmation, signed by a legal representative of the tenderer, that there has been no amendment or transfer of registered office since the most recent of these documents were issued must be added.

- o if the above documents don't show the VAT number, a copy of the **VAT registration document**, where applicable;

   If the most recent document submitted according to this or one of the two previous paragraphs is more then one year old at the time the offer is sent, a written confirmation, signed by a legal representative of the tenderer, that there has been no amendment or transfer of registered office since the most recent of these documents were issued must be added.

- o a legible copy of the notice of **appointment of the persons authorised to represent the tenderer** in dealings with third parties and in legal proceedings, if it is not included in the abovementioned documents, or a copy of the publication of such appointment if the legislation which applies to the legal entity concerned requires such publication. If the person(s) signing the tender or the person designated to sign the contract is/are entitled to represent the economic operator by a Power of Attorney from the abovementioned authorised persons, the Power of Attorney must also be submitted;

2.5.   SECTION TWO: EXCLUSION CRITERIA

2.5.1.   *Documents relating to the exclusion criteria*

In Section Two, the tenderer(s) must provide the **declaration on grounds for exclusion** (Annex 6.5) and the following related certificates or documents:

- o a recent extract from the 'judicial record' or equivalent as evidence that they are not in one of the situations listed in paragraph (a), (b) or (e) of point 2.5.2, or, failing this, of an equivalent recent document issued by a competent judicial or administrative authority in the country of origin or residence, showing that these requirements have been met.;

- o a recent certificate by the competent authorities of the state concerned stating that the tenderer has fulfilled obligations relating to the payment of social security contributions or equivalent;

- o a recent certificate by the competent authorities of the state concerned stating that the tenderer has fulfilled obligations relating to the payment of taxes or equivalent.

Where no such documents or certificates are issued in the country concerned, they may be replaced by a sworn or failing that a solemn statement made by the tenderer before a judicial or administrative authority, a notary or a qualified professional body in his country of origin or provenance.

2.5.2.   *Grounds for exclusion*

In accordance with Articles 93 of the Financial Regulation No 1605/2002 (OJ L 248, page 1, of 16 September 2002 as amended), tenderers shall be excluded from the selection and award procedures if they:

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

b) have been convicted of an offence concerning their professional conduct by a judgment which has the force of *res judicata*; or

c) have been guilty of grave professional misconduct proven by any means which the contracting authorities can justify; or

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

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

f) are currently subject to an administrative penalty referred to in Article 96(1) of the Financial Regulation (Council Regulation N° 1605/2002 of 25/06/2002, as amended In addition, contracts may not, according to Article 94 of the Financial Regulation, be awarded to tenderers who, during the procurement procedure:

g) are subject to a conflict of interest;

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

The Publications Office reserves the right to check the above information.

2.5.3. *Administrative and financial penalties*

The tenderers should also be aware of the following points:

o Each institution has a central database containing information on tenderers who have been in one of the situations described under 2.5.2. The sole purpose of this database is to ensure, in compliance with Community rules on the processing of personal data, that the above-mentioned cases of exclusion are applied correctly. Each institution has access to the databases of the other institutions.

o According to Article 96 of the Financial Regulation No 1605/2002 (OJ L 248, page 1 of 16.9.2002 as amended), administrative or financial penalties may be imposed by the Publications Office on tenderers who are in one of the situations in point 2.5.2 above after they have been given the opportunity to present their observations.

These penalties may consist:

a) in the exclusion of the tenderer concerned from contracts and grants financed by the budget, for a maximum period of ten years;

b) in the payment of financial penalties by the tenderer or contractor up to the value of the contract in question.

The penalties imposed will be in proportion to the importance of the contract and the seriousness of the misconduct.

The details of those penalties are laid down in Article 133 of the implementing rules to the Financial Regulation, Commission Regulation No 2342/2002 (OJ L 357, page 1 of 31 December 2002 as amended).

2.6. SECTION THREE: SELECTION CRITERIA

Selection of the tenderer suitable for attribution of the contract will be based on an assessment of the tenderer's:

- o   economic and financial capacity, and

- o   technical and professional capacity.

A tenderer may, where appropriate, rely on the capacities of other entities, regardless of the legal nature of the links which it has with them. In that case, it must prove to the contracting authority that it will have at its disposal the resources necessary for performance of the contract, for example by producing an undertaking on the part of those entities to place those resources at its disposal.

2.6.1.   *Economic and financial capacity of the tenderer*

2.6.1.1. Documents to provide concerning the economic and financial capacity

The tenderer shall provide **Economic and Financial capacity questionnaire** (see: Annex 6.6), including supporting documents mentioned there.

2.6.1.2. Evaluation of the economic and financial capacity

The tenderers' **economic and financial capacity** will be evaluated on the basis of the above mentioned questionnaire which the tenderers have to submit according to point 2.6.1.1

The minimum financial and economic capacity level is the following: the amount representing the estimated volume of the contract for one year must not exceed 60% of the annual overall turnover carried out by the tenderer over the last year, or the average annual turnover carried out by the tenderer over the past three years. For the estimated volume of the contract for four years see the Specifications, point 1.3.

2.6.2.   *Technical and professional capacity of the tenderer*

2.6.2.1. Documents to provide concerning the technical and professional capacity of the tenderer

Evidence of the technical and professional capacity of the providers involved in the tender will be furnished on the basis of the following documents:

1.   A duly completed company form (see: Annex 6.11);

2.   A duly completed CV summary form (see: Annex 6.8).

3.   A completed set of CV forms according to the type and number of profiles required (see: Annexes 6.9 and 6.10).

4.   A duly completed set of up to 5 relevant Project and Activity Reference Forms (see: Annex 6.12).

5.   Set of Best Practice Documents (see: Annex 6.13).

By submitting a tender, each service provider involved therein accepts the possibility of a check being carried out by the Publications Office on its technical capacities and, if necessary, on its research facilities and quality control measures.

In addition, all tenderers are informed that they may be asked to prove that they are authorised to perform the Contract under national law, as evidenced by inclusion in a professional or trade register or a sworn declaration or certificate, membership of a specific organisation, express authorisation, or entry in the VAT register.

Tenderers' attention is drawn to the fact that any total or partial omission of information for which one or more service providers involved in the tender are responsible may lead the Publications Office to exclude the tender from the rest of the procedure.

2.6.2.2. Evaluation of the technical and professional capacity

The **technical and professional capacity** will be judged on the basis of the tenderer's expertise relevant to the required services in particular with regard to **their know-how, efficiency, experience and reliability**.

Please note that only the CVs which are accepted by the evaluation committee can be used in the execution of the contract. The contractor will be informed which CVs have been accepted together with notification of the results of the tender.

Analysed criterion	Requisite documents
Company profile Is the tenderer's company structure appropriate/adapted with respect to the type of service required?	The selection is based on the contents of the tenderer's company form (see Annex 6.11).
Manpower **Technical skills and experience of the proposed staff** with respect to the technical and functional environment of the information systems described in chapter 4 and the technical environment described in Annex 6.15.	The tenderer has to present CVs with a minimum of the expertises required for each profile (see annex 6.10). The maximum number of CVs that will be accepted is also defined in this chapter. If the tenderer presents more than the maximum number of CVs requested, the excessive CVs will not be taken into account by the selection procedure. CVs will be treated according to the sequence established by the tenderer's offer. CVs that do not conform will be eliminated.
Company experience **Experience of the tenderer with respect to the technical and functional environment** of the information systems defined in Annex 6.15, as well as to the type of service required.	The selection is based on the tenderer's project/activity forms (see Annex 6.12) and the requested best practice documents (see Annex 6.13). The tenderer has to provide a minimum of one and maximum of five PARFs. If the tenderer presents more than five forms, only the first 5 forms as found in the offer will be treated by the selection procedure. Projects or activities that do not conform will be eliminated. Project/activity forms have to be relevant according to the subject of this call for tender. The pass the selection phase accepted PARFs shall cover together at least 1500 of relevant man-days.[1]

---

[1] Relevant man-day is a man-day which executed by the same profile as those requested under this CfT.

2.7. SECTION FOUR: AWARD CRITERIA – TECHNICAL BID

2.7.1. *Documents to provide concerning the technical award criteria*

This part has to contain the documents showing the merits of the bid, to make it possible to evaluate the tender with regard to the technical award criteria:

- o A document of maximum 20 pages of A4 format font-size 12 describing the Tenderer's approach to quality assurance and to user support (see Annex 6.14).

- o A proposal of maximum 10 pages of A4 format font-size 12 concerning covering the start-up phase of the contract (take-over) (see Annex 6.14).

- o A proposal of maximum 10 pages of A4 format font-size 12 concerning covering the hand-over phase at the end of the contract (see Annex 6.14) in order for the Publications Office or for another tenderer to be able to manage the information system.

- o A draft Service Level Agreement of maximum 30 pages of A4 format describing key elements of the service proposed by the tenderer including organisation of the service, technical quality of the service, change management, project management procedure and request handling (see Annex 6.14).

In case where a submitted document, including its table of content, figures, graphs, examples, annexes, and all other additional information, exceeds maximum limits as set out above only the first – respectively – 10, 20 or 30 pages will be evaluated.

2.7.2. *Evaluation of the technical award criteria*

The award criteria have the purpose to choose between the tenders which have been submitted by tenderers not subject to exclusion and which meet the selection criteria.

The contract will be awarded to the tenderer who presents best value for money on the basis of the criteria set out below.

No		Criterion	Maximum number of points
1		Overall quality of the tenderer's response	5
2		Approach to quality assurance and to user support (see Annex 6.14)	30
	2.1	The company's quality assurance and service management approach	15
	2.2	The user support services	15
3		Tenderer's proposal concerning the take-over phase (see Annex 6.14)	10
4		Tenderer's proposal concerning the hand-over phase (see Annex 6.14)	10
5		Tenderer's proposal of a draft service-level agreement(see Annex 6.14)	45
	5.1	Organisation of the service	30
	5.2	Activity management procedures	15
		Maximum number of points	**100**

The result of the technical evaluation is the sum of the number of points obtained as a result of the evaluation of each criterion. Only those bids which are awarded at least half the points for each

technical criterion (1, 2, 3, 4 and 5) and a total score of at least 65 points will be considered for the award of the Contract.

> Since assessment of the tenders will focus on the quality of the proposed services, tenders should elaborate on all points addressed by these specifications in order to score as many points as possible. The mere repetition of mandatory requirements set out in these specifications, without going into details or without giving any added value, will only result in a very low score.

2.8. SECTION FIVE: AWARD CRITERIA – FINANCIAL BID

2.8.1. Documents relating to the award criteria

For the financial bid, the tenderer must use the annexed Price Schedule and Estimation Form.

The financial bid must fulfil the following requirements:

- **prices** must **be expressed in euro;**

- prices should be expressed to a **maximum of 4 decimal places;**

- **prices should be quoted free of all duties, taxes and other charges, i.e. also free of VAT**, as the Communities are exempt from such charges in the EU under Articles 3 and 4 of the Protocol on the Privileges and Immunities of the European Communities of 8 April 1965 (OJ L 152 of 13 July 1967). Exemption is granted to the Commission by the governments of the Member States, either through refunds upon presentation of documentary evidence or by direct exemption.

   For those countries where national legislation provides an exemption by means of a reimbursement, the amount of VAT is to be shown separately. In case of doubt about the applicable VAT system, it is the tenderer's responsibility to contact his or her national authorities to clarify the way in which the European Community is exempt from VAT.

   The following must be taken into consideration when completing the Price Schedule and Estimation Form:

- the **Price Schedules** (see: Annex 6.1) must include the name of the firm and each page must be duly completed and signed by one of the duly authorised representatives of the company). No amendments to the price schedule will be permitted and a full reply must be given to each question.

   If **no** answer is given, the response will be assumed to be negative. Any omission or amendment to the original price schedule will cause the bid to be considered null and void.

- the **Estimation Forms** (see: Annex 6.1) must be duly completed and signed. The content must be based on the unit prices given in the price schedule and the price schedule will take precedence over the estimation form if there is any discrepancy between them. However, the estimation form is intended as a rough guide only and may not be cited in the event of litigation; only the work actually carried out is to be invoiced, on the basis of the unit prices given in the Price Schedule.

   The Price Schedule and the Estimation Form shall also be provided electronically as an Excel files. In the case of a discrepancy between the paper version and the electronic file, the paper version will take precedence.

2.8.2. Evaluation of the financial award criteria

The evaluation of the financial award criteria will be based on the total price in the estimation form. To ensure equal treatment of the tenderers the price for take-over phase will not be taken into the account during the financial evaluation of the offers.

2.9. Final evaluation

Only those offers that have passed the previous stages will be considered for this final evaluation. The contract will be awarded to the tenderer whose offer presents the highest value for money.

For identifying the offer presenting the best value for money, quality will be given a weight of 50 % and price will be given a weight of 50 % in accordance with the following formula:

$$R = \left(50 \times \frac{Q}{Qmax} \right) + \left(50 \times \frac{Pmin}{P} \right)$$

where:

Q   stands for quality mark of the relevant tender
Qmax stands for quality mark of the tender which received the highest quality mark
Pmin stands for the final total price of the tender with the lowest final total price
P   stands for the final total price of relevant the tender

2.10. INFORMATION FOR TENDERERS

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

If a written request is received, the Publications Office will inform all rejected tenderers of the reasons for their rejection and all tenderers submitting an admissible tender of the characteristics and relative advantages of the selected tender and the name of the successful tenderer.

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

2.11. AWARD OF THE CONTRACT

The procurement procedure is concluded by a Contract signed by the parties, or by a decision not to conclude the Contract.

After the period of validity of the tender has expired, conclusion of the Contract shall be subject to the tenderer's agreement in writing.

3.   JOINT BID AND SUBCONTRACTING

This section only applies for tenders involving joint bid or subcontracting. If this is not the case, please continue to the next Chapter (4. Technical specifications).

3.1.   MAKING A BID IN COLLABORATION WITH OTHER COMPANIES

Where a tender involves several legal entities, they may choose between:

- o   making a joint bid, in which case all the economic operators must be considered as tenderers and, if theirs is the successful bid, as contractors (in this case, one of the tenderers must be put forward as co-ordinator to manage the contract); and

- o   making a bid in the name of only one tenderer, who is then the sole contractor if the bid is successful, the other legal entities being considered as subcontractors.

Whichever type of bid is chosen (joint bid or bid in the name of one tenderer), the tenderer(s) must stipulate the role, qualifications and experience of each legal entity and, where relevant, the monitoring arrangements that exist between them.

Joint bid

Tenderers in a joint bid assume joint and several liability towards the Publications Office for the performance of the contract as a whole. Statements saying, for instance:

- o   that one of the partners of the joint bid will be responsible for part of the contract and another one for the rest, or

- o   that more than one contract should be signed if the joint bid is successful,

are thus incompatible with the principle of joint and several liability.

The Publications Office will disregard any such statement contained in a joint bid, and reserves the right to reject such offers without further evaluation on the grounds that they do not comply with the tendering specifications.

In the case of a joint bid, one of the partners of the joint bid (co-ordinator) should be given power of attorney to represent the other parties to sign and administrate the contract.

If the joint bid is selected the tenderers may be required to adopt a given legal form after they have been awarded the contract if this change is necessary for proper performance of the contract.

Subcontracting

If certain tasks provided for in the contract are entrusted to subcontractors, the main contractor retains full liability towards the Publications Office for performance of the contract as a whole. Accordingly:

- o   the Publications Office will treat all contractual matters (e.g. payment) exclusively with the main contractor, whether or not the tasks are performed by a subcontractor;

- o   under no circumstances can the main contractor avoid liability towards the Publications Office on the grounds that the subcontractor is at fault.

Tenderers must inform the subcontractor(s) that Article II.17 of the contract will be applied to them. Once the contract has been signed, Article II.13 of the above-mentioned service contract shall govern the subcontracting. During execution of the contract, the contractor will need the Publications Office's express authorisation to replace a subcontractor with another and/or to subcontract tasks for which subcontracting was not envisaged in the original offer.

3.2. DOCUMENTS TO SUBMIT – JOINT BID

In the case of a joint bid, the following documents must be provided:

Section One: Administrative Information and evidence for access to the contract

1. A **declaration** based on the model agreement on the "Power of Attorney" attached in Annex 6.2C, signed by the legal representatives of all the partners of the joint bid including the following:
   - recognising joint and several liability for all the partners of the joint bid for the performance of the contract;
   - giving one of the partners of the joint bid (co-ordinator) power of attorney to represent the other parties to sign and administrate the contract.

2. If the tenderers have already set up a consortium or similar entity to that end, they should state this in their offer, together with any other relevant information and documentation in this connection.

3. The **questionnaire for joint bids and subcontracting** (Annex 6.5) must be provided signed by a legal representative of the co-ordinator.

4. The **Form for identification of the tenderer** must be provided by each partner of the joint bid. (Annex 6.3)

5. The **legal entity form** (Annex 6.2B) for each tenderer with all the abovementioned supporting documents as specified in point 2.4.

   Only the co-ordinator must return the financial identification form.

Section Two: Documents relating to the exclusion criteria

6. Each tenderer must fill in and return the **declaration on grounds for exclusion** (Annex 6.5), as well as be prepared to provide the supporting documents as specified above in point 2.5.

Section Three: Documents relating to the selection criteria

7. Each of the parties of a joint bid must provide **Economic and Financial capacity questionnaire** (Annex 6.6)**.**

The technical documents concerning the selection criteria only has to be completed once for all partners of a joint bid, but it must be indicated to which partner the described capacities belong. However, the Company Form shall be filled in separately for each from the partners.

Sections Four and Five: Documents relating to the award criteria

The documents relating to the award criteria shall be provided once by the co-ordinator representing the group of tenderers.

3.3. DOCUMENTS TO SUBMIT – SUBCONTRACTING

If the offer envisages subcontracting, it must include the following.

Section One: Administrative Information and evidence for access to contract

1. the **questionnaire for joint bids and subcontracting** provided in Annex 6.4, signed by a legal representative of the tenderer. The third page of this questionnaire must be provided once for each subcontractor, including the following information:
   - the reasons for subcontracting;
   - the roles, activities and responsibilities of each subcontractor, and
   - the volume / proportion for each subcontractor;

2. a **letter of intent** by each subcontractor stating its intention to collaborate with the tenderer if the contract is awarded to him.

Section Two: Documents relating to the exclusion criteria

3. **subcontractors** must provide the duly signed declaration **on grounds for exclusion** (Annex 6.5). Where, in a bid, the value of the subcontracting which is to be executed by a subcontractor is equal to or exceeds 20% of the value of the contract, the subcontractor must be prepared to provide all the supporting documents to the declaration as specified in point 2.5. Where those services represent less than 20% of the contract, the subcontractor shall not be required to provide the supporting evidence. The Publications Office, however, reserves the right, to request the evidence if considered necessary.

Section Three: Documents relating to the selection criteria

4. Where, in a bid, the value of the subcontracting which is to be executed by a subcontractor is equal to or exceeds 20% of the value of the contract, the subcontractor must provide **Economic and financial capacity questionnaire** (annex 6.6) as specified in point 2.6. Where those services represent less than 20%, the subcontractor does not have to provide the Economic and Financial capacity questionnaire. However, in case the tenderer relies on the capacities of subcontractors for fulfilling the selection criteria as he indicated in the questionnaire for joint bids and subcontracting the Publications Office will ask for those documents (point 2.5). The Publications Office also reserves the right to ask for those documents if considered necessary.

5. The subcontractor has to answer the questions which concerns the services he or she is proposed to perform

Sections Four and Five: Documents relating to the award criteria

The documents relating to the award criteria shall be provided only by the tenderer.

3.4.   EVALUATION OF THE BIDS IN CASE OF JOINT BIDS OR SUBCONTRACTING

3.4.1. Exclusion criteria

The exclusion criteria will be assessed in relation to each tenderer or subcontractor individually.

3.4.2. Selection criteria

Joint bid

If several tenderers are involved in the bid as partners of a joint bid, each of them must prove that they have the required **economic and financial capacity**. However if the criteria are to be achieved above a certain level, a consolidated assessment shall be made.

The selection criteria concerning the **technical and professional capacity** will be assessed in relation to the group as a whole.

Subcontracting

The selection criteria concerning the **economic and financial capacity** will be assessed in relation to the tenderer and each proposed subcontractor individually if the Publications Office finds it necessary due to the role of the subcontractor and volume of the subcontracting. However if the criteria are to be achieved above a certain level, a consolidated assessment shall be made to the extent that the subcontractor puts its resources at the disposal of the tenderer for the performance of the contract.

The selection criteria concerning the **technical and professional capacity** will be assessed in relation to each proposed subcontractor only as regards the subcontracted services.

Only in the case where the tenderer intends to rely on capacities from the subcontractor in order to fulfil the selection criteria, as he indicated in the questionnaire for joint bids and subcontracting (Annex 6.4), the selection criteria for **technical and professional capacity** will be assessed in relation to the combined capacities of the tenderer and the subcontractor as a whole, to the extent that the subcontractor puts its resources at the disposal of the tenderer for the performance of the contract.

3.4.3. Award criteria

The evaluation (award) criteria will be assessed in relation to the tender as a whole.

4. TECHNICAL SPECIFICATIONS

4.1. SUBJECT OF THE CALL FOR TENDER

The different types of services required in the scope of this call for tender are those listed below.

o   Production support

First-level production support and assistance to end-user teams concerning functional, operational and technical issues about the information systems SEI-BUD/AMD/CR. The support and assistance will be provided in cooperation with the team responsible for the production of the budget. Second-level IT support is not a subject of this call for tender.

o   Testing

The production support will be expected to test software deliveries as end-users. The testing concerns both bug-fixes and new functions.

o   Studies, reports and other documents

Studies, reports and other documents on demand from end-user services and the Publications Office teams concerning operational and functional issues about actual, potential and suitable ways the information systems within the specified domain are or should be used.

Examples for on-site support agent and operation analyst missions within the scope of this call for tender are: reports concerning problems, obstacles and difficulties met while providing support to end users, impact analyses of possible changes on functional or operational level.

o   Training of end-users

Training of end-users so they can use the systems in an efficient and appropriate way. The training includes training of new users, brush-up training for periodic users and training sessions when new elements are introduced to the production environment.

Regular project meetings are foreseen during the whole duration of the contract. It will also be requested that the project leader attends CTI meetings (every two months on average) either in Brussels or Luxembourg. Due to the complex calendar and tight schedules, meetings are normally arranged at short notice meaning that the contractors must be equally available at short notice.[2]

4.2. ESTIMATION OF THE ANNUAL VOLUME OF WORK

The following table includes a global estimation of the annual resource requirement per profile. For the detailed description of the profiles please refer to Annex 6.10.

Profile	Estimation of the annual workload in man-days		
		Extra muros[3]	Intra muros[4]
Service Manager (SER-MAN)	60	40	20
Support Operational Agent (SUP-OAG)	450	45	405
Support Technical Agent (SUP-TAG)	150	15	135
Analyst of Operations (ANA-OPE)	90	80	10
Total	**750**	**180**	**570**

The tenderer's attention is drawn to the fact that these estimations are purely indicative.

---

[2] Costs of the participation in the meetings shall be included in the proposed price per profile.
[3] On the Contractor premises
[4] On the outside the contractor's premises, on the premises of the Publications Office, EU Institutions, bodies or its agents in Brussels, Luxembourg or Strasbourg.

4.3. WORKING METHODS AND GENERAL CONSTRAINTS

4.3.1. *Introduction*

This point defines the common procedures to be followed and the general constraints and disposals to be respected by the contractor in order to deliver the different types of services requested by the Publications Office.

4.3.2. *Working methods*

Delivery of services is based on Orders or Specific Contracts established by the Publications Office on the base of the contract no 10198. Orders and Specific Contracts may be either on a fixed price or on a time and means basis. In general, the Publications Office prefers to work on a fixed price basis. Time and means requests will be restricted to cases where a fixed price agreement is not adequate, due to a lack of specifications or to the urgency or the nature of the work.

The provisions of the framework contract have to be respected. Special attention is drawn to the rules concerning the guarantee period, invoicing conditions and penalties.

In the following rules the term 'working days' means official working days of the Publications Office.

For work on the Publications Office's premises, as well as the premises of the Commission, the Council or the Parliament, contractors must comply with the following rules:

- normal working times: between 7 a.m. and 8 p.m.

- normal working days: Monday to Saturday

- normal working hours (excluding lunch break): 8 hours

- minimum compulsory lunch break: 30 minutes

The working hours must be in accordance with the requirements of the service.

In the case of time and means work, a detailed activity report has to be provided for each individual person. If the person works on the Publications Office's premises, as well as premises of the Commission, the Council or the Parliament, the Publications Office may impose the use of an internal time management system to prepare the activity report.

For work outside normal working times, on Sundays, and on public holidays of the country where the service is to be provided, tenderers must specify the additional price per day and type of overtime (see Annex 6.1).

The budgetary cycle presents peak periods of activity along the year. Those periods are considered critical from a production point of view. During those periods the availability of the SEIBUD/AMD/CR systems is crucial. In these periods the production support can be asked to participate in solving specific problems outside normal working hours. According to the 2008 calendar the following weeks will be considered critical in terms of production activity:

- Second week of February 2008

- Second week of June 2008

- Second week of August 2008

- Third and fourth week of October 2008

- Third and fourth week of November 2008

- Third and fourth week of December 2008

The number of critical weeks and the dates in the calendar may change from one year to the next one. The calendar is known at the beginning of each year.

4.3.3. *Fixed price services*

Services based on fixed price orders will be initiated on request of the Publications Office. The request will normally come together with a functional and/or a technical specification describing in sufficient detail the service to be provided.

The contractor will answer to the request by introducing a fixed price proposal. This proposal specifies the actions the contractor will take with respect to the service to be provided. The contractor has to submit his proposal within 5 working days after initiation of the request by the Publications Office.

A fixed price service is defined by actions. In consequence, every fixed price proposal has to include the definition of all actions that will be provided to achieve the service. A fixed price must be indicated for each action. This price has to be calculated on the basis of the price schedule of the framework contract. Price calculations will be shown in proposals, which remain nevertheless fixed price. In addition, every fixed price proposal has to contain a global service plan. The service plan has to point out the major phases of the service and to reference clearly all actions demanding active participation of the Publications Office, the Commission, the Council or the Parliament. For each phase an estimation of its duration has to be defined.

On acceptance of the contractor's proposal, the Publications Office will either conclude a specific agreement or establish an order form.

The start of the service will be specified by the Publications Office in the specific agreement or in the order form and can only take place after signature of the specific agreement by both partners or after acceptance of the order by the contractor.

Actions included in a service are intended either to provide direct support to users or to produce deliverables, usually documents. Actions can take place in one or more deliveries. After each delivery, a delivery note signed by the contractor and countersigned by the user representatives (as pointed out in the specific agreement or in the order form) is submitted to the Publications Office.

In the case of actions aiming at providing production support, the Publications Office has five working days to accept or refuse a delivery note. If no explicit acceptance is given at the end of this period, the delivery is implicitly accepted without reserve. In the case of acceptance with reserve, the contractor has to communicate his position concerning the detected problems, which will lead to a new evaluation of the delivery note. In the case of non-acceptance, the contractor has to make a new delivery note.

In the case of actions aiming at producing deliverables, e.g. analysis documents, studies, each deliverable will be provided to the Publications Office as a separate delivery and will be accompanied by a specific delivery note. In this case the evaluation period is fixed to 10 working days. In the case of non-acceptance, the contractor has to carry out the necessary corrections and to deliver again. As concerns the evaluation period, the delivery of a corrected deliverable is considered again as first delivery. In any case, at acceptance of the last delivery, the whole service is to be considered as accepted.

In case of non-acceptance (insufficient performance and/ or quality of the delivered services) or non-respect of the deadline the Publications Office reserves the right to apply liquidated damages, as specified in the Article I.10 of the Contract.

The contractor nominates a project leader who is the principal contact person for the Publications Office. To assure the follow-up of a fixed price service, the Publications Office also designates a service leader on its side.

4.3.4. Times and means orders

In case of time and means requests the contractor submits within 10 working days after initiation of a request by the Publications Office a proposal concerning the required resources, including a commitment concerning the availability of each person.

In case of agreement the Publications Office may directly establish an Order or a Specific Contract based on the Price schedule of the framework contract.

To assure the follow-up of Time and Means orders and Specific Contracts the Publications Office also designates a project leader on its side.

The contractor will periodically present the financial balance of each and every order to the Publications Office. The minimum information included in the balance shall be: the commitments, expenses made, remaining budget available and the planning of submission of the remaining invoices.

4.3.5. Take-over period

Due to the complexity of the systems and the environment, a 2-month period of overlap has been foreseen between the existing contract and the new contracts to be signed as a result of this call for tender. During that period, the new contractors will ensure that they take all the necessary steps in order be fully capable to autonomously manage the production support when the take-over phase has finished.

During the overlapping period, the current contractor will continue working as the main service provider handling the production support. No distribution of the ongoing works or any other kind of cross-work between the existing contractor and the future ones has been foreseen.

The new Contractor will take over from the previous Contractor all specific documentation, which have been acquired for the purpose of the service via the previous contract. The previous Contractor will undertake corresponding hand-over efforts until the end of his contract.

Within the areas of the responsibility as defined in the specification, the Contractor must establish and carry out the necessary take-over activities in such a way that there is no interruption or degradation in services. These tasks will include (but are not limited to) the following items:

- Knowledge and understanding of the budgetary process and the interventions that belongs to each specific phase;

- Mastering of the different software elements;

- Mastering the solving of the most common types of errors that occurs during production;

- Full operation of all services taken over.

The tenderer will deliver a detailed take-over plan elaborating on the above actions as requested in Annex 6.14. The take-over plan will then be subject to further elaboration and the final approval of the Publications Office Project Leader. This approved take-over plan will be the basis for the phase-out plan of the previous Contractor.

4.3.6. Hand-over period

The Contractor must prepare for and contribute pro-actively to a complete, timely and smooth hand-over of the service to the next Contractor(s) – or to the Publications Office - allowing similar take-over as the one just described.

All information shall be handed over. All documents shall be handed over as well.

During the hand-over period, which is likely to cover 2 months of this Contract the Contractor will fully co-operate with the next Contractor(s) to achieve the continuation of high standard service quality.

4.3.7. Language constraints

The required services must be provided in English and French. Documents must be provided in English and French as well.

4.3.8. Security constraints

The Publications Office has developed its specific Baseline Information System Security Policies (see Annex 6.16).

4.3.9. Staff replacements

The list of approved CVs will be annexed to the Contract as a part of Tenderer's offer. Only persons on this list will be allowed to perform requested tasks.

The contractor has the right to ask for an adjustment to the profile attribution of a person. This request has to be accompanied by an updated CV, including a proposition concerning the new profile and a justification. The request has to be validated by the Office. In order to validate such a request, the Office may schedule an interview with the person. The Office has the right to reject a proposal.

If for exceptional circumstances the contractor wants to exchange a member of personnel during an engagement, it has to submit a formal request to the Publications Office at least 2 months in advance. An equivalent replacement shall be proposed to the Publications Office.

For a member of staff who is proposed for the first time to the Office, a duly completed CV that includes a proposition concerning the profile has to be provided by the contractor. This proposition has to be validated by the Office.

In general, the Office reserves the right to schedule an interview with a proposed candidate in the case of a first engagement. The Office has the right to reject a proposal.

The proposed candidate must be available during the whole time foreseen for his/her engagement.

If a person is unavailable due to reasons beyond the contractor's control, the contractor has to ensure that an equivalent replacement will be available within 10 working days.

For any personnel replacement, the contractor will ensure that the transition is smooth and the interests of the Publications Office are not affected. In particular, the contractor will ensure that the person to be replaced remains in place until his/her replacement is fully operational. The contractor will provide the appropriate reports in order to document the handover process.

For any personnel replacement, all the costs generated (for example training expenses) shall be borne by the contractor.

4.4. ACRONYMS

SEI-BUD: Système Editorial Informatisé pour les documents BUDgétaires

SEI-AMD   Système Editorial Informatisé pour les Amendements

SEI-CR: Système Editorial Informatisé – Change Request

CTI: Comité Technique Interinstitutionnel

FAT: Factory Acceptance Tests

Formex: Formalised exchange of electronic publications. Version 4 follows a XML definition with XML schemas. It is defined by the Publications Office and used for the production, archiving and reutilization of publications in electronic format. In particular, the Official Journal is delivered in Formex format by the printing houses

and this is used for the consolidation of legislative texts by the Publications Office. All information is available at: http://formex.publications.europa.eu

HTML: Hypertext mark-up language

LDAP: Lightweight directory access protocol

PARF: Project Activity Reference Form

PDF: Portable document format

KPI: Key Performance Indicator

Publications Office: Office for Official Publications of the European Communities

SAT: Site Acceptance Tests

XML: Extensible mark-up language

WOOD: Worldwide Object Dispatcher. Besides the exchange of data files between processes eventually running on distinct servers, this tool allows the triggering of processes based on the arrival of a file in a predefined directory. The tool is written in Perl and usually uses FTP as underlying protocol but could use any standard file transfer protocol. The Office strongly advises the contractor/supplier to ask for practical implementation guidelines before starting any development that could require integration/interaction with the WOOD.

5. <u>**REPORTS AND DOCUMENTS**</u>

See: Chapter 4 Technical Specification.

6. List of annexes

6. <u>ANNEXES</u>

Annex 6.1.   Price Schedule and Specimen Quotation

Annex 6.2A   Financial identification form

Annex 6.2B   Legal entity form

Annex 6.2C   Agreement / Power of attorney

Annex 6.3.   Form for identification of tenderers

Annex 6.4.   Questionnaire for joint bids and subcontracting

Annex 6.5.   Declaration on the grounds for exclusion

Annex 6.6.   Economic and financial capacity questionnaire

Annex 6.7.   List of documents to be provided

Annex 6.8.   CV summary

Annex 6.9.   CV form

Annex 6.10.   CV description

Annex 6.11.   Company form

Annex 6.12.   PARF form

Annex 6.13.   Best Practice documents

Annex 6.14.   Quality expectations and services proposal

Annex 6.15.   Technical environment and standard operating procedures of the Publications Office

Annex 6.16.   Security requirements

Annex 6.17.   General description of the concerned systems

ANNEX 6.1.   **PRICE SCHEDULES AND ESTIMATION FORMS**

PRICE SCHEDULE

a) Prices (*intra muros*)

	Price per day on Office's premises in Luxembourg		
	Usual working times	Public holidays	8 p.m. (day) to 7 a.m. (day + 1)
SER-MAN			
SUP-OAG			
SUP-TAG			
ANA-OPE			

b) Prices (extra *muros*)

	Price per day on contractor's premises		
	Usual working times	Public holidays	8 p.m. (day) to 7 a.m. (day + 1)
SER-MAN			
SUP-OAG			
SUP-TAG			
ANA-OPE			

c) Prices (take-over and hand-over)

Take-over (fixed price)	
Hand-over (fixed price)	

Company: _____   Date: _____

Name: _____   Signature: _____

- The tenderer's attention is drawn to the fact that fixed price day rates have to include any costs concerning the management of the service Contract. This concerns in particular all coordination and reporting activities.
- All prices have to be indicated in euro.
- The price per day is all-inclusive net of tax, since the European Community is exempt of all taxes.
- For fixed price and time means project if any work is to be done outside the contractor's premises, on the premises of the Publications Office, EU Institutions, bodies or its agents in Brussels, Luxembourg or Strasbourg, mission expenses will not be taken into account.

Annex 6.1 Price Schedules and Estimation Forms

ESTIMATION FORM

Intra-muros

Profiles	Price per day on Office's premises in Luxembourg (usual working times) (A)	Estimation of the annual workload in man-days (B)	Total price for four years (A) × (B) × 4
SER-MAN		20	
SUP-OAG		405	
SUP-TAG		135	
ANA-OPE		10	
Total			

Extra-muros

Profiles	Price per day on the contractor's premises (usual working times) (A)	Estimation of the annual workload in man-days (B)	Total price for four years (A) × (B) × 4
SER-MAN		40	
SUP-OAG		45	
SUP-TAG		15	
ANA-OPE		80	
Total			

Hand-over (fixed price)	

Final Total Price (Total intra-muros + Total extra-muros + Hand-over price	

Company: _____   Date: _____

Name: _____   Signature: _____

- The tenderer's attention is drawn to the fact that fixed price day rates have to include any costs concerning the management of the service Contract. This concerns in particular all coordination and reporting activities.
- All prices have to be indicated in euro.
- The price per day is all-inclusive net of tax, since the European Community is exempt of all taxes.
- For fixed price and time means project if any work is to be done outside the contractor's premises, on the premises of the Publications Office, EU Institutions, bodies or its agents in Brussels, Luxembourg or Strasbourg, mission expenses will not be taken into account.

ANNEX 6.2A   **FINANCIAL IDENTIFICATION FORM**

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

The specific form for each Member State is available at the following Internet address:
http://europa.eu/comm/budget/execution/ftiers_en.htm

ANNEX 6.2B   **LEGAL ENTITY FORM**

Model legal entity form
(to be completed and signed by the tenderer)

The specific form for each Member State is available at the following Internet address:
http://europa.eu/comm/budget/execution/legal_entities_en.htm

ANNEX 6.2C.   **AGREEMENT / POWER OF ATTORNEY**

Agreement / Power of attorney
Model 1

(DESIGNATING ONE OF THE COMPANIES OF THE GROUP AS LEADER AND GIVING A MANDATE TO IT)

We the undersigned:

– Signatory 1 (Name, Function, Company, Registered address, VAT number)
– Signatory 2 (Name, Function, Company, Registered address, VAT number)
– …..
– Signatory N (Name, Function, Company, Registered address, VAT number),

Each of them having the legal capacity required to act on behalf of his/her company,
HEREBY AGREE AS FOLLOWS:

(1) The European Commission has awarded the Framework Contract 10198 (« the Contract ») to Company 1, Company 2, …, Company N (« the Group Members »), based on the joint offer submitted by them on … ….. for t**he provision of the production support services for the SEI-BUD/AMD/CR systems** (« the Services »).

(2) As co-signatories of the Contract, all the Group Members:

    (a) Shall be jointly and severally liable towards the European Commission for the performance of the Contract.

    (b) Shall comply with the terms and conditions of the Contract and ensure the proper execution of their respective share of the Services.

(3) To this effect, the Group Members designate Company X as Group Leader.

    [N.B.: The Group Leader has to be one of the Group Members]

(4) Payments by the European Commission related to the Services shall be made through the Group Leader's bank account.

    [*Provide details on bank, address, account number, etc*.].

(5) The Group Members grant to the Group Leader all the necessary powers to act on their behalf in connection with the Services. This mandate involves in particular the following tasks:

    (a) The Group Leader shall sign any contractual documents — including the Framework Contract, Orders and Amendments thereto — and issue any invoices related to t the Services on behalf of the Group Members.

    (b) The Group Leader shall act as single point of contact for the European Commission in connection with the Services to be provided under the Contract. It shall co-ordinate the provision of the Services by the Group Members to the European Commission, and shall see to a proper administration of the Contract.

Any modification to the present agreement / power of attorney shall be subject to the European Commission's express approval.

This agreement / power of attorney shall expire when all the contractual obligations of the Group Members towards the European Commission in connection with the Services to be provided under the Contract have ceased to exist. The parties cannot terminate it before that date without the Commission's consent.

Signed in …. on ……….. ………

Name   Name
Function   Function
Company   Company

Agreement / Power of attorney

Model 2

(CREATING THE GROUP AS A SEPARATE ENTITY, APPOINTING A GROUP MANAGER AND GIVING A MANDATE TO HIM/HER)

We the undersigned:

–   Signatory 1 (Name, Function, Company, Registered address, VAT number)
–   Signatory 2 (Name, Function, Company, Registered address, VAT number)
–   …..
–   Signatory N (Name, Function, Company, Registered address, VAT number),

Each of them having the legal capacity required to act on behalf of his/her company,

HEREBY AGREE AS FOLLOWS:

(1)   The European Commission has awarded the Framework **Contract 10198** (« the Contract ») to Company 1, Company 2, …, Company N (« the Group Members »), based on the joint offer submitted by them on … ….. for t**he provision of the production support services for the SEI-BUD/AMD/CR systems** (« the Services »).

(2)   As co-signatories of the Contract, all the Group Members:

     (a)   Shall be jointly and severally liable towards the European Commission for the performance of the Contract.

     (b)   Shall comply with the terms and conditions of the Contract and ensure the proper execution of their respective share of the Services.

(3)   To this effect, the Group Members have set up under the laws of ……. the Group ….. (« the Group »). The Group has the legal form of a …..

     [Provide details on registration of the Group: VAT number, Trade register, etc.].

(4)   Payments by the European Commission related to the Services shall be made through the Group's bank account.

     [*Provide details on bank, address, account number, etc.].*

(5)   The Group Members appoint Mr./Ms ……. as Group Manager.

(6)   The Group Members grant to the Group Manager all the necessary powers to act alone on their behalf in connection with the Services. This mandate involves in particular the following tasks:

     (a) The Group Manager shall sign any contractual documents – including the Framework Contract and amendments thereto – and issue any invoices related to the Services on behalf of the Group Members.

     (b) The Group Manager shall act as a single point of contact for the European Commission in connection with the Services to be provided under the Contract. He/she shall co-ordinate the provision of the Services by the Group Members to the European Commission, and shall see to a proper administration of the Contract. Any modification to the present agreement / power of attorney shall be subject to the European Commission's express approval.

This agreement / power of attorney shall expire when all the contractual obligations of the Group Members towards the European Commission in connection with the Services to be provided under the Contract have ceased to exist. The parties cannot terminate it before that date without the Commission's consent.

Signed in ……….. on ……….. ………

Name   Name

Function   Function

Company   Company

ANNEX 6.3.   **FORM FOR IDENTIFICATION OF THE TENDERER**

Identification of the tenderer

acting in the capacity of:

☐ Member of consortium (specify role ……………………………)
Members of a consortium, which are not the co-ordinator, only have to fill in the first paragraph – identity, a contact person and the last paragraph – declaration
☐ Main contractor
☐ Sub contractor

Information to be included in the Contract in case of award

Identity	Answer
Official name of tenderer in full ………	
Official legal form ……………………	
Date of registration	
Country of registration ………………..	
Statutory registration number …………	
Official address of tenderer in full ……	
(Internet address – if applicable) ……...	
VAT registration number ……………..	
Person(s) designated to **sign the Contract** – name in full and function. Please indicate if the person(s) are authorised to sign alone or together*	

Bank account The information must be consistent with the financial identification form .	Answer
Name of bank ……………………………	
Address of branch in full …………………	
Exact designation of account holder ……..	
Full account number including codes ……	
IBAN code ………………………………	
BIC code ………………………………	

Annex 6.2C Agreement / Power of attorney

Contact person For administrative matters	Answer
Name in full and title ……………………	
Function …………………………………	
Company name …………………………..	
Address in full …………………………	
Telephone number ………………………	
Fax number ………………………………	
E-mail address …………………………	

Contact person For technical matters	Answer
Name in full and title ……………………	
Function …………………………………	
Company name …………………………..	
Address in full …………………………	
Telephone number ………………………	
Fax number ………………………………	
E-mail address …………………………	

Declaration by an authorised representative*

I, the undersigned, certify that the information given in this tender is correct, that I accept the conditions set out in the invitation letter, the tender specifications and the draft Contract and that the tender is valid.	
Name in full and title ……………………	
Function/Position (e.g. "manager") ……	
Telephone number ……………………...	
Fax number ……………………………...	
E-mail address …………………………	
DATE/ SIGNATURE	

* The tender must include documents proving that the person(s) designated to sign the Contract as well as the person(s) signing the tender are authorised to do so.

ANNEX 6.4.   **QUESTIONNAIRE FOR JOINT BIDS AND SUBCONTRACTING**

This questionnaire only has to be completed if your tender involves a joint bid or subcontracting.

Joint bid

1. Does your bid involve more then one tenderer?   Yes   No

The questions No 2 – 4 shall be answered only if the answer is affirmative.

2. Please fill in the name of the company having power of attorney for the group of tenderers and acting as a co-ordinator:

_____

3. Please fill in the names of the <u>other companies</u> taking part in the joint offer:

_____

_____

_____

_____

_____

4. If a consortium or similar entity exists, please fill in the name and the legal status of the entity:

_____

Subcontracting

5. Does your bid involve subcontracting?   Yes   No

If the answer is yes, please complete question number 6, and the next page once for each subcontractor.

6. List of subcontractors:

………………………………………………………………………………….…
………………………………………………………………………………….…
………………………………………………………………………………….…
………………………………………………………………………………….…
………………………………………………………………………………….…
………………………………………………………………………………….…

<u>Reasons, roles, activities and responsibilities of subcontractors</u>

Please complete this page once for each subcontractor.

Name of the subcontractor:

Official legal form:

Country of registration:

Statutory registration number:

(Internet address, if applicable):

Official address in full:

Contact person:

Telephone number:

Reasons for subcontracting:

Role, activities and responsibilities of the subcontractor:

The volume or the proportion of the subcontracting:

<div style="border:1px solid black; text-align:center; padding:1em;">

DECLARATION

</div>

1. Pursuant to Council Regulation (EC, Euratom) No 1605/2002 of 25 June 2002 on the Financial Regulation applicable to the general budget of the European Communities (OJ L 248/1 of 16 September 2002, as amended), I, the undersigned, declare on my honour that the following grounds for disqualification do not apply to the company or organisation which I represent, or to me (if the tenderer/subcontractor is a natural person):

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

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

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

(d) not having fulfilled my obligations relating to the payment of social security contributions or my obligations relating to the payment of taxes in accordance with the legal provisions of the country of establishment or with those of the country of the contracting authority or those of the country where the Contract is to be performed;

(e) having been the subject of a judgment which has the force of *res judicata* for fraud, corruption, involvement in a criminal organisation or any other illegal activity detrimental to the Communities' financial interests;

(f) being currently subject to an administrative penalty referred to in Article 96(1) of the Financial Regulation (Council Regulation N° 1605/2002 of 25/06/2002, as amended).

I therefore undertake to supply the documents mentioned below at short notice after receiving a request by the Commission to do so. I accept that failure to do so shall result in final disqualification from the remainder of the procedure.

For (d), the applicant must be prepared to submit, recent certificates issued by the competent authority of the Member State concerned showing that his or her situation is in order.

The Commission will accept as sufficient evidence that none of the cases quoted in (a), (b) or (e) applies to the tenderer, the production of a recent extract from the "judicial record" or, failing this, of an equivalent recent document issued by a competent judicial or administrative authority in the country of origin or residence, showing that these requirements have been met.

Where the country concerned does not issue documents or certificates of the kind required above, they may be replaced by a sworn, or failing this, a solemn statement, made by the interested party before a judicial or administrative authority, a notary or a qualified professional body in the country of origin or providence.

Annex 6.6 Declaration on the grounds for exclusion

2. Pursuant to Council Regulation (EC, Euratom) No 1605/2002 of 25 June 2002 on the Financial Regulation applicable to the general budget of the European Communities, published in Official Journal No L 248 of 16 September 2002, as amended, I declare on my honour that:

- neither the company or organisation that I represent nor any member of its staff or of its board or any of its directors is placed in a situation of conflict of interests for the purposes of this tendering procedure;

- I will inform the Commission, without delay, if any situation of conflict of interests or that may lead to a conflict of interests arises;

- I have not been guilty of misrepresentation in supplying the information required by the awarding authority as a condition of participation in the contract procedure or failed to supply this information;

- the information given to the Commission for the purposes of this tendering procedure are accurate, honest and complete.

The Commission reserves the right to check this information.

Done at ...., on ....

Signature:

Name of the signatory(ies) of this form (representative(s) legally authorised to represent the tenderer vis-à-vis third parties and acting on behalf of the aforementioned company or organisation)

………………………………………………………………………………………….

Name of the company/organisation represented (if applicable): ………………………………………

Legal address: …………………………………………………………………………………………

Annex 6.6. **Economic and financial capacity questionnaire**

	2007	2006	2005
Total turnover			
Turnover related to the requested tasks			
Total assets / liabilities			
Fixed assets			
• Intangible assets			
• Tangible assets			
• Financial assets			
Current assets			
• Debtors / debts due within one year			
• Debtors / debts due after one year			
• Cash (bank & hand)			
• Stocks			
• Other current assets			
Capital			
• Subscribed capital			
• Reserves			
• Profits and loss brought forward			
• Provisions			
Creditors			
• Short term bank debt (to be paid within one year)			
• Long term bank debt (to be paid after one year)			
• Short term non-bank debt (to be paid within one year)			
• Long term non-bank debt (to be paid after one year)			
• Other debts			
Turnover			
Other operating income			
Costs of staff			
Costs of material			
Gross operating profit			
Net operating profit			
Financial profit			
Profit / loss on ordinary activity			
Profit / loss for the financial year			

Company: _____   Date: _____

Name: _____   Signature: _____

The following documents shall be attached:
- Balance sheet for the year 2007;
- Profit and loss account for the year 2007;
- If financial statements have been audited during the any from the last three years, copy of auditor's statement (cover page of the auditor's report);
- Evidence of professional risk indemnity insurance.

Annex 6.7. **List of documents to be provided**

	DOCUMENTS SUMMARY	Annex	Place in the tender
	Section One: Administrative information and evidence for access to Contract		
∗	Duly signed **cover letter** (to be provided)	**---**	
∗	This **list of documents** (to be completed)	**6.7**	
∗	**Form for identification of the tenderer** (to be completed)	**6.3**	
∗	**Financial identification form** (to be completed)	**6.2A**	
∗	**Legal entity form** (to be completed) with supporting documents as described in point 2.4 of the *Specifications* – Proof of registration number and of VAT number – Documents showing that the person(s) signing the tender and designated to sign the Contract are entitled to do so	**6.2B**	
∗	**Questionnaire for joint bids and subcontracting** (if applicable, to be completed)	**6.4**	
∗	If it is a joint bid, a **declaration** signed by legal representatives of all the partners of the joint bid: • recognising joint and several liability for all the partners of the joint bid for the performance of the Contract, • giving one of the partners of the joint bid (co-ordinator) power of attorney to represent the other parties to sign and administrate the Contract, (if applicable, to be completed)	**6.2C**	
∗	If subcontracting is involved in the bid, a **letter of intent** by each subcontractor stating its intention to collaborate with the tenderer if the Contract is awarded to him (if applicable, to be provided)	---	
	Section Two: Documents relating to the exclusion criteria		
∗	**Declaration on grounds for exclusion** (to be completed) with the following supporting documents(to be provided): • a recent extract from the 'judicial record' or equivalent • a recent certificate of having fulfilled obligations relating to the payment of social security contributions or equivalent • a recent certificate of having fulfilled obligations relating to the payment of taxes or equivalent	**6.5**	
	Section Three: Documents relating to the selection criteria		
	a) economic and financial capacity		
∗	**Economic and financial capacity questionnaire**, (to be completed) <u>including</u> documents mentioned there (to be provided)	**6.6**	

Annex 6.7. List of documents to be provided

		DOCUMENTS SUMMARY	Annex	Place in the tender
		b) technical and professional capacity		
*		**Company form** (to be completed)	**6.11**	
*		**CV summary** (to be completed)	**6.8**	
*		set of **CV-Forms** (to be completed)	**6.9**	
*		set of **PARFs** (to be completed)	**6.12**	
*		Set of **Best Practice Documents** (to be provided)	**6.13**	
		Section Four: Documents relating to the technical award criteria		
*		Document presenting **tenderer's approach to quality assurance** and **to user support** (to be provided)	---	
*		Tenderer's proposal for **take-over phase** (to be provided)	---	
*		Tenderer's proposal for **hand-over phase** (to be provided)	----	
*		**Draft SLA** (to be provided)	---	
		Section Five: Documents relating to the financial award criteria		
*		**Price schedule** (to be completed)	**6.1**	
*		**Estimation form** (to be completed)	**6.1**	

ANNEX 6.8. **CV SUMMARY**

Profile type	Name	Ref. nr.	PARF reference(s) *(if any)*	Accepted / Refused *(reserved for the Publications Office)*
SER-MEN				
SUP-OAG				
SUP-TAG				
ANA-OPE				

Company: _____   Date: _____

Name: _____   Signature: _____

ANNEX 6.9. CV FORM

This document defines a standard *curriculum vitae* (CV) layout for a tenderer to use when putting forward a person for a particular profile. Only CVs submitted on this form will be accepted.

Persons whose CVs have been submitted in the offer shall be available at the beginning of the Contract. If the tenderer is about to submit CV of the persons to be recruited, declaration signed by this person shall be attached.

Each CV consists of:

- o one CV front page;
- o **at least** one CV education/training/certification page;
- o CV software/method expertise pages;
- o **and at least** one CV experience page.
- o Professional Experience Summary

Supplementary CV education/training/certification, CV software/method expertise and CV experience pages may be added as necessary.

Experience pages shall cover only the activities, which are confirming that proposed person fulfills requirements as set out in the Specifications. Therefore, at the experience pages chronological breaks are allowed.

There should be no unaccounted chronological breaks in the Professional Experience Summary.

Months in the *CV software/methods expertise page* shall be calculated from the successful end of educational studies of the proposed person. To pass the selection phase proposed person shall demonstrate expertise, at least in one software / method in each from the indicated categories (A-K), and at least at the standard level.

The tenderers shall not provide information concerning expertise in software / methods which are not mentioned in the CV form.

There is no conversion rate between minimum number of months' experience and the different expertise level. It is up to the tenderer to asses the knowledge of proposed person.

Each CV experience page contains data about the projects/activities the employee has participated in and about the hardware, software, tools, methodologies etc., he used in the context of these projects/activities. Supplementary CV experience pages may be added as needed.

The projects/activities referenced by the CV experience pages could be those described by the Project/activity reference forms provided in the offer of the tenderer. But the tenderer could also add projects/activities which are not related to a Project/activity reference form included in the tender. Projects and activities, which the employee had executed before starting to work for the tenderer should also be referenced.

The tenderer's attention is drawn to the fact, that the required expertise and experience for each profile is verified against the information included in the corresponding CV form.

CV front page

CV No :	
Tenderer :	
Person name :	
Address/Tel. :	

Date of birth :		**Nationality:**	

Employee-employer relationship :	*Check the appropriate*: ☐ Employee ☐ Free lance ☐ Sub-contractor (company: ……………………….…)		Number of months working for the tenderer: ●●●●●●●●●●●●●●●●●●●●months

Profile for which employee is entered:	Check the appropriate: ☐ Service manager (SER-MAN) ☐ Support Operational Agent (SUP-OAG) ☐ Support Technical Agent (SUP-TAG) ☐ Analyst of Operations (ANA-OPE)

Highest relevant educational qualification :	
Date IT career started (dd/mm/yy) **:**	

Languages: (indicate level of skills: mother tongue, very good, good, fair,)		Spoken	Written
	English: French: other:		

Date available (dd/mm/yy) **:**	

Summary (use this area to briefly indicate the major facts which the Publications Office should know about this employee):

CV Education/training/certification page (CV Ed./Tr./Ce. page number for this CV:)

CV No :	
Tenderer :	
Person name :	

	EDUCATION			
	Diploma/Certificate:	**Institution :**	**Subject area:**	**Period (from/to - mm/yy) :**

	PROFESSIONAL TRAINING		
	Training name :	**Company/institute organising the training :**	**Period training followed (from/to - mm/yy) :**

	CERTIFICATION		
	Certification name :	**Date achieved or planned to achieve (dd/mm/yy) :**	**Certification valid until (dd/mm/yy) :**

CV software/method expertise page

CV No :	
Tenderer :	
Person name :	

Software/Method	Months	Level (base / standard / expert)	SER-MAN	SUP-OAG	SUP-TAG	ANA-OPE
A: Programming Languages/Scripting/Querying			n/a	n/a		n/a
C, C++			n/a	n/a		n/a
JAVA			n/a	n/a		n/a
PERL			n/a	n/a		n/a
VISUAL BASIC			n/a	n/a		n/a
JAVASCRIPT			n/a	n/a		n/a
PL/SQL			n/a	n/a		n/a
SQL			n/a	n/a		n/a
B: Databases			n/a	n/a		n/a
ORACLE			n/a	n/a		n/a
SQL SERVER			n/a	n/a		n/a
ADABAS			n/a	n/a		n/a
C: Application Servers			n/a	n/a		n/a
APACHE TOMCAT			n/a	n/a		n/a
BEA WEBLOGICS			n/a	n/a		n/a
COLDFUSION MX			n/a	n/a		n/a
JBOSS			n/a	n/a		n/a
ORACLE IAS			n/a	n/a		n/a
WEBSPHERE			n/a	n/a		n/a
D: Web Servers and related technolgy			n/a	n/a		n/a
APACHE HTTP SERVER			n/a	n/a		n/a
MICROSOFT INTERNET INFORMATION SERVICES			n/a	n/a		n/a
SUN JAVA SYSTEMS WEB SERVER			n/a	n/a		n/a
CGI			n/a	n/a		n/a
JSP, ASP, PHP			n/a	n/a		n/a
E: Web Browsers						
INTERNET EXPLORER						
MOZILLA FIREFOX						
F: Standards/Formats						
FORMEX V4						
HTML						
XML						
XML SCHEMA						
XSL-T						
DTD						
XMLSpy						
XMetal						
TIFF						
JPEG, GIF						
PDF						

Software/Method	Months	Level (base / standard / expert)	SER-MAN	SUP-OAG	SUP-TAG	ANA-OPE
ISO 9001						
UNICODE 2.0						
G: Protocols				n/a		n/a
FTP				n/a		n/a
TCP/IP				n/a		n/a
HTTP				n/a		n/a
LDAP				n/a		n/a
H: Project Management				n/a	n/a	n/a
MS PROJECT				n/a	n/a	n/a
CLEARQUEST				n/a	n/a	n/a
I: Operating Systems						
WINDOWS 2000 or XP						
LINUX						
UNIX						
J: Query And Reporting Tools			n/a	n/a	n/a	
BUSINESS OBJECTS			n/a	n/a	n/a	
K: Office Automation						
MICROSOFT OFFICE						

CV Professional experience Experience page (CV experience page number for this CV:)

CV No :	
Tenderer :	
Person name :	

PROJECTS/ACTIVITIES EXPERIENCE			
PARF number (optional):			
Short description of project/activity (if no PARF form exists):			
Period of the employees participation (from/to - mm/yy) :		**Dedication (%) (Full time = 100%)**	
TOTAL[5] (Years + Months) (including dedication: 1 year @ 50% = 6 months)			
Employee's Roles & Responsibilities in the project/activity :			
Hardware, software, tools, methodologies used by the employee in the project/activity (please refer to the categories specified on the *expertise pages*) :			

---

[5] Field "*Total"* refers to the total involvement of the proposed person in the project.

Professional Experience Summary

Please, complete the following table according to the professional experience described previously

Period (from/to - mm/yy)	Role [6]	Dedication (%)[7]	TOTAL (Years + Months)

---

[6] Role: please provide exact description (Project Manager, Business Analyst, Programmer…) according to the roles requested

[7] Dedication: Percentage of the time dedicated to the role. Example: Full time = 100%. 4-hours/day = 50%

ANNEX 6.10.   **CV** **DESCRIPTION**

- This annex defines the profiles required within the scope of the call for tender.
- The maximum number of CVs to be provided per profile is the minimum number plus 1.
- For each profile information regarding the requirements is provided:
- There is no conversion rate between minimum number of months' experience and the terms *"in depth knowledge",* and *"general knowledge".* It is up to the tenderer to asses the knowledge of proposed person(s).

Required profiles

Profiles required (code)	Minimum number of CVs to be provided
Service Manager (SER-MAN)	1
Support Operational Agent (SUP-OAG)	3
Support Technical Agent (SUP-TAG)	1
Analyst of Operations (ANA-OPE)	1

Nature of the tasks	These are examples of the tasks that will be expected of a person proposed with the required profile. This list is not exhaustive and is to be regarded as an indication.
Education	A description of the minimal educational qualifications that is required for the profile.
Knowledge and skills	A list of the minimal knowledge and skills that a person with this profile is expected to possess.
Experience	The required experience for the profile.
Languages	All the proposed person shall have a good knowledge of EN and FR

Service manager: SER-MAN

The management of services, acquiring and utilising the necessary resources and skills, within agreed parameters of cost, timescales, and quality.

Nature of the tasks	• Service management including proposals for strategies, planning, definition of tasks and possible deliverables, review of service deliveries, quality control, risk analysis and management, status reports, problem reporting and management systems, follow up and organisation. • Participate in functional and technical working groups and progress meetings. • Estimate costs, timescales and resource requirements for the successful completion of each service/action to agreed terms of reference. • Prepare and maintain service and quality plans and tracks activities against the plan, provide regular and accurate reports. • Monitor costs, timescales and resources used, and take action where these deviate from agreed tolerances. Ensure that services/actions are implemented within these criteria. • Manage the change control procedure gaining agreement for revisions to the service from service sponsors. • Provide effective leadership for the service team ensuring that team members are motivated and constantly developing their skills and experience.
Education	• University degree[8], in a relevant subject.
Knowledge and skills	• Service management. • Usage of project management tools. If the *Office* decides in the future to introduce compulsory project management tool(s) the person will be obliged to use it. • In depth knowledge of the service's main aspects. • General knowledge on the other aspects touched by the service. • Usage of methods and techniques for reporting. • Ability to give presentations. • Ability to apply high quality standards to all tasks in hand, no matter how small and ensuring that nothing is overlooked. • Ability to participate in multi-lingual meetings, good communicator. • Capability of integration in an international/multi-cultural environment, rapid self-starting capability and experience in team working, understanding the needs, objectives and constraints of those in other disciplines and functions. • Leadership capability. • Ability to work under heavy work- and time pressure.
Experience	• Minimum 3 years experience in Service Management. • Minimum 2 years of experience in project management tools and methodology. • Proven experience with quality procedures.

---

[8] University degree is any first university degree delivered by a university, which gives an access to the relevant career requesting a university degree in the corresponding Member State.

Operational Support Agent: SUP-OAG

Nature of the tasks	• Provide operational support to users. • Assist and work together with users to contribute to the success of operations. • Produce the relevant documentation tracking operations and possible problems encountered. • Participate in testing new IT elements in the role as user. • Provide basic hands-on training for user. • Participation in meetings with the users.
Education	• University degree, in a relevant subject, or equivalent experience (4 years after finishing secondary education, this requirement shall be fulfilled in addition to the specific experience requirement as set out below).
Knowledge and skills	• Ability to participate in multi-lingual meetings, ease of communication is an asset. • Capability of integration in an international/multi-cultural environment and experience in team working are mandatory.
Experience	• Minimum 2 years experience in production support. • Experience in multi-client and multi-national environments.

Technical Support Agent: SUP-TAG

Nature of the tasks	• User support activities implying the ability to interact at a technical level with the IT systems in use. • Participate in testing new IT elements in the role as user. • Provide expertise and rapid integration procedures at IT level in a specific information systems domain. • Technical evaluations.
Education	• University degree, in a relevant subject, or equivalent experience (4 years after finishing secondary education, this requirement shall be fulfilled in addition to the specific experience requirement as set out below))
Knowledge and skills	• Ability to participate in multi-lingual meetings, good communicator. • Excellent knowledge concerning the technology used.
Experience	• Minimum 2 years in IT. • Minimum 2 years in production support.

Analyst of operations: ANA-OPE

Nature of the tasks	• Consultancy studies regarding the organisational aspects of deploying IT/IS. • Business process analysis and evaluation. • Provide expertise on integration of IT/IS into the business environment.
Education	• University degree, in a relevant subject.
Knowledge and skills	• Ability to participate in multi-lingual meetings, good communicator.
Experience	• Minimum 5 years experience in business analysis.

ANNEX 6.11.   **COMPANY FORM**

Company form

Tenderer [9]:

acting as :

☐ member of consortium (specify role …………………….………………………)

☐ main contractor

☐ subcontractor (specify role …………………….……………………)

Legal form of tenderer :

Date of registration :

Country of registration :

Registration number :

VAT number :

Registered address of tenderer :

Usual administrative address of tenderer :

Person(s) authorised to sign contracts (together or alone)[10] on behalf of the tenderer :
Surname, forename, title (e.g. Dr, Mr, Mrs, Ms), function (e.g. manager…).

Contact person for this call for tenders :
Surname, forename, title (e.g. Dr., Mr., Mme…), function (e.g. manager…), telephone number, fax number, address, e-mail.

---

[9] In case of subcontracting or consortium: please specify company name.

[10] Please explain or delete as appropriate.

Staff
Total number of technical staff in[11]   *2006:*   *2007:*   *2008:*
Employer-employee relationship of technical staff as of 1ˢᵗ of January 2008   *Employed on a regular base:*   *Freelance, temporary contracts, etc.:*

Dispersion of technical staff regarding different types of activities as of 1ˢᵗ of January 2008
      Operating   *:*
      System - and/or database e- and/or network administration   :
      Software development and/or maintenance   *:*
      Technical support   *:*
      Project management and/or quality control   *:*
      Technical studies and/or consultancy   *:*
      Other   *:*

Total number of non-technical staff (as of 1ˢᵗ of January) :   2006:   2007:   2008:

Dispersion of non-technical staff per category as of 1ˢᵗ of January 2008:
      Management   *:*
      Sales   *:*
      Administration   *:*

Staff turnover (in %)   *2005:*   *2006:*   *2007:*
Activity

Total number of technical staff <u>employed on a regular base by the tenderer in 2007</u> and invoiced for provision of
      Fixed price services based on a service level agreement   :
      Other fixed price services   *:*
      Time and means services   *:*

Total number of <u>other technical staff (freelance, temporary contracts, etc.) in 2007</u> invoiced for provision of
      Fixed price services based on a service level agreement   :
      Other fixed price services   *:*
      Time and means services   *:*

Current (as of 1ˢᵗ of January 2008) number of active accounts per business area
      Public sector   *:*
      Services section   *:*
      Industry   *:*
      Other   *:*

Dispersion (as of 1ˢᵗ of January) of active accounts per type of activity
      Study/analysis   *:*
      Software development and maintenance   *:*
      Technical support   *:*
      Other   *:*

---

[11] As of 1ˢᵗ January.

ANNEX 6.12. PARF

The project/activity reference form (PARF) **must** be used to give details about relevant projects and/or activities the tenderer wants to present as proof of experience.

Information:

1. Completing this form is mandatory. Only projects and/or activities references submitted by using this form will be evaluated.

2. Project/activity references have not to be out-dated, i.e. the finish date has to be after the 31st of December 2004.

3. On going project are acceptable as reference, but the tender can rely only on their executed part.

4. Framework contracts are acceptable as reference, but the tenderer can rely only on their executed part.

5. PARFs shall be relevant in term of volume and subject of this call for tenders (number of man-days / technologies / methodologies / tools).

6. PARF shall consist of 2 pages. Adding of supplementary pages is not permitted.

7. Minimum of 1 and a maximum of 5 PARFs are accepted.

Project/Activity Reference Form (page 1 of 2)

PARF n°: ……….

Project/Activity reference front page

Tenderer:

Project/Activity name:

Start date (mm/yy):   **Finish date** (mm/yy):   actual / planned

Client name: **Contact person 1**:   **Tel.**:

Contact person 2:   **Tel.**:

Principal contractor for this project (check the appropriate):
☐ Main tenderer
☐ Consortium leader
☐ Consortium member
☐ Subcontractor

Proportion of effort provided during project duration / its executed part: …….

Principal location for this project:
☐ Tenderer's premises
☐ Client's premises
☐ other: _____

Number of total and tenderer's own technical staff involved, in man-days, during the project duration / its executed part, by profile:

Profile(s)	Total number of man-days	Number of man-days provided by the tenderer

Staff references (Name, profile, CV-Forms number):

Project/Activity Reference Form (page 2 of 2)

PARF n°: ……….

Project/Activity reference description page

Technical environment (methodologies / tools / OS / hardware / software):

(please refer to the categories specified on the *CV expertise pages*):[12]

Description of the project/activity:

---

[12] Proposed PARFs shall covered methodologies / tools / OS / hardware / software, which are specified at the *CV expertise page*

ANNEX 6.13. BEST PRACTICE DOCUMENTS

In order to prove its technical capacity with respect to the service requested by the Publications Office and the project owner, each company should provide extracts of documentation, which have been produced in order to accomplish similar tasks as the ones asked for by the Publications Office and the project owner. This means that the tenderer establishes extracts of real existing documentation. For each type of documentation, it is expected that a typical example will be provided. **The table of contents and a sample of the contents of about 5 to 10 pages should be presented.**

The designation used for the different types of documentation may differ from the company's code of practice. In this case, the functional equivalent should be forwarded.

The Publications Office and the project owner reserve the right to consult the complete document, if necessary. The documents handed in and any other information obtained during this call for tender are considered confidential by the Publications Office and the project owner.

List of best practice documents

End-user documentation
- **DOC-USE-MAN:** User manual. Document instructing the user on how to use a specific system.

Technical documentation
- **DOC-INS-MAN:** Installation manual. Documentation describing the installation procedure for an information system.

- **DOC-EXP-OPE:** Operation manual. Documentation including all information to ensure the daily operation of an information system.

Project control
- **DOC-PRO-MAN:** Project management document. Set of documents used to manage the project (planning, project meeting protocol...).

- **DOC-QUA-PLA:** Quality assurance plan. Document specifying the means, procedures and resources guaranteeing the quality of the service including the deliverables to be produced.

Consulting
- **DOC-TEC-STU:** Technical study. Study concerning a technical issue in relation to information technology.

Code	Type of documentation
DOC-USE-MAN	User manual
DOC-INS-MAN	Installation manual
DOC-OPE-MAN	Operation manual
DOC-PRO-MAN	Project management
DOC-QUA-PLA	Quality assurance plan
DOC-TEC-STU	Technical study

ANNEX 6.14. QUALITY EXPECTATIONS AND SERVICE PROPOSALS

The tenderer's bid must include the three documents described hereafter.

These documents define relevant aspects of the future cooperation between the tenderer and the Publications Office. The proposals must be in accordance with the terms of the technical specifications and the draft contract.

It is very important to take following remarks into account:

- User support for the integrated SEI-BUD/AMD/CR system concerns the support of users preparing the publication of the EU budget via an XML editorial system based on the current market's standard technologies, like C++, XML, XSLT, JAVA (servlets and applets), Jboss application server, Apache Tomcat Web server, Unicode character encoding, Oracle databases, XML Editor (XMetal), FTP and HTTP protocols, and Microsoft's Office XP platform and its APIs (in particular Word XP, for which some specific DLLs have been programmed).

- The contractor must have an excellent in-depth knowledge in the area of user support and should be able to perfectly and rapidly to understand all aspects of the organisational and operating business environment, as well as of the technical and functional specifications of the IT system.

- The contractor should also be able to work under heavy time pressure (because the Budget's production delays are very short and the system is constantly evolving in order to fulfil new production requirements), have an excellent reactivity, a proactive behaviour and fully master quality standards (such as ISO 9001 or equivalent).

A constant and efficient reporting to the customer is also requested.

Tenderer's approach to quality assurance and to user support

The tenderer must provide a document of a maximum of 20 A4 pages describing the company's approach in order to ensure and to maintain a very high level of quality concerning the services related to the subject of this call for tender.

The document should cover at least the following topics:

- **Overview of the company's quality assurance and service management approach**: procedures, standards, controlling, reporting, etc. The tenderer shall indicate how he is going to apply the above-mentioned elements with regards to the services requested under this call for tenders.

- **Overview of the user support services delivered in general by the company** (including methods and tools applied) and especially of the on-site user support services. The tenderer shall indicate how he is going to apply the above-mentioned elements with regards to the services requested under this call for tenders.

The tenderer's attention is drawn to the fact that **the document should reflect real practice and not intentions or theoretical reflections**. Example documents to illustrate the description may be annexed, nevertheless they will be included in the pages limits.

If the tenderer has obtained a certification of his quality procedures conforming to the EN29000 (ISO 9000) series of quality standards or equivalent standards, he has to enclose a copy of the certificate. The tenderer must specify the year and the country for which the accreditation has been obtained, state the name of the certification body, and specify if there have been any follow-up audits.

Proposal for a take-over procedure

The tenderer has to provide a proposal covering the start-up phase of the contract. The proposal has to include the familiarisation of the tenderer's staff with the activities to be supported, the organisational environments where the support is to be supplied, with any relevant IT system and documentation. The set up of an appropriate environment on the contractor's premises shall be included in the proposal. In this context the tenderer's staff means the members of the staff directly concerned by the contract.

The proposal has to include a list of all tasks foreseen by the tenderer and total effort required. For each task a description and the estimated effort in man-days have to be indicated.

In order to ensure a valid comparison of the different offers, the proposal should be limited to a start-up phase of two month.

The proposal is indicative. The Publications Office has no obligation to issue an order in conformity with the tenderer's proposal in case of award of the contract, in particular with regard to the situation when the Contract is awarded to the current contractor.

The tenderer's attention is drawn to the fact that **the document should reflect real practice and not intentions or theoretical reflections**

Proposal for a hand-over procedure

The tenderer has to provide a proposal covering the hand-over phase of the contract. The proposal has to include knowledge sharing, documentation, procedures and plans for training.

The proposal has to include a list of all tasks foreseen by the tenderer and total effort required. For each task a description and the estimated effort in man-days have to be indicated.

In order to ensure a valid comparison of the different offers, the proposal should be limited to a start-up phase of two month.

The tenderer's attention is drawn to the fact that **the document should reflect real practice and not intentions or theoretical reflections**

Draft Service Level Agreement

As a key element of his offer, the tenderer has to deliver a proposal in form of a service level agreement (SLA) which details the measures foreseen on his side to guarantee a permanent high level of availability, competence and service quality.

This proposal should be elaborated in the form of a draft service level agreement. It should contain and cover the following topics:

- Organisation of the service

    Team

    > Description of the internal organisation and the procedures the tenderer will use and/or set up in order to deliver the requested service. For each person having a role mentioned in the tenderer's proposal (for example on site support operational agent, service manager, etc), it should be indicated who will fulfil this role. Possible back-up persons should be mentioned.

    Request handling

    > The proposal should define the procedures foreseen to handle different types of requests, which may arise. Examples of possible requests include demands for

operational and technical assistance and support, demands for operational analyses.

Methods and tools

Common or proprietary methods and tools applied by the tenderer in order to deliver the requested service should be indicated.

Knowledge transfer

The procedure foreseen to assure the knowledge transfer in case of replacement of personnel has to be indicated.

Service performance indicators

The tenderer must also indicate the key performance indicators foreseen to measure effective service delivery.

Quality of the service

The tenderer has to expose his approach to assure and to preserve a high quality of the requested service.

Infrastructure

Information has to be provided concerning the tenderer's internal technical infrastructure including an outline of the tenderer's policy to adapt this infrastructure according to the technological evolution.

Staff's competences

Another important aspect is the description of the measures foreseen to assure and to preserve a high level of competence of the tenderer's staff concerned by the contract with respect to technical evolution of the domain.

- Activity management procedures

    The tenderer has to expose his approach of project management and control foreseen in order to realise user support services in the scope of this contract.

    The challenge is to produce high-quality services in the predefined time-scale and for a reasonable price.

    The description must contain the definition of the procedures the tenderer foresees to handle the different types of changes that may occur during the realisation of a service.

The draft service level agreement cannot overrule the terms and conditions defined by the contract and by the technical specifications.

The tenderer's proposal for a draft service level agreement is considered as a formal engagement. The contractor is obliged to implement and to follow the foreseen service elements and to apply the proposed procedures. Both sides may introduce change requests in order to adapt the service level agreement. A change request has to be approved by either party. Every party has the right to reject a change request.

The tenderer's attention is drawn to the fact that **real draft SLA shall be provided**, not the information which elements he is going to include during its preparation, or theoretical reflections concerning the SLA.

ANNEX 6.15   TECHNICAL ENVIRONMENT AND STANDARD OEPRATING PROCEDURES OF THE PUBLICATIONS OFFICE

Purpose of the document

This document gives a general overview of the technical environment of the Publications Office - hereafter referred to as the Office – as well as some general rules linked to the technical organisation of the Office and applicable to all applications hosted at the Office.

Disclaimer

The information contained in this annex reflects the situation in force at the Office at the time of publishing of this document.

It does not commit the Office for the future evolution of its data processing and networking environments. It is mainly given here for clarity reasons. Changes can happen at any time and without any prior notification from the Office.

However, the environment to take into consideration for a specific project - especially the exact software versions - will be fixed at the very beginning of the project. This also includes the rules to apply by both parties in order to modify this environment.

The Office strongly advises the contractor/supplier to ask for clarification in case of doubt about the contents of this document. A meeting will anyway take place at the very beginning of the project to answer questions and, to a certain extent, examples of the expected documents could be provided.

As for the current Call for Tender, 3 units will be involved at different levels and stages:

–   **Production Coordination of the Official Journal (A2)**: it is the unit owning the **SEI-BUD/AMD/CR** systems. Its Head of Unit chairs the CTI meetings acting as the Office Representative for the different EU Institutions using both systems. The Project Owner is also responsible or appointing a Service Manager who will be the main point of contact for the users, R4 and R5. In the specific case of SEI-BUD, this role is covered by the SEI-BUD Support group (OPOCE SEIBUD SUPPORT) who handles all the daily production activities, including user's support, application accesses, production issues, collection of user's needs when necessary, testing of software deliveries, organization of passing into production any given patch and so on. All user communications are made by using a functional mailbox.

–   **IT Projects Unit (R5 – Dir R)**: is the unit responsible for managing the contracts that will be awarded to the tenderers of the present Call For Tender. The Head of Unit will appoint a Project Leader. The R5 Project Leader will be the main point of contact for all the service providers of the different lots for any contact-related matters. All the financial aspects of the contract will be handled by the Project Leader, including accepting financial offers and control of budgetary matters.

–   **Infrastructures (R4 - Dir R)**: is the unit responsible for the server farm, network, communications, storage, test and production environments, security policies and any other technical infrastructure necessary for hosting the systems owned by the Publications Office. R4 also manages the different interfaces with other systems, including those external ones up to the drop-off point.

At the present moment, every software package is delivered to R5 who, in turn, sends a formal request to R4 to install it in the test environment. R4 performs the installation and advises R5 back when it is complete. R5 then informs the Service Manager or the users to start testing. When a package has been tested clean, the Service Manager requests the installation in production, which is arranged between R4 and R5 according to the users needs.

There is a tool to manage the software deliveries, the installation on test and the subsequent installation on production. It is a web-based application (Jira based) and it basically consists of two types of requests: DMT: Request to Install on Test and DMP: Request to Install on Production. R5 will be responsible for introducing the requests (although handling DMPs may be eventually transferred to the Service Manager) in the system. R4 is responsible for handling all the requests. A software delivery can be rejected by R4 if some important information (release notes, installation instructions…) is missing.

SEI-BUD progress meetings are held every 2 weeks. During the progress meetings all ongoing issues are reviewed. Participation of all service providers, A2, R4 and R5 is compulsory. Other informal or more specific meetings are held as and when needed.

Technical environment of the Office

a) Introduction

The Office makes a distinction between systems used for office automation and administrative information systems on the one hand and systems used for production on the other hand. The quality of service and the constraints of availability are more tying on the production systems, since external partners with contractual agreements are already in place. Another important difference between these two types of information systems is linked to their architecture. The production information systems are usually spread over several servers and include complex production chains with processing on all nodes, whereas administrative and office automation systems are simpler and frequently use a one-to-one relationship between a server and its clients.

However, the same basic infrastructure is made available for both types of information systems, as described hereafter.

The Office recently deployed a DRP (Disaster Recovery Plan) making use of 2 different geographical sites and based on the following principles:

- o The DRP is conform to the Contingency Plan of the Office

- o The data replication between the 2 sites is synchronous

- o Both sites are hosting "active" applications

Unix is the recommended environment for production systems while office automation systems are normally hosted on Windows servers.

The Office fosters professional methods of managing systems and therefore implements monitoring tools for critical systems and produces statistics on the use of resources and on the quality of service provided.

The Office promotes the implementation of the three tiers architecture, using thin clients, application servers and mainly Oracle databases because of performance, scalability and flexibility reasons.

The Office also promotes the virtualisation of services and the use of abstraction layers in order to increase flexibility. This implies in particular that:

- • All web-based applications should allow the deployment and the correct operation behind any http reverse proxy chain.

- All applications should allow virtual hosting i.e. the binding of the application to only some of the IP addresses/hostnames of a multihomed server
- All applications should allow easy integration in the DRP of the Office

The Office's core business applications are tested on dedicated machines, before the production is spread over several production servers tightly interconnected.

On the hardware side, the technical data processing infrastructure is currently made of several components that can be grouped into the following categories:

- Network and telephone
- Storage and backup systems
- Workstations and peripherals
- Unix servers
- Windows servers

The hardware/software architecture to use within the framework of a project is generally proposed by the contractor/supplier. However, the Office will always first validate this architecture in order to evaluate the consistency of the proposal with the environment of the Office.

b) Network and telecommunications

The Office's staff is spread over several buildings. The Office's buildings use a unique cabling system for the telephone as well as for the TCP/IP network for data. This structured cabling system uses copper connections category 5 (or higher) to desktop computer, and optical fibre connections for backbones and to high-end servers with a throughput up to 1 Gbps. The patching mechanism relies on the AT&T 110 standard and the RJ45 standard. Both networks deal with about 1000 telephones and 1000 Ethernet devices, and will continue to grow with potential new sites.

The telephone system is based on three Siemens Hicom telephone exchanges, carrying out all dial-up services, regular dial-up connections to contractors, and even backup connections for leased lines. The Office telephone network is part of the European Commission telephone network, but it's fully managed by the Office network team. Videoconferencing is also made available to the end-user.

The Wide Area and the Metropolitan Area Networks (between buildings) use leased lines, either over dark fiber high speed connections (1 Gbps) or over 2 Mbps connections to the PSTN[13]. IP multiplexers are deployed to share high speed lines between voice and data.

The following picture shows the interconnection of the TCP/IP network of the Office.

---

[13] Public Switched Telephone Network
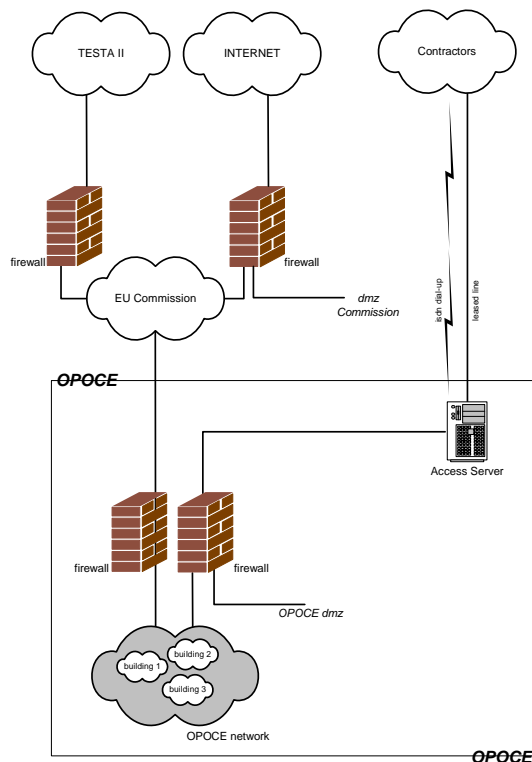
In particular, connections with the contractors working for the Office use 2 Mbps leased lines or the EURO ISDN network for lower speed data transmission. These dial-up services are available through Basic Rate or Primary Rate interfaces of a TCP/IP router. The ISDN dialup service is in many installations also serving as a backup solution for the leased line connection.

The most common application for the Office remote access service is file transfer (FTP). Files are transferred via a FTP gateway installed in the Office DMZ.

The TCP/IP network is also interconnected with the network of the European Commission that is connected to the Internet and to the TESTA II network (Trans-European Services for Telematics between Administrations). The TESTA II network allows the Office to establish private connections with most of the national Administrations of the EU Member States and most of the EU Institutions. FTPStore is a service offered by DIGIT/Commission for sending and receiving files over the public Internet or via the TESTA network. FTPStore is not offering any notification or monitoring of file movements.

All accesses that make use of the network of the European Commission (e.g. Internet accesses) have to comply with the general security rules of the Commission. This also implies that all sub-mentioned networks are interconnected through stateful inspection firewalls.

Three Windows servers running the MRS software offer fax services and are part of automatic production chains in the daily publishing process. The fax servers are running MRS of Cycos. These systems also integrate the voice mail system with the Office e-mail server in the computer telephone integration.

c) Storage and backup systems

The Office has decided to strengthen the quality and reliability of the data by centralising the administration of the data storage service on storage systems such as EMC² (mainly for production systems) and Sun Microsystems T3 (mainly for non-production systems).

Generally raid1 is used for production systems while raid5 is used for non-production systems. Around 20 Terabytes of data are currently made available to end-users and applications. This amount is steadily increasing as new users arrive and as more usage of electronic documents is spread in the Office; the increase rate is about 30%/year.

The backup system is currently under revision to implement an improved backup strategy based on LAN-less and server-less procedures used in a SAN[14] context.

The Office will focus its storage and backup strategy on:

- Online storage consolidation (SAN)
- Storage on demand
- Advanced centralised backup
- Archiving

The current backup policy and procedures are described in the **Annex 6.16.1**.

d) Workstations and peripherals

In terms of software, the standard configuration for the workstations is the following:

Type	Product/Version
Operating system	MS Windows XP SP2
Office automation suite	MS Office 2003
Web browser	MS Internet Explorer 6 SP2 (with 128 bits encryption)
XML tools	XMLSpy (development)
	XMetal (Authoring)
Reporting tools	Business Objects 5.1 – 6.x
Mail client	MS Outlook 2003
Connection middlewares and runtimes	SQL*Net 2.3.4
	NET 8.1.7 - NET 9.x
	ODBC
Anti-virus	McAfee VirusScan 8.1

Some other local productivity tools (Visio, Microsoft Project...) could also be found on the workstations as well as more specialised tools which are used for publishing (Adobe Photoshop, QuarkXPress ...).

The Office can sometimes have to apply hotfixes to ALL workstations without any prior notification if deemed necessary (e.g. for security reasons).

A small number of workstations are Unix-based or Macintosh-based (for DTP).

In terms of hardware, the workstations are ranging from Pentium III 850 MHz to Pentium 4 2.5 GHz with 128 to 512 MB of memory.

Various types of peripheral equipment are also installed, such as local and remote printers, faxes, scanners, CD burners, etc.

All workstations are clients of the Landesk Workstation Manager server, which allows remote control and software/hardware inventory.

Local data on the workstations is not backed up and users are therefore encouraged to use only shared resources for storing valuable/persistent information.

e) Unix servers

The Office computing centre hosts more than 40 Sun Microsystems servers mainly based on the Sun Fire platform, ranging from the SF V120 up to the SF25000. This also includes SF3800, SF4800 and SF6800 servers. The CPU's are mainly Ultra Sparc III+ at 1200 MHz.

---

[14] Storage Area Network

In terms of software, the following table gives an overview of the main products used:

Type	Product/Version installed	Product/Version recommended for all new developments
Operating system	Sun Solaris 2.6 - 8 – 9 and 10	Solaris 10
DBMS	Oracle from 8.0.5 to 10g Rel 2	Oracle 10g Rel 2 Character set: AL32UTF8
Text retrieval	Oracle Intermedia/Context	Oracle Intermedia/Context
Web servers	Sun ONE Web Server Apache 2.x	Sun ONE Web Server 6.1 Apache 2.x
Application servers	ColdFusion MX6.1 Oracle iAS 9.0.2 JBoss 2.4 Tomcat 4.x	ColdFusion MX6.1 Tomcat 4.x/5.x BEA WebLogic 9.2[15]
Internet portal	Eversuite 3.5	Eversuite 3.7 or above
ERP	Oracle Financials 11i	Oracle Financials 11i
Programming languages	Java 1.4.x/1.5.x	Java 1.5.x
Scripting languages	Perl 5.6 sh/ksh	Perl 5.8 sh/ksh
Workflow/Document management systems	OT Livelink 9.1 SP3 DORIS 3.51SP3 Documentum Content Svr 5.2.5 (incl CRS/DTS module)	Documentum Content Svr 5.3 or above
Reporting tools	Business Object WebI 2.7 (hosted at DIGIT/DC)	Business Object WebI 2.7 (hosted at DIGIT/DC)
XML related tools	XSV (XSML Schema) RXP (DTD) SAXON (XSLT)	XSV (XSML Schema) RXP (DTD) SAXON (XSLT)
Middelware	WOOD[16]	WOOD[17]
Monitoring tools	BigBrother 1.9 TeamQuest	N/A
Backup	Networker 7.2	N/A

More than 70 Oracle instances (production + test) are currently installed and about 100 web servers are installed.

Monitoring and reporting tools have been built around small third-party products and in-house developments.

For critical applications, Sun Cluster installations have been built.

In general, application processes exchange data either by mail or by FTP using a dedicated and in-house developed proprietary tool (WOOD – *Worldwide Object Dispatcher*).

Besides the exchange of data (files) between processes – eventually running on distinct servers – this tool allows the triggering of processes based on the arrival of a file in a predefined directory. The tool is written in Perl and uses normally FTP as underlying protocol but could theoretically use whatever standard file transfer protocol (e.g. scp). Due to the asynchronous character of this tool, the WOOD cannot guarantee the eventual sequencing of the data exchanged. If sequencing is an issue, it should be managed at application level.

The Office strongly advises the contractor/supplier to ask for practical implementation guidelines before to start any development that could require integration/interaction with the WOOD.

---

[15] The use of WebLogic should be justified and should be validated by the Office
[16] proprietary tool based on Perl
[17] proprietary tool based on Perl

The standard file system organization (directory structure) for the Unix servers is described in the **Annex 6.16.2.** Direct dependencies between servers (e.g. NFS mounts, DB links, ...) are generally prohibited.

f) Windows servers

The Office computing centre hosts about 60 MS Windows servers in a Windows 2003 Active Directory domain. Some servers are virtual machines running on VMware. All new physical servers are 2 or 4 CPU servers. Some are installed in cluster mode (for critical data and processing).

Besides standard functions like user authentication, roaming profiles, home directories, shared drives (public/group) and print services that are spread over several servers in order to improve reliability and performance, the Windows servers also host services like email, fax gateways, standalone applications and other small information systems (in-house developments, automated tasks using Microsoft Office products, small SQL server DB, IIS servers with Coldfusion, etc.).

Type	Product/Version installed	Product/Version recommended for all new developments
Operating system	MS Windows 2000 Server SP4 MS Windows 2003 Server standard edition/enterprise edition	MS Windows 2003 Server standard edition/enterprise edition
OS virtual servers	VMware ESX Server 2.51 – 3	VMware ESX Server 3
DBMS	MS SQL Server 2000	MS SQL Server 2000
Web servers	IIS 5 – 6	IIS 6
Application servers	ColdFusion MX6.1 -7	ColdFusion MX7
Programming languages	Visual Basic .Net	Visual Basic .Net
Mail servers	MS Exchange 2003	MS Exchange 2003
Reporting tools	Business Objects WebI 2.7	N/A
Backup	Networker 7.2	N/A
Anti-virus	McAfee VirusScan 7.1 Trend Micro Scan Mail	N/A

For business critical reasons, Windows clusters host the Exchange server with about 1000 mailboxes, the shared drives and the disk spaces accessible to all end-users. All production data is stored on the SAN.

Regarding security on the server side, anti-virus checking is performed on the Microsoft Exchange mailboxes and regularly on file systems.

Standard operating procedures

a) Management of software releases, bug reports and change requests

Within his quality plan, the contractor/supplier must define a detailed and unambiguous numbering scheme for the software deliveries.

The contractor/supplier must also propose procedures for the management of bug reports and change requests. These procedures must allow to unambiguously identify every bug and every change request.

b) *Software deliveries*

The contractor/supplier has to include in any software delivery submitted to the Office a **release note** (in electronic format) containing following information:

- o Project/application name concerned.

- o Unambiguous identification[18] of the version of the delivered software.

- o Version of the project/application on which the delivered package has to be installed

- o Unambiguous identification[19] of the bugs/change requests concerned (if applicable i.e. mainly in case of patch)

- o Approximate uncompressed size of the delivery

- o Reference to the installation instructions (as defined in the annex *"Technical documentation guidelines"*)

- o The software will be delivered in a standard archive format and with compression (tar, gzip, compress, zip, ...)

- o The compressed archive files will be created using relative path in order to allow decompression in whatever directory.

- o The delivery will include all the information necessary to check that acceptance testing has been performed by the contractor/supplier BEFORE delivering the software. This includes :

- o Test procedures/test cases executed

- o Test data used

- o Test results (execution report)

c) *Installations*

In principle, for each application, two distinct environments are set up at the Office's premises: a **test environment** and a **production environment**. This does not preclude the fact that several applications can share the same production or test environment.

The hardware installations (including OS installations) remain the exclusive prerogative of the Office.

No software installation in the production environment will be allowed without prior validation in the test environment.

No development environment will be set up at the Office's premises. It remains the responsibility of the contractor/supplier to make sure that software deliveries will run correctly in the Office's technical environment.

Any software installation (including patch installations) requires the software delivery to be in accordance with the rules mentioned in the previous paragraph (software deliveries).

The minimal contents of the **Installation Instructions** are described in the annex *"Technical documentation guidelines"*.

The contractor/supplier is free to add any information deemed useful.

The installation instructions must offer the opportunity to arbitrary and independently choose the installation, execution and data directories.

All software installations are normally done by the Office's staff with the assistance/support of the contractor/supplier, but depending on the complexity of the installation to perform (as evaluated by

---

[18] In accordance with the procedure defined in the approved quality plan
[19] In accordance with the procedure defined in the approved quality plan

the Office), either it does not require the support of the contractor/supplier or the support of the contractor/supplier is formally required.

A script allowing checking the availability and the response time of the application - as seen by the end-user – must be delivered. The triggering mechanism of this script must allow its easy integration in whatever integrated monitoring system.

A detailed procedure allowing copying the production environment to a test environment must be delivered. This procedure must clearly indicate the parameters to modify in order to have a fully operational system in the test environment after completion of the copy procedure. The procedure must require as few manual interventions as possible.

In order to ensure smooth installations and to evaluate the need for assistance/support, the installation instructions will be - unless otherwise stated - delivered to the Office, 5 days before the official software delivery date i.e. 5 days before the start of the official installation period.

The Office strongly advice the contractor/supplier – when possible (e.g. web application) – to setup as soon as possible a remote access to one of his environments in order to give the Office's staff the opportunity to have a first impression of the application being developed before any installation at the Office's premises.

d) Technical tests

Prior to be put in production and prior to any official acceptance, the Office will conduct specific technical tests in order to evaluate the *"manageability readiness"* of the application.

The technical tests will be performed by the Office's staff in close collaboration with the contractor/supplier and based on test procedures/test cases prepared by the contractor/supplier.

The contractor/supplier will prepare a report of the execution of the technical tests. He will deliver this report to the Office, together with the test data used. The test procedures/test cases will first be validated by the Office.

The test procedures/test cases must allow validating at least following elements:

- Application start and stop procedure
- Application backup and restore procedure (including consistency checks after restore)
- Disk space usage
- Localization of the log files
- Operational periodic tasks (data reorganization, purging, archiving, indexing...)
- Correct working of the interfaces
- Virtualization capabilities (application ability to move from one server to another one) in a Disaster Recovery Plan context

Not only the effectiveness of the procedures but also their efficiency (duration) must be tested. Their impact on the overall performance of the system must be evaluated too.

The technical tests must be conducted with a significant amount of data in order to evaluate the impact of volumes on performance, efficiency and effectiveness.

The test procedures/test cases must refer to procedures described in the System Operation Manual in order to validate this manual.

The minimal contents of the **System Operation Manual** are described in the annex *"Technical documentation guidelines"*.

The contractor/supplier is free to add any information deemed useful.

The contractor/supplier will foresee in the planning of the project a dedicated period of time for the execution of technical tests.

e) Access to the Office's environment

No direct access (telnet, ftp...) to the Office's environment (production or test) will be granted to the contractor/supplier.

Specific interfaces (e.g. Web/CGI) have to be developed for the administration of the application (e.g. periodic follow-up) and/or the production follow-up. Especially the access to interfaces (data exchange directories) must be controlled by the application in order to validate the contents of the data exchanged and to allow the "replay" of data transfers.

Annex 6.15.1. Current backup policy and procedures

1. Categories of backup jobs

The following backup jobs are distinguished:

- full backup: backup of all data.

- level backup (differential backup): backup of all data changes since the last lower level backup (full backup corresponds to level 0). Only one level is currently defined. Thus, level backups are always performed with respect to a full backup.

- incremental backup: backup of data changed since the last backup, independently of its type.

2. Backup policy:

- All Unix and Windows servers are clients of one Unix central backup server running Legato Networker. This server stores the backup sets on one tape library. This library is able to handle up to 1200 tapes and is connected to the SAN.

- The jobs are scheduled between 8 p.m. and 2:30 a.m. The effective backup might start only after the scheduled pre-processing jobs (e.g. database snapshot) have been finished.

- Full backup jobs are generally run once per week and are distributed between all days of the week.

- Level jobs (i.e. differential jobs) are run 4 times per week between Monday and Friday every day the full backup job is NOT run.

- Incremental jobs are run once a day, except the day of full backup.

- The browse policy (direct access to file and directory information of the backuped file systems) and the retention policy are generally set to 3 months.

- Software compression is used on the client.

- Hardware compression is used at tape device level.

- No separation is made between full, level (differential) and incremental job tapes.

- The backup tapes remain in the tape library. The reusability of these tapes is controlled by the software.

- The tapes are cloned.

- Cloned tapes are removed regularly by the computer center operators and placed in the safe.

- The backup software provides appropriate features to assure that the data of a tape volume can be safely overwritten.

3. Backup of Oracle databases:

One or a combination of the following techniques is used:

- **Logical database backup:** Oracle export dump files are generated while the database is in restricted access mode. These files are written on the file system of the corresponding servers. The database is then stopped and backups of the server file systems are made within the global backup framework.

- **Physical cold backup:** The database is stopped and backups of the server file systems are made within the global backup framework.

- **Physical hot backup:** An open database backup is done (alter tablespace ... begin backup ; alter tablespace ... end backup).

- **RMAN** (oracle recovery manager): All standard features of RMAN are used.
- **"Freeze"/Snapshot techniques:** In order to limit the unavailability of the database during the physical cold backup, the database is stopped only during the time needed to make a "freeze" or a snapshot of the file systems hosting the database. The "freeze" or the snapshot is then available for tape backup or for restore purposes.
  - ➢ A **snapshot** consists in attaching an additional mirror volume for the desired directories and to make a synchronisation between the additional mirror and the mirrored volume.
  - ➢ A **"Freeze"** consists in keeping the state of a file system at the given "Freeze" time by means of a second file system with exactly the same directory structure. Prior to any modification of the "frozen" file system, the unmodified data is copied to the second file system. By combining both file systems, the "Frozen" state is always available.

4. Implementation:

It is the responsibility of the Office to define the objectives to reach in terms of availability/unavailability of the application.

Based on these requirements, the contractor/supplier must define the backup procedures to implement in order to fulfil the requirements. Ideally, the contractor/supplier must base these backup procedures on techniques the Office's staff is familiar with (see contents of this appendix).

If the wishes of the Office in terms of availability cannot be satisfied with techniques the Office's staff is familiar with, the contractor/supplier must provide a full description of the procedures and techniques to use so that the implementation by the Office's staff could happen smoothly.

Annex 6.15.2 Standard file system organization on Unix systems (directory structure)

In order to ease the co-existence of applications on the same server and to ease the potential move of an application to another server, applications are generally installed under **/applications/*application_name*/** where **application_name** refers to the name of the application.

This level is then subdivided into:

- **/applications/*application_name*/users** which is itself subdivided into:

  o **/applications/*application_name*/users/system**: directory simulating the root directory for the application. Specific products used by the application are installed here (e.g. the web server is installed under /applications/*application_name*/users/system/apache/, the application server is installed under /applications/*application_name*/users/system/tomcat/).

  o **/applications/*application_name*/users/oracle**: Oracle application, oracle environment, and oracle admin directory.

  o one or more directories **/applications/*application_name*/users/*user_name***: home directories of the users *user_name* used by the application. These directories are linked to **/home/*user_name***. Generally, there is only one directory **/applications/*application_name*/users/*user_name*** and **user_name** is identical to *application_name*.

- **/applications/*application_name*/xchange**: root of interfaces (in case of exchange of data with remote applications). The following specific structure is used:

  o **/applications/application_name/xchange/remote_application_x/(sublevel if necessary)/in** for **incoming data** and

  o **/applications/application_name/xchange/remote_application_x/(sublevel if necessary)/out** for **outgoing data**

  where **application_name** refers to the name of the application and **remote_application_x** refers to the name of the remote application.

  e.g. /applications/eub/xchange/eudor/in is used for the data flow exchange from eudor to eub.

  /applications/eub/xchange/gescom/gcb/out is used for the data flow exchange from eub to the gcb part of gescom.

- **/applications/*application_name*/oradata**: Oracle datafiles.

- **/applications/*application_name*/oraexp**: Oracle exports

- **/applications/*application_name*/oralog**: Oracle online archive logs.

Deviations from this description are possible but the Office must first validate the deviations.

Annex 6.15 Technical environment and standard operating procedures of the Publications Office

```
/applications
 |
 -- /application_name
    |
    -- /users
    |   |
    |   -- /system (to install by Publications Office)
    |   |   |
    |   |   -- /init.d                                      Start/stop scripts
    |   |   |
    |   |   -- /product_1 (e.g Tomcat - Apache - ...)
    |   |   |
    |   |   -- /...
    |   |   |
    |   |   -- /product_n
    |   |
    |   -- /oracle                                          oracle binaries
    |   |
    |   -- /user_name_1  (link to /home/user_name_1)
    |   |
    |   -- /...          (if required - link to /home/...)
    |   |
    |   -- /user_name_n (if required - link to /home/user_name_n)
    |
    -- /oradata                                             oracle datafiles
    |
    -- /oraexp   (if required)                              oracle export
    |
    -- /oralog                                              oracle logs
    |
    -- /data_1   (e.g. Documentum filestore)                appli data
    |
    -- /data_... (if required)                              appli data
    |
    -- /data_n   (if required)                              appli data
    |
    -- /xchange
        |
        -- /remote_appli_1
        |   |
        |   -- /in
        |   |
        |   -- /out
        |
        -- ... other interfaces ...

(The names of the different filesystems are in bold)
```

Annex 6.15.3 Technical documentation guidelines of the Publications Office

Purpose of the document

This document gives a general overview of the technical documentation that should be delivered within the scope of every software development project of the Publications Office.

This represents the minimal contents of the specified documents; the contractor/supplier is free to add any information deemed useful.

Installation Instructions

A. Pre-requisites:

The installation instructions describe in detail the hardware configuration (agreed at the beginning of the project) and the software configuration that has to be in place prior to start the installation.

- Minimum hardware system requirements (e.g.: CPU-Memory-disk space-network throughput-...) in compliance with Opoce standards at the following levels:
    - server(s)
    - clients
    - network
- Software system requirements (version-patches-specific configuration parameters-required modules...) at following levels:
    - Operating system
    - Tools
    - Software (packages - other applications - ...); especially for Oracle, the required supplementary modules. In case of patch/service pack, the exact version of the concerned application that has to be in place before starting the installation should be specified

B. Application interfaces/data flows:

The installation instructions should give an "end-to-end" description of each data flow.

For each flow, the following elements should be described:

- origin (e.g. server/directory)
- destination (e.g. server/directory)
- used protocols (incl userID/password used if applicable)
- volume of data exchanged
- scheduling/triggering
- description of the pre- or post-processing if applicable
- error handling (including users/distribution lists to inform)

C. System installation:

i. Preparation:

- Description of the tree structure of the installed files
- List of all compressed and uncompressed files included in the delivery

- List of file systems to create with sizing

- Description of the logical and physical layout of the Oracle Database (if any), Taking into account the following rules:

  - Each database schema must contain at least two tablespaces, one for the data and one for the indexes (e.g. if there are 2 oracle schemas, 4 tablespaces are created: 2 tablespaces for the data and 2 for the indexes). Extra tablespaces can be foreseen to address special needs (e.g. in case of partitioning).

  - For each tablespace, the initial size of the corresponding datafile(s) must be specified.

- List of specific users/groups/roles to create and, for the DB, the privileges to grant (the DBA role is not allowed).

  Generally, for web-based applications, the user(s) accessing the DB-objects through the web interface are not owner of the objects in order to avoid the accidental deletion of objects. This implies that the required privileges should be granted to the user(s) accessing the DB-objects.

- Environment variables to define; variables will be used in order to avoid hard-coding in the code or in the scripts; the name of the variables will be significant.

ii. *Installation procedure:*

- The configuration parameters should be grouped in a minimum of configuration files. One annex of the installation instructions should list all configuration parameters and the specific values used for the installation in the Office's environment.

- The installation procedure should be organised in clearly identified steps. Each step should have: a sequence number, an application level description and technical comments

- The installation procedure should be based on the execution of scripts launching the effective commands to execute rather than on sequences of commands to type in order to avoid typing or "cut and paste" mistakes.

- Each step should offer a rollback functionality

- The installation procedure should produce an installation log file

- The installation procedure should be able to cope with the standard configuration of the host system.

- It should offer the opportunity for a free and independent choice of the installation, execution and data directories.

- Oracle scripts, should appropriately use the "commit" statement, together with the "whenever sqlerror exit rollback" and "whenever oserror exit rollback" statements, in order to keep application consistency in case of errors.

- Ideally, all scripts needed to build the elements of the DB (i.e. creation of the tablespaces, tables, index, triggers, users and roles including the privileges to grant, ...) and to load the data should be delivered. An alternative is to deliver a script for the creation of the tablespaces and the users and the export (dumps) of all concerned users.

iii. *Post-installation:*

- List of all files modified during the installation.

- Location of the configuration files; list of useful parameters; if necessary, global configuration files will be used in order to avoid multiple definitions of the same parameters/variables.

- List of periodic jobs to schedule

- Procedure to check the correct installation/working of the application: basic checks to be performed by the person in charge of the installation should allow to check if the application is behaving correctly without requiring a full functional validation.

D. System de-installation:

- Detailed procedure to de-install the application following the same general remarks as the installation procedure.

E System Operation Manual

Description of the hardware/software architecture:

- Schema representing the overall hardware/software architecture.
- Installed software. This will at least include:
  - name of the products/tools
  - version
  - installation parameters (e.g. installation path, users, groups, environment variables...).
  - ...
- Description of all used file systems with their contents and specific access rights. (incl any temporary space used).
- Description of the specific users/groups/roles used by the application
- Network configuration. This will at least include:
  - used interfaces
  - IP addresses
  - virtual hosting
  - IP and port-bindings
  - specific routing
  - name servers
  - LDAP servers
  - local name resolution
  - ...

Application management:

- **Application start-up and shutdown.** The exact sequence to follow when starting or stopping the application and the specific application dependencies will be described.
- **User management.** This will at least include:
  - user creation/deletion
  - management of the privileges
  - authentication
  - ...
- **Configuration files**. This will at least include:
  - Location

- useful parameters
- modification procedure
- ...
-

- **Log files.** This will at least include:
  - Location
  - Contents
  - setting of log levels
  - information retrieval
  - clean-up and archiving
  - ....

- **Monitoring.** This will at least include:
  - List of all file systems and processes to monitor with specific thresholds/critical values.
  - Configuration of the script allowing to measure the availability and the response time of the application. *(reminder: this specific script has to be delivered by the contractor/supplier – cfr § Installations of the annex "Technical environment and standard operating procedures")*
  - Description of all existing monitoring and alerting mechanisms included in the application.
  - ...

- **Administration interfaces.** A detailed description of all available application administration interfaces will be provided. This will at least include :
  - Access to the user interfaces
  - Functionalities
  - Instructions for use
  - ...

- **Periodic tasks.** A list of all periodic tasks will be delivered. For each task, the following information will at least be provided:
  - description of the task
  - procedure to execute
  - scheduling/triggering schema
  - ...

  Special attention will be put on the description of CPU intensive and time consuming tasks like:
  - data archiving
  - data purging
  - data reorganisation
  - data consistency check
  - data synchronisation
  - data indexing
  - statistics
  - ...

- **Backup procedure:** A detailed backup procedure including at least following elements will be provided:
  - list of file systems/directories to backup (incl pattern of the file names to backup)

- scheduling/triggering schema

- sequencing

- pre- and post-processing

- specific techniques to use (e.g. snapshot, hot backups...)

- …

- **Restore procedure.** A detailed restore procedure covering all disaster situations will be provided. Special attention will be put on following aspects:

  - sequencing of the restore operations in order to minimize the downtime

  - consistency checks to execute

  - repair/resync procedures to execute

  - system operation checks after restore

  - ...

- **Copy procedure.** The detailed procedure to use in order to copy the production environment to a test environment will be described. *(reminder: this specific procedure has to be delivered by the contractor/supplier – cfr § Installations of the annex "Technical environment and standard exploitation procedures")*

- **Specific DB management tasks.** All specific DB related tasks that are not already described above should be described here.

- **Application updating procedures.** The general procedure used to upgrade/patch the application will be described.

- **Specific troubleshooting procedures and FAQ.** Any useful trick, hint or procedure should be described here.

Annex 6.16   Security Requirements

6.16.1 Minimum security requirements objectives and positioning

The European Commission owns and maintains the overall EC Information Systems Security Policies (EC ISSP).

The EC ISSP does not provide rules, procedures or guidelines for specific information systems. It defines, however, the general framework to derive Directorate-General / Department specific security policies and system specific security plans. All derived security policies and plans shall be consistent with the EC ISSP.

In line with this requirement, the Publication Office has developed its own specific Baseline Information System Security Policies (BISP).

The Publication Office BISP applies to information systems NOT processing EU CLASSIFIED information.

The BISP defines the boundaries within which all processes must take place. All products selected, processes, manuals and handbooks must be in compliance with the policy. The policy serves as main reference, to which all subsequent security documents, would it be Technical Security standards, User Security standards and Security procedures, must comply with.

The European Commission is committed to follow the COBIT framework to deliver IT governance to the business services. As part of this strategy, the Publication Office has been recommended by the EC auditor to implement the COBIT "Delivery & Support 5 – Ensure System Security" controls objectives.

To fulfil this requirement the Publication Office has adopted the ISO/IEC17799:2000 standard 'Code of practice for Information Security Management. Considering the importance of Business Continuity at the Publication Office, the chapter 11 (Business Continuity Management) of the ISO/IEC 17799:2000 has been supplemented with the British Continuity Institute (BCI) Publicly Available Standard (PAS) number 56 "Good practice guide to Business Continuity Management.

Accordingly, the Publication Office BISP is structured in line with the 10 ISO/IEC 17799:2000 domains. The Business Continuity Management domain is replaced by the BCI PAS56 framework.

The Publication Office BISP provides general requirements on the commonly accepted goals for managing information security. Collectively, the Publication Office BISP includes 10 domains, sub-divided in 41 sub-domains for a total of 137 security controls statements.

Security policy (1 sub-domain);

- Organizational security (3 sub-domains);
- Assets classification & control (2 sub-domains);
- Personnel security (3 sub-domains);
- Physical and environmental security (3 sub-domains);
- Communications and operations (7 sub-domains);
- Access Control (8 sub-domains);
- Systems development and maintenance (5 sub-domains);
- Business Continuity Management (6 sub-domains);
- Compliance (3 sub-domains).

The subsequent chapters define the minimum security requirements that have to be implemented on all information processing systems. Those requirement constitute a baseline, constructed

- to adhere to the Publication Office BISP, which it-self implement the EC Information System Security Policy,
- to specify applicable lower level requirements.

This set of minimum security requirement is intended to be attached to each 'Call For Tender' for information processing systems and/or services issued by the Publication Office. The Service Provider selection criteria must include assurance from the Service Provider to deliver services in line with those requirements.

The application being integrated within the existing Publication Office security infrastructure it will benefit from the standard infrastructural security, operational controls and human practices.

However, it is critical to properly and consistently communicate

- specific technical security requirement at
  - o application level
  - o logical access control level
  - o network level
  - o system level
  - o physical level
- outsourcing and third party contractual, operational and procedural obligations, in line with the Publication Office BISP.

Information security controls must be considered at the systems and projects requirement specifications and design stage. Failure to do so can result in additional costs and less effective solutions, and maybe, in the worst case, inability to achieve adequate security

In order to assist the project owner to specify those security requirements, a simple check list of minimum security requirement is developed here under, based on common best practices and specialised organisation recommendations, such as OWASP, SANS, NSA and NIST.

The minimum security requirements are cumulative to the standard security services, as delivered by the Publication Office secure infrastructure.
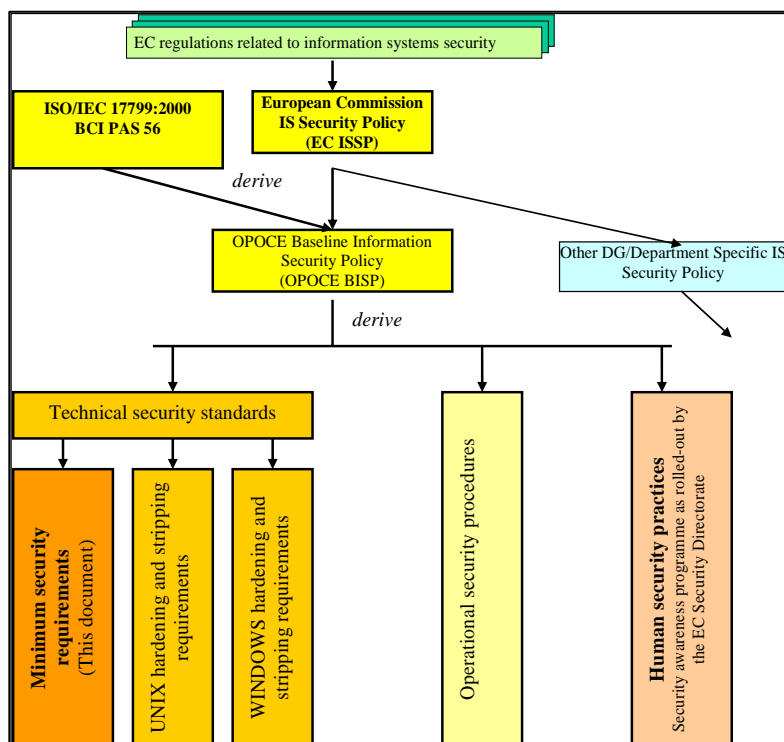
Fig. 1: Specific IS Security policies, standards, practices and procedures taxonomy

6.16.2 Information classification

Confidentiality classification

If the target information system is planned to process EU CLASSIFIED Information, then Accreditation of information systems processing classified information shall be governed by Section 25 of Decision No 2001/844/EC, ECSC, Euratom.

If the target information system is NOT planned to process EU CLASSIFIED information, then a realistic classification in terms of confidentiality must be defined by the system owner on the basis of the likely consequences that unauthorised disclosure might have for the interests of the Commission, the other Institutions, the Member States or other parties.
The confidentiality levels for NON EU CLASSIFIED information are:

- "PUBLIC": information system or information intentionally prepared and compiled for public disclosure.

- "LIMITED": information system or information reserved for a limited number of persons on a need to know basis and whose disclosure to unauthorised persons might be prejudicial to the Commission, other Institutions, Member States or other parties, but not to an extent serious enough to merit classification as laid down in paragraph 16.1 of the provisions on security of the decision No 2001/844/EC, ECSC, Euratom. An additional marking may be attached for information at this level of security identifying the categories of persons or bodies that are the recipients of the information or authorised to access it.

The minimum security requirements for EU CLASSIFIED information are out-of-scope of this document.

Integrity and availability classification

Information systems and the information processed therein shall also be identified according to their level of integrity and availability, by the system owner, on the basis of the likely consequences that a loss of integrity or availability might have for the interests of the Commission, other Institutions, Member States or other parties.
The levels are as follows:

- "MODERATE" shall apply to information or information systems the loss of whose integrity or availability might threaten the internal working of the Commission; cases would include the non-application of the Commission's Rules of Procedure without any outside impact or with limited outside impact, a threat to the achievement of the objectives of an action plan, or the appearance of significant organisational and operational problems within the Commission without any outside impact;

- "CRITICAL" shall apply to information or information systems the loss of whose integrity or availability might threaten the position of the Commission with regard to other Institutions, Member States or other parties; cases would include damage to the image of the Commission or of other Institutions in the eyes of the Member States or the public, a very serious prejudice to legal or natural persons, a budget overrun or a substantial financial loss with very serious adverse consequences for the Commission's finances;

- "STRATEGIC" shall apply to information or information systems the loss of whose integrity or availability would be unacceptable to the Commission, to other Institutions, to Member States to other parties because it might, for example, lead to the halting of the Commission's decision-making process, an adverse effect on important negotiations involving catastrophic political damage or financial losses, or the undermining of the Treaties or their application.

The minimum security requirements for STRATEGIC information are out-of-scope of this document.

6.16.3 Responsibility for security requirements

The Project Owner is responsible for:

1) setting the security requirements of the project and allocating financial, technical and human resources as required for meeting the security requirements of the project, (BISP 10.1.1)

2) ensuring that the security controls are tested and validated during acceptance test phase (BISP 8.2.2)

3) maintaining the security controls throughout the life cycle of the product or the application (BISP 10.5.1).

Product or service specifications must include the requirements for security controls. Contracts with the Providers must also address the identified security requirements.

Where the security functionality in a proposed product does not satisfy specific security requirements then the risk introduced must be evaluated and additional controls must be reconsidered prior to purchasing the product. Where additional functionality is supplied and causes a security risk, this must be disabled or the proposed control structure must be reviewed to determine if advantage can be taken of the available enhanced functionality.

Design reviews must be conducted at periodic intervals during the development process to assure that the proposed design will satisfy the functional and security requirements specified by the owner. Decisions not to implement security controls or to implement alternative controls, must be subject to formally documented exemption describing the residual risks. The exemption approval process must include the system owner and the Control & Security section.

6.16.4 Application level security

6.16.4.1 Input data validation

Web applications

- Web application and publicly available systems must not handle EU CLASSIFIED data.

- Each Web applications input data from HTTP requests must be checked against a strict format that specifies exactly what input will be allowed. All headers, cookies, query strings, form fields, and hidden fields (i.e., all parameters) must be "positively" validated against a rigorous specification that defines:
  - data type (string, integer, real, etc…)
  - allowed character set
  - minimum and maximum length
  - whether null is allowed
  - whether the parameter is required or not
  - whether duplicates are allowed
  - numeric range
  - specific legal values (enumeration) and specific patterns (regular expressions)

- Input checks must be performed at server side. On top of the server side checks, client side checking can also be included to enhance the user experience for legitimate users and/or reduce the amount of invalid traffic to the server.

- A 'positive' security check that specifies what is allowed must be implemented. "Negative" approaches that involve filtering out certain bad input or approaches that rely on signatures are not effective and are difficult to maintain.

- Direct access to files and database must be positively filtered (in URL, system calls, shell commands) against the user's rights.

- Raw data modifications in databases must not be possible. Add, modify, and delete procedures must be implement to changes data.

- Only files that are specifically intended to be presented to web users must be marked as readable using the Operating System's permissions mechanism, most directories should not be readable, and very few files, if any, may be marked executable.

- Mechanisms, including HTTP headers and meta tags, must be used to be sure that pages containing sensitive information are not cached by user's browsers.

- Protection against injection flaws must be implemented. The simplest way to protect against injection is to avoid accessing external interpreters wherever possible. For many shell commands and some system calls, there are language specific libraries that perform the same functions. Using such libraries does not involve the operating system shell interpreter, and therefore avoids a large number of problems with shell commands.
  - For those calls that must be used, such as calls to backend databases, the input data must be validated to ensure that it does not contain any malicious content.
  - The use of stored procedures or prepared statements will provide significant protection, ensuring that supplied input is treated as data, and not as active commands such as SQL statements.
  - Web servers must not run as ROOT or access a database as DBADMIN, otherwise an attacker can abuse these administrative privileges granted to the web application. Instead, it must run with only the privileges it absolutely needs to perform its function.
  - The Java sandbox must used, when feasible, to prevent the execution of system commands.
  - If an external command must be used, any user information that is being inserted into the command must be checked. Mechanisms must be put in place to handle any possible errors, timeouts, or blockages during the call.
  - All output, return codes and error codes from the call must be checked to ensure that the expected processing actually occurred.

- Session management
  - Web applications must establish sessions to keep track of the stream of requests from each user.
  - Session IDs chosen by a user should never be accepted.

  - A connection time-out must be implemented on ""CRITICAL"" (or above) applications.
  - For ""CRITICAL"" (or above) applications, the user's entire session must be protected via SSL, based on at least 112-bit 3*DES (or equivalent) or 1024-bit RSA (or equivalent) digital signatures.

  - For ""MODERATE"" applications, the user's entire session should be protected via SSL. If SSL is not used, then session IDs themselves must:

  - never be included in the URL as they can be cached by the browser, sent in the referrer header, or accidentally forwarded,

  - be long, complicated, including random numbers that cannot be easily guessed,

- o must be changed when switching to SSL, authenticating, or other major transitions.

- Protections against Denial of Service attacks must be implemented
    - o Application's session data must be as small as possible.
    - o Resources allocated to any user must be limited to a bare minimum.
    - o For authenticated users:
        - quotas should be used to limit the amount of load a particular user can put in the system,
        - one request per user should be handled at a time by synchronizing on the user's session,
        - any request being currently processed for a user should be dropped when another request from that user arrives.
    - o For unauthenticated users, any unnecessary access to databases or other expensive resources must be avoided by:
        - architect the flow of the web site so that an unauthenticated user will not be able to invoke any expensive operations,
        - cache the content received by unauthenticated users instead of generating it or accessing databases to retrieve it.

Publication Office back-office applications
- Data input must be done via menu and selection in a list.
- If the input is captured from key string then the format and syntax must be controlled by the application to reduce the risk of errors and to prevent classical attacks such as buffer overflow and code injection. Boundary checks or field limits to specific ranges of input data must be implemented to detect the following errors:
    - o out-of-range values,
    - o invalid characters in data fields,
    - o missing or incomplete data,
    - o exceeding upper and lower data volume limits,
    - o unauthorized or inconsistent control data.
- Raw data modifications in databases must not be possible. Add, modify, and delete procedures must be implement to changes data.

6.16.4.2 Control of internal processing
- Procedures and checks must be implemented:
    - o to prevent programs running in the wrong order or running after failure of prior processing,
    - o to recover from failures to ensure the correct processing of data,
    - o to ensure integrity of data, records files or software downloaded, or uploaded, between computers (e.g. hash code).
- reconciliation control counts to ensure processing of all data,
    - o Web applications must avoid implicit trust between components whenever possible. Each component should authenticate itself to any other component it is interacting with unless there is a strong reason not to (such as performance or lack of a usable mechanism). If trust relationships are required, strong procedural and architecture mechanisms should be in place to ensure that such trust cannot be abused as the site architecture evolves over time.

6.16.4.3 Error Handling

Error handling mechanisms must be able to gracefully handle any feasible set of inputs, any errors that can be generated by internal components such as system calls, database queries, or any other internal functions.

- When errors occur, the site should respond with a specifically designed result that is helpful to the user without revealing unnecessary internal details.

- Error messages must be produced and logged so that their cause, whether an error in the site or a hacking attempt, can be reviewed.

6.17.4.4 Policy on the use of cryptographic controls

Usage of cryptography is subject to the European Commission policy and isolated or local implementations are not authorized to avoid loss of unrecoverable encrypted data, loss of operational performance and/or law infringement. The Publication Office must only use cryptographic tools provided and supported by the European Commission which provide protection against:

- insecure storage of keys, certificates, and passwords,

- improper storage of secrets in memory,

- poor sources of randomness,

- poor choice of algorithm,

- attempting to invent a new encryption algorithm,

- failure to include support for encryption key changes and other required maintenance procedures.

6.17.4.5 "CRITICAL" system isolation

- ""CRITICAL"" applications must be running in dedicated computing environment, possibly implemented by virtual partitioning of the same physical system.

6.17.4.6 Documentation and operating procedures

- Documented procedures must be prepared for each system activities. All information processing system documentation must be released to the system owner, with access limited to the operators. The system documentation must be classified at the same level at the system it-self.

- The operating procedures must specify the instructions for the detailed execution of each job including, amongst others:
  - o start-up and close-down procedure, including interdependencies with other systems, earliest job start and latest job completion times,
  - o processing and handling of information, including scheduling requirements,
  - o instruction for media handling,
  - o backup,
  - o equipment maintenance,
  - o support contacts in the event of unexpected operational or technical difficulties,
  - o instructions for handling events or other exceptional conditions, which might arise during job execution, including restrictions on the use of system utilities,
  - o system restart and recovery procedures for use in the event of system failure,
  - o the management of log file.

6.17.4.7 Electronic commerce security

Electronic commerce must be protected against fraudulent activity, contract dispute and disclosure or modification of information.

The risks must be assessed and the following considerations must be taken into account:

- the level of confidence each party requires in each others claimed identity, e.g. through authentication in line with the authorization processes associated with who may issue or sign key trading documents,

- the requirements for confidentiality, privacy, integrity, proof of dispatch and receipt of key documents, and the non-repudiation of tendering and contracts,

- documented agreement which commits both parties to the agreed terms of trading, including details of authorization,

- compliance with all European directives and applicable international, national, regional and local laws, such as all tax acts, trade practices, Sale of Goods (or similar) acts, and so on.

If the Publication Office implements further electronic commerce facilities with on-line payment and financial transactions, then the risks must be reassessed including:

- the level of trust required in the integrity of advertised price lists,

- the level of protection required to maintain the confidentiality and integrity of order information,

- the confidentiality and integrity of any order transactions, payment information, delivery address details, and confirmation of receipts,

- the degree of verification appropriate to check payment information supplied by a customer,

- the liability associated with any fraudulent transactions,

- the insurance requirements.

All e-commerce payments by credit cards must comply with the Payment Card Industry Data Security Standard (PCI-DSS) and the merchant agreement.

In brief, the twelve requirements to handle credit card payments are:

Build and maintain a secure network	Install and maintain a firewall configuration to protect data
	Do not use vendor-supplied defaults for system passwords and other security parameters
Protect Cardholder Data	Protect stored data
	Encrypt transmission of cardholder data and sensitive information across public networks
Maintain a Vulnerability Management Program	Use and regularly update anti-virus software
	Develop and maintain secure systems and applications
Implement Strong Access Control Measures	Restrict access to data by business need-to-know
	Assign a unique ID to each person with computer access
	Restrict physical access to cardholder data
Regularly Monitor and Test Networks	Track and monitor all access to network resources and cardholder data
	Regularly test security systems and processes
Maintain an Information Security Policy	Maintain a policy that addresses information security

A summary of the PCI-DSS is available is in the OWASP guide, available at http://www.owasp.org and full detailed PCI-DSS requirements are available on the major credit card site e.g.;

at:http://usa.visa.com/download/business/accepting_visa/ops_risk_management/cisp_PCI_Data_Security_Standard.pdf

6.17.4.8 Application events logging

- Application logs must be enabled 24 hours per day, 7 days per week and kept for an agreed period to assist in case of future investigations and access control monitoring
- The following events must be logged:
    - o failed or rejected user authentication and access control policy violation,
    - o failed or rejected user action,
    - o use of system utilities,
    - o all activities performed by high level privileges accounts (System administrators, system operators) amongst others:
        - ▪ system start-up and stop,
        - ▪ changes, or attempt to change, configuration and security settings.
- Logs are classified as ""CRITICAL"" information and must be managed accordingly.

6.17.4.9 Clock synchronization

The Publication Office master clock is set to the local standard time with automatic feature to adjust the clock to the daylight savings time. The applications' clock must be synchronised with the Publication Office master clock.

6.17.5 Logical access control

6.17.5.1 External users of Web applications

- User access control rules must define what types of users can access the system, and what functions and content each of these types of users should be allowed to access must be documented and enforced.
- User_id's can only be used to identify and reference users and not as proof of identity or authentication mechanism.
- Access control checks to access protected URL must not be bypassable by a user that simply skips over the page with the security check.
- Administrator access through the front door of the site must not be at all possible.
- All user account management functions must require re-authentication even if the user has a valid session id.
- For accessing URL containing ""LIMITED"" information, users must be uniquely identified and authenticated with a password according to the following policy:
    1. Password must be forced: :
        - ▪ to contain at least 8 characters,
        - ▪ to be a mixture of at least 3 of the following character classes:
            - • upper case letters (A .. Z),
            - • lower case letters (a .. z),
            - • digits (0 .. 9),
            - • punctuation characters (~!@#$%^&*()_+`-={}[]|\:";'<>,.?/)
        - ▪ to be different from the UserId (also reversed, capitalized, doubled …),

2. To prevent a reuse of the same passwords or similar passwords, a password history must be maintained. The system must memorise the last 3 passwords, and accept only a new password which differs from the 3 previous ones.

3. An account must be locked after 3 erroneous user authentication attempts and be locked for an undefined period.

o A password reset procedure must be defined. The actual password reset may only be done by the system manager.

o the reset procedure must include out-of-band steps to re-authenticate the user. For example, such procedure might be to request the user to answer to some specific and personalised questions, whose answers were provided during the User_id initialisation phase,

o the new password must be one-time usage,

o if the new password is sent to the user e-mail address, than the user must introduce twice the e-mail address for validation.

4. Passwords must not be stored in the application system, but only a non-reversible hash of it. Passwords should never be hardcoded in any source code or executable.

o Repeated failed login attempts must be logged.

o The system should not indicate whether it was the username or password that was wrong if a login attempt fails.

o Users should be informed of the date/time of their last successful login and the number of failed access attempts to their account since that time.

o A "change password" function must be implemented. Users should always be required to provide both their old and new password when changing their password.

o Authentication and session data should never be submitted as part of a GET, POST should always be used instead. Authentication pages should be marked with all varieties of the no cache tag to prevent someone from using the back button in a user's browser to backup to the login page and resubmit the previously typed in credentials. Many browsers now support the autocomplete=false flag to prevent storing of credentials in autocomplete caches.

6.17.5.2 Publication Office users of internal applications

Access to the Publication Office systems and application is subject to a formal authorization procedure (DMA – Demande d'Accès) operated by the Control & Security section. The procedure is supported by an Work Flow, "suivi3D".

• When a new application is developed and rolled-out, its access control must be integrated in the DMA access control management system, by updating the DMA Applications database.

• User access authorisation approvers must be designated by the system owner.

• The application must support the User_id convention, as integrated in the Publication Office Active Directory and the Publication Office password security rules.

   o User_id convention: <five first letter of family name><two first letters of first name>
   o Password management rules:
      ▪ The initial password must be one-time usage.
      ▪ Password must expire automatically at the end of a period of 90 days. The period restarts at each new change.

- ▪ Seven days before the end of the password validity period (90 days), a warning must be sent to the user after login to remind him that his password will expire. The user must be invited to change it.
- ▪ If the user is away while the password period expires, on his return, at the first login, he is forced to change his password before continuing.
- ▪ To prevent a reuse of the same passwords or similar passwords, a password history must be maintained. The system memorises the last 3 passwords, and accepts only a new password which differs from the 3 previous ones.
- ▪ Password must be forced: :
  - • to contain at least 8 characters,
  - • to be a mixture of at least 3 of the following character classes:
  - • upper case letters (A .. Z),
  - • lower case letters (a .. z),
  - • digits (0 .. 9),
  - • punctuation characters (~!@#$%^&*()_+`-={}[]|\:";'<>,.?/)
  - • to be different from the UserId (also reversed, capitalized, doubled …),
- ▪ An account must be locked after 3 erroneous user authentication attempts and be locked for an undefined period.
- ▪ Passwords can only be reset by a system manager, upon request to the help desk.
- ▪ Passwords must not be stored in the application system, but only a non-reversible hash of it.

6.17.6 Network level security

- • Every implementation of a new information system must be requested by the "Demande Matériel Informatique" (DMI) procedure and approved by the Information Resource Manager.
- • The servers running "CRITICAL" applications should be isolated from network segments of higher sensitivity in order to prevent attackers from using them as a platform for mounting attacks on systems in other segments.
- • Connection of information processing systems to the Publication Office network must be performed by the Network section.
- • Connection of workstation or information systems not owned by the Publication Office, such as contractor's PC, is not allowed.
- • Remote access to the Publication Office information systems by third party users (e.g. printers) or Services Providers (e.g. remote system managers) can only be done by:
  - o Dedicated leased line, or
  - o Virtual Private Network (VPN).

6.17.7 System level security

6.17.7.1 System configuration hardening

- • All applications must be able to run on the standardised Publication Office production servers configured to only offer functionality that is absolutely necessary for the provision of

the envisaged service. The Service Provider must exhaustively specify the required operating system functionality, network services and security parameters.

- Software must be controlled and checked to protect against possible covert channels and Trojan code. The Publication Office applies the European Commission provided policy and settings to manage and control Java applets, Active-X controls and Java scripts.
    - Unsigned Java applets which are downloaded from the Internet and executed in a "sandbox" **are permitted**.
    - Unsigned Java applets which are downloaded from the Internet and installed locally **are not permitted**.
    - Java applets *which are certified by an external organisation that is not recognised by the Commission* **are not permitted**.
    - Java applets which are certified by an organisation inside the Commission or by an external one that is recognised by the Commission, **are permitted** (it is advisable to add the certificates of these organisations in the certification organisation database of the Internet browsers).
    - Active-X controls that are unsigned or certified by an external organisation that is not recognised by the Commission **are not permitted**.
    - Active-X controls that are certified by an organisation inside the Commission or by an external one that is recognised by the Commission **may be permitted** depending on their harmlessness and the needs of the Publication Office.
- Deviations from the standardised Publication Office servers configurations and settings must be documented and greed with the system owner and by the Publication Office LISO.

6.17.7.2 System utilities

All unnecessary system software, compilers, editors, and other development tools or system utilities are removed from the standardized Publication Office production servers.

- If the utilization of some system utilities is required for operational reasons, the utilization if the system utilities must:
    - be subject to a formal authorization from the system owner and the Publication Office LISO,
    - be limited to a minimal number of trusted authorized individuals,
    - be logged.

6.17.7.3 Restricted access to sensitive files

- Access to the following files must be restricted to system managers:
    - system configuration and software files,
    - log files,
    - hashed password files.

6.17.8 Test, development and acceptance

6.17.8.1 Separation of development, test and operational facilities

- Development and production software must run on different systems.
- Test and development software should run on either physically separated systems or different virtual partitions.

- The test system environment should emulate the production system environment as closely as possible.
- Production data or files including 'LIMITED' information, or private data should not be used to test applications software. If, for operational reasons, the test harness is constructed from production data:
  - then those data or files must be anonimised and declassified as '"PUBLIC"' information,
  - or the test system must be classified as 'LIMITED' and the same security controls must be applied as in the production environment.
- Prototypes must not be used in production.

6.17.8.2 System acceptance

- Prior to placing a system into operation, the Publication Office will verify that the required user functions are being performed completely and correctly, and that the technical, procedural and physical security controls are operational as per these security requirements.
- The system acceptance procedure must include tests of:
  - all security related features of the information systems,
  - secure web server configurations,
  - resilience test against the applicable vulnerabilities:
    - OWAPS Top Ten Web application vulnerabilities,
    - SANS Top Twenty vulnerabilities.
- If the application is due to handle private data, than the Publication Office will check that those private data are handled according to the local jurisdiction (e.g. the CNPD in Luxembourg) and in accordance to the European Commission directive EC45/2001.

6.17.9 Communications and operations

6.17.9.1 Operational change controls

The Publication Office production systems are subject to strict change control management.

- All patches and service packs must be validated and tested before promotion to production.
- Automated updates must not be used as some updates may cause applications to fail.
- The decision to install changes in production is taken by the system owner. Installation is typically performed after business hours; otherwise the service interruption procedure must be used in agreement with the production manager.

6.17.9.2 Business Continuity Management

The Publication Office has developed a comprehensive Business Continuity Management framework, supported by disaster recovery plan.

- The target system must be integrated into the Publication Office BCM framework.
- A copy of the accepted production server content must be safe stored in a location distinct from the production site.

6.17.10 Physical security

6.17.10.1 Access to the Publication Office building by Service Provider staff

Access to the Publication Office building by Service Provider staff must be controlled in line with the Publication Office physical access control rules.

- All non-statutory staff at the Publication Office are primarily under the responsibility of the unit they are placed in. After the Service Provider contract has been signed, each contractor must sign an individual Non-Disclosure Agreement. After signature, each contractor will be provided with a long term building access card for external staff, under the following rules:
  - o presence must be minimum three days/week for minimum duration of stay of two weeks,
  - o validity is three months at a time,
  - o card may be taken out of the premises.
- Everyone must visibly wear his/her identification badge in the Publication Office building. It is recommended not to wear it outside the building not to attract undue attention.

6.17.10.2 Physical security within the Publication Office building

The Publication Office applies a clear desk and clean screen policy:

- Everyone, including Service Provider staff is responsible for maintaining his working environment clear and tidy. Everyone is encouraged to avoid:
  - o eating or drinking close to any IT equipment not to damage the equipment;
  - o leaving any non-business related information or equipment in the office.
- All paper based information which is not "PUBLIC" and any removable storage media or device must be locked in a closed cabinet at the end of the working day or when the office is not attended.
- It is the responsibility of everyone to ensure all obsolete "PUBLIC" paper based information is sorted in the dustbin foreseen for "paper to recycle".
- It is recommended to use local paper shredder to dispose obsolete "LIMITED" paper based information and zeroisation techniques to securely erase all storage media.
- The Publication Office does not allow removing Publication Office's properties out of the Publication Office buildings.

6.17.10.3 Physical security requirements for outsourced operations

System servers must be operated in compliance with the Publication Office BISP:

- Equipment shall be sited or protected to reduce the risks from environmental threats and hazards, and opportunities for unauthorized access. Operating centres must be equipped with blind and shielded windows.
- All offices and computer rooms must be equipped with regularly tested UPS outlets.
- All power and data cables must be laid down in separate cable trays.
- All equipments must be maintained in accordance with the equipment provider's recommended service intervals and specifications. Only authorized maintenance personnel must carry out repairs and service equipment. Records must be kept of all suspected or actual faults, and all preventive and corrective maintenance. All requirements imposed by insurance policies must be complied with.

6.17.11 Third party and outsourcing service providers' contractual obligations

6.17.11.1 Adherence to the Publication Office BISP

- The criteria for selecting the contract shall include the capability of the contractor to meet the specified security requirements and to comply with the Publication Office BISP.

- All Service Provider's staff working at the Publication Office are required to comply with the Publication Office BISP and supporting practices and baselines.

6.17.11.2 Non Disclosure Agreement

- The Service Provider must undertake to comply with the standard Publication Office Non-Disclosure Agreement.

- After the Service Provider contract has been signed, each contractor assigned to the contract must sign an individual Non-Disclosure Agreement.

- Any information, data and/or materials of whatever kind or nature that is transmitted to the Service Provider related to the Publication Office shall be considered as "LIMITED" and proprietary to the Publication Office, unless explicitly released as "PUBLIC" information and must be treated as such by the Service Provider.

- The "LIMITED" information may also include information which has been submitted to the Publication Office by third parties, and which the Publication Office has been authorised to disclose, subject to security measures or confidentiality provisions. In such case, the Service Provider accepts that the terms of the service agreement shall be deemed to be also for the benefit of the Publication Office and any such third parties and fully binding upon the Service Provider with respect to such "LIMITED" information.

- However, the "LIMITED" information does not include information that the Service Provider can prove by written records:
  - was in the public domain at the time it became known or was transmitted to the Service Provider,
  - becomes part of the public domain thereafter through no breach of the service agreement,
  - was already in the Service Provider's possession free of any obligation of confidentiality.

- The Service Provider shall neither use nor copy the "LIMITED" information for any purpose other than the execution of the service agreement and shall neither directly nor indirectly disclose or permit such "LIMITED" information to be made available to any third party without prior written authorisation from the Publication Office system owner or the Publication Office LISO.

- The Service Provider undertakes that it will only disclose any "LIMITED" information to those of its employees, subcontractors, or any other third parties on a "need to know basis". Prior to disclosing any "LIMITED" information to any third party the Service Provider will:
  - inform that third party of the restrictions on the use and disclosure of the "LIMITED" information,
  - ensure that the third party is bound by a confidentiality undertaking or obligations of confidence which protect the "LIMITED" information to at least the extent that it is protected under the Service Provider agreement.

- Upon the written request of the Publication Office, the Service Provider shall, at the Publication Office's option, promptly return or destroy all documents and other materials in whatever form containing "LIMITED" information from the Publication Office.

6.17.11.3 Third party access to the Publication Office processing systems

- Third parties may not access the Publication Office internal processing systems unless formal contractual agreement is signed.

- Only after signature, the third party is allowed to issue an access request via the DMA procedure.

6.17.11.4 Private data protection

- The Service Provider acknowledges and agrees that the Publication Office reserves the right to process personal data relating to or supplied by the Service Provider, and/or its staff for purposes relating to staff administration and management, security, accounting and records keeping, and, more generally, the performance of its obligations and the enjoyment of its rights and remedies.

- Where such data are collected and supplied to the Publication Office by the Service Provider, the Service Provider must ensure that such data are collected and supplied for such purposes to the Publication Office in accordance with the European directive 45/2001 on the protection of individuals with regard to the processing of personal data by the Community institutions and bodies and on the free movement of such data.

6.17.11.5 Intellectual Property Rights and legal software copies (IPR's)

- All materials, including documents in written or pictorial forms, on magnetic or non-magnetic media, drawings, designs, computer programs, source codes developed by the Service Provider or its contractor(s) for the Publication Office in pursuance of the Service Agreement shall be and shall remain the property of the Publication Office.

- The Service Provider must warrant that it is entitled to agree to such transfer of rights to the Publication Office, and has obtained all the rights and necessary authorisations from all parties concerned, including from its staff and Commercial Off The Shelf (COTS) packages provider, if such COTS are embedded in the deliverables.

- All materials supplied by the Publication Office to the Service Provider or its contractor(s) shall remain the property of the Publication Office, and shall be returned to the Publication Office, with all copies thereof, when the Service Provider's assignment in the context of this Service Agreement is terminated, for whatever reasons or immediately upon request by the Publication Office, without need to justify such a request.

- The Service Provider shall be responsible to obtain the return of all such materials from its staff immediately upon such person(s) ceasing to render any services to the Publication Office.

6.17.11.6 Right to audit and monitoring activities.

- At any time the Publication Office reserves the right to audit the Service Provider for compliance with its contractual obligation, especially adherence to the Publication Office BISP. Such audit should be announced in advance with a reasonable notice.

- The Publication Office has the ability and right to monitor or examine any information stored on its information processing systems or communicated over its network or equipment.

- The Publication Office can, and will, access this information without the Service Provider or it(s) contractor consent or advance notice only:
  - o for capacity planning purpose,
  - o for back-up and archiving purpose,
  - o if there is sufficient cause or evidence indicating abuse, non respect of the Publication Office BISP or the suspicion of a fraud or crime. In such case, the explicit

authorization of the Publication Office LISO will be required before conducting any investigation.

6.17.11.7 Security incident, software malfunction and weaknesses reporting

- The Service Provider has the obligation to report all security incidents, software malfunctions, security weaknesses or threats to systems or services that their staffs notice or is made aware of to the Publication Office help desk or the Publication Office LISO.

- All users are instructed that they must not, unless formally authorized by the Publication Office LISO, attempt to prove a suspected weakness because this will be interpreted as a potential misuse of the system, could also cause damage to the information system or service and result in legal liability for the individual performing the testing.

ANNEX 6.17   GENERAL DESCRIPTION OF THE CONCERNED SYSTEMS

The purpose of this appendix is to describe the systems concerned by the call for tender.

The SEI-BUD/AMD/CR systems

6.17.1 Introduction

This document contains an overview of the general architecture of the *SEI-BUD* system (hereafter also called "the SEI-BUD/SEI-AMD system") as well as its main functions.

More detailed and technical information about this system can be found in following documents, updated to May 2007:

- The "MRF" :   Reference Manual of the *SEI-BUD/SEI-AMD* system,
- The "MUT":   User Manual of the *SEI-BUD/SEI-AMD* system.
- Procedure manual of the SEI-AMD system

The documents are available in the Internet http://publications.europa.eu/tenders/our/index_en.htm

6.17.2 Quick technical overview of the system

The table hereafter presents a quick overview of the SEI-BUD/SEI-AMD system.

Name :	*SEI-BUD/SEI-AMD* system
Version :	5.0
Purpose :	Editorial system to support the production of the Budget for the European Institutions in 22 languages
Type :	Editorial and workflow *The system is an XML based editorial system which includes some workflow features.*
Importance :	Very high availability, critical, sensitive, confidential data *(until the produced documents are officially published)*
Data exchange :	Transactional, synchronous, asynchronous *Data is handled after different models according to the specific situation. In most cases data is downloaded from the server, processed locally and sent back to the server.*
Architecture :	Client/server, 3-tiers *Oracle 10.2.0.1 64 bits* *Application server: Jboss 4.0.4.GA* *Jdk 1.5.0_11* *Web server: Apache Tomcat* *Clients: JAVA tools, MS Word, Adept Editor* *Web applications: seibud.war (inc BPSRV), webintServlet.war and axis.war* *REMI : processes handler*
Programming languages :	JAVA, C++, XSL-T

Repository and data format :	Full XML, UTF-8. *The server side component has been developed in JAVA (it does not not use Oracle's "native" XML support), which implements a versioned and persistent DOM (the persistence is ensured by the data storage in a dedicated Oracle database).*
Communications :	HTTP, FTP (WOOD system), email *Connections via Testa II (between Publications Office and other Institutions) and ISDN (between Publications Office and the printing office)* *CODICTReader (daily import from CODICT (EP)* *FTPReader (EP translations management).*
Hardware :	Sun Sunfire 25K *Processors: 8 UltraSPARC v9 CPU @ 1500 MHz Dual core* *RAM: 64 GB* *Operating System: Solaris 10 zfs in a zone* *System hosted at OPOCE premises (Luxembourg)*
Users :	All European Institutions and the printers

6.17.3 Background information: the General Budget of the European Union

6.17.3.1   Purpose

The Community Budget is an official document of the European Union published by the OPOCE once per year.

It contains a detailed itemisation of budgeted revenues and expenditures for the year in question with copious related information including commentary texts, footnotes noting the legal basis for various items, miscellaneous other tabular data, etc.

It is published in all the official languages of the European Union.

The approximate size of the principal budget documents (per language) is 2 100 pages. The total is currently around 46 000 pages for all the languages.

Each document is produced in Preliminary-, Draft- and Definitive versions, bringing the total to around 140 000 pages per year (for the main documents). All the documents are also published 5 times on the internet during a budgetary cycle.

SEI-BUD/SEI-AMD is also used to produce a series of budgetary documents accessed during the decision process.

6.17.3.2   Actors

The budget is produced by the combined efforts of around 600 users spread across 10 institutions (including the Mediator and the Data Protection Supervisor) Each institution has the responsibility for a specific part of the process – some act both as authors and translators, others only as authors.

6.17.3.3.   Content

The Preliminary Draft Budget and Draft Budget are working documents published in 10 volumes (with dedicated volumes for the budgets of the individual institutions and a volume summing up the figures – volume 1).

A "Volume 0", which covers the "Financial Perspectives" data, is used during the Commission's internal debates and in the dialogue between the Commission, Council and Parliament on budgetary priorities to produce the Preliminary Draft version of the budget. It is produced by the *SEI-BUD/SEI-AMD* system but is not included in the final budget.

The final budget is published in a single volume, with separate sections for the budgets of the different institutions.

In order to understand the context and purpose of each of the integrated *SEI-BUD/SEI-AMD* system documents, it is worth to note that each yearly budgetary cycle concerns the budget for the following year (which will be labelled "year N"). The current year is labelled "year N-1". Therefore the budget document presents:

- The projected revenues and expenditures for the following year ("year N"),
- The projected revenues and expenditures for the current year ("year N-1"),
- The adjusted figures concerning the budget executed in the previous year (labelled "year N-2").

n this context, the term "Budget document" is used to refer to any document relating to the budget of the European Institutions produced *via* the *SEI-BUD/SEI-AMD* system.

The budget documents are complex in terms of content, layout and structure. There are 5 types of documents produced by the *SEI-BUD/-SEI-AMD* system:

- The <u>Preliminary Draft Budget</u> for year N, which presents the projected revenues and expenditures for each participating European Institution for the following year, as adopted by the Commission.

- The <u>Draft Budget</u> for year N, which presents the projected revenues and expenditures for each of the institutions, as adopted by the Council after its first reading.

- The final <u>Budget</u> for year N, which presents the projected revenues and expenditures for the following year after integrating the modifications adopted by the Council after its second reading, and the amendments adopted by the Parliament after its second reading.
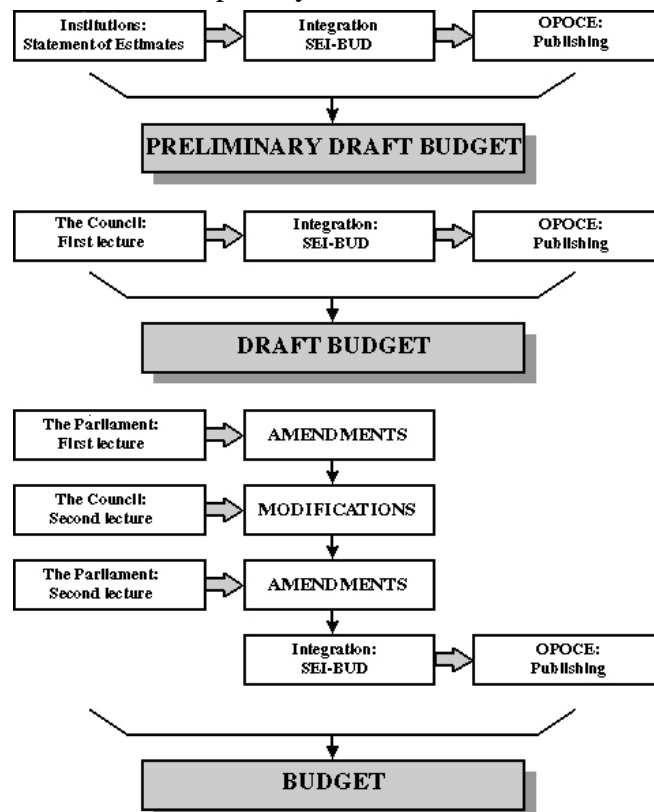
- A series of <u>Amending Budgets</u> which presents corrections to the budget for the current year ("year N-1"). Several of these documents may be produced during a given budgetary cycle, as needed, each of which are produced in Preliminary, Draft, and Final versions just as is the principal budget. These amending budgets will in the future be produced in a new part of the system SEI-CR (CR for Change Request).

- A series of <u>Amending Letters</u> which presents corrections to the "Draft Budget" for the following year ("year N"). Several of these documents may be produced during a given budgetary cycle, as needed, each of which are produced in Preliminary and Draft versions. There is no final version as the changes are integrated (or not!) into the final "Budget" for "year N". These amending letters will in the future be produced in the new part of the system SEI-CR.

SEI-BUD/SEI-AMD is also used to produce a series of budgetary documents that are used in the decision process. These documents are reports and they can feature the figures or the text of the amendments. The features used for reporting is more and more important.

The budgetary procedure is based on what is called the "pragmatic calendar". The procedure can change if there is a political background to do so.

6.17.4 Workflow

6.17.4.1 Introduction

The Budgetary procedure is now set out in Article 272 of the EC Treaty which stipulates the sequence of stages and the time limits which must be respected by the two arms of the budgetary authority: The European Council and the European Parliament.

The procedure is quite complex. In order to best understand both the procedure and the system, it is useful to present an overview from three different perspectives/points of view, at varying levels of scope and technical detail. These descriptions are important from the point of view of understanding both the workflow functionality as implemented in the *SEI-BUD/SEI-AMD* editorial system, and in understanding the functionality provided by the system's tools and central data repository.

6.17.4.2 At the Institutional level

(Widest scope)

The process is here seen in terms of the how the different organisations collaborate in the production of all the different types of budget documents produced by the system during the yearly budget exercise cycle, and the relationships between these budget documents.

The different stages of this main procedure are as follows:

- Establishment of the Preliminary Draft Budget document by the European Commission and transmission to the budgetary authority,
- First Reading and establishment of the Draft Budget document by the European Council,
- First Reading by the European Parliament,
- Second Reading by the European Council,
- Second Reading by the European Parliament, and
- Adoption of the definitive Budget document.

If unavoidable, exceptional or unforeseen circumstances happen, the European Commission may propose during the year that the budget as adopted be amended. It does this by submitting a Preliminary Draft Amending Letter. The production of these documents is subject to the same rules as the general budget described above. The current year is modified by the adopting of Amending Budgets. These follow the same workflow as the general budget.

Production calendar

The following calendar shows a general overview of who is doing what and when, with the SEI-BUD/SEI-AMD editorial system.

- All Institutions:

  All Institutions participate in establishing the Preliminary Draft Budget for the following year.
  - Any time during the year: creating amending budgets to the current year.
  - From the Preliminary Draft Budget to the First Reading of the European Parliament: creating Amending Letters.

- The European Parliament:

  The specific intervention of the European Parliament is as follows:
  - Consolidating the budget for year N in January of year N (all volumes).
  - From April to July: editing of the Preliminary Draft Budget: volumes 1 and 2 (as an institution).
  - During July to October: creating amendments to the Draft Budget (COL1), handle the documents in relation to this and consolidating Parliaments First Reading (PEL1).
  - During November: possibility to integrate the amendments adopted during the vote of the First Reading of the Parliament.
  - During December: preparing the Second Reading of the Parliament (PEL2) and start the consolidation of the final budget on the basis on the Council's Second Reading (COL2).

- The Council:

  The specific intervention of the Council is as follows:
  - From April to July: editing of the Preliminary Draft Budget: volumes 1, and 3.
  - From July to August: editing of the Draft Budget (all volumes except volume 2).
  - During July and August: manage the editing of the Council's First Reading (COL1) and consolidate this as the Draft Budget.
  - November: handle the Second Reading of the Council (COL2).
  - From December to January: validation of the Budget for volumes 1 and 3.

- The Commission:

  The specific intervention of the Commission is as follows:
  - Starting in January: editing of the projected revenues and expenditures: volumes 1 and 4.
  - From April to June: editing of the Preliminary Draft Budget: volumes 1 and 4.
  - From December to January: technical assistants to the European Parliament and validation of the Budget for volume 1 and 4.

- The Court of Justice:

  The specific intervention of the Court of Justice is as follows:
  - From April to May: editing of the Preliminary Draft Budget: volumes 1 and 5.
  - From December to January: validation of the Budget, volumes 1 and 5.

- The Court of Auditors:
  The specific intervention of the Court of Auditors is as follows:
  - From April to May: editing of the Preliminary Draft Budget: volumes 1 and 6.
  - From December to January: validation of the Budget, volumes 1 and 6.

- The Economic and Social Committee:
  The specific intervention of the Economic and Social Committee is as follows:
  - From April to May: editing of the Preliminary Draft Budget: volumes 1 and 7.
  - From December to January: validation of the Budget, volumes 1 and 7.

- The Committee of the Regions:
  The specific intervention of the Committee of the Regions is as follows:
  - From April to May: editing of the Preliminary Draft Budget: volumes 1 and 8.
  - From December to January: validation of the Budget, volumes 1 and 8.

- European Ombudsman:
  The specific intervention of the European Ombudsman is as follows:
  - From April to May: editing of the Preliminary Draft Budget: volumes 1 and 9.
  - From December to January: validation of the Budget, volumes 1 and 9.

- European Data-Protection Supervisor:
  The specific intervention of the European Data-Protection Supervisor is as follows:
  - From April to May: editing of the Preliminary Draft Budget: volumes 1 and 10.
  - From December to January: validation of the Budget, volumes 1 and 10.

6.17.4.3   At the Publication level

(Narrower scope: one document)
There are six standard phases involved in the production of any given one of the budget documents:
- The preparation phase,
- The authoring phase,
- The translation phase,
- The validation phase,
- The correction phase,
- The printing phase.

6.17.4.4   At the Operational level

(Narrowest scope)
The procedures followed by individual users in these various phases are highly structured and regular.

The *SEI-BUD/SEI-AMD* system has been implemented to support this procedure. Its main functionalities are described hereafter.

6.17.5   Functionalities of the system

6.17.5.1   The "Budget" module

SEI-BUD is an acronym for "Système Editorial Informatisé pour les documents BUDgétaires" or, in English, "Computer-aided publishing system for budgetary documents".

It is an inter-institutional system designed to assist in the publication of the budget of the European institutions in the 22 official languages, budgetary cycle after budgetary cycle.

The system has been operating since 1996, and has been evolving since then to better meet its users' needs.

SEI-BUD/SEI-AMD was updated to version 5 in Mars 2007.

The many functions of the system include:

- coverage of the ABB (Activity Based Budget – a Commission initiative);
- the capability of handling other publications (for example, Volume 0 and other documents based on the volume 0 DTD);
- technological updates (application server, JAVA, EJB, REMI, Batchsrv);
- system based on XML;
- system based on XSL;
- system using the UNICODE/UTF-8 character set;
- less maintenance and production support is needed due to the simplified system.

6.17.5.2   The "amendments" module

Work on the SEI-AMD system was started in 2000.

The system is specialised in the production and efficient management of amendments to the Institutions' budget.

The mechanics of modifying the budget through amendments are different from those of simply modifying the budget in that users are not directly modifying the budget – they are creating a different copy for each amendment. Only amendments which pass a vote (are adopted) will be incorporated into the budget, thus creating a consolidated version.

The approach used makes it possible to modify the existing full text, and then produce the amendment automatically by detecting the changes between the "before" and "after" versions of the text. The advantages are:

- User-friendliness: changes are made directly to the full text version, so there is no need to wrack one's brains to draft an amendment intended to produce a consolidated version.
- Quality: allowing editing to be done on the full text and then producing amendments considerably reduces incoherence.
- Automatic consolidation: with full text available, incorporating amendments which pass a vote into the final text is fully automatic (for all language versions).

6.17.5.3   The Change Request module:

SEI-CR (CR stands for Change Request) is under development (January 2008). SEI-CR will handle amending budgets and amending letters in an isolated workflow. SEI-CR is also a step in the direction of a unified system for producing both budgetary documents and managing the notation of the decisions.

The novelties in SEI-CR are:

- introduction of a meta level – "Budget + Identified version" to facilitate cross references between the elements of year N, N-1 and N-2;
- new mechanisms to work on the structure of the budget (split, merge, delete lines);
- new module to handle group/user access and rights at the level of the fragment.;
- new module to handle decentralised authoring;
- new workflow for the decision taking process;
- modules to exchange structured data with SEI-BUD and SEI-AMD.

6.17.5.4   General information

- SEI-BUD/SEI-AMD is based on a single repository;
- It uses "XML / XSLT" standards;
- It uses UTF-8 (indispensable for compatibility with all 22 languages).

6.17.5.4.1 Main functionalities

The system provides:

- editing functions for budget documents (authoring, translation, correction, printing and distribution);
- editing functions for amendments (authoring, translation);
- functions for incorporating amendments that have been adopted to produce a consolidated budget document;
- production of various "finished products" ("Word draft" and Web publishing, full text, reduced text and line-by-line output);
- functions for producing various reports for figures, text, vote-results etc, in different formats (Word, csv, xls, xml);
- functions for interacting with other systems (POETRY, EURAMIS, translation workflows at the instructions (GREFFE 2000 – still to be implemented)).

Part of the system is organised in a Java based user interface (the Control Tool) installed locally with access to a collection of Java based tools. Another part of the system is organised in a web-based system. The Control Tool is the integrating tool.

6.17.5.4.1.1 Main author functions

The main author functions need to cover two ways of functioning:

- Making changes directly: changes are made directly to consolidated documents, i.e. that are as they will be published:

- editing the EP / Volume 0 of the Commission;
- editing the budget documents of the Institutions which do not wish to use CRs;
- editing the budget documents after adopted CRs is incorporated.

- Making changes to existing documents by creating amendments: the system provides the following author functions:
  - creation, modification and deletion of amendments,
  - for a given amendment, it must be possible to create, modify and delete the following:
    - Transactions creating new lines (Add new);
    - Transactions deleting lines (Delete),
    - Transactions changing lines (Modify),
    - Transactions merging lines (Merge),
    - Transactions splitting lines (Split);
  - entry of adopted amendments (inputting the decision/vote);
  - incorporation to produce consolidated versions of the budget document.

The above lists of functions also apply to SEI-CR in so far as the objective is to modify an existing budgetary document.

6.17.5.4.1.2 Main translator functions

The main translator functions need to cover three ways of functioning:

- Non blocking translations of budget documents: fragments are sent to translation before the finale consolidation of the budget document:
  - translating the EP / Volume 0 of the Commission,
  - translating the budget documents of the Institutions which work directly in SEI-BUD;
- Blocking translations of budget documents: translations are typed directly over consolidated documents, i.e. that are as they will be published:
  - translating the EP / Volume 0 of the Commission,
  - translating the budget documents of the Institutions which work directly in SEI-BUD;
  - editing budget documents after monolingual incorporation of adopted changes (i.e. where CRs have not been translated into all the official languages prior to incorporation).
- Translations of amendments: Parliament's amendments are translated into all official languages before being voted on and therefore before being incorporated into SEI-BUD to produce the consolidated documents.

The *SEI-BUD/SEI-AMD* system uses different strategies to produce the "most native" Word documents for the translation services. And for both the Commission and the Parliament SEI-BUD/SEI-AMD handles translations by sending/receiving files through their own workflow systems. Files from SEI-BUD/SEI-AMD are for now customized to be used in Translators Workbench.

6.17.5.4.1.3 Main Correction functions

A correction phase follows:

- authoring and translation (e.g.: volume 0 and the Preliminary Draft Budget), or
- consolidation of a voted version (the Draft Budget, the Finale Budget).

The system includes

- the Control Tool, which makes it possible to interact with the server;
- a XML format, so the files can be corrected in XMetal (version 4.5);
- a print-out of the differences in HTML and Word.

6.17.5.4.1.4 Main Publishing functions

Once the text has been corrected, the publishing phase begins. The system includes the Control Tool, which makes it possible for the printer to interact with the server (consultation using a XML format).

6.17.5.4.1.5 Main Management functions

The system also includes:

- user-profile management functions;
- administrative functions for management of phases etc;
- translations request and translation follow-up management – the interface with POETRY;
- interface with EURAMIS to automatically generate and display TMX files.

6.17.5.4.1.6 Main Reporting (& XML/CSV Export) functions

The system provides various reporting functions, such as:

- production of a "word draft" (production of a budget document which is presented close to how it will appear on paper – including summary tables and resolved REUSEs);
- "Print differences" (HTML and Word);
- an error detecting system that compare content across the language versions;
- generate rtf-files for use for TMX-generation;
- production of the full text of an amendment (Word);
- production of the reduced text of an amendment (Word);
- production of a list of votes also xml-versions for internal systems in the European Parliament;
- production of text changes line by line;
- production of figures changes line by line;
- "Export XML/CSV";
- production of CAT/POL reports;
- production of heading and figures line by line.

6.17.5.4.1.7 Other functions

The unified system also has functions such as:

- List of Votes;
- Recording decisions;
- Recording lists;
- Generating notes to an amendment;
- Displaying and modifying notes to an amendment;
- Translating notes to an amendment:
- Generating cover-pages for compulsory reports.

6.17.6   Architecture of the system

6.17.6.4 Three-tier architecture

The diagrams below provide an overview of the system's architecture:
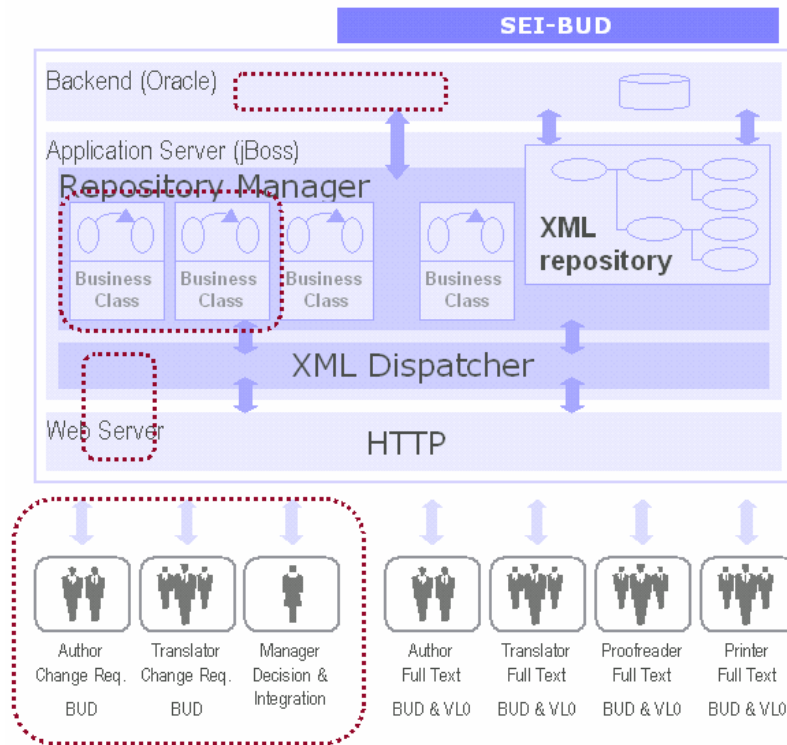
The integrated *SEI-BUD/AMD* editorial system implements three-tier architecture:

- the <u>database</u> tier (Oracle backend): used to save XML instances and management data;
- the <u>application server</u> tier: based on jBoss (J2EE open-source application server, developed under JAVA);
- the <u>client</u> tier: based on JAVA applications (control, structure and figures tools) and the office software used in the Institutions (Word, XMetal);

All the involved technologies are currently market standards: Oracle, XML, XSL, JAVA, Unicode, etc.

6.17.6.5 The repository

The system's repository is designed to provide efficient and persistent management of the various versions of XML documents.

This server side component has been developed in JAVA, which implements a versioned and persistent DOM (the persistence is ensured by the data storage in a dedicated database, Oracle 10i).

6.17.6.5.1 Versioning and persistence of data

The repository is capable of treating very huge XML instances and ensuring a versioning at the lowest level (the XML element).

The updates of the repository are of transactional type (XUpdate). This characteristic allows the "replication" of an update transaction done by an author on all linguistic versions of the document (thus ensuring a perfect multilingual coherence on all languages of the document).

Versioning is efficient in that only elementary differences between two XML documents are versioned. This is because when it comes to documents such as the budget (approximately 2 000 pages in 22 official languages) saving the entire document for each version would be inconceivable. If this were done, by the time production was complete the repository would be unacceptably large (during the authoring phase, there can easily be over 1 500 technical versions of the budget).
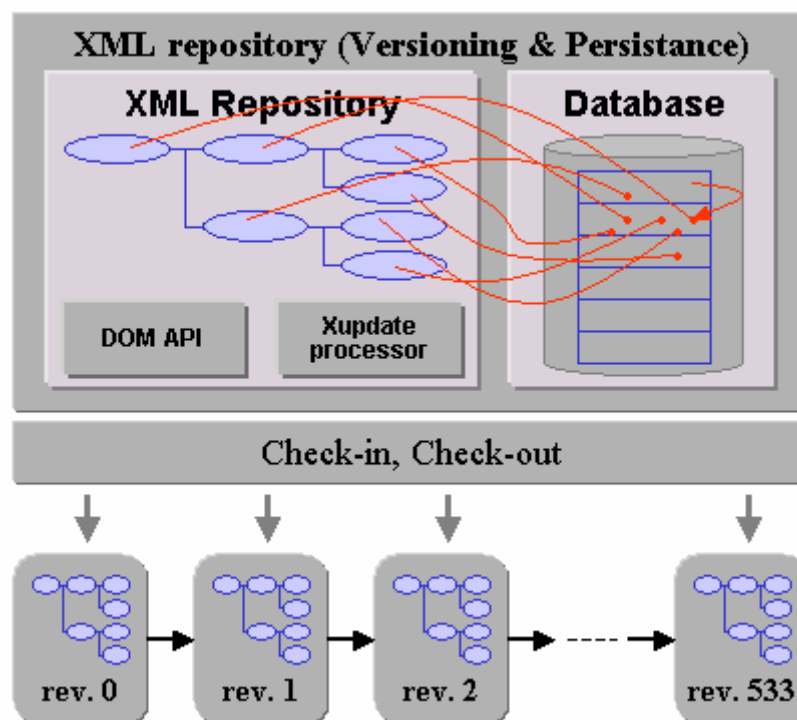
6.17.6.5.2 Merge, branch and labelling of data

In order to construct a repository, which was also able to manage amendments, the following essential functions were developed:

- "Branch" creation function: creating an amendment/change request had to be handled in the same way as creating a "branch" of a specific fragment (e.g. a budget heading) of the budget publication - a fragment which could change (several versions) independently of how the original fragment from the budget were to develop.
- "Merge" function: an amendment/change request which is passed/accepted becomes the "official" version of the figures and comments, and must be incorporated (merged) into the budget publication, resulting in a consolidated version.
- "Naming" function: if branch creation and merging are to be efficiently managed, it must be possible to use "technical versioning" suitable for "high-level" workflows and procedures.
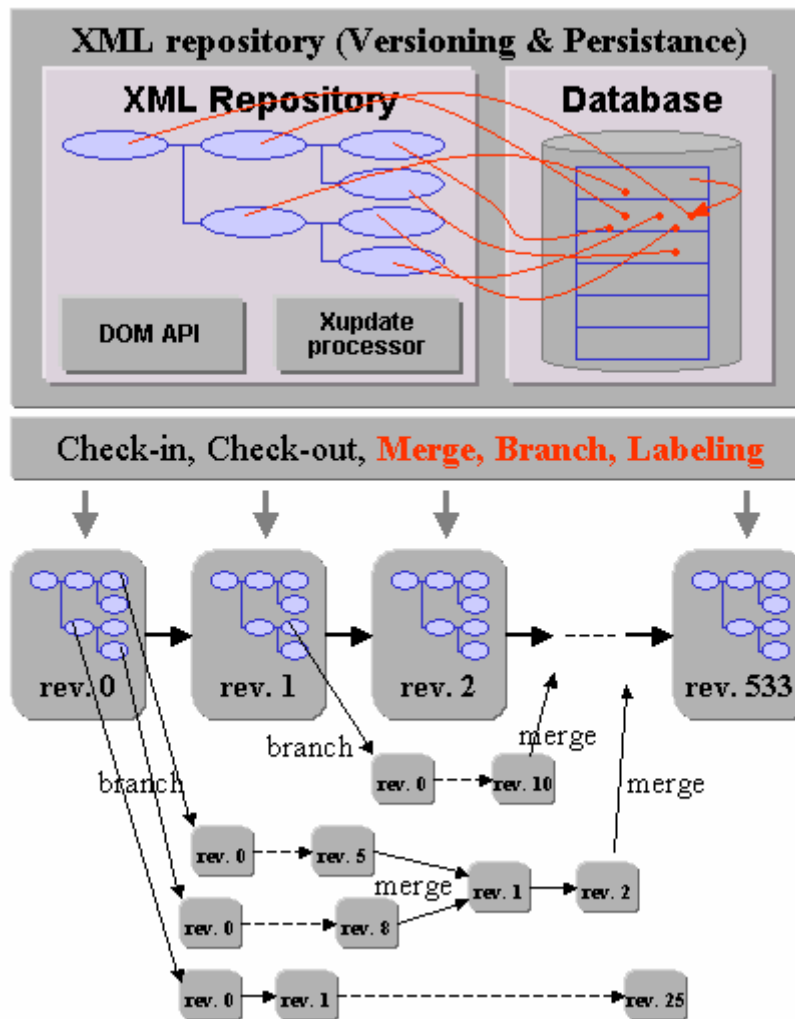
6.17.6.6 A Repository Manager

The Repository Manager implements the high level functions needed for an approach to work based on amendments and change requests.

It is the Repository Manager's job to interpret requests from clients, chain the appropriate processing and return the results to the clients.

The Repository Manager also handles access to the contents of the repository, and the way in which is accessed.

It has been entirely written in JAVA 1.5 and is executed in a Jboss (Open Source / Free software) application server.

6.17.6.7 Software

The diagram below gives a general overview on the software architecture of the integrated *SEI-BUD/SEI-AMD* editorial system.
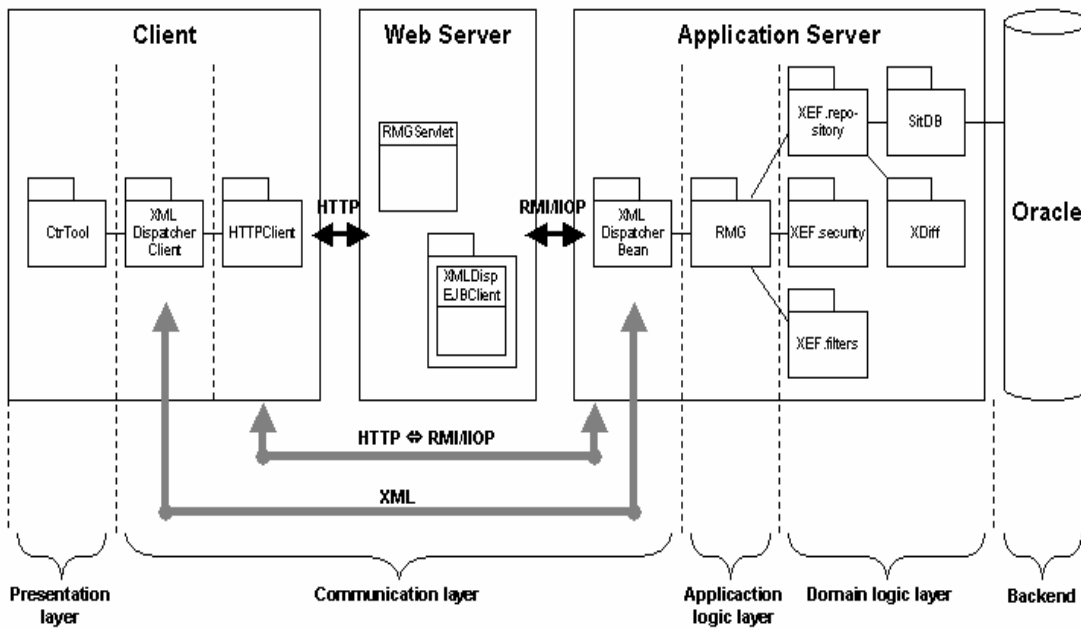
This architecture is based on following products or middleware's:

- The application server: the system uses Jboss 4.0.4.GA as a server and container for EJB (Enterprise JAVA Bean). JBoss is an "open source / free software / standard compliant" implementation of an application server written in JAVA (100 %) and based on the J2EE specification. Additional information on Jboss can be found here: http://www.jboss.org/.

- The Web server: as Jboss is an application server and not a Web server (servlets container) it does not integrate a servlets/JSP container (although version 3.0 of JBoss does include the JETTY Web server). Therefore, the integrated *SEI-BUD/AMD* system uses the Apache Tomcat Web server, which is also an "Open Source Software, Free Software". Additional information on Tomcat can be found here: http://jakarta.apache.org/tomcat/

- The backend: Oracle 10.2.0.1. Oracle is used for ensuring the persistence (DOM storage) and the storage of the management information (such as, for instance, the "locks" of the elements).

In addition to the above mentioned products, the system also integrates a mail server.

6.17.6.8 Interfaces with external systems

6.17.6.8.1 Interfacing with *BadgeBud*

The system currently offers the following ways to exchange data with *BadgeBud*:

- exchanging budgetary figures using the figures tool through xml-files;

6.17.6.8.2 Interfacing with the translation services

The POETRY system used by the Commission's translation service

SEI-BUD interacts directly with Poetry through the system for translation request/translation follow up. The files are sent from SEI-BUD with the correct information for Poetry (Translation request) and the feed back is reported in the other module (Translation follow up).

The EPADES system used by the Parliament's translation service

The system sends documents for translation as follows:

- Word files to be translated (translation text) are produced by the system and sent to the European Parliament by FTP using TESTA II. They are received by Epades at the EP and forwarded to the servers for each linguistic division.
- The same path is followed in reverse to return documents.
- The system has an "EP FTP provider" for sending documents to be translated, and an "EP FTP reader" for receiving the translations.

The Council's translation service

The Council's translation service translates the documents synchronous.

6.17.6.9 The client tools

Two types of client tools are available: the ones reserved for the administrators, and the ones for the generic users. These are:

6.17.6.9.1 The Control Tool

The Control Tool is an interface which allows a client to extract information from the remote server's repository, in order to consult, reserve or update it. Following a query sent to the server, the Control Tool receives a structured XML message. The message is processed and its editorial object (structure file, figures file, comments in RTF, differences in XML, etc.) is saved on the local machine of the user.

6.17.6.9.2 The Structure Tool

This tool is a JAVA application which is used for editing the budgetary nomenclature (structural view). This application is a stand-alone feature and can be accessed thorough the Control Tool.

6.17.6.9.3 The Figures Tool

The Figures Tool is a JAVA application which is used for editing the budgetary figures (figures view).

6.17.6.9.4 The Word/XML Author Tool

This tool is based on an XML customisation of Word 97, and is used for editing the budgetary comments.

6.17.6.9.5 The Proof reader Tool

This tool is based on a customisation of XMetal.

6.17.6.10   Data flows

6.17.6.10.1   General view

The *SEI-BUD/AMD* system is a very ambitious system: it is the only inter institutional, multilingual system implementing a production line involving authors, translators, proof-readers and a printer in a cyclical fashion, three times a year, year in, year out.

The complete description of the data flows is therefore complex. In order to have a meaningful overview of these data flows, we will first describe the "generic" flow, then the specific flow in geographical terms, then the specific flow in chronological terms in accordance with the legislative procedure.

6.17.6.10.1.1 Data flow and Control Tool

The flow of data between the server and the clients of the *SEI-BUD/SEI-AMD* system has the following features.

- The Control Tool is the sole client interface with the system's repository. Any exchange of data by means other than the Control Tool must be considered to be specific.

- XML messages sent by HTTP: the Control Tool communicates with the server by means of XML messages transmitted using the hypertext transfer protocol (HTTP). If the message requires the transmission of data in the form of a document (e.g. an RTF or Word document), the document is compressed and encapsulated in the message transmitted.

- Data compression: the data transmitted are compressed (ZIP) for reasons of performance. The compression of documents in XML, RTF and HTML formats is very efficient, and reduces the volume (bytes) of data exchanged between the server and the clients by a factor of 10.

Thus the Control Tool enables all users to exchange data with the system's repository (consultations or reservations followed by updates).

In the case of a "reservation", the editorial object obtained (XML document, RTF document, etc.) must be processed and changed using an appropriate tool (structure tool, figures tool, comment editing tool, etc.). For the repository to be updated, the editorial object modified by the user must be "sent back" (updated) by the user using the Control Tool.

6.17.6.10.1.2 Data flow and the user's role

The following gives an overview of the generic data flows which the integrated *SEI-BUD/AMD* system offers for the various production roles, i.e:

- authors (and authors +): structure, figures and comments (XML and Word) – report on changes (HTML or Word),
- translators: Word-documents to translate (RTF),
- proof-readers Word-documents or XML-documents to proofread,
- printer: "resolved" document in XML,
- Web-publishing: "resolved" HTML generation of a linked document.

The content of the data flows varies according to the role of the user. A translator should not (normally) be able to update the budget figures. A translator should therefore never be able to make a reservation of budget figures.

However, this is a matter of system configuration — in this case the configuration of users — rather than of data flows.

6.17.6.10.2   Logical view

The following figure illustrates the processes (filters, calculation of differences, etc.) which allow the budget publication held in the repository in XML format (DTD ABB) to be edited (consultation/updating):
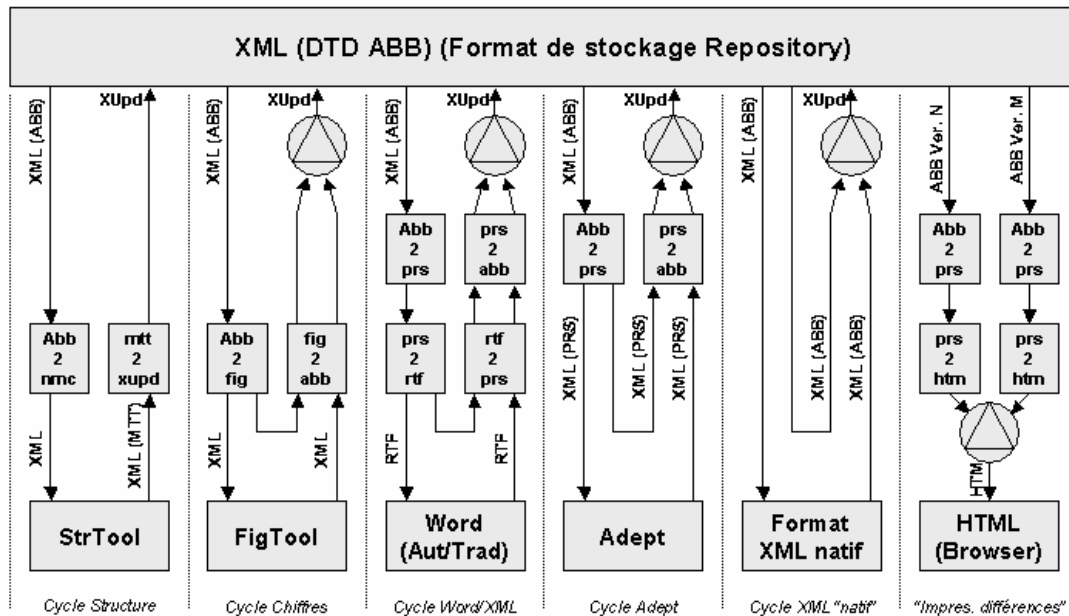
N.B. This figure presents a simplified view of the processes. For example, it does not show the "view protection" mechanism which prevents the updating of figures during the Word/XML cycle. Please note that Adept no longer is used as software.

6.17.6.10.2.1 The structure cycle

The "structure cycle" allows the budget nomenclature to be modified by acting on a reduced view — the structure view — which has been stripped of the other budget data (figures and comments) and, once modifications have been made in one language, automatically passes them on to the other languages in order to ensure the synoptic quality of the publication and to reduce workload.

An XSLT filter extracts the budget nomenclature from an ABB budget document and produces an XML file for use by the structure tool.

The structure tool comprises various functions allowing actions to be performed on this table of contents, for example:

- deleting items,
- adding new items,
- adding new items by "copying" an existing item,
- moving items,
- etc.

The structure tool records such modifications of the budget nomenclature in the form of meta-transactions (XML files conforming to the METATRANS DTD). These meta-transactions are then transmitted to the server for updating via the Control Tool. A server process then converts the meta-transactions into Xupdate transactions (XML).

These Xupdate transactions are then applied to all the language versions concerned (copying to all languages of modifications made in one language in order to ensure the quality of the publication and to reduce the workload).

6.17.6.10.2.2 The figures cycle

The purpose of the "figures cycle" is to allow modifications of the budget figures by acting on a reduced view — the figures view — stripped of the other budget data (budget comments) and, once these modifications have been made in one language, to automatically pass them on to the other languages in order to ensure the synoptic quality of the publication and to reduce workload.

An XSLT filter extracts the budget figures from an ABB budget document and produces an XML filter for use by the figures tool.

The figures tool comprises various functions allowing actions to be performed on these budget figures, for example:

- modification of the figures and of the reserve amounts of a budget heading,

- modification of the list of posts covered by a budget title.

The figures tool saves the modifications in the form of an XML file. This figures file is then transmitted to the server for updating via the Control Tool.

A server process then calculates the changes actually made by the user, i.e. the differences between the figures file sent to the user and the figures file returned by the user. This calculation of the differences produces updating transactions (Xupdate).

These Xupdate transactions are then applied to all the language versions concerned (copying to all languages of modifications made in one language in order to ensure the quality of the publication and to reduce the workload).

In SEI-CR the figures view and the structure view have been combined to one view and one tool.

6.17.6.10.2.3 The Word/XML cycle

The "Word/XML cycle" allows modifications of the budget comments by acting on a "presentation view" (the budget figures are presented in the form of tables).

In "author" mode, modifications in one language must be passed on automatically to the other languages in order to ensure the synoptic quality of the publication and to reduce the workload in the other languages.

In "translator" mode, the modifications made can affect only the language of the translation, without modifying the synoptic view.

An XSLT filter (abb2prs) converts an ABB budget document into another type of XML document ("presentation"). Another filter (prs2rtf) then converts that XML document into an RTF file which can be edited in Word.

Once the modifications to the comments made using the editing tool (Word) have been saved, the RTF file is transmitted to the server for updating. A server process converts the RTF file back into a "presentation" document, and then into a valid XML document in terms of the ABB DTD.

The differences are calculated to produce XUpdate transactions reflecting the modifications actually made by the user (differences between the file sent to the user and the file returned by the user). These XUpdate transactions are then applied to the language version concerned. If the work has been done in author mode, the XUpdate transactions are also applied to all the language versions (copying to all languages of modifications made in one language in order to ensure the quality of the publication and to reduce the workload).

6.17.6.10.2.4 The XMetal cycle

The XMetal tool allows modifications/corrections of the budget comments by acting on a presentation view (the budget figures are, for example, presented in the form of tables).

This cycle is used by proof-readers at the Publications Office.

The process is similar to that of the Word cycle, except that there is no conversion to RTF.

The XML presentation format is used directly for editing. As for the Word cycle, the modifications made as author are passed on to all the language versions to ensure the synoptic quality of the publication and to reduce the workload in the other languages; modifications made in translator mode, when applied to the repository, will only update the language version of the translation.

The calculation of the differences between the version sent to the user and the version returned by the user produces the XUpdate transactions needed to update the repository.

6.17.6.10.2.5 The "native XML" cycle

This cycle permits updates to be made while working directly on the XML format stored in the repository (ABB DTD).

SEI-BUD/SEI-AMD does not include a tool for editing this format. This format is normally (configuration) accessible only to administrators and to the printer. As for the other cycles, the author or translator mode defines whether or not updates to the repository are passed on to the other language versions.

6.17.6.10.2.6 Print-out of the differences

The "Print differences" feature is a widely used productivity tool in the *SEI-BUD/SEI-AMD* system.

The system can produce a print-out of the author differences (for any budget fragment) so that authors can view and check the modifications they have made to the budget publication (checking).

The system can produce a print-out of the translator differences (for any budget fragment) to help translators to pinpoint and understand the modifications made by the authors which need to be translated.

Proof-readers use a print-out of the proof-reader differences to view and pinpoint modifications made by a translator on a language version. The proof-readers only need to check and, where necessary, correct the parts marked on the print-out (as the translators have not touched the other parts).

Thus various people involved in the production process use the "print differences" tool. Authors, for example, will have a full print-out showing all the changes made to a budget document. However, since *SEI-BUD/SEI-AMD* system automatically passes on the changes made by authors, translators are interested only in the differences which are pertinent for them, i.e. those which really need to be translated. The print-out for translators will not, for example, show the changes which authors have made to the budget figures.

Modifications to budget figures are automatically passed on to all the language versions by a server process (quality, cost reduction, speed). Neither will it show deletions or movements of paragraphs. Deletions of paragraphs, lists, tables, etc. are detected when the author's modifications are updated and automatically passed on to all the language versions by a server process (quality, cost reduction, speed).

Once the differences have been calculated, two XSL style sheets (abstract and translator) can be used to obtain the following variants:

- print-out of the author differences (default print-out),

- print-out of the author/summary differences: a style sheet is applied which summarises the differences displayed in the print-out (for budget headings containing no differences, only the title of the budget heading is displayed),
- print-out of the translator differences: a style sheet is applied which deletes all the change marks concerning budget figures and the marks and parts which correspond to a deletion,
- print-out of the translator/summary differences: a style sheet is displayed which summarises the differences displayed in the print-out (for budget headings containing no differences, only the title of the budget heading is displayed).

The following figure illustrates these concepts:
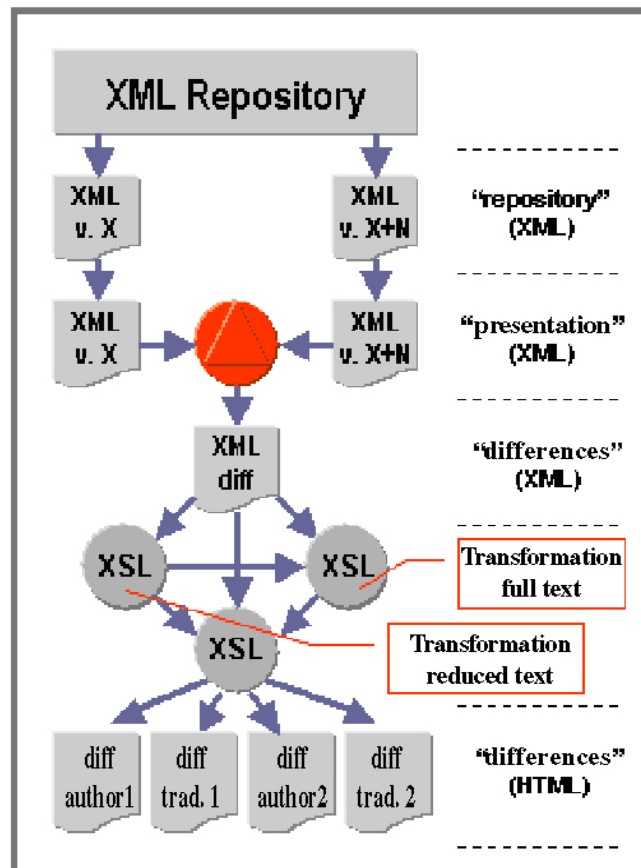
Quality control of translations

It is possible to check the quality of the translations of a given volume/fragment. The system generates a report where it is possible to see if all the paragraphs have been translated. The main idea is to get the text as perfect as possible before giving a green light to the printer so the database reflects the most correct version of the text. The pre-flight control of quality will be an issue in the years to come.

6.17.6.11   Hardware

6.17.6.11.1   Introduction

The *SEI-BUD/SEI-AMD* has a client-server architecture in which the Control Tool is the only tool (interface) which interacts with the server (except for data exchange with POETRY).

The Control Tool is an application written in JAVA and is used on PC/Windows configurations (authors, translators) and on SUN (Sparc)/Solaris configurations.

Apart from the Word/XML editing tool, which requires a PC/Windows workstation configuration, the other tools (JAVA application) are portable and can run on either PC/Windows or SUN/Solaris.

The server has been developed entirely in portable code (JAVA and C++) and can run in a SUN/Solaris or a PC/Windows environment.

The operating system architecture described below is the "typical" architecture used in production.

6.17.6.11.2 Server

- Operating system:
  Sun Sunfire 25K
  Processors: 8 UltraSPARC v9 CPU @ 1500 MHz Dual core
  RAM: 64 GB
- Location:
  Publications Office (EUR-OP), Luxembourg

6.17.6.11.3 Clients

6.17.6.11.3.1 The Author clients

The author client must have access to the repository (Control Tool — JAVA application) and be able to make changes to the budget nomenclature (structure tool — JAVA application), the budget figures (figures tool — JAVA application) and the budget comments (using Word as editing tool).

As Word is used to make changes to the comments, the "typical" workstation configuration for an author is a PC/Windows platform.

- Concerns: authors in all institutions, i.e.:
  - Commission: approx. 20 authors,
  - Council: approx. 8 authors,
  - Parliament (EP): approx. 10 authors,
  - Court of Auditors (CoA): 1 author,
  - Court of Justice (CoJ): 1 author,
  - Economic and Social Committee (ESC): 1 author,
  - Committee of the Regions (CoR): 1 author,
  - European Ombudsman (EO): 1 author,
  - European Data-Protection Supervisor – 1 author.

- Typical workstation configuration:
  - PC (Intel) Pentium III – Pentium 4 + Windows XP,
  - minimum 128 Mbytes – 1GB of RAM,
  - minimum 50 Mb of free disk space,
  - approx. 20 MB for JAVA Runtime Environment (JRE),
  - approx. 10 MB for installation of tools (CtrTool + Word/XML),
  - approx. 20 MB for working files.

6.17.6.11.3.2 The "Translator" clients

Like authors, translators use their standard office automation tool (Word) to translate budget documents.

Translators generally translate outside SEI-BUD/SEI-AMD.

Commission translators (DGT — Directorate-General for Translation) do not use the Control Tool as documents are exchanged via the POETRY system.

- Concerns: translators in all institutions, i.e.:
    - Commission: approx. 300 translators,
    - Council: approx. 30 translators,
    - Parliament (EP): approx. 30 translators,
    - Court of Auditors (CoA): (1 translator),
    - Court of Justice (CoJ): (1 translator),
    - Economic and Social Committee (ESC): (1 translator),
    - Committee of the Regions (CoR): (1 translator),
    - European Ombudsman (EO): (1 translator).

- Typical workstation configuration:
    - PC (Intel) Pentium III – Pentium 4 + Windows XP,
    - minimum 128 Mbytes – 1GB of RAM,
    - minimum 50 Mb of free disk space,
    - approx. 20 MB for JAVA Runtime Environment (JRE),
    - approx. 10 MB for installation of tools (CtrTool + Word/XML),
    - approx. 20 MB for working files.

- "DGT translator" workstation configuration:
    - PC (Intel) Pentium III – Pentium 4 + Windows XP,
    - minimum 128 Mbytes – 1GB of RAM,
    - minimum 50 Mb of free disk space.

6.17.6.11.3.3 The "Proof-reader" clients

Unlike authors and translators, who use a market standard office automation tool (MS Word), proof-readers use a specialised editing tool (XML) to edit budget documents: XMetal.

- Concerns: proof-readers at the Publications Office (EUR-OP) (approx. 20 proof-readers).
- Typical" workstation configuration:
    - PC (Intel) Pentium III – Pentium 4 + Windows XP,
    - minimum 128 Mbytes – 1GB of RAM,
    - minimum 50 Mb of free disk space,
    - approx. 20 MB for JAVA Runtime Environment (JRE),
    - approx. 10 MB for installation of tools (CtrTool + Word/XML),
    - approx. 20 MB for working files.

6.17.6.11.3.4 The "printer" client

The printer only accesses the repository for consultations.