



Tender Specifications
annexed to
Invitation to Tender
Ref. SJU/LC/0085-CFT
Performance of a study on an
ATM Performance Model and
supporting methodology

Date 30 October 2012

1. INTRODUCTION

1.1. Acronyms and terminology

ANS	Air Navigation services
ANSP	Air navigation service provider
ATM	Air Traffic Management
ATM Master Plan	SESAR Master plan and the European ATM Master plan
EC	European Commission
EU	European Union
KPA	Key Performance Area
NSA	National Supervisory Authority
PRB	Performance Review Body
PRC	Performance Review Commission
PRU	Performance Review Unit
SES	Single European Sky
SESAR	Single European Sky ATM Research Programme
SJU	SESAR Joint Undertaking
WP	Workpackage
WS	Workshop

1.2. Overview of this call

The SESAR Joint Undertaking (SJU) envisages selecting a single entity or a Consortium as the case may be for the signature of a Service Contract for the performance of a study on an ATM Performance Model and supporting methodology.

More detailed description of the services to be covered is given in Section 2 below (“Terms of Reference”).

Fact sheets and reference documents have been attached to these Tender Specifications to provide background information. The bidders are invited to read and consult the facts sheets and the reference documents before proceeding with reading the Tender Specifications, as the information contained therein is essential for the correct understanding of the objectives of the Study.

1.3. What is SESAR

The Single European Sky Air Traffic Management Research Programme (SESAR) is a European initiative aiming at modernising and harmonising the European Air Traffic Management (ATM) systems ensuring sustainable, safe and efficient air transport development through a performance driven approach. Further information on the activities of the SJU is available at www.sesarju.eu

A. The European ATM Master plan

The SESAR Definition Phase resulted in a set of deliverables, the main one being the SESAR Master plan (D5), which was the commonly agreed roadmap for the accomplishment of research activities and gradual deployment of the results. The SESAR Master plan has been endorsed by the Council of the European Union on 30 March 2009 and became the European ATM Master plan (hereinafter referred to as the ATM Master plan). Since it has been endorsed by the Ministers of Transport of 27 Member States, the ATM Master plan, although not being a legally binding document, is a commonly agreed European roadmap for the development and deployment of the future ATM systems in Europe. A new version of the European ATM Master Plan substantially modified has been approved by the SJU Administrative Board on 17 October 2012¹.

The ATM Master plan is the basis for the new generation of European ATM systems for 2030 that will help achieve “more sustainable and performing aviation” in Europe. The plan contains roadmaps for the essential operational and technological changes required from all stakeholders (airspace users, ANSPs, airport operators, the military and the network manager) to achieve the performance objectives set by Single European Sky (SESA). It provides the basis for the timely, coordinated and efficient deployment of new technologies and procedures, whilst ensuring alignment with ICAO’s Aviation System Block Upgrades (ASBU) for global interoperability and synchronisation.

B. The timeline for the deployment of SESAR

It is essential that the core elements of the ATM concept are implemented timely and consistently throughout the European ATM network to enjoy their full benefits. This requires coordination and synchronization across countries and stakeholders

The Implementation (Industrialisation & Deployment) of SESAR's systems, technologies and standards will start in reality as soon as the products (outputs of the development phase) are available, meaning they have been validated and where practical demonstrated.

¹ Date of the notification to the SJU of the European Commission Decision C(2012) 6943 final on the adoption of the European Union's position on the approval of a modification to the European Air Traffic Management Master Plan of 8 October 2012.

The SESAR Programme is also expected to deliver "early benefits" (before 2014) with the deployment of SESAR products, systems and procedures being seen as a gradual process, where the development activities run in parallel to the industrialization processes leading to deployment activities.

2. TERMS OF REFERENCE

2.1 Specifications for the study to be performed

A. Context of the Study

The Single European Sky (SES) Air Traffic Management Research Programme (SESAR) is a European initiative aiming at modernising and harmonising the European Air Traffic Management (ATM) systems ensuring sustainable, safe and efficient air transport development through a performance driven approach.

In July 2010, the European Commission adopted Regulation (EU) No 691/2010 laying down a performance scheme for Air Navigation Services (ANS) and network functions (hereafter the Performance Regulation). This marked the start of the implementation of the SES Performance Scheme.

There is a clear link between the performance driven SESAR and the SES Performance Scheme, which establishes an EU system of ANS performance target setting, incentives, and monitoring. Both are part of the SES and need to be implemented harmoniously.

The Performance Regulation was followed by the adoption of the Commission Decision (2011/121/EU) of 21 February 2011, where the EU wide performance monitoring is applied for safety for the 1st Reference Period 2012-2014 and targets for the following key performance areas (KPAs): capacity, the environmental flight efficiency and cost efficiency.

The EU wide performance targets are legally binding for EU Member States and designed to incentivise Air Navigation Service Providers (ANSPs) to be more efficient and responsive to traffic demand, while ensuring adequate safety levels.

The Performance Review Body (PRB) supported by the Performance Review Unit (PRU)² is currently assisting the European Commission in the revision of the Performance Regulation and in setting targets for the second Reference Period (RP2, 2015-2019). The EU-wide targets and conditions of application need to be defined in detail by mid-2013. **This requires inter alia a precise and shared understanding of interdependencies between the Key Performance Areas (KPAs).**

From the SESAR point of view, the SESAR Programme includes

- Project B.04.01, the Development & maintenance of the ATM Performance and Business Aspects of the European ATM Enterprise Architecture which is responsible for the development of the ATM Business Model commensurate with the nature of the ATM Performance Partnership
- with respect to safety, Project 16.03.03 which is responsible for developing a framework to establish interdependencies between safety and other performance areas.

² A unit of the Eurocontrol Agency.

B. Scope and objectives of the Study

The interdependencies between the four KPAs – safety, capacity, environmental flight efficiency and cost efficiency – are currently understood qualitatively and at a high-level only.

For Reporting Period (RP) 2 and beyond, and for SESAR purposes, a formal and detailed performance model is required.

The purpose of such performance model and its supporting methodology is to support decision making through measurements and assessment of interdependencies between four KPAs of the EU wide Performance Scheme, taking external factors into account, while ensuring that adequate levels of safety are preserved.

The performance model may be used by:

- § the SJU in balancing validation targets and understanding the potential benefit to operational performance at a network and service level from proposed deployments;
- § the European Commission assisted by the PRB
 - to propose EU-wide targets for the second reference period;
 - to assess the consistency of national performance plans with EU-wide targets, their internal consistency across KPAs and robustness to traffic variations;
 - for performance monitoring purposes and eventual corrective actions during the reference period(s), taking account of external factors;
- § the National Supervisory Authorities (NSAs - States entities) to ensure the balance of their performance plans in terms of targets, incentive scheme, and associated details.

Furthermore, the framework shall help in the process of defining new indicators and setting targets in the future.

C. Tasks to be performed

The selected tenderer shall:

1. Document relevant existing models in ATM and other fields such as the banking/insurance sector, utilities, telecoms, or transport and energy industries and assess in which way their experience can be used in establishing a Performance Model meeting the need expressed in these Tender Specifications;
2. Propose and develop a computation Performance Model for measuring and assessing interdependencies between the four KPAs³. The Performance Model will be complemented by the Guidance Material (described below);
3. Demonstrate the model (using the Guidance Material) with worked example(s) designed to show the way in which the model should be used, that outputs when compared with realistic scenarios give sufficient assurance for measurement and assessment outputs and sensitivity to input data variations are sufficiently contained to maintain the validity of the results for the users described above;
4. Develop Guidance Material on the following aspects:
 - § Methodology to measure interdependencies between the KPAs to allow for informed decision on setting the targets, both at EU and national levels;

³ Safety, capacity, environmental flight efficiency and cost efficiency of Commission Regulation 691/2010

- § Quantification of Safety in form of ‘risk’ value and the other KPAs in form of Total Economic Value (TEV) or other relevant indicator(s) of “opportunity” value, considering the different goal-setting processes;
 - § How to address the balance between risks and opportunities, while safeguarding acceptable levels of safety and preventing stakeholders from using safety as a ‘trump’ card;
 - § Informed decision making on performance monitoring and eventual corrective actions by NSAs, the PRB and other interested parties, taking account of trade-offs between KPAs and external factors, based on qualitative and quantitative arguments,
 - § Clear definitions of the terminology and description of the methodology.
5. Organise a workshop on ANS performance interdependencies with stakeholders in order to test the proposed methodology, establish buy-in to the proposed approach and report on conclusions.

D. Deliverables description, Gate reviews and schedule/milestones

1. First Deliverable: Report on relevant experience (D1)

Relevant models and methodologies addressing some of the objectives mentioned in Section B here above and which may exist in other industries shall be reviewed. Brief descriptions of these models, together with an evaluation of their relevance and applicability to the aviation environment and suggested amendments to PRC-PRB total economic cost concept shall establish the first deliverable in the form of a report. This report will represent deliverable D1.

2. Second Deliverable: ATM Performance Model (D2a)

The second Deliverable (D2a) shall describe underlying methodology and the proposed Performance Model. This Deliverable shall be developed under guidance from the Steering Group (see below). It shall describe the overall ATM performance model structure and logic, as well as sub-models containing descriptions of direct and indirect influences.

This Deliverable will be in the form of guidance material satisfying the requirements detailed in Sections B and C, and in addition, it will describe in detail the following items, (the list is non-exhaustive):

- § User needs,
- § Functional requirements,
- § Key drivers within each area,
- § Techniques and Methodology,
- § Tool/model development process,
- § Case Studies (e.g. what-if exercises),
- § Results (including current and foreseen performance indicators, qualitative trade-offs and future requirements).

3. Gate Review

A Steering Group composed of the SJU, the European Commission, EASA and PRB-PRU, with input from selected operational stakeholders whose consultation has to be organised, will be established by the SJU.

Based on the result of the assessment of D1 and D2a, the Steering Group determine whether the Task has progressed sufficiently and in an acceptable manner. Based on this assessment, the SJU shall authorise or not the progression to the next phase. In case of non-authorization, the contract may be terminated in accordance with the conditions defined in Article I-10 of the draft contract in Annex V.

The SJU may decide that the progression to the next phase shall be subject to the implementation in D2a of the comments and assessment expressed by the Steering Group . In this case, the Contractor shall provide the SJU with Deliverable D2b.

4. Third Deliverable: Worked Example (D3a).

Deliverable D3a shall contain a worked example⁴ of the model including a “User Manual”, which will help future users with their understanding and application of the model under their individual circumstances. The worked example will be built on one of the Case Studies developed in the second Deliverable (D2a or D2b as the case may be).

In addition to a worked example it is planned that real data will be provided to enable the model to be tested against a representative scenario and available datasets.

Deliverable D3a shall be presented during the aforementioned Stakeholder Workshop and, if necessary, updated, and at the request of the SJU revised to take into account the relevant comments received at the workshop and implemented by the Contractor into a revised Deliverable (D3b).

5. Fourth Deliverable: Stakeholder Workshop(s) (D4) and report (D4a).

One Workshop on ANS performance interdependencies shall be organised with various stakeholders to test the method and methodology as well as to acquire their buy-in. A report shall capture the proceedings and conclusions of the workshop. The workshop shall constitute Deliverable 4 (D4) and the Workshop Report (D4a).

6. Fifth Deliverable: ATM Performance Model (D2c)

The fifth Deliverable (D2c) shall include an update of the Guidance Material and model based on the outcome of the Workshop.

7. Model Delivery (D2d, D3b)

The final model and underlying methodology (D2d, D3b) shall be delivered along with support documentation and a report on future functions or options that could extend the model in order to meet more advanced requirements discovered during the development of the initial capability.

⁴ “Worked example” means not a final product but a type of mock-up or even a paper exercise designed to illustrate how the final model could work

8. Schedule/milestones

The activities shall start at T_0 (i.e. at Kick-Off meeting) following the signature of the Contract, expected during January 2013.

The total duration of the Tasks to be performed shall be of a maximum of six (6) months.

9. Meetings

Review meetings will be organized between the SJU and the Contractor at a suitable location agreed in advance between the SJU and the Contractor at key points in the Contract indicated below:

- § Kick-off meeting following signature of the Contract to be held in Brussels at SJU premises (i.e. T_0);
- § Ad-hoc Review/Progress meetings to be held at the request of the Contractor or the SJU;
- § Final review of the Contract to be held in Brussels at the SJU premises.

E. Deliverables Summary and Schedule

Table 1: Deliverables and Milestones

<i>No</i>	<i>Deliverables</i>	<i>Description</i>	<i>Due date</i>
D0	Project Plan	Updated Project Plan based on outcome of Kick-off meeting	T ₀ + 2w
D1	Report on relevant experience	Review of existing models/methodologies	T ₀ + 6w
D2a	Methodology and ATM Performance Model	Initial Guidance Material	T ₀ + 10w
		Gate Review	T ₀ + 12w
D2b	Methodology and ATM Performance Model	Updated Guidance Material and Model – 1 st version	T ₀ + 16w
D3a	Worked Example	Worked example of the Model including User Manual	T ₀ + 16w
D4	Workshop	Stakeholders Workshop	T ₀ + 18w
D4a	Workshop report	Workshop report	T ₀ + 20w
D2c	ATM Performance Model	Update of Model and Guidance Material based on the Work Shop	T ₀ + 22w
D2d, D3b	Final ATM Performance Model	Model and Final Guidance Material	T ₀ + 24w

The Deliverables shall be provided to SJU in English language in one paper copy as well as a CD ROM containing the electronic files (as far as possible Microsoft Office format).

The Contractor shall provide full secretarial support at all meetings that they attend in relation to this project.

The Contractor shall also be responsible for organizing all activities described in this technical specification and in the proposed offer unless indicated otherwise by the SJU.

2.2. Price

The maximum allocated budget for this Service Contract as whole is **250.000,00 EUR (two hundred fifty thousand EURO)**.

3. ASSESSMENT OF THE OFFERS AND AWARD OF THE CONTRACT

3.1. Introduction

Proposals will be assessed in accordance with the criteria laid down below. The assessment will be strictly based on the content of the received offers and in the light of the criteria set out hereunder.

The tenderer [and in case of a Consortium, the coordinator and each consortium member] shall take every necessary precaution to avoid any risk of conflict of interest relating to economic interests, political or national affinities, family or emotional ties or any other interests which may influence the impartial and objective performance of the Tasks. The tenderer [and in case of a Consortium, the coordinator and each consortium member] shall present the methodology to be used in identifying any risks of conflict of interest and the mitigation strategies to avoid them. In the event of failure to comply with these requirements, the tenderer concerned may not have their Proposal further evaluated.

The assessment procedure will be carried out in three consecutive stages:

- Stage 1 – assessment in the light of exclusion criteria (see section 3.2. below),
- Stage 2 – assessment in the light of selection criteria (see section 3.3. below) and
- Stage 3 – assessment in the light of award criteria (see section 3.4. below).

The aim of each of these stages is:

- To check on the basis of the exclusion criteria, whether tenderer can take part in the tendering procedure;
- To check on the basis of the selection criteria, i.e. legal, economic and financial, technical and professional capacity of each tenderer;
- To assess on the basis of the award criteria each offer which has passed the exclusion and selection stages.

3.2. Assessment in the light of exclusion criteria

To be eligible for participating in this contract award procedure, the tenderer [and in case of a Consortium, the coordinator and each consortium member] cannot be in any of the following exclusion grounds:

- a) being bankrupt or wound up, having its affairs administered by the courts, having entered into an arrangement with creditors, having suspended business activities, being the subject of proceedings concerning those matters, and being in any analogous situation arising from a similar procedure provided for in national legislation or regulations;
- b) being convicted of an offence concerning professional conduct by a judgment which has the force of *res judicata*;
- c) being guilty of grave professional misconduct proven by any means which the contracting authorities can justify;

- d) having not fulfilled all its obligations relating to the payment of social security contributions and the payment of taxes in accordance with the legal provisions of the country in which it is established, with those of the country of the contracting authority and those of the country where the contract is to be carried out;
- e) having been the subject of a judgement which has the force of *res judicata* for fraud, corruption, involvement in a criminal organisation or any other illegal activity detrimental to the SJU/Union's financial interests;
- f) having been a subject of the administrative penalty for being guilty of misrepresentation in supplying the information required by the contracting authority as a condition of participation in the procurement procedure or failing to supply an information, or being declared to be in serious breach of his obligation under contract covered by the EU budget.

Accordingly, tenderers [the coordinator and each consortium member] must provide a **Declaration on honour** (see Annex I), duly signed and dated, stating that they are not in one of the situations referred to above

Nota Bene:

The tenderer [and in case of a Consortium the coordinator and each consortium member] to which the contract is to be awarded shall provide, within [... calendar days] following notification of award and preceding the signature of the contract, the **original** Declaration on honour (if provided in copy at the offer submission stage) and the following documentary proofs (**originals**) to confirm the declaration referred to above:

- For situations described in (a), (b) and (e), production of a recent extract from the judicial record is required or, failing that, a recent equivalent document issued by a judicial or administrative authority in the country of origin or provenance showing that those requirements are satisfied. Where the tenderer is a legal person and the national legislation of the country in which the tenderer is established does not allow the provision of such documents for legal persons, the documents should be provided for natural persons, such as the company directors or any person with powers of representation, decision making or control in relation to the tenderer.
- For the situation described in point (d) above, recent certificates or letters issued by the competent authorities of the State concerned are required. These documents must provide evidence covering all taxes and social security contributions for which the Tenderer is liable, including for example, VAT, income tax (natural persons only), company tax (legal persons only) and social security contributions.

For any of the situations (a), (b), (d) or (e), where *any* document described in two paragraphs above is *not issued* in the country concerned, *it* may be replaced by a sworn or, failing that, a solemn statement made by the interested party before a judicial or administrative authority, a notary or a qualified professional body in his country of origin or provenance.

The SJU may waive the obligation of a tenderer to submit the documentary evidence referred to above if such evidence has already been submitted to the SJU for the purposes of another procurement procedure and provided that the documents are not more than six (6) months old

starting from their issuing date and that they are still valid. In such a case, the tenderer shall declare on his honour that the documentary evidence has already been provided in a previous procurement procedure and confirm that no changes in his situation have occurred.

Please refer to the following web page for additional information regarding the relevant requirements and model documents under national laws of the EU Member States:

http://ec.europa.eu/internal_market/publicprocurement/e-procurement/e-certis/index_en.htm.

3.3. Assessment in the light of selection criteria

The tenderer must have the overall capabilities (legal, economic, financial, technical and professional) to perform the contract. All the requirements listed below must be met in order to enter the next phase of the assessment in the light of award criteria.

Please note that in the selection phase, assessment focuses on the quality of the track record and not on the quality of the (technical) offer.

3.3.1. Legal capacity

Tenderers (and in case of consortium, the coordinator and each consortium member) are requested to prove that they are authorised to perform the contract under the national law as evidenced by inclusion in a trade or professional register, or a sworn declaration or certificate, membership of a specific organisation, express authorisation or entry in the VAT register.

The tenderer (and in case of consortium, the coordinator and each consortium member) shall provide a dully filled in and signed Legal entities' form (see section 7 b) of the invitation to tender Ref. SJU/LC/0085-CFT).

3.3.2. Economic and financial capacity

In order to prove its sufficient economic and financial capacity to perform the contract, the tenderer (and in case of consortium, the coordinator and each consortium member) shall present one of the following documentation:

- Evidence of professional risk indemnity insurance;
- Balance sheets (or extracts from balance sheets) for at least the last two years for which accounts have been closed;
- Statement of overall turnover during the last three financial years

If, for some exceptional reason which the SJU considers justified, the tenderer (and in case of consortium, the coordinator and each consortium member) is [are] unable to provide the references requested here above, the tenderer (and in case of consortium, the coordinator and each consortium member) may prove the economic and financial capacity by any other means which the SJU considers appropriate.

The following categories of legal entities are not subject to a verification of their economic and financial capacity:

- Public bodies,
- Higher and secondary education establishments.

3.3.3. Technical and professional capacity

Tenderer [and in case of a Consortium, the Consortium as such] is required to prove that he has sufficient technical and professional capacity to perform the contract. To that end, the Tenderer shall provide the following information:

- a brief presentation of the structure of the candidate's organisation, focusing in particular on the research capacity and the organizational structure set up to perform the Tasks,
- a presentation of the main current and other relevant activities of the tenderer,
- a description of the added value of their proposed participation in the performance of the Tasks, and methodology, including their understanding of the requirements, details of how they apply previous expertise and experience along with describing the prospective benefits to the SESAR Programme from their proposed contribution,
- identification of the major risks related to these Tasks proposed to be entrusted to it and proposal for risk management framework,
- the resources offered to perform the Tasks specified per Deliverable, CV's of the participating key personnel, assets made available, technologies, processes needed to achieve the objectives of the Tasks,
- evidence of skills and expertise to develop ATM Performance-related studies on similar subjects with a decisive impact on the decision making process,
- the competencies and previous experience in the relevant field(s) and related references.

3.4. Assessment in the light of award criteria

3.4.1. Technical evaluation of the offers

Only the offers meeting the requirements of the exclusion and selection criteria will be evaluated in terms of quality and price for the award of the contract.

The contract will be awarded on the basis of the economically most advantageous offer.

The Quality Score of each technical offer covering the services will be evaluated in accordance with the award criteria and the associated weighting detailed in the table below:

<p>Understanding of the requirements</p> <ul style="list-style-type: none"> - Assessment of the understanding by the-Tenderer of the Tasks to be performed, the risks and opportunities associated to them and the Deliverables to be produced. 	25
<p>Meeting the needs:</p> <ul style="list-style-type: none"> - Assessment of the compliance as well as the added-value brought by the proposal in performing the Tasks described in the Tender Specifications. Original thinking, additional ideas and individuality towards the specifications will be considered an important factor in the assessment. 	50
<p>Organizational aspects:</p> <ul style="list-style-type: none"> - Assessment of the technical expertise offered on the task and the proposed organization of supporting activities. - A detailed work plan and timetable should be submitted, elaborating on project management, team organisation and specific resources / expertise to be used. 	25

After receipt of the offers by the SJU, the Tenderers may be invited to present their proposal to a review panel as part of assessing the technical capability being offered. In this case the presentation will take place in advance of conducting the evaluation of tenders. Consequently the presentation shall be a means of explaining the proposal and not an opportunity to refine or update the proposal received.

3.4.2. Financial evaluation of the offers and recommendation for contract award

Only offers whose award evaluation gives them a score of at least half the available number of points in each of the three main criteria above and a total of 70 points may be subject to a financial evaluation and be recommended for the award of Contract. For lower scores the offers will be considered non-suitable and excluded.

The Contract will be awarded to the Tenderer which Proposal offers the highest ratio quality/cost by applying the following formula:

$\text{Ratio Quality/Price} = (\text{Total quality score of Offer Y}/\text{Highest quality score}) \times 75\% + (\text{Lowest price}/\text{Price of Offer Y}) \times 25\%$

ANNEX I

Declaration of honour with respect to the Exclusion Criteria and absence of conflict of interest

The undersigned [*name of the signatory of this form, to be completed*]:

- ☐ in his/her own name (*if the economic operator is a natural person or in case of own declaration of a director or person with powers of representation, decision making or control over the economic operator⁵*)
- or
- ☐ representing (*if the economic operator is a legal person*)

official name in full (*only for legal person*):

official legal form (*only for legal person*):

official address in full:

VAT registration number:

declares that the company or organisation that he/she represents / he/she:

- a) is not bankrupt or being wound up, is not having its affairs administered by the courts, has not entered into an arrangement with creditors, has not suspended business activities, is not the subject of proceedings concerning those matters, and is not in any analogous situation arising from a similar procedure provided for in national legislation or regulations;
- b) has not been convicted of an offence concerning professional conduct by a judgment which has the force of *res judicata*;
- c) has not been guilty of grave professional misconduct proven by any means which the contracting authorities can justify;
- d) has fulfilled all its obligations relating to the payment of social security contributions and the payment of taxes in accordance with the legal provisions of the country in which it is established, with those of the country of the contracting authority and those of the country where the contract is to be carried out;
- e) has not been the subject of a judgement which has the force of *res judicata* for fraud, corruption, involvement in a criminal organisation or any other illegal activity detrimental to the SJU/Union's financial interests;
- f) is not a subject of the administrative penalty for being guilty of misrepresentation in supplying the information required by the contracting authority as a condition of participation in the

⁵ To be used depending on the national legislation of the country in which the candidate or tenderer is established and where considered necessary by the contracting authority (see art. 134(4) of the Implementing Rules).

procurement procedure or failing to supply an information, or being declared to be in serious breach of his obligation under contract covered by the EU budget.

In addition, the undersigned declares on their honour:

- g) they have no conflict of interest in connection with the contract; a conflict of interest could arise in particular as a result of economic interests, political or national affinities, family or emotional ties or any other relevant connection or shared interest;
- h) they will inform the contracting authority, without delay, of any situation considered a conflict of interest or which could give rise to a conflict of interest;
- i) they have not made and will not make any offer of any type whatsoever from which an advantage can be derived under the contract;
- j) they have not granted and will not grant, have not sought and will not seek, have not attempted and will not attempt to obtain, and have not accepted and will not accept any advantage, financial or in kind, to or from any party whatsoever, constituting an illegal practice or involving corruption, either directly or indirectly, as an incentive or reward relating to award of the contract;
- k) that the information provided to the SJU within the context of this invitation to tender is accurate, sincere and complete;
- l) that in case of award of contract, they shall provide upon request the evidence that they are not in any of the situations described in points a, b, d, e above.

For situations described in (a), (b) and (e), production of a recent extract from the judicial record is required or, failing that, a recent equivalent document issued by a judicial or administrative authority in the country of origin or provenance showing that those requirements are satisfied. Where the Tenderer is a legal person and the national legislation of the country in which the Tenderer is established does not allow the provision of such documents for legal persons, the documents should be provided for natural persons, such as the company directors or any person with powers of representation, decision making or control in relation to the Tenderer.

For the situation described in point (d) above, recent certificates or letters issued by the competent authorities of the State concerned are required. These documents must provide evidence covering all taxes and social security contributions for which the Tenderer is liable, including for example, VAT, income tax (natural persons only), company tax (legal persons only) and social security contributions.⁶

For any of the situations (a), (b), (d) or (e), where *any* document described in two paragraphs above is *not issued* in the country concerned, *it* may be replaced by a sworn or, failing that, a solemn statement made by the interested party before a judicial or administrative authority, a notary or a qualified professional body in his country of origin or provenance.

By signing this form, the undersigned acknowledges that they have been acquainted with the administrative and financial penalties described under art 133 and 134 b of the Implementing Rules (European Commission Regulation 2342/2002 of 23/12/02), which may be applied if any of the declarations or information provided prove to be false. Source

Full name

Date

Signature

⁶ Tenderers are strongly advised to explore the sources in their respective national legal systems for acquiring the required supporting documentation and the related deadlines, already at the stage of the preparation and submission of their offers, in order to avoid any delays in providing the documents in case selected for award of the contract.

ANNEX II FACT SHEETS

Fact sheet 1: The SESAR Programme

The SESAR Programme is one of the most important research and development projects ever launched by the European Union in the field of air traffic management (ATM). Its objective is to provide technological solutions in the area of the Air Traffic Management for the full and successful achievement of the Single European Sky legislation. While the Regulation 1070/2009 will provide a revised legal framework for a more efficient, performance driven, safer and greener procedures for the air traffic management, the SESAR Programme will deliver technological solutions, functionalities, systems and proposals for standards, which will be deployed in Europe.

The whole ATM Network R&D SESAR Programme activities will develop and deliver the necessary operational and technical materials (specifications, procedures, mock-ups, prototypes, validation reports, etc.) for the progressive industrialisation, deployment and operation of a new ATM system.

The SESAR Programme is composed of three phases, the Definition Phase, the Development Phase and the Implementation Phase. The Development Phase is in progress today.

- a) **Development phase (2008-2016)**, which will develop the necessary elements on the basis of the Definition phase findings.

o **The operational activities of the Development Phase:**

The new Concept of Operations of SESAR resulting from the definition phase aims at moving from today's airspace based trajectories to the time based operations of "4-D trajectories", where all the relevant stakeholders have access to the most up to date and precise information through the System Wide Information Management (SWIM).

The Work Programme of the SESAR Development Phase is divided into following thematic areas and Work Packages (WPs):

(1) Operational ATM research will be addressed under WPs:

- WP 4: En-route Operations
- WP 5: Terminal Management Areas (TMA) Operations
- WP 6: Airport Operations
- and WP 7: Networking Operations

(2) System research considerations are addressed under WPs:

- WP 9: Aircraft systems

- WP 10: En-Route & Approach ATC Systems
- WP 11: Flight Operations Centre System
- WP 12: Airport Systems
- WP 13: Network Information Management System
- and WP 15: Non Avionics Communication-Navigation-Surveillance (CNS) Systems

(3) System Wide Information Management (SWIM) considerations are addressed under WPs:

- WP 8: Information Management
- WP and 14: SWIM Technical Architecture

(4) Transversal activities: such as validation infrastructure, development of safety, security, environment and human performance cases, economics, performance and business cases, maintenance and updates of the ATM Master Plan, of the Target Concept and its Architecture, are dealt by a number of additional WPs, which are B, C, 3, 16. It is expected that transversal WPs will contribute to maximising benefits of operational and system Work Packages.

The SESAR Programme is composed of almost 300 research projects or transversal activities.

The Work Breakdown Structure is presented below:

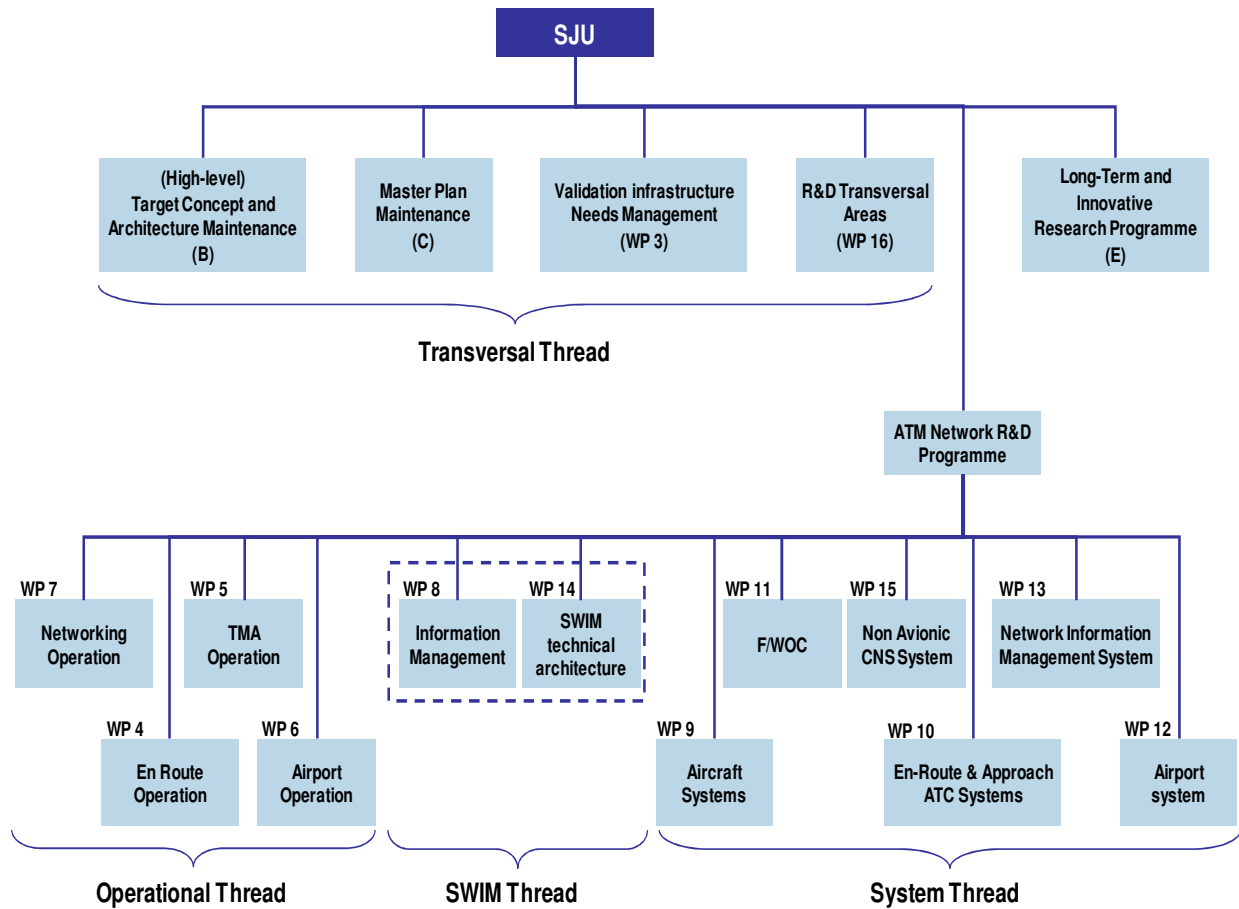


Figure: Work Breakdown Structure high-level overview

Detailed description of the Work Packages can be obtained via the SESAR JU webpage under the following link:

http://www.sesarju.eu/public/standard_page/wp.html

Detailed Technical Description of Work can be obtained via the SESAR JU webpage under the following link:

http://www.sesarju.eu/public/standard_page/library_list.html

Deployment phase (2013-2020), through which there will be large scale industrialisation and deployment of the new air traffic management infrastructure, composed of fully harmonised and interoperable components which guarantee high performance air transport activities in Europe.

Fact sheet 2: Single Sky legislation

1 History and background

The **Community legislation "Single European Sky I"** (adopted in March 2004) has provided several positive elements to the European ATM system:

- a. The establishment of an institutional and legal framework for Community action, within which a partnership with stakeholders has been put in place.
- b. The separation between service provision and regulation tasks, the harmonisation of the regime for licensing of traffic controllers, the transposition of the "Eurocontrol Safety Regulatory Requirements (ESARRs)" into the EU ATM body of law.
- c. More efficiency in the airspace utilisation through its flexible utilisation and coordination between the civil and military.
- d. A transparent and common system of "en route" charges.
- e. The acceleration of innovation, interoperability of equipments⁷ with notably the implementation of the Single European Sky technological pillar: the SESAR programme.

2 The Single European Sky second package – SES II

The second legislative package (Regulation EC 1070/2009) of the Single European Sky has been adopted in October 2009 by the European Parliament and the Council and entered into force on 4th December 2009. Its implementation is now the crucial issue.

The second legislative package has three pillars: (1) a legislative framework for the performance in the areas of safety, environment, capacity and flight efficiency; (2) a reinforcement of the network management; and (3) the integration of air navigation services in functional airspace blocks (FABs).

The second regulatory package on the Single European Sky (SES II) is performance-oriented. Its ultimate objective is to increase the economic, financial and environmental performance of the provisions of the Air Navigation Services in Europe. Amendments to the SES I regulatory package have introduced a comprehensive performance-based regulatory pillar comprised of the EU-wide Performance Scheme ; the establishment of the Functional Airspace Blocks, the Network Manager and the Charging Regulation.

- **The Performance Scheme** (Commission Regulation (EU) N° 691/2010) and the adoption by the European Commission of the EU-wide performance targets for the reference period 2012-2014 (Commission Decision of 22-02-2011) in areas of cost-efficiency, capacity and environment², requires that the National Supervisory Authorities elaborate national (or FAB-level) performance plans which contribute to the EU-wide performance targets.
- **The Network Manager** is a centralised function at EU level to carry out the management of the ATM network functions(airspace design, flow management) and management of scarce resources(transponder code allocations,radio frequencies) as defined in Commission Regulation (EU) N° 677/2011 of 07-07-2011. This function has been entrusted to Eurocontrol up to 2019.

⁷ Important to note that each State had in the past Developer its technology in an isolated manner

- **The Functional Airspace Blocks** are bottom-up initiatives led by the States to be established by the end of 2012 ; they aim at an enhanced cooperation between the air navigation service providers (ANSPs) and the national supervisory authorities (NSAs) to de-fragment the airspace and obtain the operational efficiency gains through such strategies as common procurement, training and optimisation of air traffic controllers (ATCs) resources.

The efficiency of the Single Sky implementation depends as well on the progress made in other areas: safety, technology and airport capacity. For this reason, the new Single Sky legislative measures are integrated into an "**aviation package**". Together with the abovementioned elements, other crucial aspects are: (1) the extension of competences of the European Air Safety Agency (EASA); (2) the SESAR programme deployment; and (3) the Action Plan for the improvement of the airport capacity and safety efficiency.

The Charging Regulation (Commission Regulation N° 1191/2010) on the en-route charging system lays down a legal framework of transparent reporting of en-route charges and costs' components of the Member States. It also defines a legal basis for financing, through the charging system, of the "Common Projects" in the context of the deployment of SESAR.

In conjunction with the approval of the SES regulatory framework, the competences of EASA have been extended to ATM and aerodromes³. EASA is now in charge to develop ATM rules dealing with safety and has started to carry out safety inspections in the field of ATM in 2012.

ANNEX III

BACKGROUND DOCUMENTS TO BE CONSULTED AND UNDERSTOOD BEFORE SUBMITTING THE OFFERS

- 1. Air transport key facts:**
 - a. http://ec.europa.eu/transport/air/doc/03_2009_facts_figures.pdf

- 2. SESAR Programme and SESAR Joint Undertaking:**
 - a. Council Regulation (EC) No 219/2007, amended by the Council Regulation (EC) No 1368/2009
 - b. SESAR concept of Operations (D3 of the definition phase)
http://www.sesarju.eu/sites/default/files/documents/reports/DLM-0612-001-02-00_0.pdf
 - c. European ATM Master plan, as endorsed by the Council on 30th of March 2009:
http://www.sesarju.eu/sites/default/files/documents/reports/European_ATM_Master_Plan.pdf
 - d. SESAR Activity Report 2007-2008
http://www.sesarju.eu/sites/default/files/documents/reports/SesarJU_AnnualReport07-08.pdf

- 3. Structure of the SESAR's public-private partnership:**
 - a. Regulation No (EC) 219/2007 amended by Regulation (EC) No1368/2008;
 - b. the list of the Administrative Board Members at:
<http://www.sesarju.eu/about/board>

- 4. Single European Sky legislation:**
 - a. The four basic (EC) Regulations No 549/2004, No 550/2004, No 551/2004, No 552/2004, as amended by the Regulation (EC) No 1070/2009 entered into force on 4th of December 2009, in particular:
 - i. Objectives of the Single European Sky
 - ii. Provision on the common projects
 - iii. Interoperability Regulation
 - b. Commission Decision (2011/121/EU) of 21 February 2011 setting the EU-wide performance targets and alert thresholds for the provision of air navigation services for the years 2012 to 2014.
 - c. Commission Regulation (EU) No 691/2010 laying down a performance scheme for Air Navigation Services (ANS) and network functions.

- 5. Performance Review Report prepared by the Performance Review Unit of Eurocontrol**
http://www.eurocontrol.int/prc/gallery/content/public/Docs/PRR_2009.pdf

- 6. The Air Traffic Management ATM Cost Effectiveness Report, 2008 Benchmarking Report prepared by the Performance Review Unit with the ACE working group, June 2010**
http://www.eurocontrol.int/prc/gallery/content/public/Docs/ace2008/ACE_2008_Benchmarking_Report.pdf

7. **ATM Cost-Effectiveness (ACE) 2009 Benchmarking Report prepared by the Performance Review Unit (PRU) with the ACE Working Group**
<http://www.eurocontrol.int/sites/default/files/content/documents/single-sky/pru/publications/ace/ace-2009.pdf>

ANNEX IV

GLOSSARY

- ▶ *Air navigation service providers (ANSPs)*: means any public or private entity providing air navigation services for general air traffic;
- ▶ *Air Navigation services (ANS)*: means air traffic services; communication, navigation and surveillance services; meteorological services for air navigation; and aeronautical information services

SESAR Master plan and the European ATM Master plan (ATM Master plan):

The ATM Master plan is the basis for the new generation of European ATM systems for 2030 that will help achieve “more sustainable and performing aviation” in Europe. The plan contains roadmaps for the essential operational and technological changes required from all stakeholders (airspace users, ANSPs, airport operators, the military and the network manager) to achieve the performance objectives set by Single European Sky (SESA). It provides the basis for the timely, coordinated and efficient deployment of new technologies and procedures, whilst ensuring alignment with ICAO’s Aviation System Block Upgrades (ASBU) for global interoperability and synchronisation.

▶

- ▶ *Functional Airspace Blocks (FABs)*(Please refer to Article 9 bis of the Regulation (EC) 1070/2009: means an airspace block based on operational requirements and established regardless of State boundaries, where the provision of air navigation services and related functions are performance-driven and optimized with a view to introducing, in each functional airspace block, enhanced cooperation among air navigation service providers or, where appropriate, an integrated provider. The FABs initiatives are bottom up initiatives led by the States and their scope of actions varies. Most of them are at the stage of pre-implementation and feasibility assessments, exploring different cooperation options and analyzing costs and benefits.

Currently there are 9 initiatives listed below: (1) the Baltic FAB, (2) the Danube FAB, (3) the Blue Med FAB, (4) the South-West (Spain Portugal), (5) the FABEC (Europe Centrale), (6) the FAB CE (Central Europe), (7) the FAB UK-Ireland, (8) NEFAB, (9) NUAC –please note that FABs 8 and 9 are negotiating a possible cooperation scenarios.

Further reading, composition and the assessment of the FABs can be obtained via the reports of the Performance Review Commission of Eurocontrol. The Regulation (EC) 1070/21009 sets the deadline for the implementation of the FABs by December 2012.

- ▶ *General Air Traffic (GAT)*: means general air traffic means all movements of civil aircraft, as well as all movements of State aircraft (including military, customs and police aircraft) when these movements are carried out in conformity with the procedures of the ICAO;
- ▶ *ICAO*: means the International Civil Aviation Organisation, as established by the 1944 Chicago Convention on International Civil Aviation;

- ▶ The Implementing Rules (IRs): are technical specifications, including binding implementation deadlines, which are formally adopted through the Comitology procedure including the vote at the Single Sky committee. They are directly binding on the Member States and stakeholders concerned.
- ▶ Operational Air Traffic (OAT): The needs of military aviation and ATM support often reach beyond the scope of civil aviation and are therefore not sufficiently covered by ICAO provisions for General Air Traffic (GAT). The military therefore require Operational Air Traffic (OAT) to provide regulatory provisions and ATM arrangements for successful military training and mission accomplishment. This, however, is implemented on a national basis. Since Single European Sky legislation will harmonise airspace design and arrangements for airspace use at European level, namely with the creation of functional Airspace Blocks (FABs), the European military community must overcome this national fragmentation to be interoperable with the future EATMN.
- ▶ SESAR Joint Undertaking (SJU): a joint undertaking within the meaning of Article 187 of the Treaty on the Functioning of the European Union, set up by Council Regulation (EC) No 219/2007 of 27 February 2007 on the establishment of a Joint Undertaking to develop the new generation European air traffic management system (SESAR), as amended by Council Regulation (EC) 1361/2008 of 16 December 2008,
- ▶ Users: means all aircraft operated as general air traffic.

ANNEX V

DRAFT SERVICE CONTRACT

