



SJU/LC/0070-CFP

**SESAR Integrated Flight Trials
and Demonstration Activities' –
Technical Specifications**

1. INTRODUCTION

1.1. Overview of this call

The need for SESAR Integrated Flight Trials and Demonstration Activities has been identified in order to show on a larger scale the benefits of the Programme in day-to-day operations and build confidence on the SESAR outcomes amongst the ATM community. This particular call for proposal is aiming at covering SESAR Integrated Flight Trials and Demonstration Activities in the period 2012-early 2014. However, the general programme work-stream dedicated to SESAR Integrated Flight Trials and Demonstration Activities will run up to 2016.

The purpose of this call for proposal is to select a number of integrated pre-operational demonstration projects which aim at:

- demonstrating the benefits of the SESAR solutions in a multi-aircraft/flight environment to the wider aviation community;
- capitalising on the SESAR delivery approach by going beyond the SESAR validation activities in order to increase the exposure of SESAR solutions to the real life operations and to multi-stakeholder environments; and
- accelerating the operational acceptance and the subsequent industrialisation of the SESAR solutions.

Each project selected by the SJU in accordance with the criteria indicated in Section 4 hereunder shall be subject of one individual contract.

The characteristics of the project activities to be co-financed by the SJU under the contracts which may be awarded as a result of this call for proposal are detailed in Section 3 below (Terms of Reference).

1.2. 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.

1. The EU ATM Master plan

The ATM Master Plan has been endorsed by the Council of the European Union on 30 March 2009 and became the EU ATM Master Plan. Since it has been endorsed by the Ministers of Transport of 27 Member States, the EU ATM Master Plan is a commonly agreed European roadmap for the development and deployment of the future ATM systems in Europe.

The EU ATM Master Plan in fact defines a new ATM concept identifying functions and processes as well as their corresponding interactions and information flows, concerned actors, their roles and responsibilities.

The EU ATM Master Plan, besides being the commonly agreed roadmap for the development and deployment of the technologies, standards and procedures, also contains the initial costs and investment estimate for the major categories of the stakeholders (initial business case). These initial figures will be validated and verified by the SESAR Programme activities through detailed cases of Safety, Business, Security, Environment and Human Performance impacts.

The EU ATM Master Plan will be updated in 2012.

2. SESAR Development Phase

The Development phase of the SESAR Programme aims at building up Europe's future Air Traffic Management system as outlined by the EU ATM Master Plan. The Development Phase of the SESAR Programme consists of about 300 Projects, partly inter-related, and grouped into 16 Work Packages, each encompassing a particular domain of Air Traffic Management (either operational, technical or transversal). Each SESAR Project has a defined set of deliverables i.e. expected tangible solutions that enable an improvement of the Air Traffic Management.

A majority of the SESAR Projects are now in full execution mode delivering the first R&D results as well as the necessary guidance material to the programme, in particular for the establishment of the various cases (i.e., safety, business, security, environment, human factors).

Progressively, the SESAR Projects will be taking the necessary steps towards the validation of the SESAR concept of operation: establishment of the operational requirements, development and verification of the prototypes and ultimately the conduct of validation activities. The SESAR Projects that are reaching this ultimate stage are managed together within a release.

A SESAR release encompasses groups of Projects delivering, in a determined timeframe, R&D results that will support decision to move related activities to the industrialisation stage (end of V3).

3. The timeline for the deployment of SESAR

It is essential that the core elements of the ATM concept are synchronised, implemented in a timely and consistent manner in the European ATM network as well as justified by making visible the full benefits to potential investors.

The deployment of systems, procedures, technologies and standards resulting from the SESAR Development Phase will start as soon as the solutions are available and ready for industrialisation, meaning they have been positively demonstrated and/or validated, as the case may be, in an operational environment.

Consequently, the deployment of SESAR systems and procedures will be seen as a gradual process, where some of the later development activities run in parallel to some of the earlier deployment activities.

4. Ongoing SESAR Demonstration Activities: AIRE

AIRE is an ATM focused initiative designed to improve energy efficiency and lower engine emissions and aircraft noise.

The AIRE programme aims at capitalizing on present aircraft technologies to bring improvements on energy efficiency, lowering of aircraft noise, enhancement of ATM interoperability through the acceleration of implementation of environmentally friendly procedures for all phases of flight (gate-to-gate), and the validation of continuous improvements with trials and demonstrations.

The strategy followed by the AIRE programme is to produce constant step-based improvements, to be implemented by each AIRE partner in order to contribute to reaching the common objective.

Eighteen (18) AIRE II projects were selected by the SJU for co-funding during 2010. Under this framework, more than fourteen (14) partner airlines, using their commercial flights, have tested some of the technical solutions developed in the SJU Projects.

AIRE is also expected to contribute to the first blocks of the SESAR Concept of Operations by demonstrating the environmental performance of 4D trajectory-based operations planning and

execution and integrating Performance Based Navigation with Continuous Descent Operations and Continuous Climb Operations.

2. Overview of the call for proposal

2.1. Division in Lots

This call for proposal is divided into two Lots:

- Lot 1: AIRE
- Lot 2: SESAR Solutions Demonstrations including Intercontinental and Military Operations

Selected projects shall specifically address one of the Lots here above.

2.2. Indicative timetable

Milestone	Deadline
Launch of this call for proposal	23 November 2011
Deadline for requesting additional information/clarification from the SJU	No later than 15 calendar days before the closing date for submission of proposals
Last date on which clarifications are issued by SJU	No later than 6 calendar days before the closing date for submission of proposals
Closing date for submission of project proposals	24 February 2012
Notification of contract award	March 2012 (indicative)
Contract signature	After standstill period of at least 14 calendar days following the date on which notification of the contract award decision is sent

2.3. Available budget

The SESAR Joint Undertaking has indicatively earmarked a total maximum budget for this call for proposal of **2.500.000 EUR** for Lot 1 and **7.500.000 EUR** for Lot 2, in terms of co-financing. Following the outcome of the call, the SJU expects to sign, indicatively, between 10 and 15 contracts for Lot 1 and about 5 contracts for Lot 2, taking into account the number and quality of the proposals received for each Lot.

Each selected project shall be co-financed up to a maximum of 50% of the maximum estimated project cost as presented in the submitted financial proposal.

At the end of the contract, where the actual project cost would be lower than the maximum estimated project costs in the financial proposal, the selected projects shall be co-financed up to 50% of the actual project cost. Where, on the contrary, the actual project cost would be higher than the maximum estimated project cost, the maximum SJU co-financing shall remain unchanged and correspond to the amount established in the contract.

2.4. Planned start and completion date of the selected projects

The projects cannot start before signature of their respective contracts (i.e. expected around April 2012) and must be completed within 24 months. The dates of the performance of projects set-out in the selected proposals may not be substantially changed at a later stage.

2.5. Participation of consortia in this procedure

Only entities set up as a consortium and composed of at least two independent legal entities, including at least one airspace user and one air navigation service provider can participate in this procedure. Consortia shall comply with the rules of competition.

For the purpose of this call, a consortium is defined as a permanent, legally-established grouping or a grouping which has been constituted informally for this specific procedure.

All members of a consortium (i.e., the leader and all other members) are jointly and severally liable to the SJU.

3. Terms of reference

The Terms of Reference will become part of the contract(s) that may be awarded as a result of this call for proposal.

3.1. Lots

Proposed projects shall specifically address one of the following Lots:

- Lot 1: AIRE
- Lot 2: SESAR Solutions Demonstrations including Intercontinental and Military Operations.

3.1.1. Lot 1: AIRE

The proposed projects within this Lot shall focus on the development of new procedures resulting in CO2 reductions and in particular:

- For Surface: procedures integrating Traffic Management requirements for departure with optimised pushback, taxi and departure procedures that minimise surface manoeuvring and runway holding time, during peak time operations.
- For Terminal: fuel efficient TMA procedures taking full advantage of aircraft RNP capabilities.
- For Continental En-route: procedures allowing direct routing/free routing, user preferred profiles. The involvement of several ANSPs in any proposed project under this lot is therefore recommended.
- For Oceanic operations: reduced separations for RNP4 equipped aircraft, optimized Oceanic Entry/Exit transition, oceanic trajectory optimization (horizontal, vertical, longitudinal), optimization of the NAT-OTS, better use of Meteorological information.

Each project within this Lot shall be considered as an integrated pre-operational demonstration for procedures that present the potential for fuel efficient operations for implementation right away.

Each project within this Lot shall:

- identify and report the environmental, operational and economical benefits that the adoption of the solution object of the demonstration in the project will bring to air transport,
- allow for the performance of a maximum amount of flight trials (with a minimum of 50 flight trials) in order to be able to draw stable conclusions,
- highlight the solution advantages compared to the current situation,

- raise awareness regarding SESAR activities related to environmental issues and their results, and
- highlight the cases where the procedures demonstrated under the project can be used as a baseline for SESAR Projects, and in particular, for the SESAR operational Projects¹ to conduct further developments.

3.1.2. Lot 2: SESAR Solutions Demonstrations including Intercontinental and Military Operations

SESAR Releases are aiming at delivering on a yearly basis the pre-industrialised solutions for the future ATM system. The purpose of this Lot is to increase their operational exposure as well as to accelerate their acceptance by the wider ATM community and possible subsequent industrialisation, by enabling demonstration and integrated flight trials.

The projects under this Lot shall focus on the introduction of new technologies and improvements in one or several of the following operational focus areas:

1. Efficient Required Navigation Performance Procedures in high density traffic situations

Focus on development and operations of procedures and technology for fuel efficient SIDs and STARs taking full advantage of aircraft RNP capabilities and of Precision Area Navigation in high density traffic situations;

Focus on development and operations of procedures for performance-based navigation (PBN concept) and concepts relating to the use of performance based navigation by taking advantage of improved predictability of aircraft behaviour within low, medium and high traffic density in TMAs with single or multiple airports as well as in En-Route environments;

2. Approach Procedures with Vertical Guidance

Focus on development and operations of procedures and technology of approach procedures with vertical guidance (APV) using Satellite Based Augmentation System (SBAS) leading to the ability to fly Instrument Landing System type approaches to airport independently of ground based infrastructure;

3. Integrated AMAN-DMAN & Extended AMAN horizon

Focus on development and operations of procedures and technology for trajectory based airport applications (e.g. D-TAXI) to improve the synchronisation of traffic flows and to optimize the approach sequence through air ground exchange of aircraft derived data;

4. i4D² + Controlled Time of Arrival

Focus on development and operations of procedures and technology of procedures using predicted single Controlled Time of Arrival (CTA) for en-route and TMA environments, associated airborne technology e.g. Flight Management System (FMS)

¹ i.e., Work Package 4/En route Operations, Work Package 5/Terminal Operations, Work Package 6/Airport Operations, Work Package 7/Network Operations

² Aircraft capabilities expected to support initial 4D trajectory Operations:

- CPDLC: WG78 messages related to CTA allocation with selectable tolerance defined to a second
- ADS-C: WG78 ETA min/max and EPP report (up to 128 fix and computed way points with associated altitude/time/speed estimates and constraints, aircraft parameters such as gross weight) with all sending criteria (periodic, on request, on event i.e. in case of deviation versus thresholds specified by ATC)
- Improved FMS meteorological model (i.e. use of more wind/temp inputs and improved prediction of wind/temp using onboard data), ETA min/max (i.e. reliable CTA interval displayed to the flight crew), improved CTA algorithm (i.e. wider CTA speed range, +/- 10" or 30" selectable CTA tolerance, reliable guidance)

and the appropriate ground-based system support to improve arrival management and sequence building;

Focus on the exchange of flight trajectory from its initiation at the flight/mission planning stage up to the day of operation including trajectory updates and successive authorisations;

Focus on demonstrating that the concept of Mission Trajectory is applicable to military aircraft and is proposing realistic improvement steps to meet the military performance targets (e.g. training requirements, mission effectiveness, safety);

5. Time Based Separation

Focus on operations of procedures and technology enabling the use of refined time based separation minima in an effective way in typical operational circumstances, challenging wind conditions and some off-nominal cases. This will include a focus on the operational definition and validations of the different In-Trail Procedures applications;

6. Free Routing

Focus on operations of en-route procedures and technology allowing direct routing/free routing, user preferred profiles and taking full benefit of current or advanced flexible use of airspace solutions; initial steps for free routing airspace within which users shall freely plan their routes between an entry point and an exit point without reference to the Air Traffic Services (ATS) route network;

7. System Interoperability with Air and Ground Data Sharing

Focus on operations of technology capabilities enabling the exchange of digital ATM information, as a backbone for the implementation of the SESAR CONOPS and SWIM. This can include both Ground data exchange between ATS Units and/or Airline Operation Centers and Air to Ground Data exchange, aiming at sharing the same representation of flights, as well as aeronautical or meteorological information;

8. Airborne Spacing Sequencing & Merging Manoeuvres

Focus on development and operations of procedures and technology enabling "Airborne Spacing Sequencing & Merging Application" (ASPA S&M), including possible integration of lateral and vertical aspects with the longitudinal dimension in combination with CPDLC from both air and ground perspectives. This will include a focus on the operational definition and validations of the different In-Trail Procedures applications;

9. Surface Planning and Routing

Focus on operations of procedures and technology integrating traffic management requirements for departure with optimised pushback, taxi and departure procedures that minimise surface manoeuvring and runway holding time, during peak time operations;

10. Airspace Management and Advanced FUA

Focus on the design and operations of specified ad-hoc airspace structures, on the definition of procedures for sharing airspace, taking into account the military's need for flexibility with regard to meteorological and/or operational constraints and optimising the trade off between civil and military requirements;

Focus on the validation of the interactions between the national airspace management cells, and the military and civil ATC centres;

11. Better Use of MET information

Focus on the development and operations of new procedures and technology that will enable ATM Performance through a better use of MET Information.

Each project within this Lot shall be considered as an integrated pre-operational demonstration for technologies and associated procedures that present the potential to increase ATM operational performance.

Furthermore, each proposed project shall:

- demonstrate the benefits in a multi aircraft/flight environment that the adoption of the solution subject of the validation project will bring to air transport;
- allow for the performance of a maximum amount of flight trials (with a minimum of 30 flight trials) in order to be able to draw conclusions;
- highlight the solution advantages with respect to the solution currently used, and;
- raise awareness regarding SESAR activities and objectives by the exposure of SESAR solutions to the real life operations and to multi-stakeholder environments;
- where relevant, ensure a compatibility of the proposed project with the US Federal Aviation Administration - FAA³

3.2. Deliverables and meetings

During the execution of the contract, the Consortium shall provide the SJU with the following deliverables.

All Reports shall be in English, in electronic format (in principle Microsoft Office format or compatible formats) and one paper copy.

3.2.1. Deliverable A.1 – Report refining the proposed project

Within 45 days from the kick off meeting, which shall take place within 15 days from the signature of the contract, the selected consortium shall detail its proposed project and related communication plan in collaboration with the SJU. This activity shall not change the substantial content of the proposed project selected by the SJU.

In particular, taking into account the comments formulated by the SJU in selecting the project, the selected consortium shall refine the project documentation and in particular the Demonstration Plan in line with the structure and content detailed in Annex II attached hereto (“Template to submit a proposal for call ref SJU/LC/0070-CFP”).

In order to ensure the proper preparation of Deliverable A.1 the following meetings shall be held with the SJU:

- Kick-off on the spot or web-conferencing meeting following contract signature
- Presentation Report.

Where, in accordance with the procedure established in Article 12.1 (“Acceptance of Reports”) of the draft contract attached hereto, Deliverable A.1 would not be accepted by the SJU, the contract shall terminate and no costs shall be eligible for co-financing from the date of the SJU notification of non acceptance.

3.2.2. Deliverable B.1 to B.n

Subject to approval by the SJU of Deliverable A.1, the selected consortia shall perform the proposed project, as further refined in Deliverable A.1.

³ Interested entities may contact Maria Dipasquantonio from the FAA - maria.dipasquantonio@faa.gov

The number and deadline of each specific deliverable shall be defined in Deliverable A1. In any case, 30 days before the end date of the project, the selected consortia shall provide the SJU with a draft Final Report in accordance with Annexe III attached hereto.

3.2.3. Meetings and quarterly reporting

A review meeting with presentation of the draft Final Report shall be held with the SJU.

A quarterly progress report (maximum 2 pages) should be submitted to the SJU summarizing:

- Key developments
- Key risks and associated management plan, and
- Expected duration and number of trials.

3.3. Duration of the contract(s)

Each Contract will be concluded for a maximum period of **twenty-four (24) months**.

Unless otherwise agreed, activities shall start in 2012 with the respective kick off meeting and be completed within 24 months from the contract signature. Considering the SESAR Programme timeframe, the provision of relevant results already by the end of 2013 is strongly encouraged.

3.4. Place of performance

The project shall be performed on the territory of EU, ECAC member states and/or, considering the major inbound-outbound Europe traffic flows, in the ICAO North Atlantic (NAT) region.

4. ASSESSMENT OF THE PROPOSALS AND AWARD OF THE CONTRACT

4.1. Introduction

The assessment will be strictly based on the content of the received proposals and in the light of the criteria set out hereunder.

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

- Stage 1 – assessment in the light of exclusion criteria (see section 4.2. below),
- Stage 2 – assessment in the light of selection criteria (see section 4.3. below) and
- Stage 3 – assessment in the light of award criteria (see section 4.4. below).

The aim of each of these stages is:

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

4.2. Assessment in the light of exclusion criteria

To be eligible for participating in this contract award procedure, the bidder⁴ (i.e., the coordinator and each consortium member) cannot be in any of the following exclusion grounds:

- (a) They are bankrupt or being wound up, are having their affairs administered by the courts, have entered into an arrangement with creditors, have suspended business activities, are the subject of proceedings concerning those matters, or are in any analogous situation arising from a similar procedure provided for in national legislation or regulations;
- (b) They have been convicted of an offence concerning their professional conduct by a judgement which has the force of *res judicata*;
- (c) They have been guilty of grave professional misconduct proven by any means which the contracting authority can justify;
- (d) They have not fulfilled obligations relating to the payment of social security contributions or the payment of taxes in accordance with the legal provisions of the country in which they are established or with those of the country of the contracting authority or those of the country where the contract is to be performed;

Accordingly, bidders (i.e., 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 bidder (i.e., the coordinator and each consortium member) to which the contract is to be awarded shall provide, within 15 days following notification of award and preceding the signature of the contract, the following documentary proofs (**originals**) to confirm the declaration referred to above:

- For points a) and b) above a recent extract from the judicial record or, failing that, an equivalent document recently issued by a judicial or administrative authority in the country of origin or provenance showing that those requirements are satisfied.
- For point d) recent certificates issued by the competent authorities of the States concerned.

Where the document or certificate referred to 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 its country of origin or provenance.

⁴ Where parts of the activities are intended to be subcontracted, the bidder has also to ensure that the subcontractors satisfy the exclusion criteria as indicated in section 4.3 below.

The SJU may waive the obligation of a bidder 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 bidder 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/markt/ecertis/searchDocument.do>

4.3. Assessment in the light of selection criteria

The bidder 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 strictly on the quality of the track record and not on the quality of the (technical) offer.

4.3.1. Assessment of the legal capacity

Bidders (i.e., 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 bidder (and in case of consortium, the coordinator and each consortium member) shall provide a dully filled in and signed Legal entities' form (see section 10 b) of the invitation to tender Ref. SJU/LC/0070-CFP).

4.3.2. Assessment of the economic and financial capacity

In order to prove its sufficient economic and financial capacity to perform the contract, the bidder (i.e., 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 bidder (i.e., the coordinator and each consortium member) is [are] unable to provide the references requested here above, the bidder (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.

4.3.3. Assessment of the technical and professional capacity

The consortium shall establish that it has sufficient technical and professional capacity to perform this contract.

In order to establish its technical and professional capacity, the consortium is requested to present the following information:

- a presentation of its main current activities, with details for any entity constituting the consortium,

Technical Specifications - Call for proposal ref. SJU/LC/0070-CFP

- a brief presentation of the consortium structure and how the different entities will organize themselves to achieve the project activities ,
- the evidence of skills and expertise in developing studies on similar subjects (i.e., demonstration of the delivery of proven results in the concerned field by providing references to participation to similar projects),
- demonstration that the bidder has the research and demonstration tools' capacity needed to execute the proposed project, by providing:
 - § the curriculum vitae for each of the key members of staff who will work on the project being proposed.
 - § a description of the facilities and/or material to be used for the project being proposed, etc.), taking in particular into account the different phases of the project.

4.4. Assessment in the light of award criteria

The SJU will evaluate, mark and establish a ranking of the submitted proposals on the basis of the criteria listed below.

Only the proposals meeting the requirements of the exclusion and selection criteria will be evaluated in terms of quality for the award of the Contracts. The evaluation in light of the award criteria and evaluation in terms of quality will be performed for each proposal respectively.

N°	Award criteria	Weighting
1	Quality of the proposed project in particular with regards to: <ul style="list-style-type: none"> § Understanding of the requirements § Description, relevance and objectives of the proposed project § With regard to Lot 2, clarity of the link to the operational domains identified in the call § Planning of the proposed project, including consortium organization, resources, timetable, level of involvement of stakeholders, in particular involvement of several stakeholders in various different aircraft/flight environments § Proposed collection and reporting of data and results 	40
2	Added value to the SESAR Programme and benefits that would be achieved if the solution is implemented: <ul style="list-style-type: none"> § To what extent is the project likely to have tangible impact on the execution of the EU ATM Master Plan? § To what extent does the proposed project identify the links to the SESAR Programme and is complementary to ongoing SESAR Projects? § To what extent the proposed project does contribute to the future industrialisation of the SESAR results? 	30
3	Cost-effectiveness <ul style="list-style-type: none"> § To what extent is the estimated budget clear and detailed? § Are the estimated expenditures based on tangible elements/information? § Do the presented results of the project reflect a reasonable relationship to the estimated budget costs and the requested amount? § Is the estimated amount reasonable with regard to the project content? § Are the estimated costs all necessary for the running of the proposed project? 	30

ANNEX I

Acronyms and terminology

AMAN	Arrival Manager
AMAN-DMAN	Arrival Manager – Departure Manager
ANSP	Air navigation service provider
APV	Approach Procedures with Vertical guidance
ASPA S&M	Airborne SPACing Sequencing & Merging applications
ATC	Air Traffic Control
ATFM	Air Traffic Flow Management
ATFCM	Advanced Air Traffic Flow Management
ATM	Air Traffic Management
ATS	Air Traffic Services
CDM	Collaborative Decision Making
CFMU	EUROCONTROL Central Flow Management Unit
CONOPS	Concept of Operations
CPDLC	Controller Pilot DataLink Communication
CTA	Controlled Time of Arrival
EC	European Commission
ECAC	European Civil Aviation Conference
EU	European Union
FMS	Flight Management System
FOC	Full Operational Capability
FUA	Flexible Use of Airspace
ICAO	International Civil Aviation Organisation
MET	Meteorological

Technical Specifications - Call for proposal ref. SJU/LC/0070-CFP

NAT/SAT	ICAO North/ South Atlantic Region
PBN	Performance-Based Navigation
R&D	Research and Development
RNP	Required Navigation Performance
SBAS	Satellite Based Augmentation System
SES	Single European Sky
SESAR	Single European Sky ATM Research Programme
SID	Standard Instrument Departure
SJU	SESAR Joint Undertaking
STAM	Short Term Air traffic flow and capacity management Measure
STAR	Standard Arrival Procedure
SWIM	System Wide Information Management
TMA	Terminal Manoeuvring Area
WP	Working Package

ANNEX II

**Template for the submission of technical proposal in response
to call ref SJU/LC/0070-CFP**

Published on the SJU website

ANNEX III

Indicative Table of Content of the draft Final Report and Final Report

1	EXECUTIVE SUMMARY
2	INTRODUCTION
3	CONCEPT OVERVIEW
4	CONDUCT OF DEMONSTRATION EXERCISES
4.1	EXERCISES PREPARATION
4.2	EXERCISES EXECUTION
4.3	SUMMARY OF DEVIATIONS FROM THE DEMONSTRATION PLAN
5	EXERCISES RESULTS
5.1	SUMMARY OF EXERCISES RESULTS
5.2	ANALYSIS OF EXERCISES RESULTS
5.3	CONFIDENCE IN RESULTS OF EXERCISES
6	SUMMARY OF EXECUTED COMMUNICATION ACTIVITIES INCL. COPIES OF COMMUNICATION MATERIAL
7	DESCRIPTION OF NEXT STEPS TO ENSURE TRANSITION TO INDUSTRIALISATION
8	CONCLUSIONS AND RECOMMENDATIONS
8.1	CONCLUSIONS
8.2	RECOMMENDATIONS
9	EXERCISES REPORTS
9.1	EXERCISE #1 REPORT (ONE PER EXERCISE)
9.1.1	Exercise Scope
9.1.2	Conduct of Exercise
9.1.3	Exercise Results
9.1.4	Conclusions and recommendations
10	REFERENCES
11	ACRONYMS AND TERMINOLOGY

ANNEX IV

Indicative List of Reference Documents

- 1 EU ATM MASTER PLAN
- 2 DESCRIPTIONS OF WORK FOR ALL SESAR R&D WORK PACKAGES
- 3 SESAR RELEASE 2011
- 4 SESAR RELEASE 2012 (TBC)
- 5 SESAR CONCEPT OF OPERATIONS AT A GLANCE (TBC)

CAN BE FOUND AT:

WWW.SESARJU.EU/NEWS-PRESS/DOCUMENTS-REPORTS

ANNEX V

**Template for the submission of financial proposal
in response to call ref SJU/LC/0070-CFP**

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