Specifications attached to the Invitation to Tender

15.CAT.OP.001

“Governmental Satellite Communication (GOVSATCOM)

Feasibility Study”

CONTENTS

Introduction to EDA

Pursuant to Council Decision 2011/411/CFSP of 12 July 2011 defining the statute, seat and operational rules of the European Defence Agency (hereinafter “the EDA” or “the Agency”) and repealing Joint Action 2004/551/CFSP, the mission of the European Defence Agency is "to support the Council and the Member States in their effort to improve the EU’s defence capabilities in the field of crisis management and to sustain the Common Security and Defence Policy (CSDP) as it currently stands and as it develops in the future.”

Functions and tasks

The EDA, within the overall mission set out in the Agency’s constituent act, is ascribed four functions, covering:

- developing defence capabilities;
- promoting defence research and technology (R&T);
- promoting armaments cooperation;
- creating a competitive European Defence Equipment Market and strengthening the European Defence, Technological and Industrial Base.

All these functions relate to improving Europe's defence performance, by promoting coherence. A more integrated approach to capability development will contribute to better defined future requirements on which collaboration - in armaments or R&T or the operational domain - can be built. More collaboration will, in turn, provide opportunities for industrial restructuring and progress towards the continental-scale demand and market, which industry needs.

Further information can be found on the Agency’s web site at http://www.eda.europa.eu.

1 Overview of this tender

1.1 Description of the contract

The services required by EDA are described in the terms of reference in part 2 of the present tender specifications.

1.2 Timetable

Summary timetable	Date	Comments
Deadline for request of clarifications from EDA	24/04/2015	
Information meeting	17/03/2015	At 10:00h Brussels local time
Last date on which clarifications are issued by EDA	28/04/2015, 17:00h, Brussels local time	
Deadline for submission of tenders	**05/05/2015**[1]	Tenders delivered by hand shall be submitted not later than **17:00h Brussels Local Time**
Opening session	06/05/2015[2]	At 10:00h Brussels local time
Interviews	Not applicable	
Completion date for evaluation of tenders	end of May 2015	Estimate
Signature of contract(s)	June 2015	Estimate

1.3 Participation in the tender procedure

Tenderers must not be in any of the exclusion criteria indicated in section 3.1 of these tender specifications and must have the legal capacity to allow them to participate in this tender procedure (see section 3.2.1).

Please note that any attempt by a tenderer to obtain confidential information, enter into unlawful agreements with competitors or influence the evaluation committee or the EDA

[1] The deadline for submission of tenders shall be considered to be the date of receipt by the Agency of the tender.

[2] Maximum one legal representative per participating tenderer may attend the opening session. Tenderers shall inform the Agency of their intention to attend, at least 5 days prior to the opening session.

during the process of examining, clarifying, evaluating and comparing tenders will lead to the rejection of his tender and may result in administrative penalties.

1.4 Participation of consortia

Consortia, may submit a tender on condition that it complies with the rules of competition.

A consortium may be a permanent, legally-established grouping or a grouping which has been constituted informally for a specific tender procedure.

Such grouping (or consortia) must specify the company or person heading the project (the leader) and must also submit a copy of the document authorising this company or person to submit a tender. All members of a consortium (i.e., the leader and all other members) are jointly and severally liable to the Contracting Authority.

In addition, each member of the consortium must provide the required evidence for the exclusion and selection criteria (see **Section 3** of these tender specifications).

The participation of an ineligible person will result in the automatic exclusion of that person.

1.5 Sub-contracting

The tenderer must indicate clearly, which parts of the work will be sub-contracted.

Sub-Contractors must satisfy the eligibility criteria applicable to the award of the contract. If the identity of the intended sub-Contractor(s) is already known at the time of submitting the tender, all sub-Contractors must provide the required evidence for the exclusion and selection criteria as detailed in **Section 3** of these tender specifications.

If the identity of the sub-Contractor is not known at the time of submitting the tender, the tenderer who is awarded the contract will have to seek the EDA's prior written authorisation before entering into a sub-contract.

Where no sub-Contractor is given, the work will be assumed to be carried out directly by the bidder.

1.6 Presentation of the tenders

The tenders must comply with the following conditions:

1.6.1 Tenders must be submitted in accordance with the **double envelope system:**

The **outer envelope** or parcel should be sealed with adhesive tape and signed across the seal and carry the following information:

- the reference number of the invitation to tender **15.CAT.OP.001**

the project title

"GOVernmental SATellite COMmunication (GOVSATCOM) Feasibility Study"

- the name of the Tenderer
- the indication "***Tender - Not to be opened by the internal mail service"***
- the address for submission of tenders *(as indicated in the letter of invitation to tender)*
- the date of posting *(if applicable)* should be legible on the outer envelope.

The outer envelope must contain **three inner envelopes**, namely, **Envelope A, B and C**.

The content of each of these three envelopes must be as follows:

Envelope A – Administrative documents

- the **Tender Submission Form** found in **Annex VII**
- the duly filled in, signed and dated **Exclusion Criteria Declaration(s)** as requested in section 3.1 and using the standard template in **Annex IV**
- the duly filled in, signed and dated **Legal Entity Form(s)** as requested in section 3.2 and using the standard template in **Annex V**
- the duly filled in, signed and dated **Financial Identification Form**[3] using the template in **Annex VI**
- The **Economic & Financial Capacity** criteria documents as requested in section 3.2
- The **Technical & Professional Capacity** criteria documents as requested in section 3.2 - **One signed original and 3 (three) copies.**
- **Duly authorised signature**, i.e. an official document (e.g. statutes, power of attorney, notary statement, etc.) proving that the person who signs on behalf of the tenderer is duly authorised to do so.
- In case of **consortia**, the consortium agreement or a duly signed and dated consortium statement by each of the consortium members specifying the company

[3] in case of consortia, only **one** Financial Identification Form for the whole consortium shall be submitted, nominating the bank account into which payments are to be made under the contract in the event that the respective tender is successful

or person heading the project and authorised to submit a tender on behalf of the consortium.

Envelope B – Technical proposal

One signed original and 3 (three) copies of the technical proposal providing all information requested in point 4.2.

Envelope C – Financial proposal

One signed original of the financial proposal based on the format found in **Annex II**.

1.6.2 The original tender must be signed, dated and marked "**ORIGINAL**", and the copies marked "**COPY**".

1.6.3 Tenders should be drafted in one of the official languages of the European Union, **preferably** English. Requested documents not available in English should be accompanied by an English courtesy translation. The contract shall be entered into in English.

It is extremely important that tenders be presented in the correct format and include all documents necessary to enable the evaluation committee to assess them. Failure to respect these requirements will constitute a formal error and may result in the rejection of the tender.

1.7 Period during which the tenders are binding

Period of validity of the tenders, during which tenderers may not modify the terms of their tenders in any respect is 120 days after the deadline for the submission of tenders. In exceptional cases, before the period of validity expires, the EDA may ask tenderers to extend the period for a specific number of days, which may not exceed 40.

The selected tenderer must maintain its tender for a further 60 days from the date of notification that his tender has been recommended for the award of the contract. The further period of 60 days is added to the validity period irrespective of the date of notification.

1.8 Contacts between the EDA and tenderers

Contacts between the EDA and tenderers are prohibited throughout the procedure save in exceptional circumstances and under the following conditions only:

A. Before the final date for submission of tenders:

- At the request of the tenderer, the EDA may provide additional information solely for the purpose of clarifying the nature of the contract. Any request for additional information must be made in writing by **e-mail** at **procurement@eda.europa.eu** or at the **Fax No**.: **+32 (0)2 504 29 75** and should indicate the reference number and the title of the tender.
- Requests for additional information received after the deadline for request of clarifications from the EDA as specified in point 1.2 – *Timetable* will not be processed.
- The EDA may, on its own initiative, inform interested parties of any error, inaccuracy, omission or any other clerical error in the text of the call for tender.
- Any additional information including that referred to above will be published on the EDA's website. Please ensure that you visit regularly the site for updates.

B. After the opening of tenders:

- If, after the tenders have been opened, some clarification is required in connection with a tender, or if obvious clerical errors in the submitted tender must be corrected, the EDA may contact the tenderer, although such contact may not lead to any alternation of the terms of the submitted tender.
- **After the award decision, all tenderers will be informed of the outcome of this procedure by e-mail. It is the tenderer's responsibility to provide a valid e-mail address together with their contact details in their tender and to check their e-mail regularly.**

1.9 Visits to EDA premises – Information meeting

An Information meeting will be organised at EDA's premises on 20 March 2015, at 10:00 o'clock.

- Maximum three representatives per tenderer may attend the meeting. Prospective tenderers shall inform the Agency by email to procurement@eda.europa.eu of their intention to attend, at least 5 days prior to the meeting, providing the names and the ID details of their representatives and giving the company details.

- Prospective tenderers wishing to participate may ask questions on the tender. Should this be the case, those should be provided preferably in writing at least 2 days prior to the meeting. Minutes of meeting will be produced, where all the questions and answers will be recorded and published on EDA's website.

Participation in the meeting does not prevent tenderers from asking further questions during the tender clarification stage (see Point 1.2 "Timetable" above).

Economic operators choosing not to attend the meeting recognise to have the full knowledge and information allowing them to submit an offer.

1.10 Division into lots

This tender is not divided into lots. The tenderer must be in a position to be able to provide all the services requested.

1.11 Variants

In the absence of any such indication in the terms of reference your tender should not deviate from the services requested.

1.12 New services

In accordance with Article 31 of the Council decision 2007/643/CFSP of 18 September 2007 on the financial rules of the European defence Agency and on the procurement rules and rules on financial contributions from the operational budget of the European defence Agency, the EDA may have recourse to the negotiated procedure without prior publication of a contract notice for additional contracts involving services similar to those assigned to the party that was awarded this contract.

1.13 Security standards

In the general implementation of its activities and for the processing of tendering procedures in particular, the EDA observes the Council Decision 2013/488/EU of 23 September 2013 on the security rules for protecting EU classified information.

1.14 Contract provisions

In drawing up your tender, you should bear in mind the provisions of the draft contract (see **Annex I** to the present tender specifications). In particular, the draft contract indicates the method and the conditions for payments to the Contractor.

2 Terms of Reference

The Terms of Reference will become part of the framework contract that may be awarded as a result of the tender.

Used abbreviations in the terms of Reference:

COMSATCOM	Commercial Satellite Communication
CONOPS	Concept of Operations
COTS	Cost Off The Shelf
CSDP	Common Security and Defence Policy
CST	Common Staff Target
DOTMLPFI	Doctrine, Organisation, Training, Material, Leadership&Education, Personnel, Facility and Interoperability
EDA	European Defence Agency
ESA	European Space Agency
EU	European Union
GEO	Geostationary Earth Orbit
GOVSATCOM	Governmental Satellite Communication
G/T	Antenna Gain to noise Temperature
IDT	Integrated Development Team
IER	Information Exchange Requirement
MEO	Medium Earth Orbit
MILSATCOM	Military Satellite Communication
pMS	Participating Member State(s) of EDA
RPAS	Remotely Piloted Aircraft System
SATCOM	Satellite Communication(s)
WP	Work Package

2.1 Introduction

2.1.1 Background of the invitation to tender

Satellite Communications (SATCOM) are generally split into three main categories ('tiers') defined from a military user perspective.

- Tier 1: Protected and guaranteed SATCOM, generally provided by MILSATCOM systems, offering highly and assured protected SATCOM capacity both in terms of nuclear hardening, anti-jamming/dazzle capability and highly secure TT&C, supplemented by associated robustness and resilience in the ground segment. Security and technology characterised by being highly specialised and largely sovereign in nature.

- Tier 2: Highly assured SATCOM offering a certain robust security level with some resilience, utilising commercially available solutions with minimal modifications. Tier 2 systems, generally referred to as '*GOVSATCOM*' are by nature less protected than Tier 1.

- Tier 3: Service/Commodity based procured capacity, sourced solely from the commercial market who will provide a degree of 'on-demand' access, or on a as needed basis, generally referred to as 'COMSATCOM'.

EDA's satellite communication initiative, as mentioned in the conclusions of the European Council, will address the feasibility of the set-up of a future collaborative programme fulfilling the Tiers 2 requirements for the defence community as well as EU actors involved in CSDP operations.

The EDA has just finalised the initial requirement identification phase and is now considering the launch of the programme preparation phase of the GOVSATCOM programme. In that respect, the EDA requires an industrial support for a feasibility study.

The purpose of the contact is to realise a feasibility study of a future programme on Governmental Satellite Communication in terms of scope, time, cost, acquisition regime, organisation and participation based on various options to be defined and then evaluated.

Throughout this process, the work will be closely coordinated with the defence community through the EDA Project Team Satcom.

The work will also be performed in close cooperation with the European Space Agency (ESA) (see section 2.1.2, 2.2.3.3, 2.2.3.4 and 2.3.3).

Some synergies could also take place with similar efforts led by the European Commission concerning the civil aspects of the GOVSATCOM programme.

2.1.2 Scope of the framework contract

The study logic described below outlines three work packages (WP). Each of them will be implemented through a separate specific contract, signed under this framework contract.

Work to be performed:

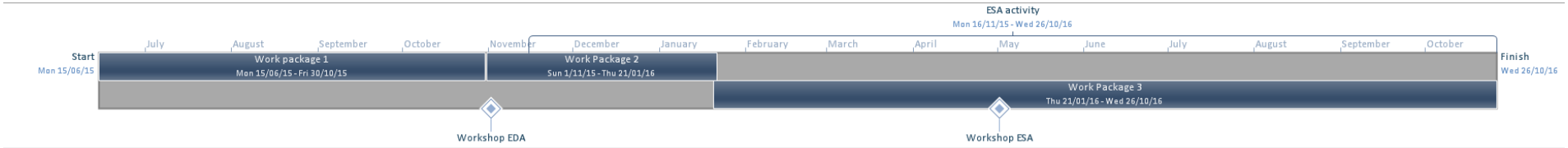
The work programme has been developed through interactions with relevant Satcom experts in Member States and ESA.

The EDA work will focus on the analysis of the Information Exchange Requirements (IERs), the development of an assessment model, the analysis of the current GOVSATCOM assets to cover the IERs over time, referred to as the Initial Operational Capability (IOC) and finally, the development of the Full Operational Capability (FOC) supported by the system requirements, associated business model and programmatic dimensions.

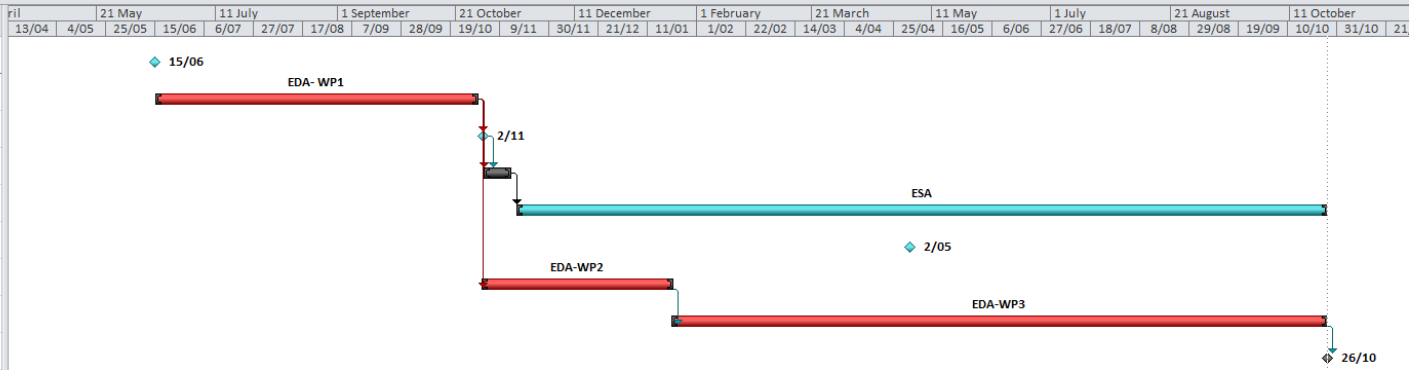
The European Space Agency will use the findings of Work Package 1 to conduct a parallel study whose findings in its turn will be made available to be possibly considered during the performance of the activities under Work Package 3.

Work Package	Brief description of the work package	Expected Duration
WP1	On the basis of the user needs (Common Staff Target (CST), the Contractor will refine the Information Exchange Requirements (IER), propose various configurations based on grouping of IERs and develop an assessment model.	5 months
WP2	The Contractor shall assess the Initial Operational Capability (IOC) based on the current and planned governmental assets taken in isolation.	3months
WP3	The Contractor shall develop a space distributed architecture based on the pooling and sharing of the spare capacity of current and planned governmental assets complemented, if required, by other systems to be defined, in order to cover the full set of IERs and configurations identified in the Work Package 1Contractor	10 months

An indicative calendar is provided here-below.



	Task Name	Start	Finish	Duration
1	**Kick Off**	Mon 15/06/15	Mon 15/06/15	0 days
2	**Work package 1**	Mon 15/06/15	Fri 30/10/15	5 mons
3	**Workshop EDA**	Mon 2/11/15	Mon 2/11/15	0 days
4	Hand Over EDA-ESA	Mon 2/11/15	Fri 13/11/15	10 days
5	ESA activity	Mon 16/11/15	Wed 26/10/16	12,4 mons
6	**Workshop ESA**	Mon 2/05/16	Mon 2/05/16	0 days
7	**Work Package 2**	Sun 1/11/15	Thu 21/01/16	3 mons
8	**Work Package 3**	Thu 21/01/16	Wed 26/10/16	10 mons
9	**Final workshop**	Wed 26/10/16	Wed 26/10/16	0 days



2.1.3 Use of the Results

The study results will be available without restriction to all EDA's participating Members States as well as to the European Space Agency, including to potential industrial support contracted in the framework of the GOVSATCOM initiative (see also Article II.8 of the framework contract).

The main objective of this contract is to provide the needed information for pMS :

- To support their national decision making process
- To secure the 'political' buy-in of the collaborative option
- To provide the visibility for a seamless progression toward the potential realisation phase.

2.2 Detailed description of the work packages

2.2.1 Work package 1: Refinements of the IER and development of a GOVSATCOM assessment model

- Expected duration: 5 months
- Input: CST, reference documentation on CSDP operation and RPAS, documents from pMS on national needs
- Output: See section 2.3.4.1.
- The management activities related to this work package include also the potential coordination meetings with ESA (see 2.3.3).

2.2.1.1 Refinements of the IER

The proposed rationale and methodology will be based on the analysis of the Common Staff Target (CST) document. This document as well as other inputs (see above Point 2.2.1) will be provided by EDA after the signature of the contract. The Contractor will then analyse the military needs and provide some basic consequences concerning the operational characteristics. In particular, a description of the typical Satcom environment for each kind of users will be detailed (maritime, aeronautical, manned, aeronautical unmanned, land, space, handheld, deployable, on-the-move, on-the-pause…).

For the baseline requirement introduced in the CST, the Contractor will derive from the various CSDP scenarios detailed in the CST some representative topologies involving a number

of defence assets. The Contractor will then derive the IER related to the Satcom use, referenced as IER1. The future use of RPAS shall also be taken into account.

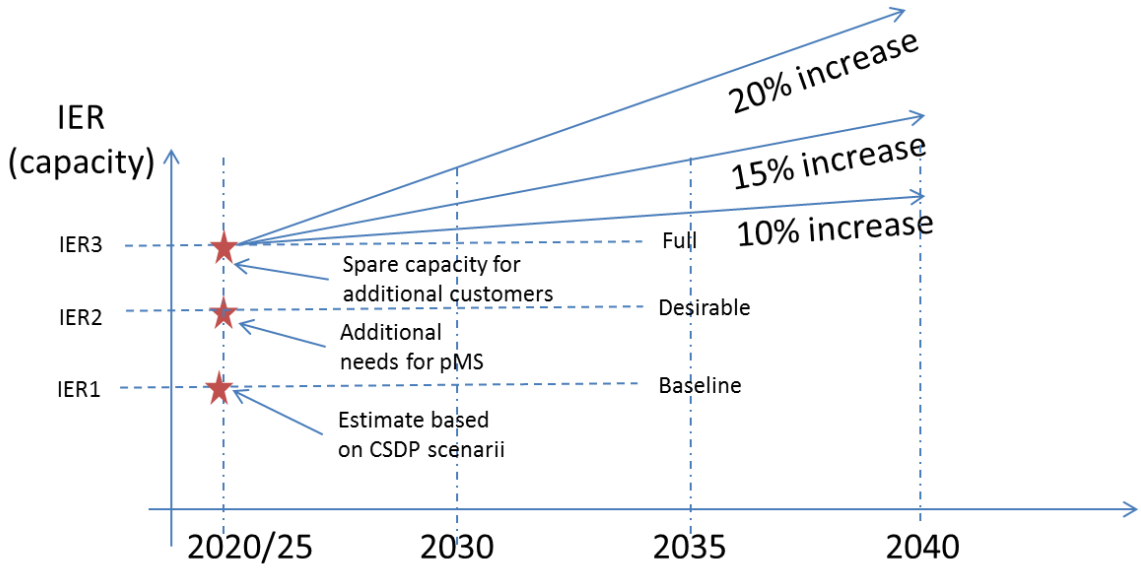
Then, the Contractor will propose, based on its experience or past projects some additional topologies to cover additional requirements related to national use of Satcom in another framework than CSDP operations. The relevance of these topologies proposed by the Contractor will be assessed by the defence community through the Project Team on Satcom. The Contractor will then derive the IER related to the Satcom use, referenced as IER2. Member States might provide also their own IER to be covered by the GOVSATCOM capability. The Contractor shall demonstrate in its tender to what extent he is able to get access to national requirements (e.g. past studies, interviews, letter of sponsoring…)

The Contractor will propose also a scaling factor to address a spare capacity whose benefit will be assessed later during the performance of the contract. This estimate will be referenced as IER3.

IER[4] concerning Satcom should then be quantified to the maximum extent possible. The approach should be innovative (service oriented and not necessarily technology limited). The methodology to quantify the IER will however be part of the evaluation of the tender and needs to be provided with the technical proposal.

The Contractor shall clearly identify from this exercise the IER corresponding to the GOVSATCOM segment foreseen for 2020/2025. Based on this estimate, he should be able to extrapolate the needs for three basic assumptions concerning increase of the Satcom traffic (10, 15 and 20%/year) as illustrated in the figure below.

[4] *An Information Exchange Requirement (IER) is the description, in terms of characteristics, of the requirement to transfer information between two or more end users. The characteristics include capacity (throughput or bandwidth), locations, coverage and number of users, contents, size, timeliness, latency and jitter, environment of end-users, security and trigger. The IER shall express requirements foreseen in 2020/2025 and extrapolated till 2040.*



At this stage, there shall be a clear understanding of what and where capacity is provided and to which user community/cluster and under which assumptions/circumstances. The Contractor will also propose a prioritisation of the IER (e.g. 'mandatory', 'need to have', 'nice to have', 'optional', 'limited to few users') and associate the relevant user community. These different dimensions or degree of variability shall allow the Contractor to define various configurations of user needs (5 anticipated) based on a variability analysis.

For example, one configuration could be to provide the capacity limited to IER1 over the most important areas. Another configuration could be to provide the whole capacity (IER1+IER2+IER3) on a worldwide basis. The definition of these configurations shall ultimately (i.e. in the course of the Work Package 3) allow the defence community to assess the benefits and drawbacks of providing IER3 capacity in top of the defence requirements based on IER1 and IER2. These configurations will be noted CONFIG#1 to CONFIG#P where P is the number of proposed configurations to be addressed.

The initial views of the Contractor concerning some basic configurations will be part of the evaluation of the tender and need to be provided with the technical proposal

Based on its experience, the Contractor will also highlight some additional assumptions which should be taken into account in the capability development process such as the sovereignty dimension, the applicable standards, the impact of using existing assets (anchoring station or satellite) and the compatibly with Satcom terminals (antenna size, G/T, environment such as land, maritime or aeronautical) in order to limit the cost of the GOVSATCOM solution.

The work shall be supported by the use of an existing forecast tool. This tool shall allow EDA to create deployment scenarios with multiple conflicts and variable conflict types. The tool shall allow EDA then to quantify Satcom needs and simulate IER such as capacity (bandwidth) and throughput (bps) requirements by frequency band, military segment, and commercial vs.

proprietary systems. In particular, the forecast tool shall allow EDA to replicate the findings of the Contractor.

NB: The purpose of this part of the work is on the use of the tool and the analysis of the results in terms of IERs and not on a specific tool development as such. In this respect, the Agency underlines the importance of the fact that the Forecast tool must have been used for similar studies in the past. No development is required but minor adaptation can be envisaged to better match with EDA requirements.

Moreover, the Agency stresses the utmost importance of the rationale and methodology to characterise the Satcom demand in terms of IERs since it will be the basis for the follow up activities as well as ESA activities.

2.2.1.2 Development of a GOVSATCOM assessment model

Within work package 1, the second part of the work will be related to the development of an appropriate mathematic model assessing the ability of various GOVSATCOM solutions to address the various configurations defined before. This shall go beyond the usual assessment of the best trade-off between cost and capacity. A weighting method based on the calculation of an overall effectiveness factor (OEF) is proposed.

$$OEF = \sum_{n=1}^{N} \propto_n . KA_n$$

Where $\propto_n$ is a weighing factor (between 0 and 1) et $\sum_{n=1}^{N} \propto_n = 1$

And $KA_n$is the n^{th} key attribute and *N* the number of key attributes.

In that respect, the Contractor shall propose some key quantifiable key attributes that will contribute to meeting the user's requirements.

For example:

- Capacity (Mbps or MHz)
- Latency (file, video, voice transfer)
- Number of terminals addressed
- Interoperability
- Access (secured and guaranteed)
- FOC
- Date entry into force (IOC, FOC)
- Technology maturity/ Risk of obsolescence
- Compliance with Satcom standards
- Connectivity with various types of platforms and terminals
- Flexibility

- Scalability
- Non-EU dependency

The Contractor shall already provide at the tendering stage a list of key attributes to demonstrate its experience and its ability to conduct such impact assessment exercise. This initial list will then be refined through interactions with the defence community. Once the list finalised, a hierarchy and priority of the different key attributes will be proposed by the Contractor and then discussed with the defence community through EDA. Once agreed, the hierarchy of the key attributes will lead to the weighting factor $\propto_n$

For each key attribute, the Contractor will derive from the IER a threshold requirement *TR* and an objective requirement *OR*. The Contractor shall also propose a way to quantify later the achieved performance *AP* by each GOVSATCOM solution. For a key attribute such as capacity, the threshold value *TR* could be 10 Gbps, the objective requirement *OR* 30 Gbps and the achieved performance (*AP*) would be the GOVSATCOM candidate capacity.

The key attribute will then be quantified as:

$$KA_n = f\left(\frac{AP_n - TR_n}{OR_n - TR_n}\right)$$

Where

- $TR_n$is the threshold requirement of the n^{th} key attribute
- $AP_n$is the achieved performance of the n^{th} key attribute
- OR_n is the objective requirement of the n^{th} key attribute
- And *f* the function defining the scaling dimension e.g.
  - $f(x) = x$ for $x \in [0; 1]$
  - $f(x) = x^2$
  - $f(x) = \sqrt{x}\ldots$

In the case of an achieved performance AP_n greater than the objective requirement OR_n, the KA_n will be limited to 1 (no over-performance). In the case of an AP_n lower than the threshold requirement $TR_{n,}$*either the solution is omitted or* $TR_{n,}$ *is reconsidered so that* $TR_{n,} < AP_n < OR_{n.}$ The Contractor is requested to provide its view on the proposed assessment model already at the tendering stage, and room for improvement. This initial assessment will be part of the evaluation of the tender and needs to be provided with the technical proposal.

The assessment model will also be delivered to ESA.

2.2.1.3 Key attributes on secured and guaranteed access

The GOVSATCOM initiative relies on the ability to provide SATCOM offering a certain robust security level with some resilience, utilising commercially available solutions with minimal

modifications. Therefore, the key attributes related to Satcom security and Satcom access are the two most important to be considered.

This assessment shall be realised through appropriate metrics qualifying how the system design mitigate the various threats which may impact the Satcom access.

This access shall minimise system vulnerabilities to low-cost, easily affordable, ground-based threats, thus limiting GOVSATCOM vulnerabilities to only space-based threats, more expensive and difficult to put in place in practice.

The assurance assessment shall include but is not limited to solutions mitigating threats from electronic, physical and cyber-attacks.

The Contractor will develop appropriate key attributes demonstrating the specificities of GOVSATCOM compared to commercial or military Satcom taking into account various dimensions (non-exhaustive) such as:

- Waveforms
- Signal and antenna processing
- Radio Frequency access
- Foreign presence
- Physical access
- Traffic concentration
- Redundancy and back-up features

For example, the key attribute on resilience could be quantified through a level reached over a scale of resilience capacity. The scale would be defined by combining various requirements on signal processing, antenna processing, encryption, anti-jamming, data protection and redundancy…Level L could represent the best protection level before what is provided by Milsatcom solution and Level 1 (to be defined) the minimum acceptable level. The threshold value *TR* would be L and the *OR* would be 1. *AP* would be the level reached by each GOVSATCOM solution.

2.2.2 Work package 2: Initial Operational Capability (IOC) assessment

- Expected duration: 3 months
- Input: Findings of the Work Package 1
- Output: See section 2.3.4.1.
- The management activities related to this work package include also the potential coordination meetings with ESA (see 2.3.3).

The purpose of this work package will be to assess the ability of some satellites taken in isolation to fill part of the various configurations defined in WP 1. This should allow the Agency to test the assessment model and identify potential gaps to fulfil entirely the different configurations.

Based on publically available information, in-house knowledge and potential additional information from pMS, the Contractor will propose a list of current and planned satellites which could be eligible to the GOVSATCOM definition including commercial assets intending to deliver GOVSATCOM services. Each asset will be named as IOC#1 to IOC#K where K is the number of assets proposed by the Contractor. The Contractor will then apply the assessment model developed under WP 1.

The Agency shall be in a position to understand to which extent each asset can fulfil the different configurations identified as outcome of WP1. In its proposal the tenderer is expected to provide a preliminary list of those assets. Furthermore, the tenderer shall explain its degree of autonomy to apply the developed assessment model to each of the listed assets and, by reciprocity, the missing information to be provided by the relevant pMS.

For each configuration identified as outcome of WP 1, he shall in particular assess the achieved performance *AP* for each GOVSATCOM asset and each key attribute defined in Work Package 1. A table as below will be part of the output:

GOVSATCOM asset	KA_1	KA_2	KA_3	KA_4	…	KA_N
IOC#1						
IOC#2						
…						
IOC#K						

The Contractor will then derive the overall effectiveness factor (OEF) for each GOVSATCOM asset over the entire life cycle.

GOVSATCOM architecture	*OEF*	Rank
IOC#1		

IOC#2		
…		
IOC#K		

In the case of a concept with an *OEF=0* (all key attributes estimated at 0), the *OEF* will be fixed at half the lowest *OEF* calculated with the other concepts (to avoid a null effect for the work to be carried out in the work package 3).

The Contractor will finally provide a sensitivity analysis of each key attribute on the ranking of the different concepts evaluated. The Contractor will then summarise its findings by populating the rank obtained by each governmental Satcom asset for each configuration.

RANK	*CONFIG#1*	CONFIG#2	…	CONFIG#P
IOC#1				
IOC#2				
…				
IOC#K				

It will further comment this table by analysing the results. In particular, the Contractor shall also identify the potential gaps between the IERs covered by each GOVSATCOM asset and the IERs target.

The Contractor will also issue an initial concept of operations (CONOPS) based on the current knowledge of the governmental assets listed before such as:

- the processes, information flows and interactions required for initiating, using, maintaining, retiring the system.
- how to manage conflicting bookings
- the actors to be involved, their roles and responsibilities,
- the operational environment
- the monitoring and troubleshooting procedures
- back-up procedures in case of failure, disruption of Satcom links
- the security procedures including the certification and accreditation of users
- some key figures e.g. set-up time to get the Satcom link
- an helpdesk with the status of the needed Point of Contacts

2.2.3 Work package 3 : Programme proposal for a Full Operational Capability (FOC)

- Expected duration: 10 months

- Input:

  - Findings of Work Packages 1 and 2;

  - ESA findings on GOVSATCOM architecture design (to be assessed)

- Output: See section 2.3.4.1.

2.2.3.1 Background

The WP 2 outcomes will demonstrate to what extent each governmental satellite asset taken in isolation can fulfil the various configurations identified in WP 1.

The Satcom environment (operational, technical, financial, security) is changing and in that context new and innovative approaches should be considered. One possible way forward relies in the concept of space distributed architecture, defined as the ability to provide capability through multiple systems.

The Agency is very much interested in investigating the added-value of space distributed architecture instead of a specific development of a monolithic space system. Indeed, the European Council's conclusions recalled that capacities are owned and operated by Member States. Therefore, the development of the next generation of governmental satellite communications shall take into account this postulate. The Agency intends to demonstrate through this contract the leverage effect, the benefits as well as the interdependencies of this solution.

Therefore, the Contractor is requested to study the space distributed architecture based on the pooling and sharing of the spare capacity of current and planned governmental assets complemented, if required, by other systems to be defined, in order to cover the full set of IERs and configurations identified in WP 1.

The Contractor will address, among other things, the following dimensions to provide the evidence of the benefits of such an approach:

- Technological dimension. Refresh and updates opportunities.
- Discipline (Conops). What impact on the ground segment (Network and Terminals)?
- Sustainment of the European space industrial base through a larger market with more regular developments
- Impact on resilience by redundancy. How to quantify this?
- Satcom resource planning (operational use)
- Satcom procurement planning
- Incentive for Satcom standardisation and interoperability
- Others

The preliminary views of the Contractor concerning these dimensions will be part of the evaluation of the tender and needs to be provided with the technical proposal. A preliminary analysis or extract of similar work realised in the past will be an added value.

The development of the Full Operational Capability will consider the added-value and benefits for three classes of users.

- Shareholders: Members of the GOVSATCOM programme participating in the recurring cost of the system. A shareholder has a guarantee of access and can receive benefits from leasing extra capacity to customers. It is anticipated that a shareholder will host an anchor station.

- Stakeholders: Members of the GOVSATCOM programme who do not participate in the recurring cost of the system. A subscription fee is defined to ensure a guarantee of access.

- Customers: No guarantee of access, the Satcom capacity is provided on a pay-per-use basis.

2.2.3.2 Pooling and sharing of existing and planned governmental assets

In this part of the work, the Contractor shall develop a model based on the pooling and sharing of the existing and planned governmental assets considered solely in WP2. The Contractor shall study the benefits brought by the pooling of these systems. The GOVSATCOM assessment model shall assess the improvements, constraints and limitations. in particular in terms of guaranteed and secured access, by this pooling effect.

The analysis should clearly distinguish between:

- pre-existing elements that would be available, like facilities or items developed/procured, specifying the required adaptations or modifications whenever applicable,
- elements that have to be procured as Commercial Off The Shelf (COTS), indicating the proposed procedure for the procurement, and
- duly justified, elements that have to be developed with the appropriate timeframe.

The Contractor shall clearly define the remaining gaps between the capacities provided by pooling of existing and planned governmental assets and the capacities defined in the various configurations of WP 1.

2.2.3.3 GOVSATCOM level playing field: the theoretical approach

At this stage, it is expected that the European Space Agency (ESA) will have developed several high-level architectures based on various concepts[5] (architecture designs) addressing in an optimal manner the various configurations identified in WP 1. ESA is expected to define which bands support which capacity, what coverage is provided to which user community/cluster and under which assumptions/circumstances.

Moreover, ESA should provide the minimum set of technical requirements to have any future satellite eligible for the GOVSATCOM segment.

The Contractor will then derive the overall effectiveness factor (OEF) for each GOVSATCOM concept over the entire life cycle for each configuration identified as outcome of WP1. This will be similar to the work made for the existing GOVSATCOM assets named as IOC#1 to IOC#K in WP 2.Then, the Contractor will also provide a cost analysis through value engineering techniques (i.e. balance a system maximising the output of the assessment model whatever the cost with more affordable systems covering only part of the requirements). The system cost shall include not only the cost to develop or acquire the system but also the costs to operate, maintain, upgrade. The Contractor shall also study the impact for the ground segment (possibility to reuse existing or conventional ground segment (anchor, ground or terminal stations) and the interoperability dimension, for example, through existing standards.

The methodology to compute costs must be consistent across all concept proposals (extension of an existing system, development of a new system, leasing, etc.) and shall cover the life cycle cost of the systems (or duration of leasing contracts). The costs shall also be related to each user status (shareholders, stakeholders and customers) of the spare capacity.

The Contractor shall already provide at the tendering stage how it intends to conduct the cost analysis exercise to demonstrate its ability to conduct such impact assessment exercise. The methodology to compute costs will then be refined through interactions with the defence community. This methodology will be part of the evaluation of the tender and needs to be provided with the technical proposal.

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[5] ESA will assess the ability of the following concepts to address each configuration defined at the end of WP1 :

- Concept#1: A leasing through the commercial sector;
- Concept#2: A hosted governmental payload on board satellite;
- Concept#3: A totally new system to be defined (one or several space assets to fulfil all the needs in GEO and MEO orbits);
- Concept#4: Other proposed by ESA

The Contractor will assess the impact (including financial) of the acquisition regime model for the different classes of users (shareholder, stakeholder or consumer):

- Pooled acquisition
- National acquisition and pooled use
- Public Private Partnerships (partly or fully)
- Other (to be defined)

The Contractor will then summarise the cost for each user class and each GOVSATCOM concept

GOVSATCOM architecture	*Cost C*	Rank
Concept#1		
Concept#2		
…		
Concept #4		

The Contractor will finally provide a sensitivity analysis of each cost on the ranking of the different concepts evaluated.

Finally, the GOVSATCOM score of the concept #p (*GSp)* is proposed to be computed as:

$$GS_p = \frac{C_p}{OEF_p . FOC_p}$$

Where

- OEF_p is the overall effectiveness factor of the concept #p
- FOC_p is the number of years of Full Operational Capability or duration of the framework contract in case of leasing
- C_p is the cost of the concept #p

The purpose of this exercise is to provide as far as possible a methodology to derive objective data which quantify the requirements satisfaction level to help decision makers to choose which system architecture to develop, produce or maintain. The choice will be made on the lowest GOVSATCOM score standing for the lowest cost per year at FOC per Overall Effectiveness Factor (i.e. best value for money).

For each configuration (see 2.2.1.1) and user class, the Contractor will finally summarise the score for each GOVSATCOM concept

GOVSATCOM architecture	OEF_p	FOC_p	C_p	Score GS_p	Rank
Concept#1					
Concept#2					
…					
Concept #4					

The Contractor will finally provide a sensitivity analysis on the ranking of the different concepts evaluated.

2.2.3.4 The pragmatic approach: Pooling and sharing of existing and planned governmental assets complemented by additional systems

For this part of the work, the Contractor shall develop a model based on the pooling and sharing of existing and planned governmental assets complemented by additional systems to cover the various configurations and IERs identified in WP 1. The additional systems will be inspired by the outcomes of the ESA activity and the theoretical approach developed before. The ESA will provide its own findings by addressing the satellite architecture designs and in particular, the remaining gaps identified in section 2.2.3.2. The GOVSATCOM assessment model shall quantify the improvements, constraints and limitations in particular in terms of guaranteed and secured access, by this pooling effect, and the added value for each community of users (shareholder, stakeholder and customer).

Other factors outside the model will need to be considered in the selection process.

For example, the Contractor shall also assess the impact of various sovereignty levels on the Satcom delivery (management, planning, presence of an anchoring, ground station controlled nationally, by another nation, by EU institutions, by a third party).

The Contractor shall also assess the programmatic aspect of each GOVSATCOM solution. Synergies and opportunities with national plans known at this stage shall be highlighted.

The Contractor shall also make some recommendations on the sustainability of the business model. For example, how to grant access to the GOVSATCOM capability for a new partner, how to opt-in, opt-out, what should be the governance?

The final delivery will be a report summarizing the benefits and conditions of implementation of the proposed concept through the development of a Business Case, Architecture design and Management Plan. Section 2.3.4.1 details the form and contents of this/these report(s).

The business case shall clearly demonstrate how the implementation of the Satcom distributed concept based on pooling and sharing of current and planned governmental satellites complemented eventually by other systems is the best way to fulfil the IERs and provide the best value for money for the various communities of users (shareholder, stakeholder and customer). Synergies with national plans and efforts conducted at EU level shall be sought to the maximum extent possible. More importantly, each assessment shall demonstrate the benefits (and drawbacks) for the defence community of providing extra-capacity (fulfilling additional requirements of other communities of interest) compared to a solution limited to fulfilling only the defence requirements. The business case shall also demonstrate the benefits for the European Space industry (research, manufacturer, service provider, etc.).

Particular attention will be given in the Business Case and management plan on the governance, funding, logistics and spares management, education and training dimensions.

The CONOPS will be finalised at a level of details which illustrate how the use of the GOVSATCOM capability could be anticipated. In addition to the items already covered, the CONOPS will include explicit references to the procedure related to Service Creation Request (from users), Service Creation Request fulfilment, Frequency/ Channel allocation and prioritisation, Service management (Fault reporting, fault tracking, resolution management), process to meet urgent operational requirements, performance monitoring (e.g. number of answered request/total number of requests, number of request fulfilled in less than X hours, etc.).

The Contractor shall propose or update the programmatic aspects of the potential realisation phase of a GOVSATCOM programme..

An initial version of the final deliverables shall be produced two months after the start of this work package and will be updated through interaction with EDA and feedback from the PT Satcom every two months.

2.3 Management and Contractual Deliverables

2.3.1 Management

A draft management plan is to be elaborated already at the tendering stage, building upon the information provided in these tender specifications.

The management plan shall:

- Provide evidence that the Contractor commits to the general objectives of the project and that it will produce the required results;
- Propose any potential relevant adaptation to the logic of the project to improve its results;
- Include a Statement of Work (including an analytical outline on how the key aspects of the study will be performed);
- Explain the organisation, methodology and means intended to be used in the project;
- Explain the monitoring structure proposed to ensure appropriate decisions in due time, including interaction with EDA and its representatives for project orientation matters.

This management plan considered as a living document will be updated during the duration of the contract and will be part of the deliverables.

The management plan shall contain already at the tendering stage at minimum the following elements:

- Management of the industrial team (in particular in case of consortium)

- Management of the project resources (time, budget, staff). The Agency shall be able to easily understand the workload (in man-days) associated for each task and each partner/sub-contractor in order to assess where the bidder intends to focus its effort along the study.

- Management of the risk, responsibilities, liabilities and quality control

- Management of deliverables. The Contractor shall create and maintain a documentation list, recording all the documents produced during the work, including reports, specifications, plans and minutes. A PDF viewer is required in order to ease exploitation.

- Interface with EDA and the EDA Programme Manager on Satellite Communications

EDA will be the official point of contact and all communication with MoDs of the EU Member States, ESA and third parties shall be realised through EDA.

Main results and critical points shall be reported to the contracting authority in due time in accordance to the proposed risk mitigation.

2.3.2 Dissemination and advertisement

The Contractor shall explain already at the tendering stage how and what types of media and communication contents can be developed to advertise and support the findings of the study (banners, flyers, video, artistic views, model…).

Media and communication kit(s) shall be developed along the study so that some elements can be illustrated from the beginning (such as context, explanation of the GOVSATCOM concept, etc.) till the end with the presentation of the final results and proposals.

2.3.3 Meetings

The Contractor shall schedule regular review meetings that may be held at EDA, at the Contractor's premises or by teleconference (VTC, phone conference or Lync). The Contractor is responsible for the preparation and the distribution of the minutes of all meetings held in connection with the contract. EDA reserves the right to request additional review meetings. The

Contractor shall write and propose for EDA approval all minutes of the meetings held for this contract.

The kick-off meeting will take place at EDA premises after the signature of the contract. Details concerning progress review meetings will be discussed and agreed during the kick-off meeting.

Kick-off, progress and final meetings will be organised to the maximum extent possible during meetings of the EDA Project Team Satellite Communication. In case this is not possible, meetings will be organised between EDA and the Contractor.

In addition to the progress meetings, the Contractor shall provide within the first five working days of each month, a short and concise status report describing the main achievements and identified risks compared to the previous report. This report can be combined with the minutes of a review meeting when appropriate.

A specific meeting ('Hand-Over' workshop) shall be organised by the Contractor at the end of WP 1. Once agreed by EDA, the WP1 deliverables will be explained to the defence community and ESA (including potential support), leaving room for Questions and Answers (Q&A).

The same will apply at the end of the ESA activity. The Contractor will be requested to attend the 'Hand-over' workshop prepared by ESA. The results of the ESA activity will be explained leaving room for Q&A for the Contractor, such that the EDA activity can take into consideration the outcomes of the ESA study.

The Contractor may have to participate also to meetings held in the framework of the ESA activities (estimated at a maximum of 2 meetings per ESA work package).

Agenda, presentations and documents to be discussed during a meeting must be sent by e-mail minimum 5 days before the meeting. Reports of the meeting must be sent maximum 4 days after the end of the meeting to the project. Project manager will comment or approve them within maximum 2 weeks.

Upon completion of the study, the Contractor will be responsible for a final presentation to present the major achievements of the project. It will be an event with attendees from various organisations. The preparation of this event will be performed in close coordination with EDA. The Media and Communication kit will be of particular interest in that context.

Meetings can be held as video conferences, web conferences or conference calls or through any other appropriate conferencing tool.

The Contractor will also edit a final data package labelled with 'final data package' with all the documents produced as well as with an index document with hyperlinks to the different document files.

2.3.4 Deliverables and calendar of payments

2.3.4.1 Deliverables

The Contractor will be responsible for the compliance of the deliverables with the tender specifications. The deliverables shall be submitted in MSWord and Adobe PDF format or compatibles formats. Presentation shall be submitted in MS Power point and Adobe Format or compatibles formats. Two paper copies have also to be delivered at each submission.

The final version of these deliverables shall be submitted in electronic form followed by a paper version form once approved by EDA, with up to 30 hard-copies.

The following deliverables must be produced by the Contractor:

Ref	Title	Date of Delivery	Type	Validation criteria	Work package
D0.x	Management plan	Before To+0.5 month	document	Living document (updates); time to deliver before and after meeting; fidelity of the document	All
D1.x.y	Minutes of meetings	Every review meeting	document	Living document (updates); time to deliver before and after meeting; fidelity of the minutes	All
D2.x.y	Monthly Progress Report	With the first five working days of each month	document	Living document (updates); time to deliver before and after meeting; fidelity of the reports	All
D3.x	Report on the IER, definition of	T1+5 months	Document Presentation	Compliance with the expectations of Work Package 1.	1

	configurations and assessment model			Completeness and depth of the analysis; Structure of the document; reliability of the sources used	
D4.x	Forecast tool	T1+5 months	Software and associated documentation	Completeness of the software tool. Exhaustiveness and comprehensiveness of the user's guide and test cases.	1
D5.x	Concept of Operations	T2+3 months (initial version) T3+10 Months (revised version)	Document	Compliance with the expectations of each work package	2 & 3
D6.x	Executive summary of D3.x	T1+5 months	Document	Fidelity of the summary	1
D7.x	Report on work package 2	T2+3 Months	Document Presentation	Compliance with the expectations of Work Package 2. Completeness and depth of the analysis; Structure of the document; reliability of the sources used	2
D8.x	Executive summary of D7.x	T2+3 Months	Document	Fidelity of the summary	2
D9.x.y	Report(s) on work package 3	T3+2 Months (initial version) and updates	Document(s) Presentations	Compliance with the expectations of Work Package 3. Completeness and depth of the analysis; Structure of the	3

		every two months till T3+ 10 Months		document; reliability of the sources used	
D10.x.y	Executive summary of D9.x.y	T3+ 10 Months	Document	Fidelity of the summary	3
D11	Media and communication kit	T3+ 10 Months	Video, pictures, model	Ability to address various communities (Satcom experts, press, policy makers…)	3

- To is the date of entry into force of the contract in accordance with the provisions of the contract.
- T1 is the date of transmission of the CST document to the Contractor
- T2 is the starting date of the work package 2, estimated around To+5 months
- T3 is the starting date of the work package 3, estimated around To+8months

a) **D0.x: Management of the project:**

See section 2.3.1. 'x' stands for the version of the management plan

b) **D1.x.y: Minutes of the meeting:**

See section 2.3.2. 'x' stands for the number of the review meeting and 'y' stands for the version of the minutes.

c) **D2.x.y: Monthly Progress Report:**

See section 2.3.2. 'x' stands for the number of the review meeting and 'y' stands for the version of the report.

d) D3.x: Report on WP1: IER, definition of configurations and development of an assessment model

See section 2.2.1. 'x' stands for the version of document.

The structure of the document(s) should enable to read it/them as such, but also enable a further digital exploitation (hyperlink, matrix, etc.). Every data, figures shall be clearly referenced to ensure reliability of the argumentation. The document shall clearly address the different requirements listed in the description of the WP 1.

The skeleton of the document is part of the evaluation of the tender and needs to be provided with the technical proposal. Nevertheless, the following headlines are already foreseen:

- Analysis of the military needs (based on the CST document and other sources)
- A description of the kind of users that are served, including their typical environment (maritime, aeronautical, manned, aeronautical unmanned, land, space, handheld, deployable, on-the-move, on-the-pause).
- Definition of scenarios and topologies (based on the CST document and other sources)
- Quantification of Information Exchange Requirements in 2020/25 and forecast till 2040
- Requirements which can be considered as external to the IERs, i.e. the need for using existing infrastructure, standards, terminal populations.
- Access conditions and limitations
- Definition of the configurations (set of assumptions for the system design)
- Requirements which are driven by the use of existing standards (STANAG's, ETSI,…)
- Development of the assessment model
- Development of the key attributes

The report can be split into various documents to ease its readiness.

e) D4.x: Forecast tool

See section 2.2.1. 'x' stands for the version of the tool.

The forecast tool shall be associated with a user's guide and some tutorials with test cases.

f) D5.x: Concept of operations (CONOPS)

See sections 2.2.12.2.2 & 2.2.3. 'x' stands for the version of the document.

The structure of the document(s) should enable to read it/them as such, but also enable a further digital exploitation (hyperlink, matrix, etc.). Every data, figures shall be clearly referenced to ensure reliability of the argumentation. The document shall be initiated during WP 2, and tailored to the proposed GOVSATCOM solution during WP 3. At this stage, the document will be incorporated in the deliverable D9.x.y. The skeleton of the document however is part of the evaluation of the tender and needs to be provided with the technical proposal.

g) D6.x: Executive summary of D3.x

See section 2.2.1. 'x' stands for the version of document.

The executive summary of the report D3.x shall be developed in three different formats:

- A five pages (maximum) document for Satcom experts.
- A five pages (maximum) document releasable to public.
- A one page document for decision and policy makers

h) D7.x: Report on WP2 : Initial Operational Capability

See section 2.2.2. ‘x’ stands for the version of document.

The structure of the document(s) should enable to read it/them as such, but also enable a further digital exploitation (hyperlink, matrix, etc.). The document shall clearly address the different requirements listed in the description of WP 2.

The document shall contain the following headlines at minimum:

- Presentation of the Governmental assets
- Application of the assessment model to governmental asset and sensitivity analysis
- Analysis of the results

i) Gaps and recommendation**D8.x: Executive summary of D7.x**

See section 2.2.2. ‘x’ stands for the version of document.

The executive summary of the report D7.x shall be developed in three different formats:

- A five pages (maximum) document for Satcom experts.
- A five pages (maximum) document releasable to public.
- A one page document for decision and policy maker

j) D9.x.y: Report(s) on WP3: Development of the Full Operational Capability (FOC)

See section 2.2.3. ‘x’ stands for the considered GOVSATCOM solution and ‘y’ stands for the version of the document. The structure of the document(s) should enable to read it/them as such, but also enable a further digital exploitation (hyperlink, matrix, etc.). The document shall clearly address the different requirements listed in the description of the WP 3.

The report shall allow pMS (Satcom expert but also policy and decision makers) to take a decision concerning the set-up of the proposed solution based on clearly identified compelling reasons. The following headlines shall be addressed

- Impact of the pooling of existing governmental asset

- Analysis of the theoretical approach

- Development of the GOVSATCOM proposal
    - Impact on the programmatic aspect
    - Impact on the (European) industrial market
    - Impact on the access conditions
    - Value analysis based on the functional analysis and different level of performances
    - How the proposed architecture mitigate the threats
    - Metrics and score of the proposed solution (as the best value for money)
    - Standardisation and interoperability

The GOVSATCOM proposal will be based on the elaboration of the following documents:

- A business case based on the template in Annex IX to these Tender specifications
- A report on the GOVSATCOM requirements (architecture design)
- A GOVSATCOM programme management plan based on the template in Annex X to these Tender specifications
- A final version of the Concept of operations (document D5.x tailored to the proposed solution).

The first two headlines might be dealt with a separate report to ease the reading of the documentation.

k) D10.x.y: Executive summary of D9.x.y

See section 2.2.3. 'x' stands for the considered GOVSATCOM solution and 'y' stands for the version of the document.

The executive summary of the report(s) D9.x.y shall be developed in three different formats:
- A five pages (maximum) document for Satcom experts.
- A five pages (maximum) document releasable to public.
- A one page document for decision and policy maker

l) D11: Media and communication kit

A media and communication kit in line with EDA communication approach and style guide proposing: content, multimedia / videos products, artistic pictures, model, poster and any other relevant material shall be delivered. This shall allow EDA to advertise and communicate on the results achieved through this study and demonstrate to non-Satcom experts how the capability gap is fulfilled.

The tenderer shall provide its views on the M&C kit. It will be evaluated as part of the technical proposal.

2.3.4.2 Calendar of payments

The following table recalls the calendar of payments:

Nr	Title	Description	Timelines	Payment
1	**Work package 1**	Acceptance of D0.x, D1.x.y and D2.x.y issued up to the deadline and D3.x, D4.x, D6.x	T1+ 5 months	Maximum EUR 400 000
2	**Work package 2**	Acceptance of D0.x, D1.x.y and D2.x.y issued up to the deadline and D5.x , D7.x and D8.x	T2+3 Months	Maximum EUR 100 000
3	**Work package 3**	Acceptance of D0.x, D1.x.y and D2.x.y issued up to the deadline and D9.x.y, D10.x.y and D11	T3+ 10 Months	Maximum EUR 500 000

2.4 Specific Security Issues

The overall classification of the contract is RESTREINT UE/EU RESTRICTED.

For details about the elements of contract to which security classification is assigned refer to draft Contract, Annex III, Appendix II.

It is estimated that some of the deliverables might be RESTREINT UE/EU RESTRICTED. The Contractor shall mention in its proposal the need for higher security levels, if applicable.

2.5 Volume of the contract

The maximum contract value of the framework contract is **EUR 1 000 000** (VAT excluded). The maximum contract value per Specific contract is, respectively, **EUR 400 000** for **WP 1**, **EUR 100 000** for **WP 2** and **EUR 500 000** for **WP 3**.

Any offer exceeding the above maximum amounts will be automatically rejected.

2.6 Duration of the contract

The contract implementation period is 18 months starting from the date of the entry into force of the contract (T0).

Subject to budget availability, EDA may decide not to contract Work Package 2 and 3 and terminate the Framework contract in anticipation (see also Article I.1.2 of the draft Framework Contract).

2.7 Place of delivery/execution

Deliverables shall be delivered at EDA premises in Brussels, Belgium

2.8 Variant solutions

Not applicable.

3 Exclusion and selection criteria

3.1 Exclusion criteria

Participation to this tender is only open to tenderers who are not in one of the situations listed below:

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

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

d) 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;

e) have been the subject of a judgement which has the force of res judicata for fraud, corruption, involvement in a criminal organization or any other illegal activity detrimental to the Union's financial interests;

f) following another procurement procedure or grant award procedure financed by the Union's budget, they have been declared to be in a serious breach of contract for failure to comply with their contractual obligations.

In addition to the above, contracts may not be awarded to tenderers who, during the procurement procedure:

- are subject to a conflict of interest;
- 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.

Means of proof required

Tenderers, **including all consortium members and all sub-Contractors where applicable**, shall provide a declaration on their honour (see model in **Annex IV**), duly signed and dated, stating that they are not in one of the situations referred to above.

Nota bene:

The tenderer to whom 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 to confirm the declaration referred to above:

- For points a), b) and e) 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) a recent certificate issued by the competent authority of the State 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 his country of origin or provenance.

The tenderers will be waived of the obligation to submit the documentary evidence above mentioned if such evidence has already been submitted for the purposes of another procurement procedure launched by the European Defence Agency and provided that the documents are not more than one year 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, specifying the reference of the call for tender for which the documents have been provided, and confirm that no changes in his situation have occurred.

3.2 Selection criteria

The tenderers must submit evidence of their legal, economic, financial, technical and professional capacity to perform the contract.

3.2.1 Legal capacity

Requirement

The tenderers, **including all consortium members and all sub-Contractors where applicable**, are asked to prove that they are authorised to perform the contract under their 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.

Evidence required

Each tenderer, **including every consortium member and every sub-Contractor where applicable**, shall provide a duly filled in and signed **Legal Entity Form** (see **Annex V**) accompanied by the documents requested therein.

3.2.2 Economic & Financial capacity

Requirement

The tenderer, **including every consortium member where applicable**, must be in a stable financial position and have the economic and financial capacity to perform the contract.

Evidence required

Proof of economic and financial capacity shall be furnished by the tenderer, including every consortium member, as follows:

Where publication of the Balance sheet is required under the law of the country where the economic operator is established, the tenderer shall complete and include in the offer a financial statement form (Annex VIII) to these tender specifications.

Please observe the following aspects in completing this financial statement (Annex VIII):

- It should be certified by means of a signature of the chief accounting officer of the tendering organisation
- EDA has the right during the tendering process and before awarding the contract to request further evidence on the tenderer's compliance with the economic & financial capacity requirement, in which case balance sheets and profit & loss accounts for the past financial years may be requested.
- In the case of a consortium submitting an offer, the financial statement should be included in the offer for all consortium partners.
- In the case of a physical person the financial statement should be included in the offer for where only the lines 16 and 17 need to be filled in and the financial statement can be signed by the physical person only.

If, for some exceptional reason which the EDA considers justified, the tenderer is unable to provide the information requested by the contracting authority, he may prove his economic and financial capacity by any other means which the EDA considers appropriate. EDA reserves the right to ask sub-Contractors to prove their financial capacity should their share of work is substantial.

3.2.3 Technical and professional capacity

Requirement(s)

1) To successfully conduct the contract the tenderer shall have experience in conducting and delivering projects/services and/or having experts - part of the project team, having experience in, the following fields:

a) Consulting activities in space in general and Satcom in particular

b) Quantification of Information Exchange Requirements (for Satcom)

c) commercial feasibility studies and business models associated with new satellites, services and applications

d) technical feasibility studies to evaluate implementation options of a procurement programme (for Satcom).

2) The tenderer shall also have proven experience of more than 5 years in delivering projects dealing with Satellite communications. In particular, the tenderer should be able to demonstrate familiarity with the characteristics of existing satellite assets used for GOVSATCOM purposes and how they are used for defence purposes.

3) The tenderer shall be in a position to comply with the requirements to handle classified information at level RESTREINT UE/EU RESTRICTED (as per the requirements set out in Appendix I to Annex III of the draft Framework Contract).

Evidence required

The following documents or information must be presented as evidence of compliance with the technical and professional capacity:

a) A list of the principal services, contracts, studies, etc. provided by the legal entity or entities submitting the offer corresponding in terms of scope and complexity to the fields of expertise defined above under 1) and 2). The following template shall be used

Area/Field	List of services, contracts, studies	Comments
Consulting activities in space in general and Satcom in particular	[Reference1, name of the project, short description] ….	[Further details to be put in an annex (entity and people involved, detailed tasks)]
Quantification of Information Exchange Requirements (for Satcom)	[Reference1, name of the project, short description]	[Further details to be put in an annex (entity and people involved, detailed tasks]
Commercial feasibility studies and business models associated with new satellites, services and applications	[Reference1, name of the project, short description]	[Further details to be put in an annex (entity and people involved, detailed tasks]
Technical feasibility studies to evaluate implementation options of a procurement programme (for Satcom).	[Reference1, name of the project, short description]	[Further details to be put in an annex (entity and people involved, detailed tasks]
Experience of more than 5 years in projects dealing with Satellite	[Reference1, name of the project, short description]	[Further details to be put in an annex (entity and people

communications.		involved, detailed tasks]

b) A list of CVs of project team members. EDA strongly recommends the use of the Europass CV format (see in Annex III)

c) The following documents or information must be presented as evidence of compliance with the requirements to handle classified information at level RESTREINT UE/EU RESTRICTED security :

• A commitment from the tenderer, including all consortium partners and the subcontractors already identified that they will comply with the requirements to handle classified information at level RESTREINT UE/EU RESTRICTED before the signature of the contract, and consequently, that they have or will nominate a Security Officer, who will be responsible to its management for enforcing the security obligations within such an entity, and that they will appropriately safeguard the confidentiality of all classified information in their possession or coming to their notice throughout the duration of the contract and after termination or conclusion of the contract, in accordance with the basic principles and minimum standards of security laid down in the Council Decision of 23 September 2013 on the security rules for protecting EU classified information (2013/488/EU) and the contract-specific security requirements mentioned in the Security Aspect Letters (SAL) of the future contract (see draft Contract, Annex III, Appendix I); Additionally, in case the management of classified information at level RESTREINT UE/EU RESTRICTED is envisaged to take place at their premises, the above-mentioned commitment shall include the statement that they have established in their facilities, as a minimum, an “Administrative Area” as defined in Annex II title IV of the Council Decision of 23 September 2013 on the security rules for protecting EU classified information (2013/488/EU).

Therefore, the tenderers and potential sub-Contractors are requested to fill out the form found in Annex XI to these Tender Specifications and submit it together with their tender.**The technical and professional capacity will be assessed in relation to the combined capacities of all the Consortium members [leader and member(s)] and the sub-Contractor(s), if any, as a whole.**

4 Award of the contract

Only the tenders meeting the requirements of the exclusion and selection criteria will be evaluated in terms of quality and price.

The contract shall be awarded to the tenderer submitting the tender offering the best value for-money (best quality-price ratio).

4.1 Technical evaluation

The quality of each technical offer will be evaluated in accordance with the award criteria and the associated weighting as detailed in the evaluation grid below.

The technical proposal shall include a **summary giving for each award criteria the relevant elements with a reference to the relevant sections of the proposal.**

Only bids that have reached a total score defined in section 4.3 will be taken into consideration for the award of the contract.

No	QUALITY CRITERIA	DETAILS OF THE QUALITY CRITERIA	Max points
1	**Understanding of the objectives of the contract and the assignments to be carried out**	Details within the Proposal that explain in qualitative terms the services/products to be delivered against each Work Package (WP) and demonstrates the understanding of the tender.	**10**
2	**Quality, level of details and relevance of the technical proposal to fulfil the objectives of the work package 1**	This is to assess the quality of the technical proposal when compared with the technical requirements of the work package 1.	**30**
3	**Quality, level of details and relevance of the technical proposal to fulfil the objectives of the work package 2**	This is to assess the quality of the technical proposal when compared with the technical requirements of the work package 2.	**15**
4	**Quality, level of details and relevance of the technical proposal to fulfil the objectives of the work package 3**	This is to assess the quality of the technical proposal when compared with the technical requirements of the work package 3.	**30**
5	**Project Management**	This is to assess the extent to which the team set-up is suitable for the implementation of the assignment. Attention will be drawn to project management aspects (Organization, work sharing, risk mitigation, quality aspects, …)	**15**
	TOTAL		**100**

Interviews

The Evaluation Committee does not expect to conduct any interviews.

4.2 Technical proposal

The assessment of the technical quality will be based on the ability of the tenderer to meet the purpose of the contract as described in the Terms of Reference (see Section 2).

A template based on the Table here above is provided in Annex XII to help the tenderer in fulfilling the requirements expressed in the technical specifications.

In particular, technical proposal shall contain a summary giving for each award criteria the relevant elements with a reference to the relevant sections of the proposal.

All other documentation deemed necessary from the tenderer's perspective to demonstrate the ability to meet the prescribed technical requirements.

The whole tender proposal shall not exceed 60 pages*

***** excluding CVs, and list of delivered studies/services requested under Section 3.2.3 above; excluding also separate annexes deemed necessary to attach extracts of similar work or initial assessment, as requested in the Terms of Reference, to illustrate compliance with award criteria 2,3 and 4.

Annex XII provides guidance on how the evaluation committee will analyse the technical proposals.

4.3 Technical quality threshold

Only tenders scoring **80 points** or more (of a maximum of 100) points against the technical award criteria and a minimum of **60% of the points for each evaluation criterion** will have their financial proposal evaluated.

4.4 Financial evaluation

The evaluation will be made on the basis of the price offered in the model financial offer (Annex II) and based on the following formula:

Financial Score for "offer X" = (cheapest bid price received/price of "offer X") * 100

"Price received" is "total cost of assignment (WP 1, 2 and 3) including all associated expenses and excluding VAT" as in Annex II Model Financial Offer.

Where maximum budgets are mentioned in these tender specifications, any tenderer submitting a financial proposal exceeding those maximum budgets will be rejected.

4.5 Financial proposal

- The financial proposal should be presented in the format found in **Annex II**.
- Prices must be quoted in **EURO** and include all expenses necessary to perform the contract.
- The price quoted is fixed and is subject to **NO revision**.

- Prices must be quoted free of all duties, taxes and other charges (including VAT) as the EDA is exempt from such charges under Article 3 of the Protocol on the Privileges and Immunities of the European Union.

- Costs incurred in preparing and submitting tenders are borne by the tenderer and shall not be reimbursed.

4.6 Choice of the selected tender

The most economically advantageous tender is established by weighing technical quality against price on an **70/30** basis.

The consolidated score for each candidate shall be calculated as follows:

Consolidated score= Technical Score*0,7+Financial Score*0,3

ANNEX I - DRAFT CONTRACT

ANNEX II - MODEL FINANCIAL OFFER

Prices should be all-inclusive; the Agency will not pay expenses for any additional costs incurred from the execution of the contract.

Financial proposals exceeding the amounts indicated in Section 2.5 shall be excluded outright.

Name of Tenderer:	

TOTAL COST OF WORK PACKAGE 1, INCLUDING ALL ASSOCIATED EXPENSES AND EXCLUDING VAT :	**€**
TOTAL COST OF WORK PACKAGE 2, INCLUDING ALL ASSOCIATED EXPENSES AND EXCLUDING VAT	**€**
TOTAL COST OF WORK PACKAGE 3, INCLUDING ALL ASSOCIATED EXPENSES AND EXCLUDING VAT	**€**
TOTAL COST OF ASSIGNMENT (WP 1, 2 AND 3), INCLUDING ALL ASSOCIATED EXPENSES AND EXCLUDING VAT	**€**

Maximum budgets : Any offer exceeding EUR 1 000 000 (respectively, EUR 400 000 for WP 1, EUR100 000 for WP 2 and EUR 500 000 for WP 3) will be automatically rejected.

Name: (of the Tenderer or authorised representative)	**Signature:**	**Date:**

ANNEX III - CURRICULUM VITAE

To be downloaded from the following URL address:
http://europass.cedefop.europa.eu/en/documents/curriculum-vitae/templates-instructions

ANNEX IV - DECLARATION ON EXCLUSION CRITERIA

(To be completed and signed by each Consortium member and by each Sub-Contractor, where applicable)
The undersigned:

Name of the individual/company/organisation:

Legal address:

Registration number/ID Card No.:

VAT number:

Declares on oath that the individual/company/organisation mentioned above is not in any of the situations mentioned below:

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 EDA 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;

e) they have 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 Union's financial interests;

f) following another procurement procedure or grant award procedure financed by the European Union or the Agency's general budget, they have been declared to be in serious breach of contract for failure to comply with their contractual obligations.

g) they are subject to a conflict of interest;

h) they 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

Full name: Date & Signature:

ANNEX V - LEGAL ENTITY FORM

To be downloaded from the following URL address:
http://ec.europa.eu/budget/contracts_grants/info_contracts/legal_entities/legal_entities_en.cfm

ANNEX VI - FINANCIAL IDENTIFICATION FORM

To be downloaded from the following URL address:
http://ec.europa.eu/budget/contracts_grants/info_contracts/financial_id/financial_id_en.cfm

ANNEX VII - TENDER SUBMISSION FORM

15.CAT.OP.001

"Governmental Satellite Communication (GOVSATCOM)

Feasibility Study"

One signed original of this tender submission form must be supplied.

1. **SUBMITTED by (i.e. the identity of the Tenderer)**

	Name(s) of legal entity or entities submitting this tender	**Nationality**[6]
Leader		
Member 2		
Etc … [7]		

2. **SUBCONTRACTORS** (if applicable)

	Name(s) of the legal entity or entities identified as sub-Contractor(s)	**Nationality**
Sub-Contractor 1		
Etc … [8]		

[6] Country in which the legal entity is registered

[7] If this tender is being submitted by an individual legal entity, the name of the legal entity should be entered as "Leader" (and all other lines should be deleted)

[8] Add / delete additional lines for sub-Contractors as appropriate

3. CONTACT PERSON for this tender (to act as focal point for all communication which may take place between the EDA and the Tenderer)

Name and position	
Organisation	
Address	
Telephone	
Fax	
e-mail	

4. STATEMENT

I, the undersigned, being the authorised signatory of the above Tenderer (including all consortium members, in the case of a consortium), hereby declare that we have examined and accept without reserve or restriction the entire contents of the tender specifications for the tender procedure referred to above.

We are fully aware that, in the case of a consortium, the composition of the consortium cannot be modified in the course of the tender procedure except with the prior written authorisation of the EDA. We are also aware that the consortium members would have joint and several liability towards the EDA concerning participation in both the above procedure and any contract awarded to us as a result of it.

Our tender is subject to acceptance within the validity period stipulated in point 1.7 of the Tender Specifications and is made up of the following documents:

ENVELOPE A - ADMINISTRATIVE DATA:	
▪ This **Tender Submission Form**	☐
▪ The duly filled in, signed and dated **Exclusion Criteria Declaration(s)** by every legal entity identified under point 1 and point 2 of this Tender Submission Form	☐
▪ The duly filled in, signed and dated **Legal Entity Form** (*using the standard template referred to in Annex V to the Tender Specifications*) and the supporting documents requested therein, by every legal entity identified under point 1 and point 2 of this tender submission form	☐
▪ The duly filled in, signed and dated **Financial Identification Form** (*using the standard template in Annex VI to the Tender Specifications*) to nominate the bank account into which payments would be made in the event that our tender is successful	☐
▪ **Documents proving the economic and financial status** (as requested in point **3.2.2** of the Tender Specifications) of every legal entity identified under point 1 and point 2 of this tender submission form	☐
▪ **Documents proving our technical and professional capacity** (as requested in point **3.2.3** of the Tender Specifications) - One signed original and three copies	☐
▪ **Duly authorised signature**, i.e. an official document (*statutes, power of attorney, notary statement, etc.*) proving that the person who signs on behalf of the Tenderer is duly authorised to do so	☐
▪ Our **consortium agreement/** duly signed and dated **consortium statement** by each of the consortium members specifying the company or person heading the project and authorised to submit a tender on behalf of the, as requested in point 1.4 of the tender specifications	☐
ENVELOPE B - TECHNICAL PROPOSAL (one signed original and three copies and providing all information requested in point **Error! Reference source not ound.** of these specifications).	☐
ENVELOPE C - FINANCIAL PROPOSAL (one signed original using the template in Annex II), **which is submitted in a separate, sealed envelope.**	☐

Signed on behalf of the Tenderer

Name	
Signature	
Date	

ANNEX VIII – ECONOMIC AND FINANCIAL CAPACITY

(Please fill in the excel file uploaded together with the tender documents)

Information on financial capacity of the tenderer			
The numbers in the below cells must be indicated in **ABSOLUTE VALUES** (i.e. as full amounts and not in			
The exchange rate to be used for the conversion of the amounts should be the monthly accounting rate of the			
Tenderer name:			
Begin and end of the financial year (eg: 1/1/n - 31/12/n)):			
Asset	**2013**	**2012**	**2011**
Long term assets (assets convertible in cash in > than 1 year)	€ 0	€ 0	€ 0
Short term assets (current assets convertible in cash in =/< than 1 year)	€ 0	€ 0	€ 0
Total assets (TOTAL ASSETS SHOULD EQUAL TOTAL LIABILITIES)	€ 0	€ 0	€ 0
Liabilities	**2013**	**2012**	**2011**
Own capital (Equity)	€ 0	€ 0	€ 0
Long term debts (to be repaid in > than 1 year)	€ 0	€ 0	€ 0
Short term debts (to be repaid in =/< than 1 year)	€ 0	€ 0	€ 0
Total liabilities (TOTAL LIABILITIES SHOULD EQUAL TOTAL ASSETS)	€ 0	€ 0	€ 0
Profit and loss account data	**2013**	**2012**	**2011**
Turnover (sales revenue realized from the day-to-day operations of the entity)	€ 0	€ 0	€ 0
Turnover in the filed of the call for tenders	€ 0	€ 0	€ 0
Depreciation & amortisation	€ 0	€ 0	€ 0
EBITDA (Earnings before interest, taxes, amortisation, depreciation)	€ 0	€ 0	€ 0
Net profit (Earnings after interest, taxes, amortisation, depreciation)	€ 0	€ 0	€ 0
Main indicators	**2013**	**2012**	**2011**
Operational profit margin (EBITDA/turnover)			
Return on Equity: Rentability of own capital (net profit/own capital)			
Net working capital (current assets - current liabilities)			
Current ratio (current assets/current liabilities)			
Debt ratio - indebtness (debts/total liabilities)			

Declaration by the Chief Accounting Officer of the tenderer:	
From my position of the Chief Accounting Officer of the tenderer,	
1. I confirm that the information presented in this simplified financial statement are correct and are taken from the official financial statements either finally approved, or from the preliminary financial statements in case these are not yet finally approved (applicable only to the last year statements).	
2. I confirm that I am aware that, in the case we are successful tenderer, EDA, before signing the contract, may ask and verify the official financial statements for the last 3 years.	
3. I confirm that I have been informed that, under the Procurement rules of the EDA (Council Decision No 2007/643/CFSP of 18 September 2007), tenderers found guilty of false declarations may be subject to administrative and financial penalties in accordance with the conditions laid down in that Decision. In particular, I am aware that the information from this simplified financial statement must be in compliance with the official financial statements which EDA may verify before signing the contract.	
Name of Chief Accounting Officer of the tenderer:	
Date:	
Signature:	

ANNEX IX

BUSINESS CASE SKELETON

The key principles that a Business Case usually addresses are:

- What is the operational capability requirement?
- How could the requirement be filled over the required time period?
- How can best value for money/cost effectiveness/benefits be established?
- What certainties and risks remain?
- How is the capability to be procured/supported/accepted?

The suggested template below is a recommended content of a Business Case that shall be used for the delivery of work package 3. It should provide the objective evidence and argument to support a national decision to cooperate in the next phase(s) of the GOVSATCOM programme and implement the proposed solution.

It is expected that a Business Case of 6-8 pages would be sufficient.

The Business Case is not a repository for all programme information or an executive summary. Instead it should address those issues relevant to senior officers responsible for making a national decision to continue with the programme. Supporting information should be contained the associated documents on the GOVSATCOM requirements and GOVSATCOM programme through-life management plan.

SUMMARY

Set out the key, high-level features of the Business Case that can be released to all pMS.

ISSUE

Short summary statement

RECOMMENDATION

Clear statements on the key elements of the Business Case. This might include:

- Reference to the Key capability requirements
- The estimated in-service date
- The considered option
- The expected procurement strategy (ies)
- The expected co-operation strategy (ies)
- The principal risks at this stage

- Short purpose of the next Phase
- Likely costs of the next Phase
- Key milestones and plan of work for the next Phase
- The estimated whole-life costs for the programme
- The likely in-service support arrangements (solution and organisation)
- Others

TIMING

A brief explanation of why the decision needs to be taken by a specified date.

DETAIL

This is the main body of the Business Case and should clearly state:

Requirement

On the basis of the user's needs, outline the capability gap and a clear statement on what the requirement is, including the nature of the requirement being addressed and any linkages to other previous or expected capabilities within the Member States or at an international level. Outline the hierarchy of requirements, their flexibility and the potential for an incremental approach.

Options

A brief explanation of each of the options considered, including a „do nothing" option, a „do cooperatively" option and a combined „do nationally" option. Explain why options have been eliminated from the analysis.

Options Analysis

Explain the methodology used in assessing the relative merits of different options and their capability consistency, including reference to the results of the Investment Appraisal (conducted on a whole-life basis and across all relevant Lines of Development) where required, and their technical feasibility through system and technology readiness levels.

The paper should clearly state the most cost-effective and technically feasible option as well as the option that represents best value from a European perspective when the relevant wider factors are considered.

The potential benefits of proceeding in cooperation and the loss of benefits if not should be explained.

Support

Outline how the recommended option(s) is planned to be supported in-service, including the proposed management organisation.

Education and training

Outline the education and training needs for the recommended option(s), including the proposed management organisation.

Withdrawal and disposal

Outline how the equipment is planned to be withdrawn from service and disposed of.

Interoperability
Outline how interoperability is planned to be enhanced, including reference to key military and/or civil standards existing or to be developed.

Affordability
The focus should be on identifying major cost drivers and affordability issues such as peaks and troughs in spend profiles, and how these might be mitigated through cooperation or other management methods.

A table of expected cost per year for the next phase of the programme and how these are intended to be shared amongst the contributors should be presented. In addition, a table of expected cost for the whole life cycle should be presented, in order to assess the overall affordability for the programme.

Procurement & Commercial Strategy
Expose the technology and procurement options that are potentially available to meet the requirement.

Identify any options that are unlikely to deliver a viable solution with a clear rationale for those that are not going to be pursued.

If possible, outline the proposed procurement strategy for the recommended option (e.g. sole source, competition, buy/lease, Public Private Partnership etc.), who will act as the procurement agent (e.g. OCCAR) and relevant elements of the commercial strategy (e.g. how has industry been/to be engaged, firm or max prices, incentives, etc).

International Co-operation

Explain the consistency of military needs and planning amongst the contributing Members, possible discrepancies, and the foreseen co-operation strategy for the next phases of the programme.

Risks
Based on the results of the Preparation Phase, expose the key risks to the achievement of the next phase and the programme as a whole in terms of impact on cost, capability and timescale.

Include an explanation of how the risks have been allocated; the performance time and cost impacts of the risks; how each risk will be managed and the fall-back measures should a risk materialise.

OCCAR"s Programme Decision template could be used as prompt for the broad range of issues that may need to be addressed.

Legal Issues related to the use of the Capability
Self explanatory.

Industrial Issues
Highlight any industrial implications and how they relate to the proposed procurement strategy and the wider EDTIB. Indicate export potential and conditions, and possible security of supply, third party dependencies, IPR and security of information issues.

Safety & Environmental Considerations

Highlight the main safety and environmental impacts through the life of the equipment and in the event of an accident or emergency. Whether any of these impacts are covered by specified safety or environmental standards, legislation or policy, and what could be done to reduce impacts to acceptable levels.

The Next Phase

Explain the intentions for the next phase (e.g. the Definition phase) with estimates for the cost, capability and timescales envelope within which the phase will be conducted, the main deliverables expected, and entrance and exit strategy for participating Member States.

Whole-life costs

On the basis of a Through-Life Management Plan, outline the main assumptions and the cost estimates for the subsequent phases (development, production, support and disposal) and indicate how these costs might be shared amongst the participants Member States.

Wider Issues

Interfaces with other European bodies (e.g. European Commission), CSDP, NATO programme plans (to avoid duplication), political considerations and others.

ANNEX X

Skeleton for the GOVSATCOM programme management plan

Section	Subject	Possible Content
Section 1	Mission & Objectives	Objectives Overview of the Programme Military Context Capability Gap Key Requirements Programme Boundaries Programme Background Programme Status Assumptions Constraints and Drivers Current Approvals Programme Objectives
Section 2	Stakeholders	Overview of the Programme Organisation A Preparation Group Context Diagram/ Stakeholder Map Key Stakeholder Interfaces – agreements and control Stakeholder responsibility Matrix Through Life management responsibility Matrix Lines of Development Responsibility Matrix
Section 3	Strategies	A summary explaining how the programme will be managed on a through-life basis; The key strategic areas of the next phase of the programme: - Procurement - Capability management - Technology management - Risks, impacts and mitigating strategies - Milestones and approvals - Safety - Environment - Evidence to substantiate the preferred option(s) (technical and operational, testing, tested operational scenarios,….) - Technology, Interface and System Readiness Levels (TRL, IRL and SRL), planned and achieved. - Transition from phase to phase - Interfaces with other systems - Government Furnished Equipments and other contributions (e.g. Satellite facilities..) - In-Service Support - Disposal
Section 4	Plans & Processes	Detailed Plans & Processes for the next phase Programme Schedule and Programme Breakdown Structures; Overview/draft plan for all subsequent programme phases; Responsibilities for delivering the outputs and for Funding and Resourcing the Work; Processes for delivering the Outputs.
Section 5	Resources	The Resources to deliver the Programme; The Whole Life Cost (WLC) Plan, encompassing cost forecasting strategy and WLC management strategy; Overview, and links to the : - The WLC model - WLC and Investment Appraisal analysis for each option - Analysis of escalating factors - Financial Plan for the next phase and outline plan for subsequent phases. - Resource Breakdown Structure

		Programme Resource Plan (personnel and skills) for the next phase and estimates for the subsequent phases of the programme
Section 6	Evaluation of Success	Methodology to evaluate and demonstrate successful satisfaction of the GOVSATCOM mission and objectives. Acceptance Criteria and Plan Overview of performance Management processes Definition of Entry and Exit Criteria for the next phase of the programme and for the subsequent phases. Learning from Experience Plan Post-Programme Evaluation Plan Process for reviewing and updating the GOVSATCOM programme management plan

ANNEX XI

INFORMATION SHEET FOR POTENTIAL CONTRACTOR(S) / SUBCONTRACTOR(S)

INFORMATION SHEET FOR POTENTIAL CONTRACTOR(S) / SUBCONTRACTOR(S)*
TENDER PROCEDURE N°. ----------

I, ……(name of the legal entity submitting this tender), the undersigned, declare the below information I provide for this tender is true and complete.

REQUEST

I. Facility particulars

1. Full facility name :
   .....
2. Full facility physical address :
   .....
3. Mailing address (if different from 2) :
   .....
4. Zip code / city / country :
   .....

5 Security officer
Name : .....
Phone # : .....
Fax # : .....
e-mail : .....

****

II. Security requirements **

[ ] **Holds or is in condition to hold a FSC before the awarding date of the contract**
At level [ ] Secret-UE / EU Secret
[ ] Confidentiel UE / EU Confidential

With safeguarding of classified documents :
[ ] yes,
At level [ ] Secret-UE / EU Secret
[ ] Confidentiel UE / EU Confidential
[ ] no.

[ ] **Does not need a FSC since it will not be provided with or granted access to classified information at level Confidentiel UE / EU Confidential or above**

[ ] **Complies with the Security requirements to handle Restreint UE/EU Restricted information at its premises.**
[ ] **Will not be provided with classified information at Restreint UE/EU Restricted level.**

REMARKS :
.....
.....

SIGNATURE ON BEHALF OF THE TENDERER

Name : .....……. Date : .....

* Please use one form per Contractor/subContractor;
** Please tick the appropriate box(es)

ANNEX XII

TEMPLATE FOR SUBMISSION OF THE TECHNICAL PROPOSAL

This annex is intended to guide the tenderer in the presentation of its technical proposal, in particular, with respect to the fulfilment of the EDA requirements. The technical quality threshold of 80% (respectively, 60% for each evaluation criterion) implies that the tenderer covers all points with a high level of quality.

The tenderer is requested to fill the template below to ease the evaluation of its proposal. Key points and main arguments shall be mentioned in this document. References to separate annexes are highly recommended in order to provide more evidence.

For criterion 1: *Understanding of the objectives of the contract and the assignments to be carried out*

Note from EDA: *The tenderer shall demonstrate its understanding of the logic and the objective of the contract and explain in qualitative terms the services/products to be delivered against each Work Package (WP).*

Mainly based on a detailed analytical outline, the tenderer shall provide sufficient evidence on how the key aspects of the study will be approached

The evaluation committee will look in particular on:

- *The readability of the overall proposal*
- *The reformulation of the objectives and the awareness of the policy framework*
- *The critical assessment of the technical specifications and the tenderer's perception of the key challenges of the study*
- *A detailed analytical outline (on how the key aspects of the study will be approached) that demonstrates a good understanding of the challenges and its driving factors ;*
- *A detailed overall methodology for implementation of the study;*
- *The discussion on alternatives (suggestion to change the study logic or proposed methods to get better outcomes)*

For criterion 2: Work Package 1

Note from EDA: *The tenderer shall provide as far as possible extracts from previous studies demonstrating the ability of the company to perform similar work as well as possible preliminary analysis demonstrating the initial views concerning this work package.*

The evaluation committee will base its evaluation on the level of details proposed (reference, extract from similar studies) which demonstrate that the Contractor will produce the expected outcomes

The following elements shall be described:

- *The initial views on the configurations to be addressed (basic set of IERs for a particular community of users in a particular area) emphasizing the necessary trade-offs, limitations and constraints already foreseen*
- *Proposed method to derive the IER*
- *Evidence of the in-house knowledge of the national Satcom requirements*
- *Evidence of the possibilities to get access to national Satcom requirements or on the contrary clear description of the required support from pMS to get this information*
- *Initial views of the Contractor concerning some basic configurations*
- *An initial description and supporting examples on how the Contractor intends to derive the Information Exchange Requirements*
- *A presentation of the forecast tool. The presentation shall go beyond a functional chart*
- *Evidence on the ability of the tool to produce the expected results*
- *An initial description of the key attributes and assessment model. Specific section will provide initial thoughts on the key attribute on secured and guaranteed access (page 16)*
- *A skeleton of the main deliverable D3.x*

The evaluation committee will pay particular attention on the fact that the methodology to derive IER is sufficiently documented and demonstrates that the tenderer propose the right compromise between the appropriate level of details and too much complexity.

For criterion 3: *Work Package 2*

Note from EDA: *The tenderer shall provide as far as possible extracts from previous studies demonstrating the ability of the company to perform similar work as well as possible preliminary analysis demonstrating the initial views concerning this work package.*

The evaluation committee will base its evaluation on the level of details proposed (reference, extract from similar studies) which demonstrate that the Contractor will produce the expected outcomes

The evaluation committee will evaluate the quality of the technical proposal when compared with the technical requirements of the Tender Specifications, in particular

- *Evidence of the in-house knowledge of the Governmental Satellite assets (to implement autonomously the assessment model) or evidence of the ability to get an access to this information*

- *Clear description of the required support from pMS to implement successfully the assessment model*
- *A skeleton of the main deliverable D5.x*

For criterion 4: Work Package 3

Note from EDA: *The tenderer shall provide as far as possible extracts from previous studies demonstrating the ability of the company to perform similar work as well as possible preliminary analysis demonstrating the initial views concerning this work package.*

The evaluation committee will base its evaluation on the level of details proposed (reference, extract from similar studies) which demonstrate that the Contractor will produce the expected outcomes

The evaluation committee will evaluate the quality of the technical proposal when compared with the technical requirements of the Tender Specifications, in particular

- *The views of the Contractor on the distributed satellite communication concept*
- *Evidence of in-house knowledge related to this concept*
- *An initial description and examples of the cost and value analysis*
- *Proposed method to analyse the pooling and sharing of governmental assets*
- *Proposed method to develop the cost and value analysis for the theoretical concepts*
- *Proposed method to develop the programme proposal*

For criterion 5: ***Project Management***

Note from EDA: *This is to assess the extent to which the team set-up is suitable for the implementation of the assignment. Attention will be drawn to project management aspects (Organization, work sharing, risk mitigation, quality aspects, …)*

The evaluation committee will evaluate in particular

- *A detailed work programme explaining how the work will be implemented ;*

- *The quality of the draft management plan as outlined in section 2.3.1 (D0.x) covering at least:*
    - *Overall effort*
    - *Quality (risk and mitigation)*
    - *Management (meetings, reports)*
    - *Team organization (responsibility, reporting)*
    - *Interface with EDA and EDA Programme Manager on Satellite Communications*
    - *An initial description and how the Contractor intends to deal with media and communication matters*

- *In particular, the Agency shall be able to easily understand the workload (in man-days) associated for each task and each company in order to assess where the bidder intends to focus its effort along the study. The Agency will have a particular look on the team organization work package by work package considering that the needed skills for each work package are different and therefore, suitable teams should be built up accordingly.*

- *In case of consortium involving one or several satellite manufacturers, the tenderer shall also demonstrate how the work carried out will not be biased by particular industrial interest.*

- *The tenderer shall also address the identified risks in managing the project with respect to the interactions with ESA and its potential outsourced activities*

- *Information on which part or tasks of assignments will be assumed by a consortium partner or a sub-Contractor. The respective sub-Contractor or consortium partner should be specified for each part or task if applicable.*