

CONTENT OF THE STUDY PROPOSAL

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The Study Proposal shall offer to perform preparatory work and establish the key documents for the development of a product for satellite telecommunication. The Bidder shall have firm plans to develop the product in an activity following the work offered in the Study Proposal. The follow-on activity shall be planned to develop the product to the level that it is ready for commercial exploitation. The product can be an equipment, a sub-system or a full satellite system, including the Space and Ground Segment.

The study is a means to consolidate the technical specifications and the technical baseline and to identify technical risks before entering into the development of a product. Thus a Study Proposal offers a possibility to perform preparatory tasks before the submission of a Full Proposal.

The Study Proposal shall offer to generate the following outputs for the product to be developed in a later activity:

- Architecture/Interfaces Definition
- The Technical Specifications
- Development Plan
- The Test Plan
- Programmatic Documentation
- Assessment of technical risk and a risk mitigation plan
- Specification Justification

In addition, the Study Proposal may offer to generate:

- Demonstration of technical feasibility by design, manufacture and test of breadboards of critical elements;
- Trade-off of design solutions
- Technology survey
- Contacts with potential customers

Studies may be undertaken for Ground and/or Space Segment as well as satellite system activities but not for Satcom Applications. The ESA funding may not exceed 50% of the cost of the study. The ESA funding is limited to a maximum of 250.000 Euro.

Please find below for your quick reference a summary of the documents of which the Study Proposal shall consist. Further details on the content of each document are provided thereafter.

<u>1.</u>	<u>Cover Letter</u>
<u>2.</u>	<u>Executive Summary</u>
<u>3.</u>	<u>Outline Business Plan</u>
<u>4.</u>	<u>Technical Proposal</u>
4.1	<u>Architecture/Interfaces Definition</u>
4.2	<u>Work Description</u>
<u>5.</u>	<u>Financial, Management and Administrative Proposal</u>
5.1	<u>Description And Background Experience Of The Company(Ies)</u>
5.2	<u>Organisation And Management Of The Activity</u>
5.3	<u>Facilities</u>
5.4	<u>Key Personnel</u>
5.5	<u>List Of Items To Be Produced, To Be Delivered</u>
5.6	<u>Work Breakdown Structure</u>
5.7	<u>Planning</u>
5.8	<u>Cost Price Data</u>
5.9	<u>Statement Of Profit</u>
5.10	<u>Conversion Rates</u>
5.11	<u>Type Of Price</u>
5.12	<u>Milestone Payments Plan</u>
5.13	<u>Travel And Subsistence Plan</u>
5.14	<u>Acceptance Of Contract Conditions</u>
5.15	<u>Acceptance Of Management Requirements</u>

1. Cover Letter

The cover letter shall contain the following:

- A general paragraph introducing the proposed project with a clear indication whether the proposal addresses the Ground Segment or Space Segment or the study of satellite systems.
- An overview of the proposed team structure (Prime Contractor and Subcontractor(s) where applicable) and the respective geographical distribution.
- The full address (registered office and mailing address) and the ESA Bidder Code of the Prime and each proposed Subcontractor. The Member States of ESA have made it mandatory for the Agency to register economic entities wishing to do business with ESA. Economic entities wishing to do business with ESA that are not yet registered as potential tenderer, are requested to complete the online questionnaire on the ESA EMITS website (<http://emits.esa.int/>) under “Entity registration”. Further information on the registration process can be found at the INDUSTRY OUTLOOK pages available via: <http://www.esa.int/home-ind/>. As of the completion of the questionnaire in INDUSTRY OUTLOOK registered economic entities will have to update the questionnaire on an annual basis. Failure to do so will result in EMITS access being blocked.
- a statement that the proposal will be valid for 4 months from the date of submission
- a statement of total cost and price (equivalent up to 50% of cost) for the proposed activity.
- the name(s) and contact details (address, telephone, fax and e-mail numbers) of the person(s) to whom all communications relating to the proposal should be addressed.
- the names of the persons who will be responsible for the technical and contractual management of any resulting contract.
- the signature of the cover letter by an authorised representative.

The relevant authorisation by the National Delegation(s) shall be attached to this Cover Letter.

2. Executive Summary

The Executive Summary shall contain a synopsis of the work to be performed in the study as well as a description and a ROM cost of the product to be developed later.

3. Outline Business Plan

The Outline Business Plan shall describe the identified opportunity, including the potential target market and the competitive environment. In particular, the following shall be outlined:

- Target Customers
- Competitors and their price of the product/service
- Overview of the value chain, including interactions and profitability assessment of the different segments if applicable
- Total market size, predicted market share, with and without the proposed development
- Bidder's planned cost and price of the product, including assumptions taken to define cost structure, price policy and other elements used in the financial statement
- Financial indicators such as Internal Rate of Return, Break Even Point (with and without ESA co-funding), Net Present Value (NPV) and associated sensitivity analysis of main assumptions supported by financial statements such as profit and loss account, cash flow, and/or what-if analysis where applicable
- Bidder's planned partnerships to achieve the objectives

4. Technical Proposal

4.1 Architecture/Interfaces Definition

The Architecture/Interfaces Definition document shall describe the architecture of the product and the system or sub-system where the product will be included, starting from the high level architecture down to the product building blocks, with emphasis on the interfaces of the product.

The Architecture/Interfaces Definition document shall also include an initial definition of the user needs and requirements applicable to the product.

In the case of subsystem/system studies the Architecture/Interfaces Definition document shall identify which elements:

- are pre-existing, specifying any required adaptations or modifications necessary
- have to be developed in the frame of future development projects
- will be defined and/or designed during the system study
- have to be procured as Commercial Off The Shelf (COTS), indicating the proposed procedure for the procurement

4.2 Work Description

The work to be performed shall be described in detail including potential problem areas and risks. A plan shall be presented for managing the risks and the actions shall be defined to mitigate the risk.

In case the work builds upon already performed work a description of the heritage/starting point shall be provided, including a list of all relevant ESA contracts awarded to any company within the bidding team. Furthermore, the Bidder shall confirm that the work proposed does not overlap with any currently running ESA contract awarded to any entity in the proposal consortium.

5. Financial, Management and Administrative Proposal

5.1 Description and Background Experience of the Company(ies)

The Bidder shall present the company(ies) and their organisational structure. It also shall describe the background of the companies and the relevant experience of the Bidder and any proposed Subcontractor for the performance of the work.

In case any company of the bidding team has been involved in relevant ESA contracts, the Bidder shall provide a summary description of the direct and indirect results achieved through such activities and lessons learned.

5.2 Organisation and Management of the Activity

5.2.1 The Bidder shall present the project team and the structure of the project organisation, and where it is proposed to subcontract part of the work, the structure of the industrial group. Lines of communication and reporting, and means for settling disagreements shall be described.

5.2.2 The Bidder shall present his management plans, policies and procedures for this activity including a description of the management control organisation, the procedures that will be used to exercise control over the project and the proposed subcontracting control (if any).

5.3 Facilities

The Bidder shall submit a brief description of all facilities which are proposed to be used for the work offered, including those facilities which are still to be developed/built and/or purchased, (with a statement whether the costs of developing/building/purchasing the facility are to be directly or indirectly charged to the Contract). Modifications to existing facilities are also to be described. For this purpose facilities may include, as applicable, hardware, computer software, manufacturing, test equipment, production and integration lines, service centres and infrastructures hosting the user communities.

The Bidder shall also describe what means of access to information resources it has, if these are required for the work proposed.

5.4 Key Personnel

Key personnel are defined as persons who, because of their individual qualifications and positions are proposed for the work, and indicated as such in the Bidder's organigramme. Key personnel should be proposed to one level below the study/project manager, both for the Prime Contractor and any Subcontractors. The provisions of Article 5 of the Draft Contract (Appendix 2 to the Call for Proposals) shall apply to all key personnel. As a minimum, all Work Package managers at Level 1 (see Section 5.6 below) shall be proposed as key personnel.

For each key person identified, the Bidder shall:

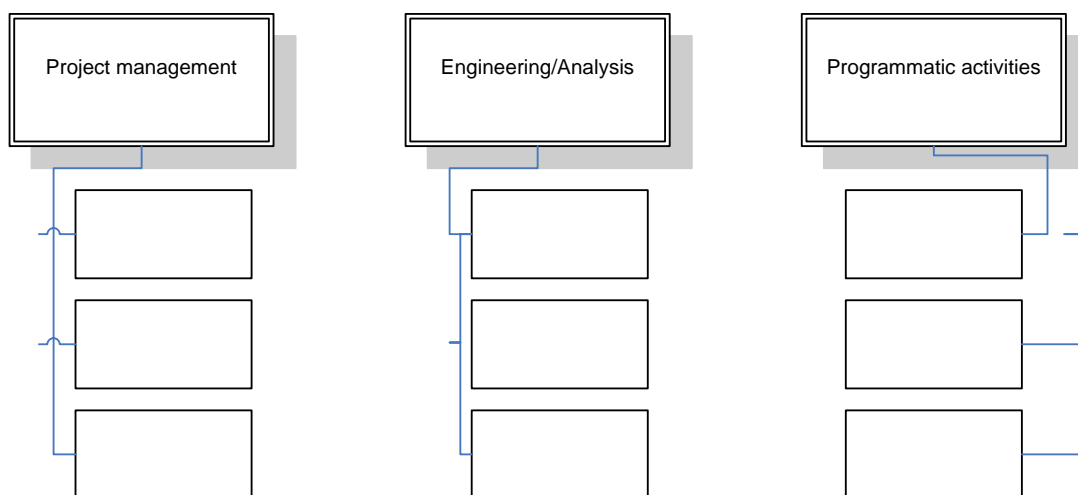
- 5.4.1 provide a curriculum vitae, giving in particular the work experience of the person concerned, and a brief description of the person's present job and responsibilities;
- 5.4.2 indicate the person's position in the Bidder's organisation;
- 5.4.3 define the proportion of the person's working time that is devoted to the work offered.

5.5 List Of Items To Be Produced, To Be Delivered

The Bidder shall provide a list of all items produced under the contract and all items to be delivered. Delivery of hardware may be waived if a subsequent development contract is placed.

5.6 Work Breakdown Structure

The Bidder shall submit a Work Breakdown Structure on two levels. A possible Work Breakdown Structure is shown below, but the Bidder is free to propose an alternative.



Work Package Descriptions shall be provided for each Work Package identified in the Work Breakdown Structure which shall cover the total programme of work being proposed.

The Agency reserves the right to have the work broken down into phases subsequent to tender submission. The Bidder may propose a phased approach in case high risks are evident in the proposed activity.

5.7 Planning

The Bidder shall submit his planning in the form of a bar chart. In establishing his planning, the Bidder shall take account of the need of the Agency to review and/or approve intermediate deliverables and shall include sufficient time for the Agency to do this.

The expected total duration of a study contract is between 3 and 6 months.

5.8 Cost Price Data

5.8.1 PSS FORMS

The following PSS forms [latest version available on EMITS (<http://emits.esa.int/>) under “Reference Documentation” → “Administrative Documents”] included in the General Conditions of Tender as Annex 5(3) shall be completed for the Prime Contractor and for each Subcontractor proposed, showing per company the total cost of the proposed work, i.e. including the Bidder’s share:

PSS-A1, issue no. 2

Company Cost Element Data Sheet (unless already supplied - see Annex 5/3 of General Conditions)

PSS-A2, issue no. 4

Company Price Breakdown Form (including reduction for company contribution). The inclusion of Exhibit A to PSS-A2 (breakdown of external cost elements) is mandatory in all cases involving external cost elements.

PSS-A8, issue no. 4

Manpower and Price Summary at Work Package Level

Furthermore, the Bidder shall submit a summary table showing the cost and the price (= ESA funding) in EURO per company and for the total.

The management effort shall not exceed about 10% of the overall effort depending on the complexity of the activity.

5.8.2 SOURCE OF COMPANY CONTRIBUTION

The source of the company contribution shall be explicitly stated in the Bidder's proposal. In this context, the "company contribution" shall be deemed to include Third Party sources, if any. The company contribution can be treated as a loss against the contract or may be contributed by a Third Party private source. Accordingly, the contribution shall not be allowed from third party public funds. The Bidder is not allowed to include his contribution in overheads included in rates charged to the Agency for the contract or any other contract with the Agency, or sub-contract awarded under an Agency contract.

5.9 Statement of Profit

The offer must be exclusive of profit.

5.10 Conversion Rates

For the purpose of currency conversions, Bidders are required to clearly indicate the exchange rate(s) and other factors on which their calculations are based.

Paragraphs C.4 and C.5 of the General Conditions of Tender are replaced by the following:

Paragraph C.4 - Quotation in National Currency

Prices shall be expressed in EURO, including those of any Subcontractor. The geographical distribution shall only be expressed in the total EURO per country.

Paragraph C.5 - Conversion Rates is deleted.

5.11 Type of Price

The proposal shall be made on the basis of a Firm Fixed Price type. Further details can be found in Article 2 of the Draft Contract (Appendix 2 to this Call for Proposals).

5.12 Milestone Payments Plan

The payments plan shall be proposed in accordance with the following table. All claims for payment (with the exception of the Advance payment) shall be linked to the achievement of well defined milestones (e.g. conclusion of Work Packages, Review Milestones).

Milestone Description	Schedule Date	Amount in Euro	Company
Advance: upon signature of Contract by both parties (35% of total price)			
Progress: upon TBD milestone(s) and / or deliverables			
Final: upon the Agency's acceptance of all deliverable items due under the contract and the Contractor's fulfilment of all other contractual obligations (10% of total price)			

5.13 Travel and Subsistence Plan

The Bidder shall submit a brief description of the travels he envisages for the execution of the Contract together with the related cost details. This shall preferably be given in the form of the following matrix:

Time (To + ...)	Meeting / Purpose	Destination	Travel duration	Participants per company	Travel Cost (A)	Subsistence Cost (B)	Total Cost (A+B)

The Bidder should take into account in his planning that the Negotiation/Kick-off Meeting should be attended by the Bidder and as far as possible by all Subcontractors. The Kick-Off Meeting and the Final Presentation will normally be held at ESTEC.

5.14 Acceptance of Contract Conditions

The Bidder shall confirm that the conditions of the draft contract (Appendix 2 to this Call for Proposals) are read, understood and accepted and that any sales conditions of the Bidder do not apply.

5.15 Acceptance of Management Requirements

The Bidder shall confirm his acceptance of the Management Requirements in Appendix 2 to the draft contract (Appendix 2 to this Call for Proposals).