



# How to write a proposal



Workshop

Innovative space-based solutions for Future Cities

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# Scope



- 1. Structure of a Proposal
- 2. What to pay attention for in the proposal
- 3. Evaluation Criteria
- 4. Submitting a Proposal

#### **Disclaimer**



As the Invitation to Tender has not been published on EMITS, specific information on the Feasibility Study Space Applications in Support of Future Cities can not be disclosed in this presentation.

The presentation shall provide a general overview and guidance for preparing a proposal for an ARTES 20 Feasibility Study. This is based on the documentation of the Open Call for Proposal for ARTES 20 (Integrated Applications Promotion Programme) and earlier ITTs for ARTES 20 Feasibility Studies.

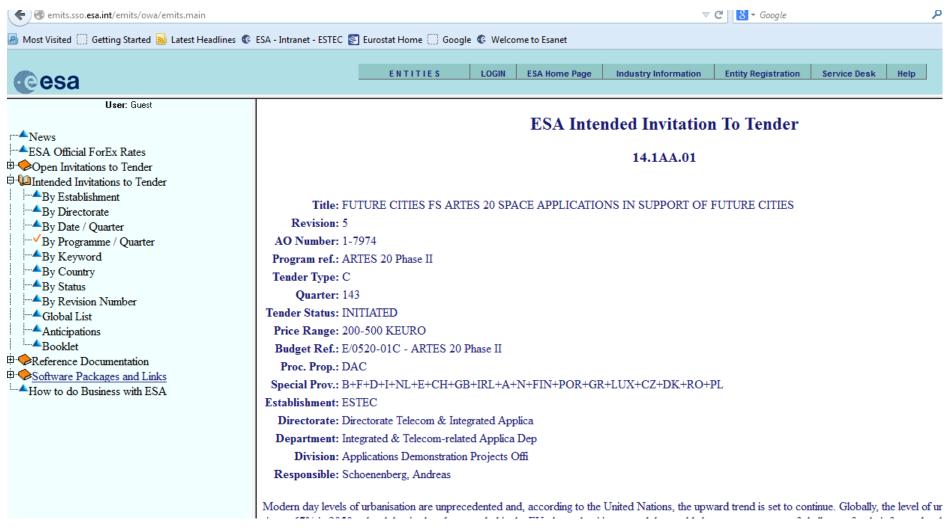
#### **EMITS – ESA Invitation to Tender System**



- ✓ Intended Invitation to Tender (ITT) 14.1AA.01
  - ✓ Published on EMITS http://emits.esa.int
  - ✓ Introduced on <a href="http://artes-apps.esa.int/">http://artes-apps.esa.int/</a>
- ✓ Invitation to Tender
  - ✓ Cover Letter
  - ✓ Statement of Work
  - ✓ Special Tender Conditions or Proposal Template
  - ✓ Draft Contract Conditions
  - Clarifications (if requests are submitted)
- Support
  - ✓ IAP website <a href="http://artes-apps.esa.int/documents">http://artes-apps.esa.int/documents</a>
  - ✓ IAP toolkit <a href="http://telecom.esa.int/opdt/artesapps/artes20demo/">http://telecom.esa.int/opdt/artesapps/artes20demo/</a> (needs login)

#### **Intended Invitation to Tender**







# ESA Integrated Applications Programme

# **Feasibility Studies**

#### **Objectives**



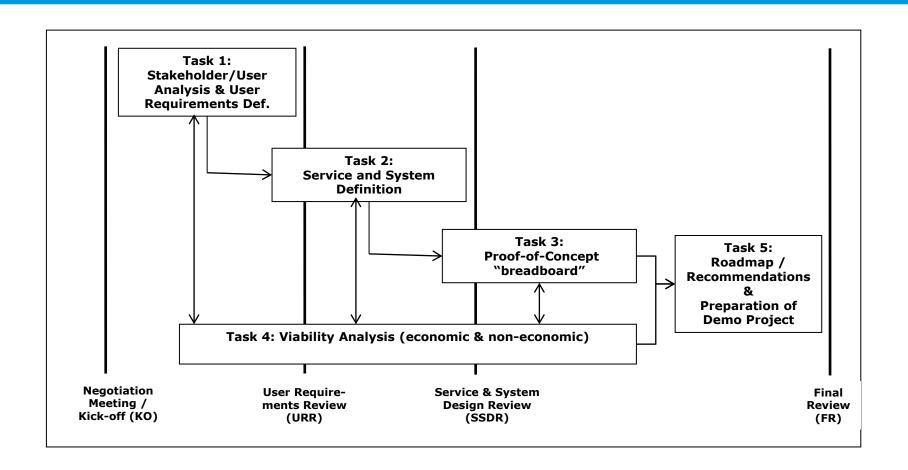
Feasibility Studies provide the preparatory framework to define and evaluate new, potentially sustainable applications and services within the Integrated Applications Promotion (IAP) element of the ARTES programme (ARTES 20).

The objectives of a feasibility study are:

- 1. to prepare the implementation of a sustainable service(s) on the targeted market, and to support the business development for such service(s),
- 2. to evaluate and determine the technical feasibility and commercial viability of an integrated service(s) and the associated system(s)1 able to meet the needs and conditions of relevant user community(ies) and other stakeholders,
- 3. to reduce the technical and commercial risks related to the implementation of such sustainable service(s),
- 4. to generate the relevant answers to the most critical questions which allow taking informed decisions by all involved parties (industries, users/customers, stakeholders, ESA / National Delegations) on the necessary further investments,
- 5. to secure the buy-in and involvement of important users and other stakeholders,
- 6. to prepare a potential follow-on demonstration project.

# **Study Logic – Feasibility Study**





## **Feasibility Study - Tasks**



- ✓ Task 1 consolidating the interest of the related stakeholders and users, analysing their problems and needs, and defining the user requirements,
- ✓ Task 2 defining the services and the service value chain, generating the specifications and architecture of the related system including design justification, identifying the critical elements
- ✓ Task 3 proving the feasibility of critical technical and non-technical elements of the system and/or of parts thereof (Proof of Concept) in collaboration with the users
- ✓ Task 4 analysing the economic and non-economic viability of the services and the associated system
- ✓ Task 5 preparing the roadmap for the further implementation, defining a potential demonstration project, securing the involvement of users/stakeholders

# ESA's Integrated Applications Promotion Programme (ARTES 20)



#### **Ideal characteristics of involved parties:**

#### • User:

representing / leading broader markets (champion) enabling the market access communicator to spread the message open for new solutions and systems willing to engage as stakeholder / customer / client

#### Service provider:

familiar with the market (already in the market) provider of operational services (24/7) various technologies to address the specific user demand

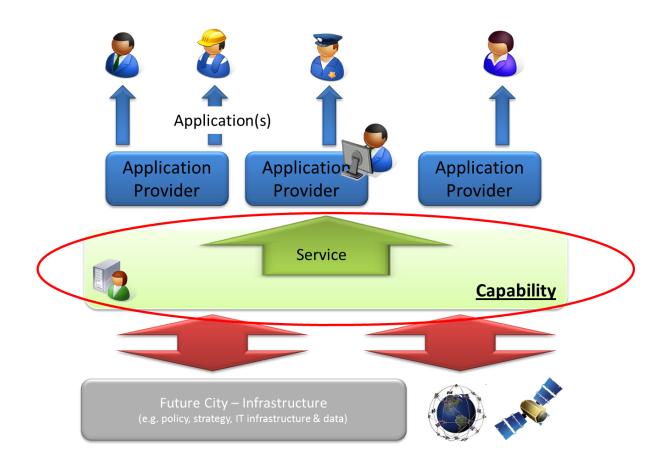
#### Industrial team:

strong leadership and good management right mix of know-how (completeness of the team)

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#### **Involved Partners - Users**





# ESA's Integrated Applications Promotion Programme (ARTES 20)



# Ideal know-how / composition of consortium (depending on the subject):

- Subject / domain specific expertise
- Business development expertise
- Earth Observation value adding services
- GIS & mapping services
- In-situ sensors & data collection
- Satcom products & service provisioning
- GNSS products and service provisioning
- Data fusion & modelling
- Service provisioning in the subject area



# **Proposal**

## **Proposal Package**



- ✓ Cover Letter
  - ✓ <u>Letter of Support from National Delegate</u>
- ✓ Technical Proposal
- Management and Administrative Proposal
  - Expression of Interest from users (users of the solution, including cities)
- Financial Proposal
- ✓ Contractual Proposal

## **Proposal – Cover Letter (General)**



- ✓ General paragraph introducing the proposed activity
- ✓ Completed Tables "Bidder's Information and Statements" (reference tables in Annex 2 of the SCT):
  - Table i) Bidding Team and Price Breakdown Information
  - Table ii) Geographical Distribution within bidding consortium
  - Table iii) Contact Details, Representatives
- ✓ Completed and signed forms and statement(s) (reference forms in Annex 3 of the SCT):
  - Form A Declarations on Key Acceptance Factors
  - Form B Declarations on Compliances
- ✓ Letter(s) of support from relevant National Delegation(s)
- ⇒ Start coordination process with National Delegations as soon as possible, as Delegations have different approval processes (can last up to 2 months) [contact information: http://artes-apps.esa.int/national-delegations]
- ⇒ Delegations require a rather mature proposal to take decisions

# **Technical Proposal (1)**



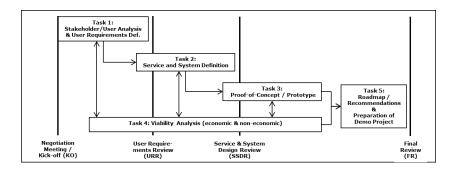
- 1. Study objective and background
- 2. Compliance with ARTES 20 Programme Objectives
  - ✓ User driven initiative:
    - relevant general stakeholder and user community
    - involved users, major needs, interest, and involvement
    - representativeness of users for sustainable business case
    - user letter(s) of interest / commitments
  - ✓ Preparing for sustainable operational services:
    - targeted solution (proposed services and integrated system),
       and their expected added value for the users / customers
    - consortium motivation and ideas regarding the future service provider, vision regarding position and role of consortium partners for operational
    - intention and capabilities of consortium partners for potential demo project
  - ✓ Value of using multiple space assets:
    - space assets envisaged for integration, shortlist of relevant technologies
    - expected added value in proposed applications / services above other technologies
- ⇒ Background shall motivate the compelling need for proposed solution,
- ⇒ Added Value of space assets shall be clear.

# **Technical Proposal (2)**



#### 3. Study Logic:

- Study logic and flow chart
- Study logic proposed by ESA, but other study logic can be proposed



- ⇒ If information on specific tasks exists, this task can be skipped, but evidence needs to be provided in the proposal
- ⇒ The proposal shall provide an indication of which methods and tools will be used (for each activity) to arrive at the required results.

# **Technical Proposal (3)**



#### 4 Study Tasks:

For <u>each study task</u> the following information has to be provided

- ✓ the starting point for the work to be done
  (e.g. existing contacts / partnerships, existing services, existing technologies,
  existing experience / know-how, existing business plan)
- the planned outcome(s) / target(s) of the individual tasks (e.g. which questions need to be answered at the end of a task that will help to take an informed decision on the further implementation of the targeted application / service and the related investments)
- ✓ the critical elements of each task that will be subject for investigation
  (e.g. specific unproven technologies, trade off of business models, partnership
  agreements, buy in of users / customers, specific regulatory situation)
- ✓ the work, methodology and approach to reach the planned outcomes / results (e.g. how to interact with the users in task 1, how to define services / technical solution in task 2, how to involve the users in task 3, how to elaborate the business case / model in task 4, how to secure partner involvement for follow-on activities in task 5)
- ✓ planned interactions with user community in each task
- ⇒ An initial iteration of the results is appreciated, discussing the (critical) subjects which will be addressed in each task.

### **Technical Proposal - 4**



#### 5 Potential Problem Areas

- main problem(s) or problem area(s) likely to be encountered in performing the feasibility study (insufficient capacity, loss of partner / key person, missing know-how, time criticality / delays, dependency on other aspects, etc.)
- potential solutions / mitigation measures
- ⇒ This is linked with an initial risk evaluation. Please note that there is a difference between risks associated with the implementation of the proposed solution and risks associated with the execution of the feasibility study.
- ⇒ Most problems with incomplete information on «Study Tasks» (especially 'starting point', 'planned outcome', 'critical elements')

# Management and Administative Proposal - 1



- 1 Description and Background Experience of the Company(ies)
  - Organisational structure including key company details such as ownership, turnover, number of employees, business lines, etc.
  - Relevant experience for the planned work, especially on technologies subject for integration, application domain know-how, service provisioning, business development
  - Summary description of results of previous relevant ESA activities where the company(ies) have been involved
- 2 Organisation and Management of the Activity
  - Study team and structure (organogram)
  - Lines of communication and reporting, including involved users and ESA
  - rationale for the proposed industrial organisation, especially with view to the targeted future service provisioning
  - involvement of **potential service provider** strongly recommended
  - management plans, policies and procedures
- ⇒ Important to show how the team is organised (hierarchy, responsibilities)
- ⇒ How are consortium members placed in their respective organisations

# **Management and Administative Proposal - 2**



#### 3 Facilities

- NB: mainly relevant if 'Proof of Concept' is foreseen as study task
- facilities may include, as applicable, hardware, software, manufacturing equipment, test equipment, production and integration lines, service centres, as well as infrastructures hosted by the involved users/stakeholders
- access to space assets (e.g. EO products / imagery, Satcom services, Satnav services) and information resources (such as libraries, databases, etc.)

#### 4 Key Personnel

- Key persons, i.e. study manager and work package managers
- Request for key person with relevant business development expertise
- Per key person:
  - . curriculum vitae, relevant work experience, current job and responsibilities, position in the tenderer's organisation, assignment to study tasks
  - . average percentage of the total working time
  - . man-hours assigned to Work Packages

#### 5 Travel and Subsistence Plan

- Exhibit B of its PSS A2 form of the prime and its subcontractors
- ⇒ Link travel plan to meeting plan incl attendance -> costs in PSS sheets.

# **Management and Administative Proposal - 3**



- 6 List Of Items To Be Produced, To Be Delivered
  - Documentation: as defined in 'Management Requirements'
  - Hardware (to be procured or produced): ownership of hardware below 10 kEuro is with the contractor, ownership of hardware above 10 kEuro typically left to the contractor when completing the contract (condition: utilisation for purposes connected with the objectives of the contract)
  - Software: in feasibility studies not expected as deliverable
- 7 Work Breakdown Structure and Work Package Descriptions
  - Work Breakdown Structure (WBS): for feasibility studies a WBS on the first level is considered sufficient including a separate Work Package on 'Study Management'
  - Work Package Description (WPD): utilising PSS-A20 form as available on EMITS under "Reference Documentation" → "Administrative Documents" → PSS Forms
- 8 Planning
  - Proposed schedule and milestones (typical duration of 9 months), incl. planning assumptions, e.g. envisaged study start date, holidays, etc.
  - Bar chart incl. work packages, meetings (e.g. user workshop), review milestones

## **Financial Proposal - 1**



#### 1 PSS Forms

- PSS A1, PSS A2 including Exhibit A (other direct cost elements) and Exhibit B (travel plan and cost detail), PSS A8
   PSS forms are available on EMITS under "Reference Documentation" → "Administrative Documents" → PSS Forms.
- PSS forms shall be completed and signed by Prime and each Subcontractor.
- 2 Statement of Profit
  - In co-funded activities, no profit is allowed to be included in the price
- 3 Conversion rates
  - Proposals must be presented in EURO, and conversation rate to be stated: base exchange rate published on EMITS for the month of the base economic conditions required in the tender under "Reference Documentation" ⇒ "Administrative Documents" ⇒ "National Price and Salary Statistics Annual Publications" section 3 Exchange Rates
- 4 Type of Price = firm fixed price
- 5 Quotations free of taxes and customs duties
- 6 Milestone Payments Plan
  - Milestone Payment Plan (MPP), broken down per subcontractor (if applicable), in the form shown in the relevant appendix of the Draft Contract ESA UNCLASSIFIED For Official Use ESA UNCLASSIFIED For Official Use 108/07/2014 | Slide 23

# **Contractual Proposal - 1**



- 1 Compliance with management requirements
  - Explicit statement that Management Requirements in Appendix 3 to draft contract (the draft contract is presented in Appendix 2 to Call for Proposals) will be met
  - Any reservation must be clearly identified
- 2 Compliance with contract conditions
  - Explicit statement that the contract conditions have been read, are understood and accepted, and that any sales conditions do not apply
  - Any reservation / modifications must be clearly identified, and reasoning provided
- 3 Insurance waiver
  - Either: waiver of subrogation rights from the contractor's insurance company (see Clause 18.1.3 of the GCC)
  - Or: hold harmless agreement between the parties in accordance with Clause 18.1.6 of the ESA GCC (NB: easier to obtain)
- 4 Statement relating to Export/Import licences/authorisations
  - State any particular conditions related to Export/Import licences/authorisations and related documentation

#### **Evaluation Criteria**



As the ITT is not published, the evaluation criteria can not be presented. As a reference the evaluation criteria for the Open Call for Proposals is included.

- ✓ COMPLIANCE WITH THE ARTES 20 PROGRAMME OBJECTIVES: USER DRIVEN INTEGRATIVE, PREPARING FOR SUSTAINABLE OPERATIONAL SERVICES, VALUE OF USINGO FULTIPLE SPACE ASSETS
- ✓ SUITABILITY OF THE PROPOSED STUDY LOGIC VS. PROJECTA BJECTIVES, QUALITY AND COMPLETENESS OF TECHNICAL PROPOSAL
- ✓ COMPANY EXPERIENCE AND COMPETENCE, COMPLETENESS OF THE TEAM IN ALL AREAS REQUIRED FOR THE PROPOSED PROGRAMME OF WORK, CALIBRE OF KEY PERSONNEL, ADEQUACY OF FACILITIES
- ✓ ADEQUACY OF MANAGEMENT (INCL. COMPLETENESS OF WORK PACKAGE DESCRIPTIONS), PLANNING AND COSTING (INCL. COMPLETENESS OF COST DATA), VALUE FOR MONEY, ASSESSMENT OF FINANCIAL RISK VERSUS COMPANY RESOURCES
- ✓ COMPANCE WITH CONTRACT CONDITIONS AND OTHER TENDER CONDITIONS

#### **New with ESA**



- √ <a href="http://www.esa.int/About\_Us/Industry">http://www.esa.int/About\_Us/Industry</a>
- ✓ Registration as Tenderer

http://www.esa.int/About Us/Industry/Industry how to do business/On-line Registration System for ESA Tenderers

- ✓ Information related to ARTES 20 (IAP)
  - √ <a href="http://artes-apps.esa.int/artes-20-working">http://artes-apps.esa.int/artes-20-working</a>
  - √ <a href="http://artes-apps.esa.int/opportunities">http://artes-apps.esa.int/opportunities</a>
  - √ <a href="http://artes-apps.esa.int/documents">http://artes-apps.esa.int/documents</a>
  - √ <a href="http://artes-apps.esa.int/national-delegations">http://artes-apps.esa.int/national-delegations</a>



#### If you do not know what to do, contact us!

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## Thank You for your Attention

