

ESA's ARTES Applications Programme

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- ARTES
- ARTES 3-4 Satcom Applications
- ARTES 20 (IAP) Feasibility Studies
- ARTES 20 (IAP) Demonstration Projects
- What are the opportunities
- How to apply & get involved in ARTES Applications
- Link, criteria, check list, hints focal points etc
- Overview of completed/running IAP activities

ARTES – **A**dvanced **R**esearch in **T**elecommunication **S**ystems

- **Objectives**

- Maintain and improve the capability and **competitiveness** of industry of participating countries in the **world** satellite satcom **market**
 - Develop satellite-based Solutions that meet the needs of the European Society and European Institutions.
- **ARTES is a «frame» programme which hosts different Elements and each of these Elements has a set of specific objectives and conditions**

The ARTES programme as of today



A balanced combination of generic envelope programme Elements

- ❑ ARTES 1: Preparatory
- ❑ ARTES 3-4: Satcom Space and Ground Segment Products and **Commercial Satcom Applications**
- ❑ ARTES 5: Technology
- ❑ ARTES 20: **Integrated Applications**

and specific Mission/System orientated Programme Elements

- ❑ ARTES 8: Alphasat/Alphasat
- ❑ ARTES 11: Small GEO platform/mission
- ❑ ARTES 7: EDRS
- ❑ ARTES 10: Iris
- ❑ ARTES 21: **Sat-AIS**

ARTES 3-4 Satcom Applications

The goal :

Maintain and **improve the capability and competitiveness** of the industry in the world **satellite telecommunication** market. Ensure the short-term readiness of the industry to respond to commercial opportunities by focusing the ARTES 3- 4 activities on **products ready for the commercial or institutional market.**

Incubator of Products

ARTES Satcom Applications (part of ARTES 3-4)



Satcom Applications, together with Space and Ground Terminals, is part of the three segments addressed by the ARTES 3-4 Programme Element

ARTES 3-4 Satcom Applications is a well consolidated(*) instrument used since 1997 to support applications activities promoting utilisation of satellite communications

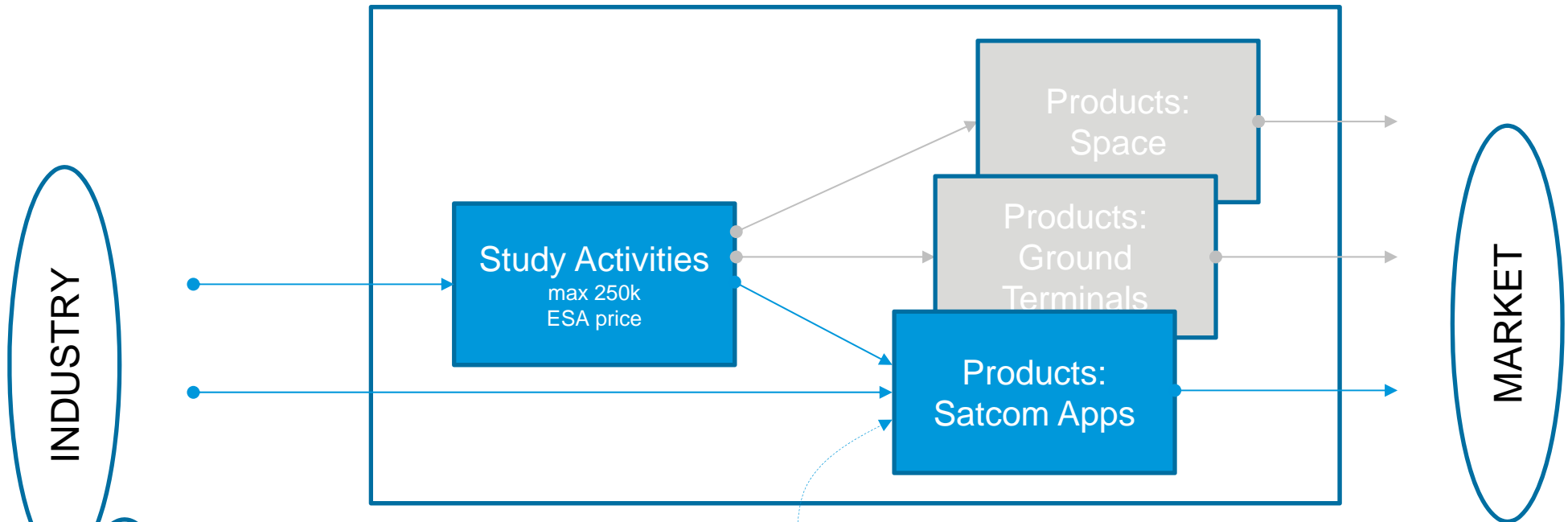
(*) A total of 154 projects has been launched in the period 1997-2011, for a total funding (ESA part) of about 110 MEUR.

66% of the projects contracted to Small and Medium Enterprises
~50% of the projects contracted to new entrant into ESA Telecom

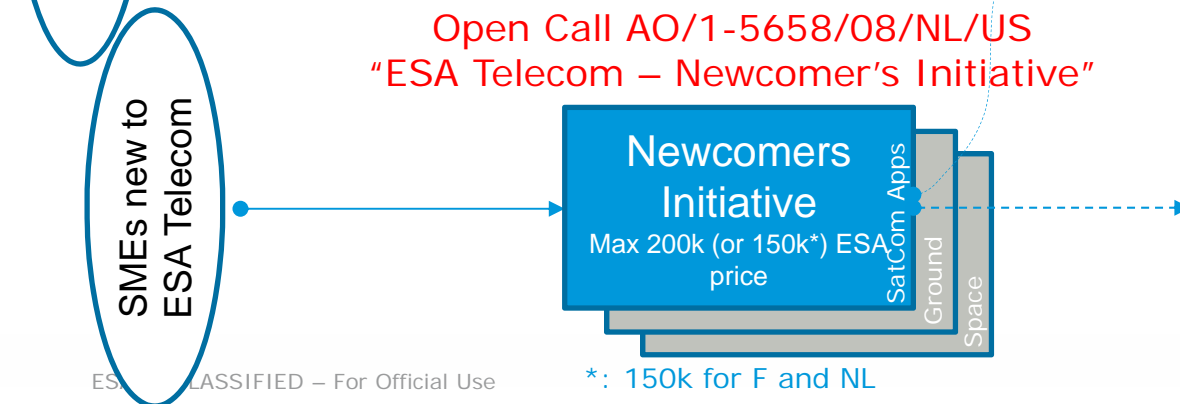
ARTES 3-4 – Commercial Satcom Applications



Open Call AO/1-5891/08/NL/US ARTES 3-4 "Telecom - Products Programme"



Open Call AO/1-5658/08/NL/US
"ESA Telecom – Newcomer's Initiative"



For all activities: ESA price can be up to 50% of the project costs

ARTES 3-4 – Commercial Satcom Applications

AO 5891 – Product Development



- Development, integration and pilot utilisation of **Satcom based applications**
- Ideas originated by Industry (industry driven)
- Technical part and business case equally important
- Outline Proposal ⇒ Full Proposal
- Direct negotiation, funded up to 50%
- **Letter of authorisation from National Delegations**
- Part of the Continuous Open Call for ARTES 3-4 (AO 5891) (together with Space and Ground Segment)

ARTES 3-4 – Commercial Satcom Applications

AO 5891 – Study Activity



- Objective: perform preparatory work and establish key documents for the development of a product for SatCom
- Option just recently introduced for SatCom Apps (Apr2012)
- Tenderer shall have firm plans to develop the product in an ARTES 3-4 Development Activity following the Study Activity. The follow-on activity shall be planned to develop the product (Space, Ground or Satcom Apps) to the level that it is ready for commercial exploitation
- Scope: consolidate the technical requirements and baseline and identify technical risks before entering into the development of a product
- ESA funding not exceeding 50% of the cost (max 250 kEuro)
- Outline proposal OPTIONAL (but highly recommended!)
- Info on how to apply can be found in the documentation of the ‘Continuous Open Call for ARTES 3-4 Proposals in EMITS’
<http://emits.esa.int>: AO 5891,

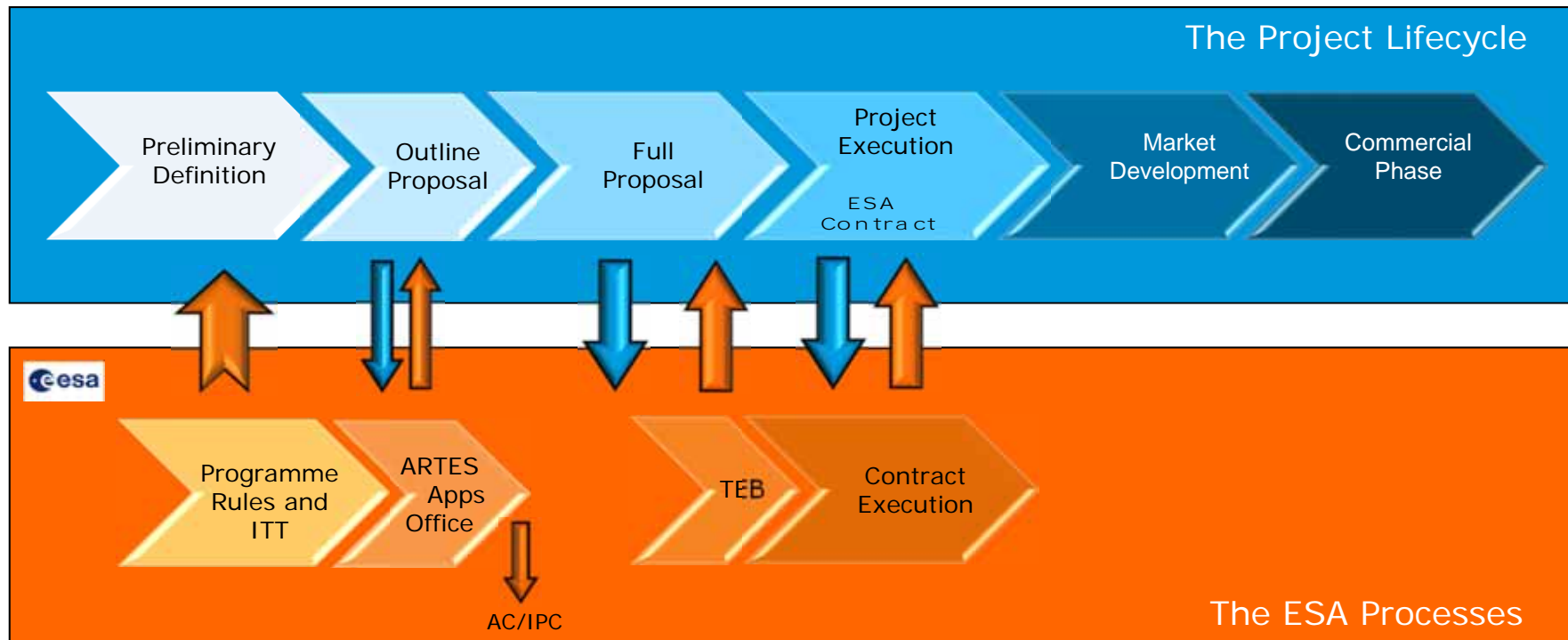
ARTES 3-4 – Newcomers Initiative

AO 5658



- Objective: attract and assist Small and Medium Enterprises (SMEs) with special attention to companies which never had a contract with ESA Telecom
- Development, integration and pilot utilisation of **Satcom based applications**
- Ideas originated by Industry (industry driven)
- First step: Outline Proposal of about 4 pages (business opportunity, role of Satcom, proposed solution, project content, company background, cost/price, duration, contact information, SME status) via a secure website <http://telecom.esa.int/newcomers>
- Second step: Full Proposal according to Continuous Open Call AO 5658
- Direct negotiation, funded up to 50% (max. 200 kEuro)
- **Letter of authorisation from National Delegations**
- Difference to ARTES 3-4: easy entry, reduced application requirements, more support from ESA, business case as part of the project, funding ceiling of 200 kEuro

ARTES 3-4 Project Lifecycle & ESA Processes

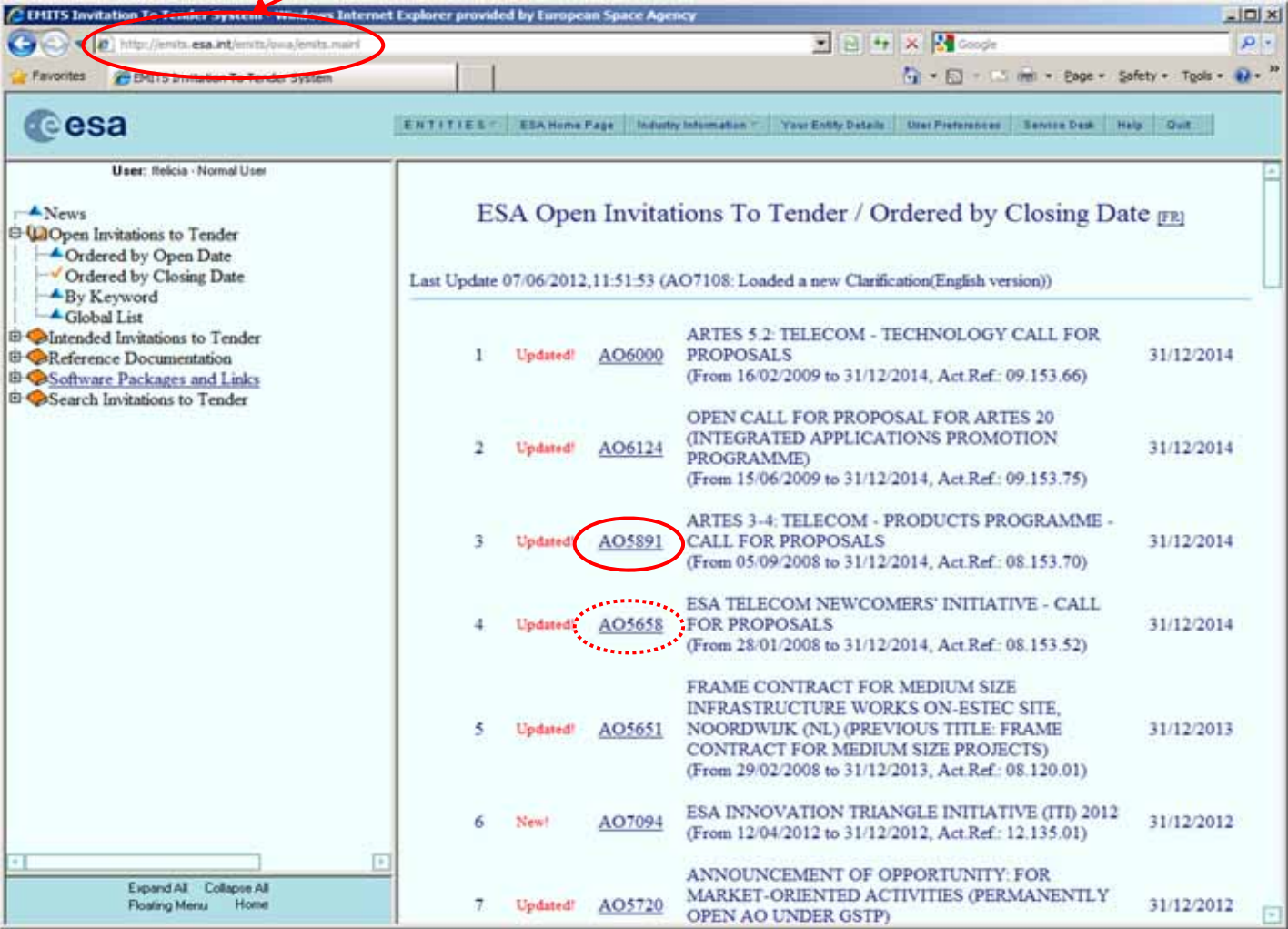


ESA Boards & Committees →

- AC: Adjudication Committee (price > 250k)
- IPC: Industrial Policy Committee (price > 500k)
- TEB: Tender Evaluation Board

How to apply (1)

ESA EMITS: <http://emits.esa.int>



The screenshot shows the ESA EMITS website interface. The browser address bar is circled in red, showing the URL <http://emits.esa.int/emits/owa/emits.main>. The page title is "ESA Open Invitations To Tender / Ordered by Closing Date". A navigation menu on the left includes "Open Invitations to Tender" (selected), "Intended Invitations to Tender", "Reference Documentation", "Software Packages and Links", and "Search Invitations to Tender". The main content area displays a table of 7 tender entries, each with a status (Updated or New), a tender ID, a description, and a closing date. The tender IDs AO5891 and AO5658 are circled in red.

Order	Status	Tender ID	Description	Closing Date
1	Updated!	AO6000	ARTES 5.2: TELECOM - TECHNOLOGY CALL FOR PROPOSALS (From 16/02/2009 to 31/12/2014, Act.Ref: 09.153.66)	31/12/2014
2	Updated!	AO6124	OPEN CALL FOR PROPOSAL FOR ARTES 20 (INTEGRATED APPLICATIONS PROMOTION PROGRAMME) (From 15/06/2009 to 31/12/2014, Act.Ref: 09.153.75)	31/12/2014
3	Updated!	AO5891	ARTES 3-4: TELECOM - PRODUCTS PROGRAMME - CALL FOR PROPOSALS (From 05/09/2008 to 31/12/2014, Act.Ref: 08.153.70)	31/12/2014
4	Updated!	AO5658	ESA TELECOM NEWCOMERS' INITIATIVE - CALL FOR PROPOSALS (From 28/01/2008 to 31/12/2014, Act.Ref: 08.153.52)	31/12/2014
5	Updated!	AO5651	FRAME CONTRACT FOR MEDIUM SIZE INFRASTRUCTURE WORKS ON-ESTEC SITE, NOORDWIJK (NL) (PREVIOUS TITLE: FRAME CONTRACT FOR MEDIUM SIZE PROJECTS) (From 29/02/2008 to 31/12/2013, Act.Ref: 08.120.01)	31/12/2013
6	New!	AO7094	ESA INNOVATION TRIANGLE INITIATIVE (ITI) 2012 (From 12/04/2012 to 31/12/2012, Act.Ref: 12.135.01)	31/12/2012
7	Updated!	AO5720	ANNOUNCEMENT OF OPPORTUNITY: FOR MARKET-ORIENTED ACTIVITIES (PERMANENTLY OPEN AO UNDER GSTP)	31/12/2012

How to apply (2)



The screenshot shows the EMITS Invitation To Tender System interface. The left sidebar contains a navigation menu with categories like 'News', 'Open Invitations to Tender', 'Intended Invitations to Tender', 'Reference Documentation', 'Software Packages and Links', and 'Search Invitations to Tender'. The main content area displays details for a tender with the following information:

- Proc. Prop:** NO
- Tender Type:** C
- Price Range:** > 500 KEURO
- Establishment:** ESTEC
- Directorate:** Directorate Telecom & Integrated Applica
- Department:** Telecom Technologies, Product&Systems Dep
- Division:** Technologies and Product Division
- Contract Officer:** Ulrich Sterzl
- Last Update Date:** 17/04/2012
- Update Reason:** Modified a Clarification(English version) 5

Below the details is a paragraph of text describing the ARTES 3-4 programme. At the bottom, there is a list of document attachments:

- [Letter of Invitation, 144999 Bytes](#)
- ~~[Statement of Work, 25419 Bytes](#)~~ → NO Statement of Work!
- [Contract Conditions, 655848 Bytes](#) → It includes the Management Requirements
- [Tender conditions, 421644 Bytes](#)
- [Clarification-e 4, 54106 Bytes](#)
- [Clarification-e 5, 70129 Bytes](#)

At the bottom of the attachment list, there is a 'Transfer' button and a dropdown menu set to 'native to your email-address'. Below the attachments is a section for 'Current Expression of Interest'.

How to apply (3)

- Invitation Letter



- Special Tender Conditions



=> How to prepare the outline proposal and the full proposal

- Draft Contract

- Management Requirements

- Study Activities

- Ground Segment Activities

- Space Segment Activities

- Satcom Applications



=> How to organise the work and its deliverables



How to apply (4)

1. To facilitate the preparation of the Outline Proposal for ARTES 3-4 SatCom Apps Projects, a Guideline Template has been prepared
2. The template is a MS Word document that can be used as a starting point to fill in the content of the Outline Proposal
3. The Template can be accessed from:
<http://iap.esa.int/what-and-why/proposal-guide/satcom-apps>



Outline Proposal
Guideline
Template



ESA Satcom Operators Initiative (1)



- As part of the Special Tender Conditions, Par.5.16 of the section “Content of the Full Proposal for SatCom Applications”, the possibility to access SatCom capacity and services at preferential conditions is indicated
- This option is conceived to help new ARTES SatCom Apps projects, especially when generated by new entrants in the space domain, to find the “right” Satcom solution fitting their technical, operational and commercial requirements
- Frequent obstacles are the lack of technical know-how in the ARTES Project team and the sometime unclear offers from the markets
- Apps projects have typically low scale deployments, which make them not particularly attractive for Satcom solution providers, in particular when specific technical issues need to be addressed
- The ESA-Satcom Operators initiative has been introduced to answer the above points



ESA Satcom Operators Initiative (2)



Formal agreement between ESA and the Satcom Operator guarantees the following undertakings:

- 1) A set of privileged conditions to access the satellite capacity for the duration of the ESA project (free, or discounted fees)
- 2) Structured access to technical, operational and commercial information to support the applicants' proposal
- 3) Dedicated support during the preparation of the proposal and the execution of the project

Current Agreements:

Satcom Operator	Satellites	Provision	Status
Avanti	HYLAS 1	Raw Capacity, Managed IP Access Services	Operational telecom.esa.int/hylas1apps
SES Broadband Services	Astra 23.5 ° East	Managed IP Access Services	In preparation

HYLAS 1 Opportunity:

A single Ku European beam suitable for DTH TV, HDTV and Multicast services.

Uplink frequency bands	17.3-18.1GHz
Downlink frequency bands	11.7-12.5GHz
Service areas	Western Europe

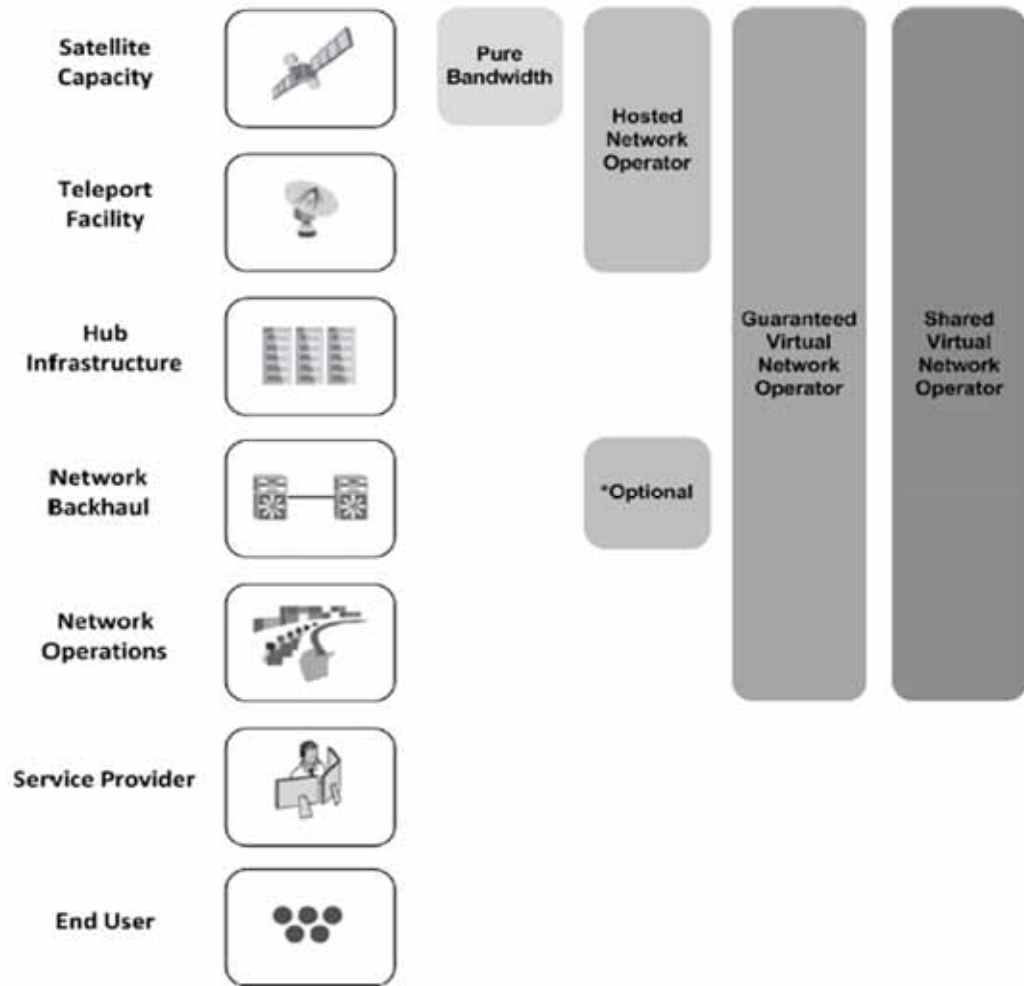
Up to eight Ka spot beams capable of serving broadband, interactive TV services as well as HDTV.

Uplink within	27.5 - 30.0 GHz
Downlink within	18.1 - 20.2 GHz
Service areas	Western Europe



HYLAS 1 Opportunity:

what is offered
at NO COST for
ARTES 3-4 and
ARTES 20 Projects



HYLAS 1 Capacity Request Template

Screen 1 of 3

HYLAS 1 Application Opportunity Ver1.3

Project Name:

Company:

Contact Name:

Contact Email:

All questions must be completed except where directed otherwise.

1. Is the capacity request for dedicated bandwidth or bandwidth from a shared pool?
 Dedicated (go to Question 2)
 Shared (go to Question 5)
2. Is the capacity request for MHz carrier capacity or IP Kbps via an Avanti supplied Hughes or iDirect platform?
 MHz capacity (go to Question 3)
 IP Kbps
3. What carrier?
Forward terminal(s):
Return (Remote terminal(s) to Avanti):
4. How much dedicated bandwidth is required in Kbps?
Forward (Avanti to remote terminal(s)):
Return (Remote terminal(s) to Avanti):
5. How much shared bandwidth is required per remote terminal?
Forward (Avanti to remote terminal(s)):
Return (Remote terminal(s) to Avanti):

Screen 2 of 3

to Avanti):

6. How Many remote terminal(s) would you require?
Quantity:
7. Would the terminal(s) be fixed or mobile?
 Mobile (go to Question 6)
 Fixed (go to Question 7)
8. Who is the manufacturer of the mobile terminal platform?
Manufacturer:
9. What approximate duration do you require shared or dedicated capacity for?
10. Does your organisation have an Avanti certified installer?
 YES (go to Question 11)
 NO
11. Would your organisation seek to have individuals certified as Avanti installers for the installation of any remote terminal(s)?
 YES (go to Question 11)
 NO
12. Would your organisation seek details of approved Avanti certified installers for the installation of any remote terminal(s)?
 YES
 NO
13. Would you use a Hughes HN9200 terminal, iDirect terminal or Other?
 Hughes HN9200
 iDirect (specify model):
 Other (specify make & model):
14. What are the planned locations of an terminals, fixed or areas of operations for mobile

To be attached to the Outline Proposal

How to apply – Checklist

1. Register to ESA EMITS at emits.esa.int (to get access to ITT documents)
2. Between the two possibilities:
 - a. AO5891 “ARTES 3/4: TELECOM - PRODUCTS PROGRAMME”
Satcom Applications section
 - b. AO5658 “ESA Telecom – Newcomer’s Initiative”select the most suitable for your project idea (*if you do not know, call us!*)
3. Prepare a concise concept paper (one-two pages) that you could share with ESA if you wish so; contact the relevant National Delegation(s) [countries of prime and subs] to get feedback on their potential support.
Contact points are available at: <http://iap.esa.int/delegates>
4. If feedback of 3. is OK, prepare the Outline Proposal in line with applicable ITT documents (either ARTES 3-4 Satcom Applications Study, Satcom Applications Development or Newcomers Initiative). Guidelines and Template docs to support the preparation of the Outline Proposal are available
5. In case you want to apply for the special access to SatCom capacity and services at preferential conditions, clearly indicate this in the Outline Proposal
6. Submit the Outline Proposal in accordance with what is indicated in the ITT
7. After ESA feedback and green light, proceed with Full Proposal preparation and submission

ARTES 3-4 Full Proposal (1)



1. Content of the Full Proposal is indicated in the Special Conditions to Tender
2. Structure of the Full Proposal: i) Cover Letter, ii) Technical Proposal, iii) Financial Management and Administrative Proposal
3. Include letter of Avanti confirming agreement for access to HYLAS 1 capacity (if this option is chosen)
4. The Business Plan can be either included in the Technical Proposal, or provided as a Separate Volume (if confidential for subcontractors)
5. General points to be noted:
 - a. Registration with ESA (EMITS) is necessary for obtaining a Bidder Code without this code no contract can be placed
 - b. Expenses incurred in the preparation of the outline or full proposal will not be reimbursed
 - c. Intellectual Property Rights (IPRs):
 - IPRs remain with the Contractor
 - ESA licence limited to the use of IPR required to fulfil the objectives of the Contract
 - Protection of background know how, if applicable
 - No royalties to ESA

ARTES 3-4 Full Proposal (2)



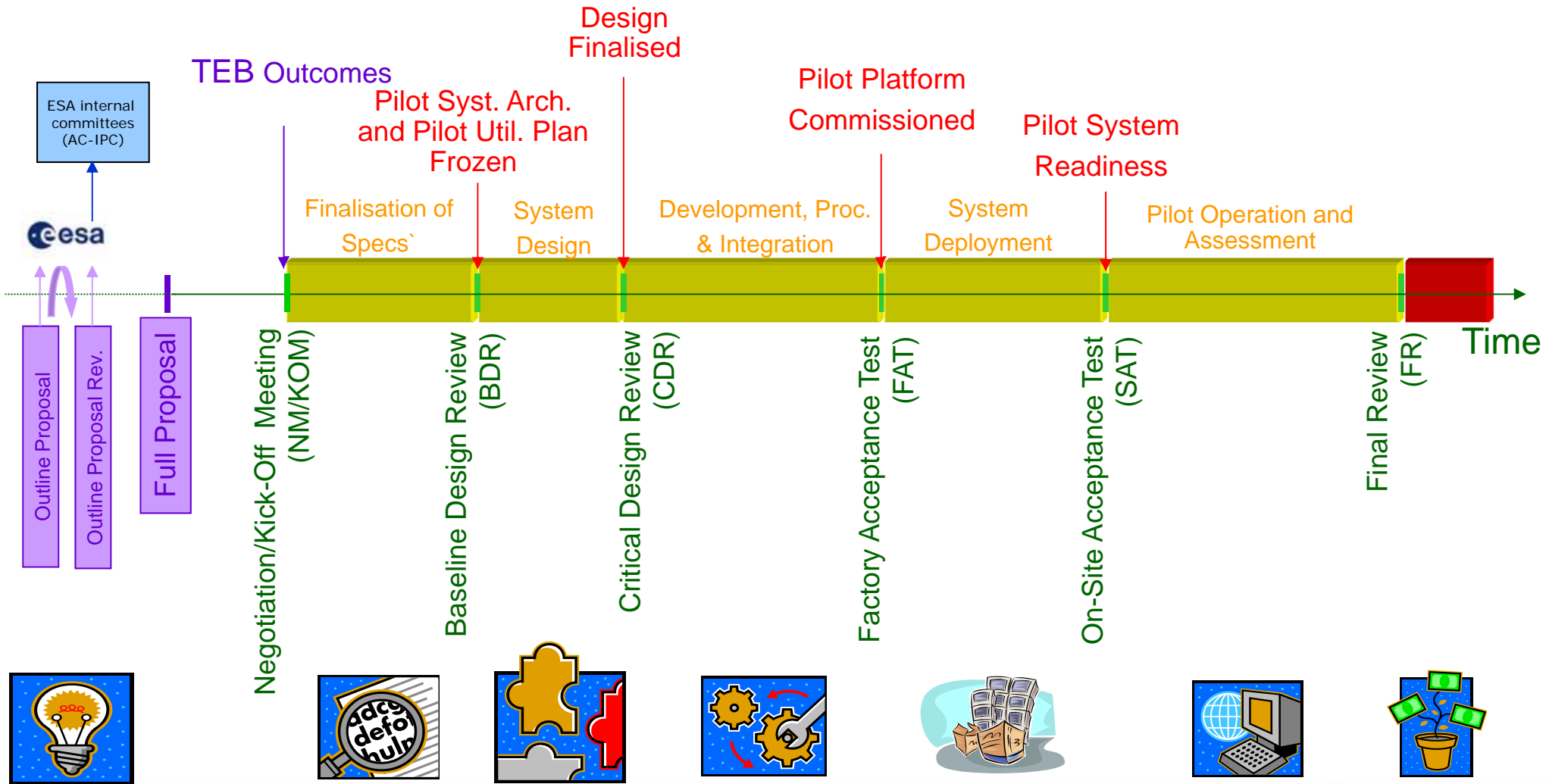
Do:

1. Provide a sound justification for the choice of technology
2. Provide a clear list of deliverables
3. Clarify roles and responsibilities of partners (e.g. subcontractors) in the industrial team (each subcontractor should be responsible for at least one WP)
4. Provide a clear list of inputs, tasks and outputs for each Work Package (WP). Outputs shall be **S**pecific**M**easurable**A**greed**R**elevant**T**ime bounded
5. Include an explanation of the used acronyms and abbreviations where necessary
6. Include a short presentation of the company(ies), going straight to the key points (e.g. products/business, key customers, previous related experience, size, organisation, key financial figures)

Do not:

1. Spend too much on presenting and discussing the background scenario
2. Leave space to interpretation as it can generate wrong expectations within the contractual team and ESA
3. Correlate quality of proposal with number of pages (be concise!!!)

ARTES 3-4 – Project Logic



ESA's Integrated Applications Promotion Programme (ARTES 20)

The goal :

Foster **new utilization of existing space capacity and capability**, in close **partnership** with **end-users**, through the development of **integrated** (different space and non space technologies) applications projects which **demonstrate** a potential for **sustainable services**.

Addressing global challenges in different thematic areas:
Space for: Health, Development, Transport, Security, Safety,
Energy, Innovation ...

ESA's Integrated Applications Promotion Programme (ARTES 20)



**Earth
Observation**

**Tele-
communication**

Navigation

→ **Developing new services for new user communities**

**User
Demand**

**Feasibility
Study**

Demo

**Operational
Service**

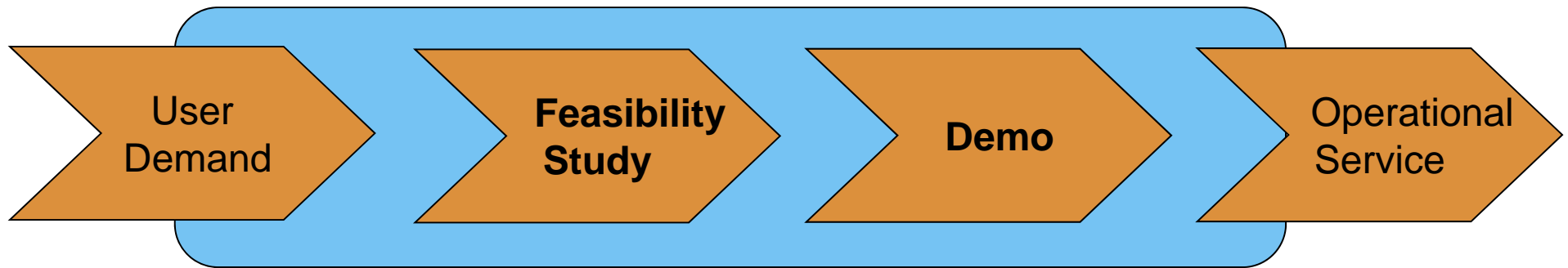
**Manned
Space Flight**

Latitude (deg) : 45.45
Longitude (deg) : 15.15
Elevation (m) : 1000
Position
X coordinate : 3839591
Y coordinate : -50599
Z coordinate : 5799
Latitude (deg) : 5
Longitude (deg) : 5
Elevation (m) :

ESA's Integrated Applications Promotion Programme (ARTES 20)



ESA IAP Involvement



User with demand but no contact to industry

Contact with ESA:

- iap.esa.int
- conferences
- ambassadors
- call for user ideas

Funding by ESA:

- 100% - ESA initiated activities in close collaboration with users / stake-holders
- 50% * - Partner / industry initiated activities in close collaboration with users / stakeholders

Funding by ESA:

- 50% - initiated by ESA or industry

Support etc.

* For Feasibility Studies only: Work carried out by universities and research institutes and justifying no further commercial interest in the final solution may be funded 100% by the Agency

- Development, integration and pilot utilisation of **Integrated Applications based on several space assets**
- **User driven activities aiming for sustainable services**
- Feasibility Studies & Demonstration Projects
- A) Ideas originated by ESA in collaboration with users
 - = > Specific Open Competitive Tenders (ITT)
 - = > fully funded
- B) Ideas originated by Industry in collaboration with users
 - = > Continuous Open Call for Proposals (AO 6124)
 - = > Outline Proposal ⇒ JCB Approval ⇒ Full Proposal
 - = > co-funded
- **Letter of authorisation from National Delegations**

Feasibility Studies (fully funded and co-funded)



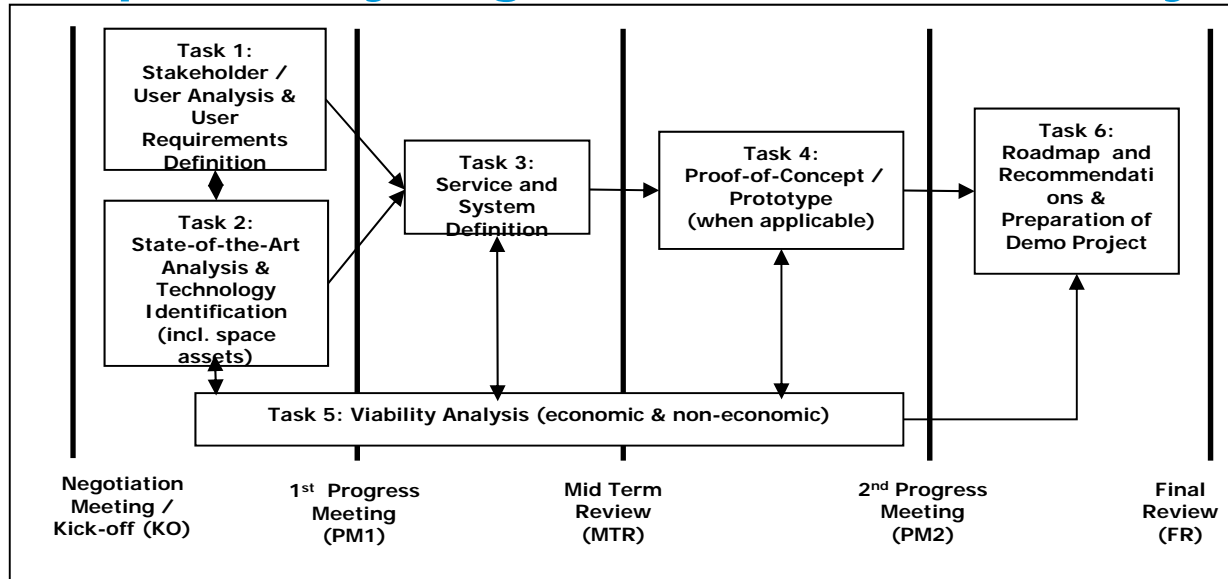
User involvement as starting point for every IAP activity

- Proof of interest and involvement of users/stakeholders is required for any IAP activity (feasibility studies and demonstration projects)
- Open competitive tenders (fully funded):
Expressions of Interest to be attached to the proposal including:
 - information on the motivation of the user organisation to participate
 - confirmation of active contribution to several tasks (i.e. user needs, validation of the user requirements, information on existing services and operational procedures, validation of specifications of services and solution, contribution to the validation of the Proof of Concept, contribution to the implementation roadmap)
- Direct negotiation activities (co-funded):
Expressions of Interest to be attached to the Outline Proposal including:
 - information on the motivation of the user organisation to participate
 - information how they intend to contribute to the study and to which tasks,
 - for Feasibility Studies: information if they are interested to engage in a potential follow-on demo project in case of successful study outcome
 - for Demo Projects: information if they consider to subscribe to operational services in case of successful completion of the demonstration project

Feasibility Studies (fully funded and co-funded)



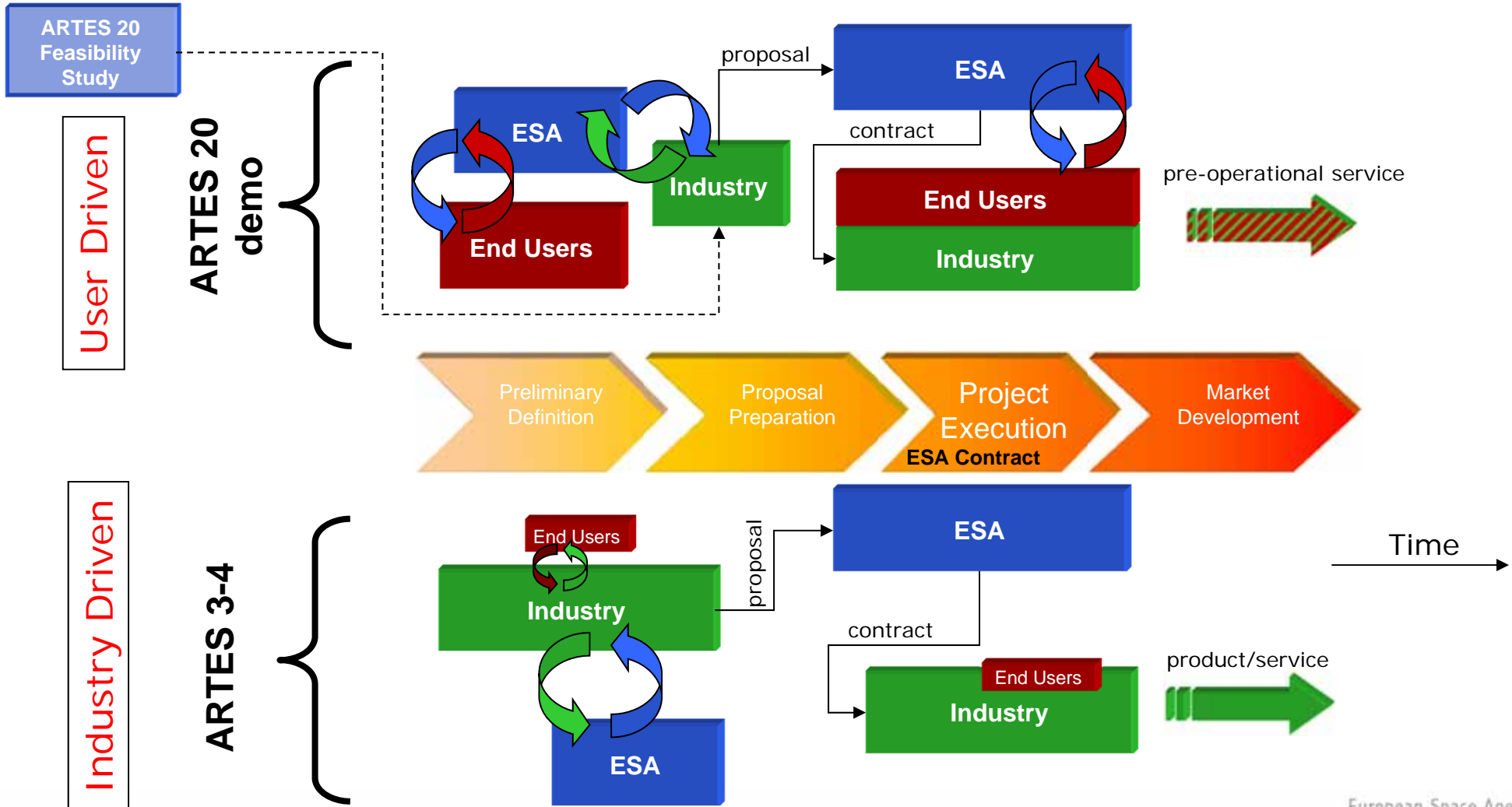
Principle Study Logic of an IAP Feasibility Study



- Task 1 – consolidating the interest of the related stakeholders and users, analysing their needs and defining the user requirements,
- Task 2 – performing a state-of-the-art analysis of the different existing technological solutions (both space and terrestrial based)
- Task 3 – defining the services and the service value chain, generating the specifications and architecture of the related system

- Task 4 – 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 5 – analysing the economic and non-economic viability of the services and the associated system,
- Task 6 – preparing the roadmap for the further implementation of the system and its associated services (e.g. via a demonstration project), securing the involvement of users/stakeholders

Demonstration Projects (fully funded and co-funded)



Demonstration Projects (fully funded and co-funded)



	ARTES 3-4	ARTES 20 demo
scope of work	satcom based applications	applications using multiple space assets (min: 2)
originator	industry (incl. service providers)	end users, in association with industry where applicable
pilot utilisation phase	with end users in their operational environment	with end users in their operational environment
complete business plan	yes	yes for commercial services, simplified for institutional services
price	50% of the eligible costs	50% of the eligible costs

ESA's Integrated Applications Promotion Programme (ARTES 20)



What are the opportunities?

What are the opportunities? (1)



1. Competitive tenders (feasibility studies):

Currently Open Tenders

- Improvement of the Safety at Railway Level Crossings (FS): AO 7147
tender open from 9 May until 18 July 2012
- Supporting Services for Wind Power Industry (FS): AO 7148
tender open from 9 May until 18 July 2012
- Piracy Prevention and Commercial Navigation in Insecure Waters (FS): AO 7168
tender open from 4 June until 27 August 2012
- Improved Alpine Avalanche Forecast Service (FS): AO 7213
tender open from 28 June until 20 September 2012

Intended Tenders

- Improving Disaster Response Capacity (FS): July 2012
- e-Health for Sub-Saharan Africa – IV: Sustainability (FS): September 2012
- Safety and Information Services for Ski Resorts (FS): September 2012
- Improved Situational Awareness in the Arctic (FS): October 2012
- Improving the Efficiency of Loss Adjustment and Claims Management in the Insurance Industry (FS): October 2012
- Maintenance and Recovery of High Voltage Electricity Transport Systems (FS):
October 2012

**Information to be found on the IAP website (announcements): iap.esa.int
and on ESA's electronic tendering system (tender documents): emits.esa.int**

What are the opportunities? (2)



2. Continuous Open Call for proposals for Feasibility Studies and Demonstration Projects (AO 6124)

Beginner's Guide and **Proposal Guides** on IAP website for IAP, SATCOM-APPS, SAT-AIS including:

- Administrative Guide
- Outline Proposal Guidelines Feasibility & Demo
- Process Flowcharts

accessible under <http://iap.esa.int/what-and-why/proposal-guide/iap>

3. Initiatives in preparation:

- User Call on Critical Infrastructures (transport, energy, food, etc): closed 30 June <http://iap.esa.int/opportunities/iap/critical-infrastructure-call-for-user-ideas>
- Activities triggered by new Italian Ambassador Platform on 'Dual Use Applications'
- New Ambassador Platform (NL) on 'Water Management' in preparation

Related information can be found on the IAP website: iap.esa.int

ESA offers ...



- **Financial support** in the co-funded programmes ARTES 20 (Integrated Applications Promotion) and ARTES 34 (Satcom Applications)
- **Consultancy** from idea generation until introduction of a sustainable application / service
- **Access to ESA's technological expertise** in a number of disciplines covering not only space
- **Networking within and access to** the community of the ESA Telecom and Integrated Applications programs (regular workshops on various subjects), i.e. a plethora of organisations and industries
- Organisation of **awareness activities** on specific subjects (thematic workshops, PR campaigns, etc.)
- **Credibility** through the involvement with ESA as international acknowledged organisation

ESA expects applicants to...



- **Identify the user community and the needs/demands** that could trigger a new sustainable service
- **Identify the gaps** that prevent the users to do their job optimally or to expand ... may be, there is a chance for space systems to fill the gaps
- **Come to us** with their idea and **we discuss together** if and where space can help, **identifying the best route** through the system of ESA programs (Satcom, Integrated Applications, others)
- Get in **contact with their national ESA delegation**, as they are the ones needed to support the activity as well
- Be aware that there is a **requirement for co-funding** for both industries and user groups

ESA's Integrated Applications Promotion Programme (ARTES 20)



How to get involved in an IAP activity

Selection criteria for an IAP activity:

- **Strong user needs, interest & involvement**
- **Utilisation of two or more space assets**
- Evidence of a **clear added value**
- **Potential for sustainability**
- **Strength in background and experience** (credibility) of the bidding team with respect to proposed activity
- **Funding mainly for space** related activities
- And for Demonstration Projects:
Need for and the representativeness of the future service (incl. scalability).

Ideal characteristics of involved parties:

- **User:**
 - representing / leading broader markets (champion)
 - enabling the market access
 - communicator to spread the message
 - open for new solutions
 - willing to engage as stakeholder or customer
- **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)

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

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

ESA initiated Activities (fully funded) Mainly Feasibility Studies



How to participate in Open Competitive Tenders:

- After publication, ESA is not allowed to communicate with industry about the subject of the tender in order not to disturb the competition
- Organisation of a consortium is initiated by industry:
 - Either you start organising your own consortium
 - Or you try to get involved with another consortium
- If you are not known to other companies you will not be approached
- EMITS offers the opportunity to announce the interest for collaboration and to provide information on the expertise
- It can be expected that industries providing similar services or have engaged in similar development activities in the past are interested to submit a bid ⇒ search for projects on similar / related subjects on ESA websites

Partner/industry initiated Activities (co-funded) Feasibility Studies or Demonstration Projects



How to prepare for Direct Negotiation Activities (1): Outline Proposal

- Ruling document for Outline and Full Proposals is the continuous “Open Call for Proposals for Feasibility Studies and Demonstration Projects”:
<http://emits.esa.int> Open Invitations to Tender **AO 6124**
- Submission of an Outline Proposal to email address: **iap@esa.int**
- Beginner and Outline Proposal guidelines already on IAP website; related update of AO 6124 on EMITS by end March 2012
- ESA assessment and iteration on promising ideas **together with bidder**
- Coordination with **national delegations** necessary
- Insertion in the rolling IAP workplan for **approval by IAP Member States (JCB: 4x per year)**

Partner/industry initiated Activities (co-funded) Feasibility Studies or Demonstration Projects



How to prepare for Direct Negotiation Activities (2): Full Proposal

- After approval, invitation to submit a full proposal
- Full proposal to be prepared according to requirements of 'Open Call for Proposals (AO 6124) including letters of authorisation of the related national delegations (early coordination process recommended)
- Submission of the Full Proposal triggers the ESA evaluation process
- If the proposal contains major non-compliances clarification iterations will be initiated with the bidder(s)
- When the proposal is considered compliant, the negotiation process will be initiated

Proposal preparation (fully funded and co-funded)



Points to pay attention to:

- Often it is asked to provide a **first iteration** of specific tasks already within the proposal: this should include information on the actual starting point of the activity and an outlook how to bring this task forward within the activity.
- The involvement of the **stakeholders / users** in most of the tasks is indispensable: it needs to be explained how this involvement is done.
- Experience and **completeness of the team**: it needs to be explained which know-how is already in the team, but also which know-how is missing and how this will be acquired (training, new partner, external service, advisor, etc.).
- The identification / involvement of a potential **service provider** is highly recommendable for FS and indispensable for DP (ideal case: the service provider is the prime).
- The **viability analysis** is often done by technical persons which is often inappropriate, as they do not have the know-how.
- The coordination with the **national delegations** related to the consortium partners has to be established from the very beginning, as their approval procedures to issue the required authorisation letters need time as well.

- IAP Website: <http://iap.esa.int>
- “Integrated Applications Handbook” available as hardcopy and via the IAP website: <http://iap.esa.int/handbook>
- IAP Open Call for co-funded activities online on
- EMITS: <http://emits.esa.int> (ITT AO6124)
- Information on IAP Open Competitive Tenders online on
- IAP website <http://iap.esa.int/intended-tenders/all>
- EMITS at the time of publishing
- IAP general email address: iap@esa.int

Questions?



If you do not know what to do:

Call us!

Thank you



Contact information

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Thank you



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Up coming Opportunities



a. Currently Open Tenders

- Improvement of the Safety at Railway Level Crossings (FS): AO 7147
tender open from 9 May until 18 July 2012
- Supporting Services for Wind Power Industry (FS): AO 7148
tender open from 9 May until 18 July 2012
- Piracy Prevention and Commercial Navigation in Insecure Waters (FS): AO 7168
tender open from 4 June until 27 August 2012
- Improved Alpine Avalanche Forecast Service (FS): AO 7213
tender open from 28 June until 20 September 2012

b. Intended Tenders

- Improving Disaster Response Capacity (FS): July 2012
- e-Health for Sub-Saharan Africa – IV: Sustainability (FS): September 2012
- Safety and Information Services for Ski Resorts (FS): September 2012
- Improved Situational Awareness in the Arctic (FS): October 2012
- Improving the Efficiency of Loss Adjustment and Claims Management in the Insurance Industry (FS): October 2012
- Maintenance and Recovery of High Voltage Electricity Transport Systems (FS):
October 2012

Information to be found on the IAP website (announcements): iap.esa.int

and on ESA's electronic tendering system (tender documents): emits.esa.int

IAP Website

- <http://iap.esa.int>

AP Community Portal

- <http://iap.esa.int/c/ceer>

“Integrated Applications Handbook” (available as hardcopy and via the IAP website)

- <http://iap.esa.int/handbook>

IAP Open Call for proposals

- EMITS: <http://emits.esa.int> (ITT AO6124)

IAP general email address: iap@esa.int

Overview of completed / running IAP studies and projects

Space for Health

Feasibility Studies

- VECMAP – Disease Vector Mapping
- PREDICT – Prevent and Respond to Epidemics and Demonstrate Information and Communication Technologies
- GULLIVER - Tracking Pharmaceuticals in Remote Regions
- B-LiFE – Biological Light Field Laboratory for Emergencies
- VOYAGE – Telemedical support in mobile environment

Demonstration Projects

- AMAZON - Real-time satellite-based telemedicine system for professional clinical users in remote locations
- T4MOD - Telemedicine for Medical Operations in Distant areas
- VECMAP Demo Project

Space for Transport

Feasibility Studies

- SSMART: Intermodal transport of hazardous goods
- IRISS: Integrated Railways via Integrated Satellite Services
- Bird Strike Risk Reduction for Civil Aviation
- ITRAQ: Integrated TRaffic management and Air Quality control in cities
- EASY – Easy and safe yachting
- DG-TRAC – Dangerous Goods transport TRACking and tracing in the medical sector
- Intermodal Freight Transport (2x)

Demonstration Projects

- FlySafe – Bird Avoidance for Air Forces (transition to operational service)
- S2BAS – Space Services Benefits in Aviation Systems
- SEMAFORS - Demonstration of Ship Efficiency Monitoring, Weather Forecasting and Optimised Routing Service

Integrated Applications Promotion

IAP Projects



Space for Safety and Security

Feasibility Studies

- Satellite Systems and Operations for Unmanned Aerial Systems (UAS)
- Integrating Space Assets for UK Resilience
- Land Border Control
- PIMS - Pipeline Integrity Monitoring using Space Assets
- Space Assets for Demining Assistance (3x)
- SASISA – Small Aircraft Service for Instant Situational Awareness
- Prediction, Monitoring and Alerting of Landslides and Subsidence Affecting the Transport Infrastructure

Demonstration Projects

- Nuclear Safeguard and Verification
- FAAPS - Fully Automated Aqua Processing Service

Integrated Applications Promotion IAP Projects



Space for Energy

Feasibility Studies

- INTOGENER - INTegration of EO data and GNSS-R signals for ENERgy applications
- CSP FoSyS - Concentrating Solar Power Forecast System and Service
- CCS SpaceMon - Carbon Capture and Storage - Integrated Space borne Site Monitoring
- UASatcom – Satellite Services for Exploration and Monitoring

Demonstration Projects

- SpaceGrid – Satellite based services for Power Grids

Integrated Applications Promotion IAP Projects and User Partners



Space for Environment

Feasibility Studies

- SAVEWATER – Integrated SATellite-AUV services for sustainable WATER management
- SAMBA - SATellite Monitoring of the Baltic sea ship emissions

Integrated Applications Promotion IAP Projects and User Partners



Space for Other Areas (agriculture, fishery, education, ...)

Feasibility Studies

- BIOSCOPE – Biodiversity multi-scale Observation Performance Enhancer
- FishSAT - Sustainable Fishing
- Integrated Information System for North Sea Fisheries

Demonstration Projects

- Talking Fields - Integrative Use of Satellite Techniques to Optimise Agricultural Production
- Grapelook - Space Based Services for Water Irrigation Management of Vineyards in South Africa