APNorway Ambassador Platform for Norway

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Norwegian Space opportunities within the IAP program

OSLO

16th of April 2015

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Norwegian Space opportunities within the IAP program

Where	Oslo	Drammensveien 165
When	16st of April	1000-1500
Registration	27th of March	Free of charge
Send to	Kay.fjortoft@marintek.sintef.no	
Program		
10.00	Welcome	APNorway - Kay Fjørtoft
10.15	The IAP Program	ESA – Tony Septhon
10.40	The Norwegian Space Centre	NSC – Rune Sandbakken
11.00	Break	
Project presentation		
11.15	Maritime communication challenges, the ArcticSat IAP project	MARINTEK – Kay Fjørtoft
11.45	The way of writing an IAP proposal, the industry perspective	Harald Skinnemoen - AnsuR
12.15	APFin: Possibilities for collaboration between Finland and Norway	Miranda Saarentaus
12.30	Lunch	
Workshop + Panel discussion		
13.15	Introduction to the workshop. - Elements of importance in an IAP application - The steps to an proposal - Group work / Individual assistances	
14.45	Summary	

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Ref: ARSwiss

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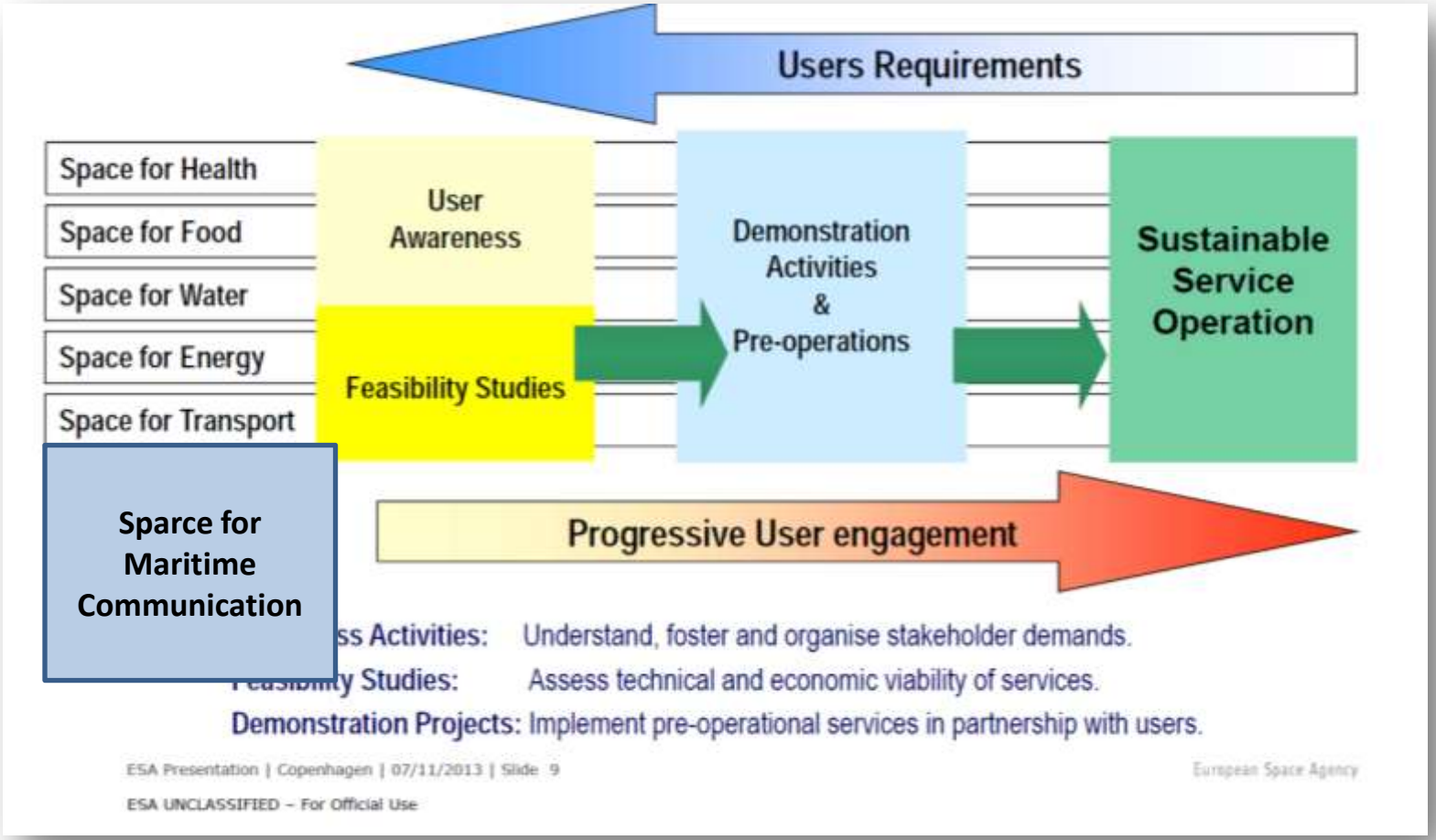
- The Ambassador Platform Norway is hosted by MARINTEK in Trondheim.
- The Ambassador Platform Norway addresses the interactions between relevant stakeholders in the field of maritime navigation, communication and earth observation:
  - Efficiency improvements of transport and operations in the maritime and oil and gas industry;
  - Exploiting integration potentials in utilizing technology to improve collaboration between people and organizations;
  - Monitoring of transport infrastructure to identify and/or predict problems caused by inadequate information on adverse conditions to navigators;
  - Improved situational awareness providing decision support during demanding maritime operations (harvesting, sea-farming, transport, oil & gas operations, search and rescue, etc.);

The Application Program goals

1. Better knowledge of ESA's ARTES Applications programmes to industry, research community and users.
2. Advice on how to apply for funding
3. Review latest developments on (mainly) maritime R&D
4. Identify Opportunities for the ARTES Applications programmes
5. Provide Opportunities for One-to-One discussions on specific ideas

IAP Programme Structure



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FUNDING OPPORTUNITIES

ESA supports the development, validation and demonstration of viable operational applications and services relying on space systems and having the objective to establish sustainable operational solutions, through two funding programmes: Integrated Applications Promotion (IAP – ARTES 20) and Satellite Telecommunications Applications (SATCOM – ARTES 3-4). Proposals can be submitted in response to Open Competition issued by ESA on specific subjects (fully funded by ESA) or at your own initiative through Direct Negotiation (50% funded by ESA). Depending on the level of maturity of your project, ESA programmes offer different funding schemes.

DIRECT NEGOTIATION

Feasibility Studies

ARTES 20 – Feasibility Studies provide the preparatory framework to identify, analyse and define new potentially sustainable applications and services within the ARTES 20 IAP programme.

Fast Track Feasibility Studies

ARTES 20 – Fast Track Feasibility Studies: the ESA funding is limited to 50 kEuro, the duration should not exceed 6 months, and the content is expected to be focussed on a few specific, but critical elements of a regular Feasibility Study.

Demonstration Projects

ARTES 20 Demonstration Project: The output of ARTES 20 IAP Demonstration Projects shall be a pre-operational service responding to well identified user needs and requirements and should show a clear potential to become sustainable at the conclusion of the project with ESA.

Satcom Applications Projects

ARTES 3-4 Satcom Applications Projects: Aims to support design, development and demonstration activities of system and services making use of satellite telecommunications. The scope of the development can be any hardware, software, service or application item aligned with industry plans for future exploitation.

300kEuro
(100 or 50%)

50 kEuro
(< 50%)

<50%

<50%

ARTES 20 Integrated Applications Promotion (IAP)

- The ARTES 20 IAP programme is dedicated to the development, implementation and pilot operations of Integrated Applications. These are applications that combine (or 'integrate') data from at least two existing and different space assets, such as Satellite Communication, Earth Observation, Satellite Navigation, Human Spaceflight technologies and others.
- ARTES 20 Integrated Applications projects cover Feasibility Studies and Demonstration Projects. Any organisation can propose to develop a new commercially promising space-based application or service. It may be e.g. a federation of users, a commercial company, a public body or a non-governmental organisation.

Examples: https://artes-apps.esa.int/projects

- SASS@sea
- EUROPORT
- SaMoSa
- Profumo
- eHSA

SASS@Sea
Last update: 25 March 2015
The objective of the project is the development and validation of a system for the provisioning of an integrated maritime communications service.

EUROPORT Demo Project
Last update: 24 March 2015
Ports are fundamental and main part of inter-modal global transport in the world. The growth in freight transport stresses the existing infrastructure to its limits. There are already considerable signs of congestion in the European transport system, e.g. on the roads and in harbors. Congestion will have a negative impact on the costs and time of transportation, which affects the prices and the quality of products.

SaMoLoSa
Last update: 10 March 2015
The Ovinto SaMoLoSa study addresses the use of satellite technology for **the reduction of transport risk, security enhancement and optimisation of logistic operations** by the tracking and monitoring of extremely dangerous goods in unpowered, mobile transport units such as rail tank cars and intermodal tank containers.

Profumo
Last update: 16 February 2015
Profumo proposes operational weather routing services for the maritime community, based on cooperative collection of meteo-marine data from **commercial vessels**.
The idea is to establish a cooperative schema where meteo-marine data is collected from standard and non-standard on-board instrumentation. Acquired data is used in the Profumo service center to provide enhanced meteo-marine forecast and nowcast capabilities on a local scale.

eHSA, Study on Sustainability, Liability & Business Aspects
Last update: 29 January 2015
Sub-Saharan Africa, characterized by its extensive rural populations with little or no access to conventional healthcare, renders eHealth a potentially effective solution for the provision of healthcare. The goal of the eHealth for Sub-Saharan Africa (eHSA) programme is the development of pan-African eHealth services, enabled by satellite telecommunications, to expand healthcare access for rural African populations.

Examples: https://artes-apps.esa.int/projects

- PLASMA
- ARCTICSAT
- Sea Search
- METSAR
- ISABELIA

PLASMA

Last update: 01 December 2014

This project covers the specification, design, implementation and pre-operational demonstration of a 'Platform for Advanced SAT-AIS Maritime Applications' (PLASMA) at the UK's Satellite Applications Catapult facility in Harwell.

ARCTICSAT

Last update: 24 November 2014

The objective of this feasibility study is to assess and validate the requirements for space technologies in support of ***optimising situational awareness in the Arctic***. The major focus is on two application areas – shipping (e-Navigation in the Arctic) and oil & gas (Arctic oil spills).

SEA SEARCH

Last update: 01 October 2014

SeaSearch provides small vessel detection and identification capabilities.

Key capabilities of SeaSearch includes:

- Detection of small boats outside of the radar coverage
- Detection of small boats with large number of passengers
- Detection of "new" passenger on board
- Support for tracking small vessels

METSAR

Last update: 09 September 2014

The METSAR project will investigate the feasibility of developing and demonstrating a new concept to the Search and Rescue (SAR) community.

ISABELIA

Last update: 27 June 2014

The ISABELIA Feasibility Study specified and validated the sustainability of services and that would provide users at sea with near real time information on dangerous ice situations, indicators of collision risk and on risk of grounding, thereby improving the safety of vessels in the Baltic Sea.

PROTECT

Last update: 13 May 2014

The PROTECT project aims to exploit existing systems and infrastructure in conjunction with applicable space based assets to provide cost-effective added-value technology centred services that provide improved situational awareness to both on-board and shore based stakeholders, based on real-time innovative integration of piracy and sensor information/data.

Examples: https://artes-apps.esa.int/projects

- PROTECT
- CAESAR
- SAMBA
- iFish North Sea
- FishSat
- SEMAFORS

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CAESAR
Last update: 02 May 2014
The CAESAR feasibility study, finished in March 2014, focused on a service able to provide detailed and timely information on the weather and marine conditions to the maritime Search and Rescue (SAR) coordination centres, with the aim of reducing the risks and improving the efficiency of SAR operations.

SAMBA
Last update: 07 April 2014
The objective of SAMBA is to establish feasibility of space-based services for maritime emission monitoring. SAMBA will achieve its objective by combining AIS/GPS-based maritime emissions with remote sensing-based atmospheric pollution monitoring into maritime emission compliance monitoring and information provision service.

iFish North Sea
Last update: 03 March 2014
I-fish North Sea aims to provide an integrated information and communications system that will utilise a combination of satellite communications and satellite navigation to enable unified timely and accurate collection, management, and use of marine fisheries data to provide value added services to fisheries stakeholders for improved sustainability of our fast depleting fisheries resources.

FISHSAT
Last update: 27 September 2013
FISHSAT is conceived as a system of systems employing space assets (Earth Observation, Satellite Navigation and Satellite Communication) to improve collaboration between markets, fisheries and enforcement authorities. The intended benefit of FISHSAT is to increase the efficiency of fishing activities, match better the market demand, improve catch traceability and strengthen enforcement.

SEMAFORS
Last update: 22 April 2013
SEMAFORS, the Ship Efficiency Monitoring, weAther Forecasting and Optimised Routing Service is a user focused project in support of the shipping industry.
SEMAFORS will investigate, establish and demonstrate through sea trials a concept to improve ship fuel efficiency by providing the means to better planning, avoiding of adverse weather and by making better use of ocean currents.

Video

- https://artes-apps.esa.int/videos