

The network of IAP Ambassadors

ARTES Applications Workshop Harwell Oxford, United Kingdom, 20th April 2012

European Space Agency

Purpose of the Ambassador Platforms



1. To improve:

- a. Awareness
 - Redress a lack of dialogue, information and understanding between potential user communities and the space sector

b. Local presence

- Through both a physical presence and virtual portals
- c. Synergy
 - Replace compartmentalization of the offer from individual space technologies, with the integrated applications approach

d. Demand

 By connecting with new user communities, identifying their needs and federating their demand.

Role & Objectives of the APs



- a. To identify and penetrate new user communities.
- b. To **build awareness** of the potential of space-based services among users who are unfamiliar with them.
- c. To be an **"honest broker"** between ESA, potential users, service providers and other stakeholders who are interested in participating in the ARTES applications programmes.
- d. To motivate players to submit viable proposals, and/or to propose partnerships with ESA, where IAP or ARTES 3-4 might be instrumental in meeting user needs.
- e. To **federate demand**, creating a critical mass for the development of satellite applications that can lead to sustainable services.

IAP APs presentation | 20/04/2012 | Slide 3

The Network of Ambassador Platforms



- 1. A growing European network:
 - a. Eight operational IAP Ambassador Platforms;
 - b. Several more in preparation;
 - c. ESA is looking for more...
- 2. Each AP has thematic and/or geographic expertise and responsibility.
- 3. Hosted by institutions/professional organizations that meet key criteria:
 - a. Neutral and trusted as honest brokers;
 - Expert in their domain with strong local knowledge, experience and contacts with decision-makers, stakeholders, industry and institutions;
 - c. Credible as a regional/national entry point to ARTES applications programmes.

Network of IAP Ambassador Platforms

AP for e-Health in Inaccessible Regions (NST)



UK AP for Integrated Applications (ESA Harwell)



AP for the Netherlands (Het Waterschapshuis)

AP for Environmental Risks & Hazards in the Mediterranean Region (Pôle Risques)



AP for EU adoption of Renewable Energies (CENER) AP for Integrated Applications in the Central & Eastern European Region (ESPI)

AP for Dual Use Integrated Applications (Italian MoD)

Ambassador Platform network



ARTES Applications

APBSR

APCEE

APDUSS

EARE

eHIR

ERHM

EMOB

- 1. Baltic Sea Region (AP BSR), hosted by the Baltic Sea Action Group (BSAG) in Helsinki. Manager: Anti JOKKINEN: <u>antti.jokinen@bsag.fi</u>
- Central and Eastern European (APCEE), hosted by the European Space Policy Institute (ESPI) in Vienna. Manager: Erich KLOCK: <u>erich.klock@espi.or.at</u>
- Dual-Use Space-based Services (APDUSS), hosted by the Office of the Advisor for Aerospace Activities Italian Ministry of Defence (CIRA) in Rome. Manager: Massimo CAVALIERE: <u>m.cavaliere@cira.it</u>
- 4. European Adoption of renewable energies (AP EARE), hosted by the National Renewable Energy Centre of Spain (CENER). Manager: Ignacio MARTI: <u>imarti@cener.com</u>
- 5. E-Health in inaccessible regions (AP e-HIR), hosted by The Norwegian Centre for Integrated Care and Telemedicine (NST) in Tromso. Manager: Leif Erik NOHR: <u>Leif.Erik.Nohr@telemed.no</u>
- 6. Environmental Risks and Hazards in Mediterranean (AP ERHM), hosted by the excellence Cluster in Risk Management (Pôle Risques) in Aix-en-Provence. Manager: Marie-Laure GERMAIN: marielaure.germain@pole-risques.com
- **7. Enhanced Mobility** (AP EMOB), hosted by the ESA office at Harwell in the United Kingdom. Manager : **Alan BRUNSTROM** (acting): <u>alan.brunstrom@esa.int</u>
- 8. Water Management, hosted by Het Waterschapshuis in the Netherlands. Manager: Joris VAN ENST: j.vanenst@hetwaterschapshuis.nl

IAP APs presentation | 20/04/2012 | Slide 6

ESA UNCLASSIFIED – For Official Use





1. Administer a dedicated **community web portal**:

- a. Distribute information materials, notices on ITTs, upcoming events, workshops, news stories, calls for user ideas, best practices, etc;
- 2. Organize workshops and seminars
- 3. Create and distribute **promotional materials**

4. Build relationships with stakeholders:

a. Individual meetings, participation in conferences and other events.

5. Foster IAP proposals:

a. Including synergies for cross-sector or cross-border applications.

6. Regular coordination meetings with ESA and the other APs

Example for user communities



- 1. Space applications to enhance civil protection operational effectiveness
 - a. Added value of space
 - Integrated applications are crucial to increase the efficiency and effectiveness
 - Satellite-based services have the potential to support the full disaster management cycle
 - Satellite communications provide a robust network
 - b. Existing shortcomings
 - The limited **interoperability** among task forces
 - The lack of standardisation
 - The **costs** of satellite services are often higher
 - The availability of SatCom systems is often inadequate during crisis

Example for user communities

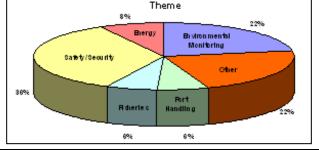


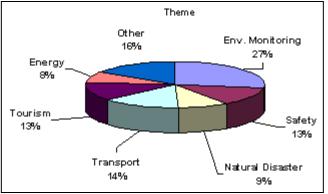
- c. User workshop dedicated to space applications for CP
 - Held in May 2011 in Vienna
 - Brought together officials and experts from key European countries to identify needs and requirements
 - CP representatives confirmed necessity of satellite services and the need of a dedicated programme
 - A dedicated Advisory Team was composed
- d. The workshop facilitated an **Open Competition** on "Peace Building and Damage Assessment: Improving Disaster Response Capacity"
 - Federated European approach will improve flexibility, responsiveness and cost effectiveness

Call for User Ideas



- 1. Useful tool to stimulate new ideas, federate user demand and collect user needs
- 2. APs play an important role in promoting the calls
- 3. 1st IAP Call for User Ideas on the Baltic
 - a. 44 ideas received for evaluation
 - b. Resulted in 2 OC and 1 DN
- 4. 2nd IAP Call for User Ideas on the Alpine region
 - a. 38 ideas received for evaluation
 - b. Resulted in 1 OC and 2 DN





IAP APs presentation | 20/04/2012 | Slide 10

ESA UNCLASSIFIED – For Official Use

European Space Agency

Call for User Ideas



5. Upcoming Call for User Ideas on Critical Infrastructure



Large <u>impact</u> on people's lives and/or critical role in the economy

- It handles a **vital good** (for the economy, for people's health): * Energy, information, water, food, health services
- It enables a large variety of activities (e.g. roads).
 Degradation would cause major financial losses & disruption in people's life

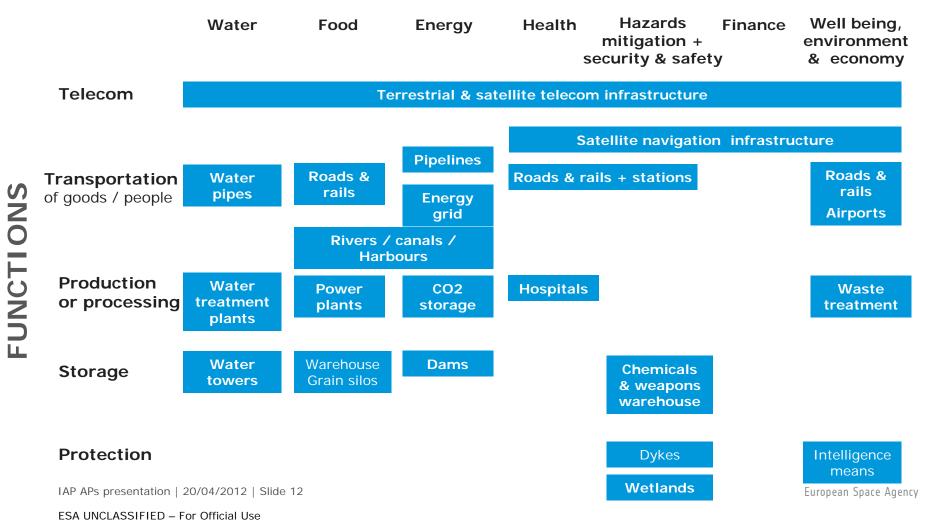
High Vulnerability

- It is subjects to hazards (e.g. natural or man-made disasters), e.g. storms, tsunamis, pollution events, nuclear explosions.
- Functionally concentrated infrastructure (i.e. the function is not spread over a distributed architecture)
 Little tolerance to fault.
- Physically spread infrastructure, difficult to monitor and maintain. It is also more subject to environmental hazards.

IAP APs presentation | 20/04/2012 | Slide 11



APPLICATION DOMAIN







Thank you for your attention QUESTIONS?

- IAP Ambassador Platform Info on IAP Website: http://iap.esa.int/communities/all
- IAP general email address: iap@esa.int

IAP APs presentation | 20/04/2012 | Slide 13

ESA UNCLASSIFIED – For Official Use

European Space Agency