



european aeronautics science network

EASN Technical Workshop
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Increasing the EASN scientific activities

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Objective of this talk

Increasing the EASN scientific activities

- Overview on the current EASN scientific activities and suggest possible ways on how this can be increased.
- Open discussion aiming at producing discrete suggestions which will form a roadmap for the EASN Association BoD

Research *Job of the researchers*
To transform money to knowledge

Innovation *Job of industries*
To transform knowledge to money

Innovation is the main objective of Europe

Achievements of EASN

- EASN started as a project in FP5 (EASN I)
- EASN build up a platform for basic research in the field of aeronautics, performed by universities and research establishments in Europe.
 - ⇒ The project became a success, since it managed to bundle together various academic experts in the field
- EASN showed the specific expertise of universities and research establishments, and the different research topics those actors were involved in
- EASN developed a methodology: how to analyse the existing fields of competences by means of questionnaires and a professional data base
- EASN supported the exchange of knowledge and experience along the knowledge chain, by bringing together universities, research establishments, SME, industry and end users

Achievements of EASN

Under FP6, EASN was further developed, now called EASN II.

→ EASN I and EASN II helped to reinforce the collaboration between the different stakeholders along the knowledge chain and to raise public awareness of the role of basic research in the field of aeronautics

Objectives of EASN

- To support and coordinate the interests of the Universities involved in research in the field of aeronautics in Europe
- To foster aeronautical upstream research
- To structure the aeronautic European academic research area
- To harmonise and integrate the research activities of Universities in the field of aeronautic
- To act as point of contact representing Universities on the European level towards the EC, ACARE, Industry, SME, research establishments and related organisations
- To increase the part of basic and upstream research in European research programme
- To perform University lobbying

Instruments of EASN

- Workshops
 - Interest Groups
 - Data base
 - Internet Website
 - EASN Association
 - Regional Contact Points
 - National Contact Point
 - EASN Technical Coordinator for the scientific areas of EASN
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- **European Research Projects (FP6 only)**

Current EASN project procedure

- Expression of interest (EoI) campaign
- Interest Groups
 - ➔ Project idea
- Consultation of EASN Industry partners (EADS Innovation Works, and SCRATCH (SME))
 - ➔ Either support and/or participation OR rejection
- Formation of a consortium with integration of partners and ideas
- Proposal preparation
- EASN support for writing and managing

- **Potential increase of success rate!**

Current situation of basic research in aeronautics

FP7 offers different funding schemes and a huge budget, however, the understanding of the specific conditions and challenges of academic research esp. by industry has faced obstacles that have to be overcome.

For this reason, the participation of industry in EASN II-supported proposals in FP7 is weak. The success rate of EASN II-supported or EASN II-driven proposals is almost zero.

The experience was made, that industry “lobbied” specific proposals at the European Commission and put strong pressure, even political pressure, upon the European Commission,

Proposers and tax payers have the impression of “pre-cooked” evaluation rankings and results. Hence, EASN in FP7 has to enter new corridors to achieve its still valid and crucial goals.

➤ The aeronautical research funded under FP7 needs to be re-newed: Procedures, as the evaluation procedures, seem to be quite often misused and strongly lobbied by specific pressure groups, especially from industry

On the behaviour of scientists and engineers from industries about EASN

Opposite behaviours between industry representatives attending EASN meetings and industry engineers belonging to the same group, but in charge of research group:

- the first ones are strongly convinced of the advantages of EASN for their company to attract new scientists, new approaches, new ideas to their long term thematic,
- the second ones, who don't know EASN and its potential added-value, affirm that their research priorities are well known and already defined for many year ahead, that the best laboratories are already known and selected; and that new research groups can be clearly identified by their works. The short term objectives of these engineers are probably the reason of these opposite behaviours.

➔ But, the contracts are concluded only by these last type of engineers.

“Old” aeronautic country scientists’ view on EASN

The laboratories prefer to integrate directly to industrial consortia than to propose and bring alone a full (academic) project:

- The success rate is strongly increased
- They avoid the confidently conflicts with their industrial partners which are generally involved with them in national programs
- The writing of the proposal is very heavy of scientists

Consequently, only laboratories not presently involved in aircrafts or engines manufacturers’ networks are free to write a proposal, but their insufficient skill on applied problematic and lack of references decrease their success rate, this is often observed for proposal from new European countries who are hoping for support from EC.

The way forward – Visions

The various stakeholders attracted by FP7 should help EASN to develop further and to become a long-lasting initiative

EASN Association and the EASN members have to play a more active role in European aeronautical research.

They should not only look for the usual ways of receiving funding for longterm research, but for many different kinds of funding.

FP7 instruments: Networks of excellence

The Networks of Excellence are designed for research institutions willing to combine and functionally integrate a substantial part of their activities and capacities in a given field, in order to create a European "virtual research centre" in this field.

This is achieved through a "Joint Programme of Activities" based on the integrated and complementary use of resources from entire research units, departments, laboratories or large teams. The implementation of this Joint Programme of Activities will require a formal commitment from the organisations integrating part of their resources and their activities.

Can EASN apply for this?

FP7 instruments: Collaborative projects

Collaborative projects are focused research projects with clearly defined scientific and technological objectives and specific expected results (such as developing new knowledge or technology to improve European competitiveness). They are carried out by consortia made up of participants from different countries, and from industry and academia.

How can EASN better apply for this?

FP7 instruments: Coordination and Support Actions

These are actions that cover not the research itself, but the coordination and networking of projects, programmes and policies.

This includes, for example:

coordination and networking activities, dissemination and use of knowledge

studies or expert groups assisting the implementation of the FP

support for transnational access to major research infrastructures

actions to stimulate the participation of SMEs, civil society and their networks

support for cooperation with other European research schemes (e.g. "frontier research").

Can EASN apply for this?

FP7 instruments: Joint Technology initiative (JTI)

- CLEAN SKY
- SESAR (ATM)

How can EASN participate ?

FP7 instruments: European research Council ERC

EASN should furthermore engage in the Ideas programme in FP7

The Ideas programme will support "frontier research" solely on the basis of scientific excellence. Research may be carried out in any area of science or technology, including engineering, socio-economic sciences and the humanities. In contrast with the Cooperation programme, there is no obligation for cross-border partnerships. Projects are implemented by "individual teams" around a "principal investigator". The programme is implemented via the new European Research Council (ERC).

Can EASN apply for this?

FP7 instruments: Marie-Curie Actions

The People programme provides support for researcher mobility and career development, both for researchers inside the European Union and internationally. It is implemented via a set of Marie Curie actions, providing fellowships and other measures to help researchers build their skills and competences throughout their careers:

- Initial training of researchers - Marie Curie Networks
- Industry-academia partnerships
- Co-funding of regional, national and international mobility programmes
- Intra-European fellowships
- International dimension - outgoing and incoming fellowships,
- international cooperation scheme, reintegration grants
- Marie Curie Awards

Can EASN apply for this?

EASN should build up links to other thematic areas in FP7, especially

- Information and communication technologies
- Nanosciences, nanotechnologies, materials and new production technologies
- Energy
- Environment (including climate change)
- Socio-economic sciences and the humanities

How to improve EASN instruments and services?

For example:

- Create “think tank” on aeronautical problems
- Upgrading the EASN workshops to (small) scientific congress with invited lectures to attract scientists,
- To submit Poster on EASN and EASN IG during major Symposium OR/AND to organise Thematic EASN workshop or meeting during these events
- Job offers and vacancies on the EASN website
- Thematic Summer School (link research, formation, industry for innovation)
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**Thank you for your attention
and
fruitful discussion**