



EASN strategy for activities with the Industry





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1. Objective

One of the aims of EASN is to “promote, encourage, coordinate and focus efforts between Universities, Research Organizations, Industry and SMEs which are active in Europe in the field of aeronautics and aerospace.” In order to support this aim EASN shall propose activities to establish collaboration with above listed entities, including Industry and SMEs. Such activities are defined in the following.

2. The European Aerospace Industry

The European Aerospace Industry divides into civil aviation, defence and space industry, each driving innovation with their own R&D strategy on European and national level. With respect to indirect funding effects between these sectors there is much less R&D transfer from publicly supported defence and space industries to civil aeronautics in Europe compared to the US industry. This is a significant competitive disadvantage for the European civil aviation industry which has to be compensated with a well-coordinated R&D funding strategy.

The aeronautics, space and defence industries in Europe are represented by ASD (“AeroSpace and Defence Industries Association of Europe”).

The proposed EASN strategy will focus primarily on civil industry sectors, as defence R&D projects typically fall under national responsibility.

2.1. Large OEMs

There are a limited number of large OEMs in the European aviation and space industry which have been very proactive from the beginning in contributing to a common European R&D funding strategy. As key stakeholders in European R&D these large OEMs also today actively participate in the definition of the long-term priorities for aerospace research and development.

2.2. SME type OEMs

Although Europe has seen a strong consolidation in the general aviation (GA) aircraft industry there is still a fairly large number of small OEMs present today. For a number of reasons these companies tend to be reluctant to take part in larger international R&D funding schemes:

- The margin of small GA aircraft typically does not support large investments in R&D
- As a result these OEMs rarely have an R&D department as part of their design organization
- The administrative hurdle is seen as too high to apply for funding

Small OEMs therefore typically participate only in such R&D funding programs which fall fully in line with their current product strategy.



The ASD subgroup EGAMA represents the leading European general aviation manufacturers ranging from business jets to helicopters and small leisure aircraft. One of the aims of EGAMA is to generate a co-ordinated industrial view on strategic areas of interest, including Research and Technologies. In contrast to the large OEMs the SME-type OEMs have limited access to long-term R&D priorities definition on European level and could welcome supportive actions in this area.

2.3. System Suppliers

Just as for OEMs there is a significant number of large, medium sized and small system suppliers, which are of paramount importance for a strong European Aerospace Industry. Consolidation and strengthening of this R&D intensive industry sector therefore has to be an important factor for European competitiveness.

While large system suppliers can be compared to the large OEMs with respect to the influence on long term R&D strategy definition, there is a difference in the SME-type system suppliers compared to small OEMs: SME-type system suppliers also have to bid on large aircraft and space systems. In order to stay competitive in this market they also have to regularly invest in R&D. So they have a vital interest to participate not only in national but also in R&D European funding schemes. The creation of network activities including SME suppliers can be a useful tool to strengthen their market position.

3. EASN link to the Industry

The EASN objectives shall serve to promote the development of science and research and its application to aeronautics and aerospace, spreading knowledge to the industry. In order to achieve this aspect of industrial application EASN has to establish a strong link to the European Industry. Based on the existing EASN offer to its members and to the European R&D community a number of activities are defined that seem well suited to establish such strong link.

3.1. The EASN offer

EASN Membership

EASN is open for SMEs and Industries to become Associate members, giving full access to the benefits of such membership. In particular, this is the case for

- Individuals from SMEs and Industries, who are active in aeronautical research activities and cooperate with the academia, and
- Entities such as SMEs and Industries subscribing to the EASN objectives.



Being a member of EASN opens the door to bilateral and multilateral international cooperation in Aeronautics. EASN provides the means for locating partners for research activities of common interest, the preparation of joint projects as well as partnerships in student exchange programs. Enrolment in the EASN database also allows for the EASN members to be visible to the national and international communities in academia, industry and major research organizations and also the ability to search and locate cooperation partners according to their geographical location and areas of expertise. The active participation in the EASN Interest Groups leads to the creation of new and efficient partnerships.

EASN Conference

EASN is organizing a yearly conference which has been established as a major European dissemination event. The conference typically includes key note speeches and round table discussions, also with key-figures from industry. It offers thematic sessions and gives a platform for collaborative research projects in order to disseminate the project results and achievements. The EASN conferences are structured in a way to enhance interaction between the participants and present an excellent opportunity for networking and creating new synergies for future collaboration. Together with the Council of European Aerospace Societies (CEAS) it has been decided to merge the EASN conference with the CEAS conference to thematic joint EASN-CEAS Conferences every second year. This may even more increase the conference impact and networking opportunities for the participants.

EASN Workshops

In addition to the annual conference EASN is organizing thematic Workshops. While in general these Workshops achieve the same goals as the Conference, they are aiming at a smaller but at the same time thematically more focussed number of participants. These Workshops are open to all EASN members.

Proposal of European R&D priorities to the EC

During the preparation phase of European Research Frame Programs EASN is one of the stakeholders providing input for the definition of long-term research priorities. While this activity is promoted through the EASN BoD and EASN-TIS, all EASN members are invited to participate in establishing this input.



Support in establishing collaborative projects

In the past EASN has proven that on the basis of its European network of individual, institutional and associated members it is in a position to offer support in establishing European collaborative project as well as in composing competitive proposals for specific calls.

3.2. Proposed EASN Activities

In the following a number of activities are proposed, linking the above listed EASN possibilities to the needs and expectations of the R&D community in Industry and SMEs:

Emphasize EASN Associate membership for SMEs and Industry

A small number of SMEs and Industries are/have been Associate members of EASN (e.g. ALTHOM GmbH), most likely due to a participation in an EASN Conference which is linked to a one year membership. It seems that after this one year period the membership is not extended (e.g. Piaggio, TAI [tbc]). The benefits of an EASN membership shall be emphasized to these Associate members, e.g. with a small leaflet, in order to create a larger “industrial base” within the EASN members.

Establish close contact to ASD / ASD-EGAMA

EASN may be interested in a sustainable – potentially formalized – collaboration with the Industry representatives, i.e. ASD in general and ASD-EGAMA in particular for the General Aviation industry. EASN should aim at defining areas of common proposals with these industry representatives. In addition, regular meetings with the individuals in charge of R&D within these organizations may prove to be fruitful.

In this context it may also be useful to regularly offer the EASN newsletter as a forum to Industry leaders.

Strengthen the cooperation with EACP

EASN has established a MoU with EACP, a partnership between the European aerospace clusters with a focus on SMEs. In strengthening this cooperation, e.g. through regular meetings with the representative or common proposals, EASN can intensify the link to European SMEs.

Invite Industry to EASN Conference and Workshops

Already today industry is invited to give key note lectures during the EASN Conference and to actively participate in the sessions and workshops. This activity can be further expanded in order to achieve a strategic link with key Industry representatives in the long term.



Active Support to Conferences and Events organized by Industry

In order to further strengthen the contact between EASN and the Industry representatives, EASN should participate on ASD conventions on a more regular basis. This is also the case for other events organized by industry such as round table discussions during the major air shows or similar events.

Encourage Industry participation in collaborative European research activities

When encouraging collaborative European research activities, EASN shall actively address potential industrial partners who reasonably could participate to a call. Ideally EASN associate members would be preferably contacted in such cases. On the other hand, with a strong link to industry, EASN is in a position to identify topics of interest to OEMs and SMEs and on this basis organise calls for cooperative research activities within the EASN members.

An issue in collaborative research between industry and academia is the different view on the protection of Intellectual Property (IP) rights: while academia is in favour of sharing the results of research and technology development with the aim to advance science and progress, industry would prefer to/has to protect the R&T results in order to stay competitive outside as well as within Europe. During the establishment of collaborative research activities EASN could provide cooperation models well-suited to balance between the diverging interests with respect to IP.

3.3. EASN Terms of Reference

From the status and proposed activities listed above, the following terms of reference are derived for the strategic orientation of EASN:

- Extend the scope of EASN research activities by including undertakings like SESAR, EDA, space.
- Facing fragmentation of aeronautical community in Europe through
 - a) conferences
 - b) journals
 - c) position papers
 - d) connection to clusters (EACP etc.)
 - e) common CSAs
- strengthen links to the big OEMs
- serve as a strategic partner of SMEs and develop to a "virtual" R&D department for SMEs
- refresh EASN's regional structure
- extend to education related issues by
 - a) providing continuing education and training on demand



- b) implementing the outcome of PERSEUS
- c) introducing student awards, competitions etc.
- d) introduce EWADE and READ like activities
- Establish an Advisory Industrial Board

4. Glossary

ASD	Aerospace and Defence Industries Association of Europe
BoD	Board of Directors
CEAS	Council of European Aerospace Societies
CSA	Coordination and Support Action
EACP	European Aerospace Cluster Partnership
EASN	European Aeronautics Science Network
EASN-TIS	EASN Technology Innovation Services
EC	European Community
EDA	European Defence Agency
EGAMA	European General Aviation Manufacturers Association
EWADE	European Workshop on Aircraft Design Education (CEAS)
GA	General Aviation
IP	Intellectual Property
MoU	Memorandum of Understanding
OEM	Original Equipment Manufacturer
PERSEUS	Promoting Excellence & Recognition Seal of European Aerospace Universities
R&D	Research and Development
READ	Research and Education in Aircraft Design
SESAR	Single European Sky ATM Research
SME	Small and Medium Enterprises