

“Cooperation Potential for SMEs in Aeronautics Research Projects”

Minutes of the Panel Discussion as part of the conference on
„Future Trends for Digital ATM Communication Technologies“
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Keepers of the minutes: Vera Ellegast, Sarah Krautsack

Panel Members:

Carl-Herbert Rokitansky (Universität Salzburg)

Olaf Dlugi (SESAR Executive Committee Chairman)

Werner Langhans (ERA Systems Corporation)

Hans-Jörg Lotter (infoWERK GmbH)

Johannes Prinz (Frequentis AG)

Moderator: Christoph Rihacek

Mr. Rihacek: What is the impact of the economic crises on SESAR especially on the time schedule and the objectives?

Mr. Dlugi: In SESAR the first party involved is the Joint Undertaking (JU). The JU has the legal responsibility to fulfil the tasks. The crisis doesn't change anything for them. The objectives are to fulfil. The political delay is more serious. This delay doesn't influence the content but the planned timescale. The provisional council didn't vote in favour of SESAR.

Mr. Rihacek: To which extend is the geographic scope of Austria influencing co-operations in R&D?

Mr. Lotter: Over the past years the Austrian Research Promotion agency improved their communication and information channel very well, which helps a lot for networking and getting contacts easily.

Mr. Rihacek: What are the challenges and success factors of SMEs in cooperation? What can help them to be more successful?

Mr. Langhans: The challenges are that they stand against the large industries, which often form monopolies. In SESAR it is very difficult for SMEs to get the respective SESAR funding, but lead companies e.g. Austro Control, FWAG, AUA could develop incubator mechanisms on national level. An important success criterion in research is the applicability of RTD. The results have to be workable and usable and should lead to an operational and thus commercial benefit for the users and customers of the developments, otherwise they will find no market and will cease.

Mr. Rihacek: What are the difficulties for Universities to enter RTD cooperative projects?

Mr. Rokitansky: There aren't many difficulties. The university succeeded in what they were interested so far. The continuation of projects is very important. In national research funding programmes the difficulty is the low funding rate for universities. On European level the funding rate for research projects is 100% or 120%, but it is not the same for national programmes.

Mr. Rihacek: From your point of view, what are the success factors for SMEs in cooperation with large companies in funding projects?

Mr. Prinz: Due to the nature of funding, the strategic view is an important element to consider. Often on European as well as on national level SMEs don't have a five year plan; the devotion to a certain goal is missing, often they do not know where to end up. So SMEs need a clear vision in order to be successful.

Mr. Rihacek: Do SMEs need certain certification in order to be successful?

Mr. Langhans: First of all "success" has to be defined. Quality management is largely required, sometimes Environment Management will be a help nowadays, other "certifications" are not needed, unless an SME would like to start and provide ATM services to airspace users. Certain industry standards, (e.g. SES-Requirements, EUROCAE, MIL-STD, etc.) need to be fulfilled for certain Hardware and Software developments to actually be sold as a product on the aviation market.

Mr. Prinz: Certification isn't required to enter RTD projects, but passion, devotion understanding.

Mr. Rihacek: On which topics so called lead projects (Leitprojekte) can have a focus on?

N.N.: Such projects could focus on trials with technology, operation or validation

Mr. Langhans: Such projects could also focus on mechanisms of better education in different organisations and establishing skills required for more effective and efficient international interaction, paper writing and requirement definition.

Mr. Dlugi: The famous CDM is necessary, not only to make the trajectory happen. All players in Austria have to be brought together, sit down, try to understand the way of thinking of each others and try to educate each other.

Mr. Rihacek: Is it a must that all five players have to be in the consortium?

Mr. Langhans: This makes sense to me, because this is the only way to involve all stakeholders and create buy-in to the potential developments right from the beginning to achieve a higher RTD success rate; in this way it is a kind of insurance for the RTD money being spent

Mr. Fakoussa: Before starting the project, the leading project people have to be around one table and first need to understand each other. But therefore they have to be taught first, how to talk and HOW to listen to

really understand the other viewpoint.

(There was a project on CDM@airports 5 years ago, but finally the airport of Vienna didn't keep its commitment to set up a lead project.)

Mr. Dlugi: In the end if there is a political will, it is possible to set up such a lead project. If BMVIT wants Austria as one consortium, the stakeholders have to act this way. Common effort is needed.

Mr. Rihacek: Which measures can be taken to develop high qualified human resources for future needs?

Mr. Langhans: Two pillars are needed. On the one hand the training itself and on the other hand an innovation friendly environment within the companies Besides equipment training, increased emphasis on soft skills, languages and technical writing are needed as well as know-how to work in international projects.

Mr. Rihacek: What could be the areas of interest for national cooperative projects in ATM?

Mr. Prinz: Enterprises are individual organisations with individual goals. For cooperation one single goal is needed. National capability can be increased by bringing organisations together to form that capability. Therefore a critical mass is required.

Mr. Rihacek: What are the Human Factors issues in SESAR?

Mr. Dlugi: For a lot of people paradigm shift mean a threat and a risk. There are some people who see SESAR as a threat and not as a chance Pilots are used to change management, but controllers will have to see their job description differently as well. If they think, that SESAR could be a threat, it is because of misunderstanding. Misinformation is a big thread to SESAR.

N.N.: SESAR for universities no chance seen to enter.

N.N.: ASTERA is one crack in a big wall, where one could see a little chance to enter into SESAR

N.N.: The risk of SESAR is, that it is not open to the scientific community, it is only open to the members of board.

Mr. Dlugi: The organisational Part of the SESAR development Phase is finalised. In four weeks the contracts with the members are going to be signed. There are contracts for certain work packages or sub-work packages. SESAR is still looking for qualified entities for subcontracting to do the jobs required. 250 tasks found a home, but just a home, because 60-70% of SESAR has still to be placed to expertise. The members of the JU are responsible for putting the process in place and for the beginning until flying, but other expertise is still needed.

Mr. Prinz: The question is justified. Phase 2 of the SESAR Joint Undertaking looks similar to Phase 1, but all the provisions that are necessary for subcontracting others have to be financed by the member itself. Europe is quite underrepresented in 16 organisations being

member of the SESAR JU. In the future it will be clearer where there is a lack of expertise.

N.N.: Why should members subcontract Austrian SMEs, e.g. if they have to pay them themselves?

Mr. Dlugi: By subcontracting large industry could ensure that there are many different players for certain tasks and make them compete. SESAR can't be a technology driven project. SESAR is by definition an airspace user driven project, which means operational, "user owned". To achieve a subcontractor status, once the 16 signatures (15 members + Eurocontrol) have been made, the list of members will be on the table, and the industry can contact the Work package owners and offering them their expertise. The current co-financing scheme makes subcontracting difficult. There are some public rules, which have to be ensured by the committee. The Choice is taken by the industry if they subcontract partners.

Mr. Prinz: Frequentis AG is willing to involve SMEs. He asks whether the open 50% can be supported by the TAKE OFF Programme. It would be great to get some momentum on this edge from the BMVIT.