

Selected Remarks about Smart AEROVAN as a Candidate for L2 Project

FP7 topic AAT call at 2011

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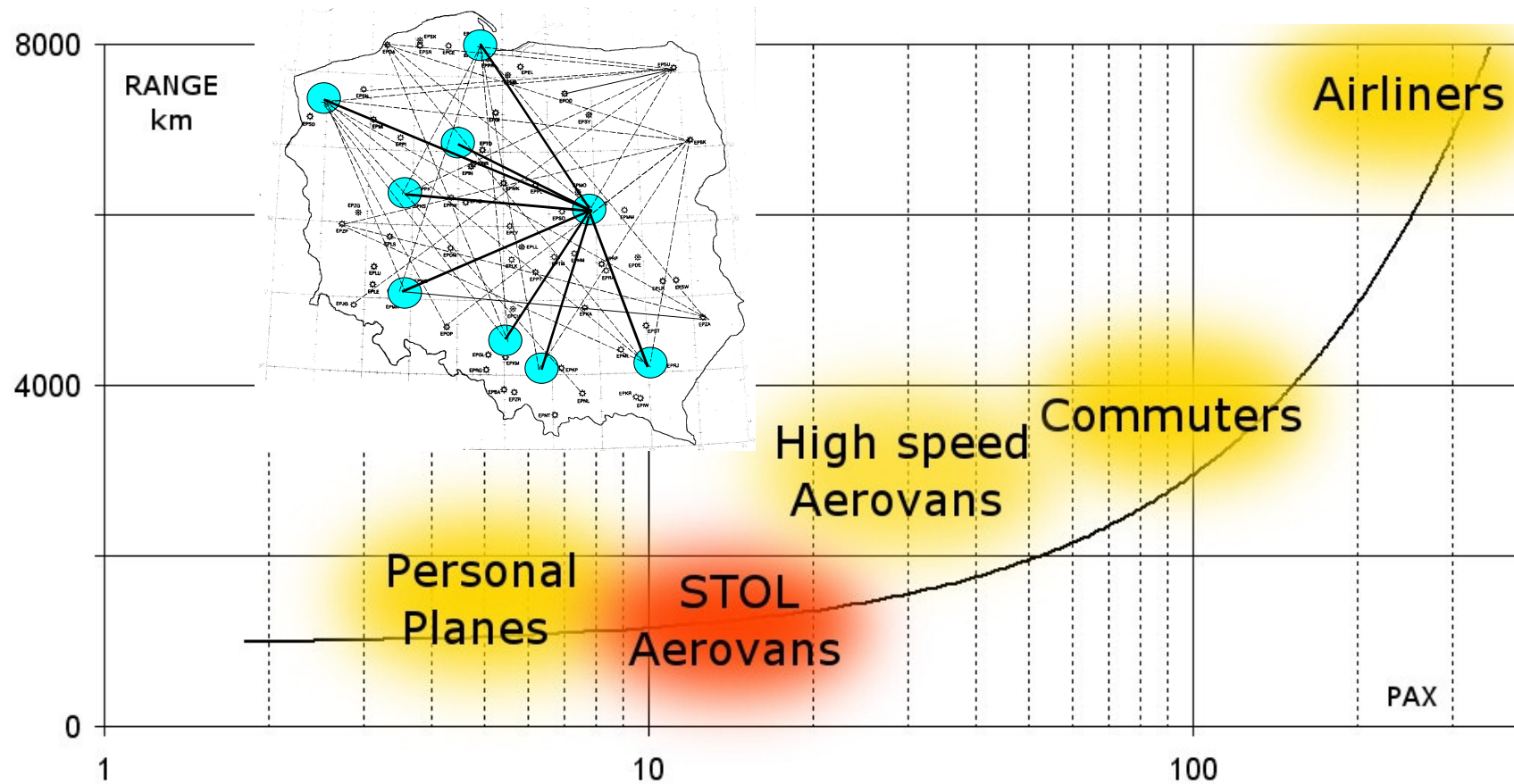
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Outline of presentation

1. **Role of AEROVAN** in passenger transport system
2. Motivation for integrated project of AEROVAN class
3. **Overcoming the weaknesses of current configurations**
4. Consortium
5. **Structure of the project**

Components of the passenger air transport system

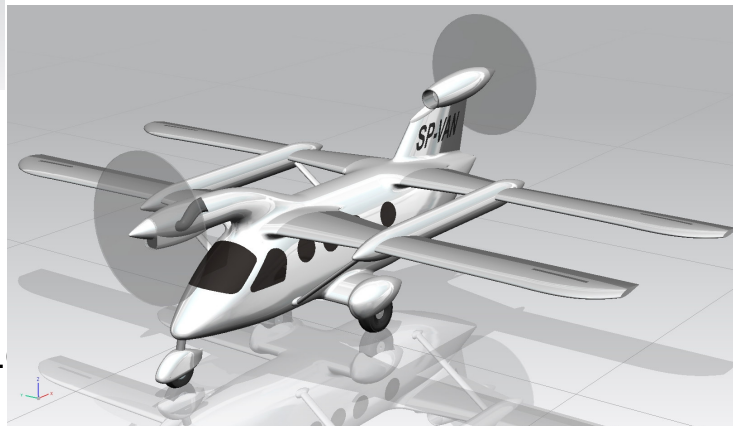
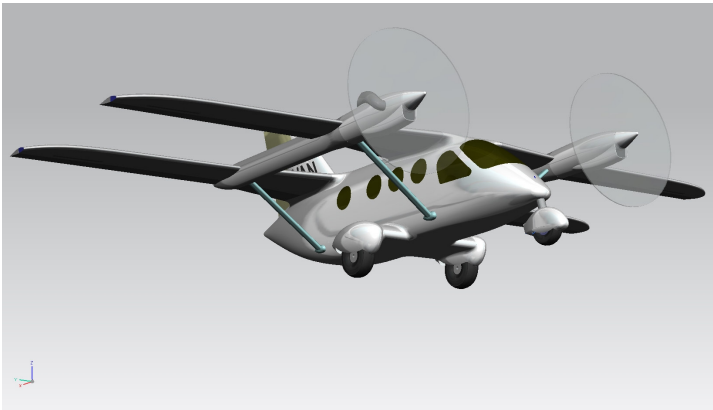
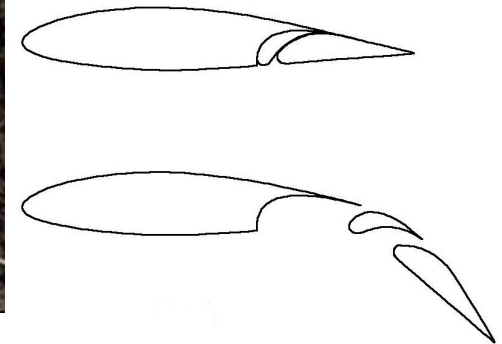


Motivation – why just AEROVAN ?



1. In the past the producers of large airplanes, helicopters and engines were supported with European money in their research to become world leaders. ***Now it is time for change!*** - new member states must play more important role in the category of short range aircraft of lower capacity;
2. AEROVAN L2 might be a downstream RTD, multidisciplinary, focused on integration and validation at system level project;
3. AEROVAN L2 project might bring together partners from all of the Europe industry, research organisationn and academia with the essential role of new member states: Poland, Czech Republic, Romania etc;
4. The so-called Flexi-Bird tool (scaled, flying model) could be used as a proof-of-concept (this tool was developed within NACRE project);

Multidisciplinary optimisation at system level - overcoming the weaknesses of current configurations



Goals:

$V_{\text{landing}} \approx 75 \text{ km/h}$

$V_{\text{cruise}} \approx 350 \text{ km/h}$

Low noise

Potential partners in the consortium



Universities

- | | |
|--|----------------|
| 1. PW (Warsaw University of Technology) | Poland |
| 2. BUT (Brno University of Technology) | Czech Republic |
| 3. CUA(Cranfield University Aerospace Engineering) | United Kingdom |
| 4. Stuttgart University | Germany |

Industry

- | | |
|---|----------------|
| 5. Hoffmann | Germany |
| 6. Grob | Germany |
| 7. Piaggio Aero Industries SpA | Italy |
| 8. SOCATA | France |
| 9. IAI | Israel |
| 10. BIRD | Israel |
| 11. Aircraft Industries (former LET Kunovice) | Czech Republic |
| 12. PZL-Swidnik | Poland |
| 13. SAGEM | France |

Research Institutes

- | | |
|--|----------------|
| 14. ARA, Aircraft Research Association Ltd. | United Kingdom |
| 15. IoA (Institute of Aviation) | Poland |
| 16. VZLU (Vyzkumny a Zkusebni Letecky Ustav) | Czech Republic |
| 17. ONERA | France |
| 18. NLR | Netherlands |

Z.Goraj, Smart AEROVAN Concept



Draft scheme of the WP-ies in the AEROVAN L2 project

