Achievements and challenges of SESAR: current status and future perspectives.

Industrial and regional achievements and perspectives.

Krzysztof Banaszek, President of the Polish Air Navigation Services Agency - an associate partner to the member of the SESAR Joint Undertaking

HL SES Conference - Warsaw, 28.11.2011
# General Information

**Baltic FAB geographical location:**
Nothern -Eastern Europe

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baltic FAB dimensions :</td>
<td>410 126 sq. Km</td>
</tr>
<tr>
<td>Population (LT+PL) :</td>
<td>41,5 mln.</td>
</tr>
<tr>
<td>Total Traffic (LT+PL in 2009) :</td>
<td>774 000 MVS</td>
</tr>
<tr>
<td></td>
<td>370 000 flight hrs</td>
</tr>
</tbody>
</table>

**ACCs :**
- Warszawa ACC
- Vilnius ACC

**Total employment:**
- 2015
- Operational staff & technical support: 1658
- ATCOs on OPS duty: 479
ATM Systems / Investment
ANSP view

Polska Agencja Żeglugi Powietrznej
Polish Air Navigation Services Agency

Cooperation with INDRA as SJU Associated Member

PANSA current situation

i-TEC SESAR PANSA future plans...

ANSP view
PANS looks closely to the founding mechanism (EU founds and/or bank loans) when building its investment plans based inetr alia on European programmes trying to find proper/acceptable balance between requirements set in the regulatory framework and implementation plans based on SESAR ATM MP.
SESAR and iTEC...

...natural evolution for Pegasus-21 ATM system
PEGASUS – 21 Development - future plans

**P_21**
- New ATM system PEGASUS implementation (March 2012)
- Continue the analysis of the ATM system functionality and SESAR Implementation Packages requirements

**i-TEC**
- Decision to „follow” the i-TEC concept and functionality
- PEGASUS evolution programme
- PEGASUS upgrade and integration

**SWIM**
- Join to the integrated European ATM network
- Fulfill the SESAR Concept of Operation, Architecture and Technologies
Polish Air Navigation Services Agency as a Associated Member to SJU

- ATC Global 2010: working discussion PANSA & INDRA (main ATM System „Pegasus-21” Contractor for Poland) about possible scenario „how to join to SESAR family?”
- March 2010: meeting in Madrid – initial approach: PANSA as a Sub-Contractor will be represented on SESAR forum by INDRA as a SESAR Member
- April/May 2010: INDRA & PANSA join activities to prepare proposal for SESAR JU
- 26 May 2010: INDRA & PANSA completed full set of the required documents
- **19 July 2010**: PANSA became a SESAR JU Associated Member
PEGASUS – 21 implementation fulfills several requirements laid down in the IP1 of ATM MP:

- **AOM-0801** - Flexible Sectorisation Management
- **AOM-0802** - Modular Sectorisation Adapted to Variations in Traffic Flows
- **CM-0201** - Automated Assistance to Controller for Seamless Coordination, Transfer and Dialogue
- **CM-0202** - Automated Assistance to ATC Planning for Preventing Conflicts in En Route Airspace
- **CM-0203** - Automated Flight Conformance Monitoring
- **CM-0801** - Ground Based Safety Nets (TMA, En Route)
and will in the next years (next SW version):

AOM-0401 - Multiple Route Options & Airspace Organisation Scenarios
AOM-0402 - Further Improvements to Route Network and Airspace incl. Cross-Border Sectorisation and Further Routeing Options
IS-0204 - Facilitated Aeronautical Data Exchanges through Digitalised Information
IS-0401 - Automatic Terminal Information Service Provision through Use of Data-link
AUO-0301 – Voice Controller-Pilot Communications (En Route) Complemented by Data Link
The environmental impact of CDAs and CCDs

There are vertical flight efficiency benefits from the introduction of Continuous Descent Approaches (CDAs) and Continuous Climb Departures (CCDs) at Vilnius and Kaunas airports resulting in a reduction of around **1 300 tonnes** of CO2 emissions in 2015, growing to **3 250 tonnes** in 2030.

Future: Inter FAB CDA/CCD – Poland-Slovakia-Hungary cooperation
Baltic FAB benefits identified and SESAR = technological enabler

**Major benefits (annual benefits > €1m)**
- Provision of ANS in NE Poland delegated to Vilnius ACC
- Common SUR procurement, planning and maintenance
- Convergence of ATM systems
- Joint MET service provision
- Saving costs by sharing best practice

**Minor benefits (annual benefits < €1m)**
- Joint provision of ATFCM/FMC functions
- Coordinated contingency provision
- Seamless operations between FIRs
- Continuous descents and climbs at Vilnius and Kaunas
- Joint provision of Search and Rescue (SAR) coordination
- Common NAV procurement, planning and maintenance
- Common approach to COM system upgrade and data link deployment
- Ground-ground data link
- Flight calibration
- Cooperation in safety
Thank you for attention!

http://www.ans.lt/
http://www.pansa.pl/
http://www.balticfab.eu/