

LFV Data link AIS activities

RTCA/EUROCAE/206/WG 44&53

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Agenda

- EGOA project
- Presentation of CDTI software
- Forthcoming work
- Proposals for the meeting
- Questions

EGOA project (www.egoa.se)

Enhanced General aviation Operations by ADS-B

Objectives:

- A validation and pre-implementation testbed to evaluate the possibilities using ADS-B and FIS-B
- To integrate ADS-B and FIS-B experience in the day-to-day work for both Air Traffic Controllers and GA pilots by upgrading ATC equipment and equipping a large number of GA aircraft within a well-defined area (Östgöta TMA)
- ...after the end of the EGOA project the developed airborne and ground infrastructure will continue to serve the and be available for other ADS-B and FIS-B related projects.

EGOA project (www.egoa.se)

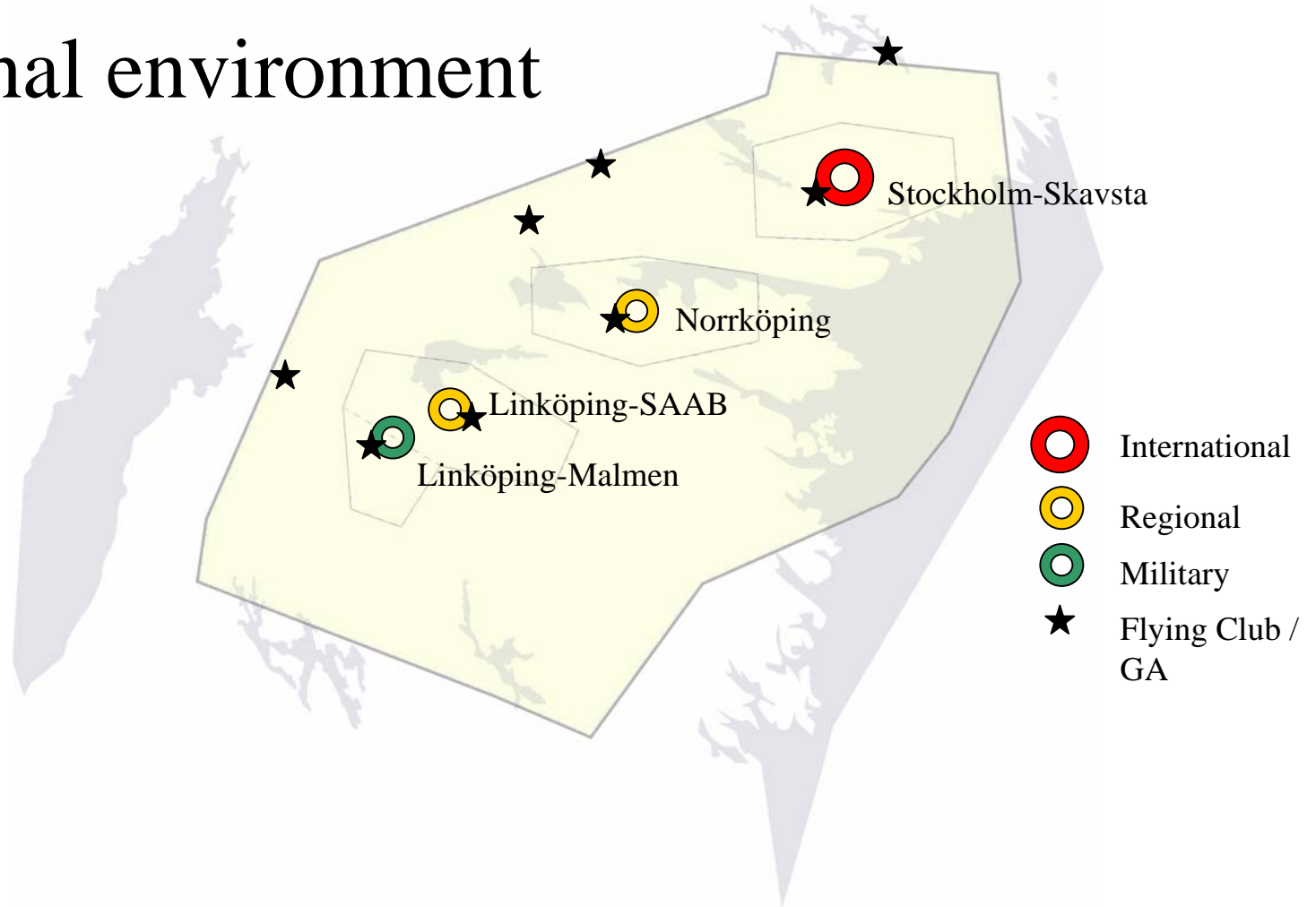
Three year project, 2003-2005

Three phases:

- Phase 1: ADS-B out
- Phase 2: ADS-B in & out
- Phase 3: FIS-B, ADS-B in & out

EGOA project (www.egoa.se)

Operational environment



EGOA project (www.egoa.se)

FIS-B issues addressed

- Controlled airspace changing over time makes it hard for not-everyday-pilots to get a clear view of the airspace.
- Pilot awareness of current weather situation at airport.
- One ATC Tower sometimes controls two airports (Linköping-SAAB and Linköping-Malmen)
- ...additional surveillance/ADS-B issues

EGOA project (www.egoa.se)

Equipment

- Data link transceivers



- RTX6040, combined 8,33 Voice and VDL Mode 4 data link radio

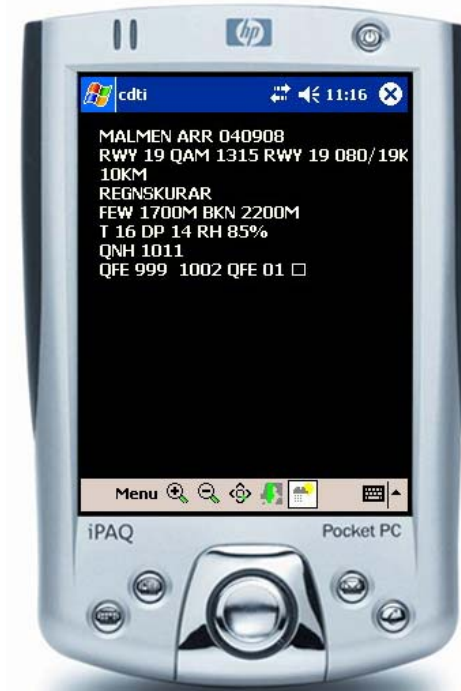
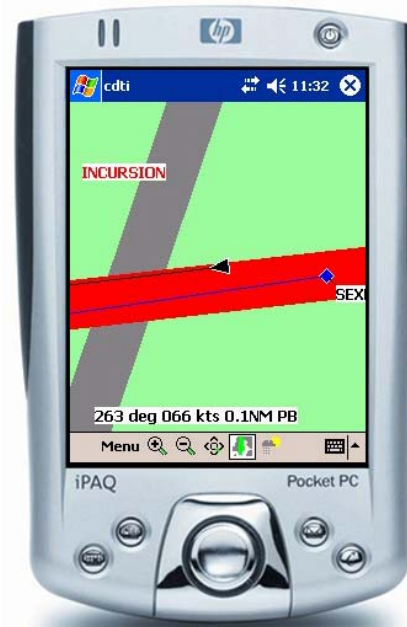
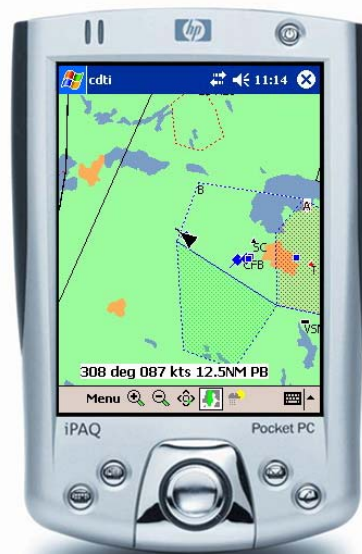


- VDL4000/GA, VDL Mode 4 data link transceiver

EGOA project (www.egoa.se)

Equipment

- Cockpit Display of Traffic Information (CDTI)



EGOA project (www.egoa.se)

Services addressed

- ADS-B

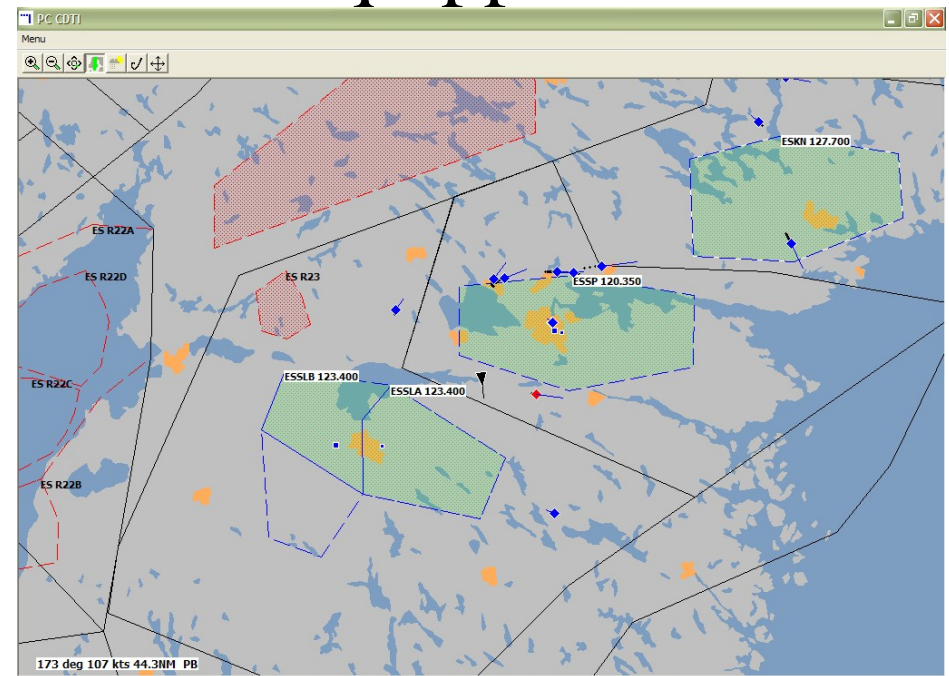
- Traffic situational awareness (ATSAW)
- Runway incursion

- FIS-B

- Met report (Text format)
- Temporary Segregated Areas (Graphical format)

Presentation of CDTI software

- Log file from joint EGOA and CASCADE demonstration and workshop on October 26
- 16 participating ADS-B&FIS-B equipped aircraft
- FIS-B applications:
 - Met report (text format)
 - Temporary Segregated Areas - TSA (graphical presentation)



Forthcoming work

Status

- Project in Pre-study phase
- Cooperation with EUROCONTROL
- Project objectives:
 - In the field of aeronautical information provide benefits for the users, the users considered to be airlines, general aviation, airports etc. The project should aim to achieve these benefits by increased automation all the way from data provision, data distribution to data presentation.

Forthcoming work

- **Project objectives** (continued from prev. page)
 - Focus on broadcast services and graphical presentation where appropriate. Examples of such services could be (list not exhaustive):
 - NOTAM
 - Aerodrome Mapping Services
 - Other FIS-B services such as:
 - MET REPORT
 - Temporary Segregated Areas (TSA)
 - Combining FIS-B information with ADS-B information, 4D trajectory information

Forthcoming work

- **Project objectives** (continued from prev. page)
 - Use available standardised technology, exchange formats and data formats where available
 - Provide a “joint test bed” for EUROCONTROL and LFV to verify and validate the services addressed in the project

Proposals for the meeting

- Appendix with a list of standardised Data links, Exchange formats and Data formats in FIS MASPS. Referring to their respective standard document.
- Work done/findings by the forthcoming project included in relevant RTCA/EUROCAE documents (FIS MASPS, etc)

Questions

