German Air Force Headquarters

Cross Domain Information Exchange during DEU Exer „Timber Express 2018"

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TDL Manager

Introduction

- ➢ DEU Air Force since 1993

- ➢ 1993 – 2003 CRC Sweetapple, Surveillance Section

- ➢ 2003 – 2015 German Air Operation Command

  - Branch Info Management & DEU Air Force TDLMC

- ➢ 07´2015 German Air Force Headquarters, TDL Assistant

Exercise Setup

Challenges

Benefits

Summary

Questions

Exercise Setup

March 26th –29th — **Start set-up** (National)

April 03rd – 06th — **Main set-up**

April 09th – 20th — **Live Link / Experimental Phase**

Exercise Setup

1. **Live Link 16**
   – Use of NLD Exercise Frisian Flag (FF) 2018
   – Datastream (JREAP-C) to Hanscom Air Force Base (HAFB), USA
   – Secure Gateway (Infodas)
   – Training for SMEs
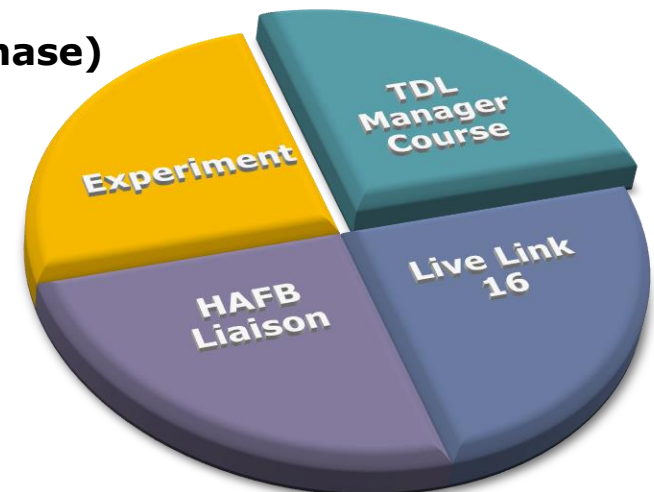
2. **Experimental Phase**
   – Link 16, Link 22, VMF, CESMO, JREAP-C, Common Operational Picture, DaCAS Gateway, Helo SIM
   – Viasat, Tactical Communication Group, Northtrop Grumman, Hensoldt, Peraton, IBM Germany, Atlas Electronics, General Dynamics, Atheniem, Fraunhofer, DEU SpecFor, DEU AF JTAC, DEU Navy, Bundeswehr Cyber Security Center, DEU Technical Center for Information Technology & Electronics

3. **TDL Manager Course i.a.w. ADTLP 5.55 (Practical Phase)**
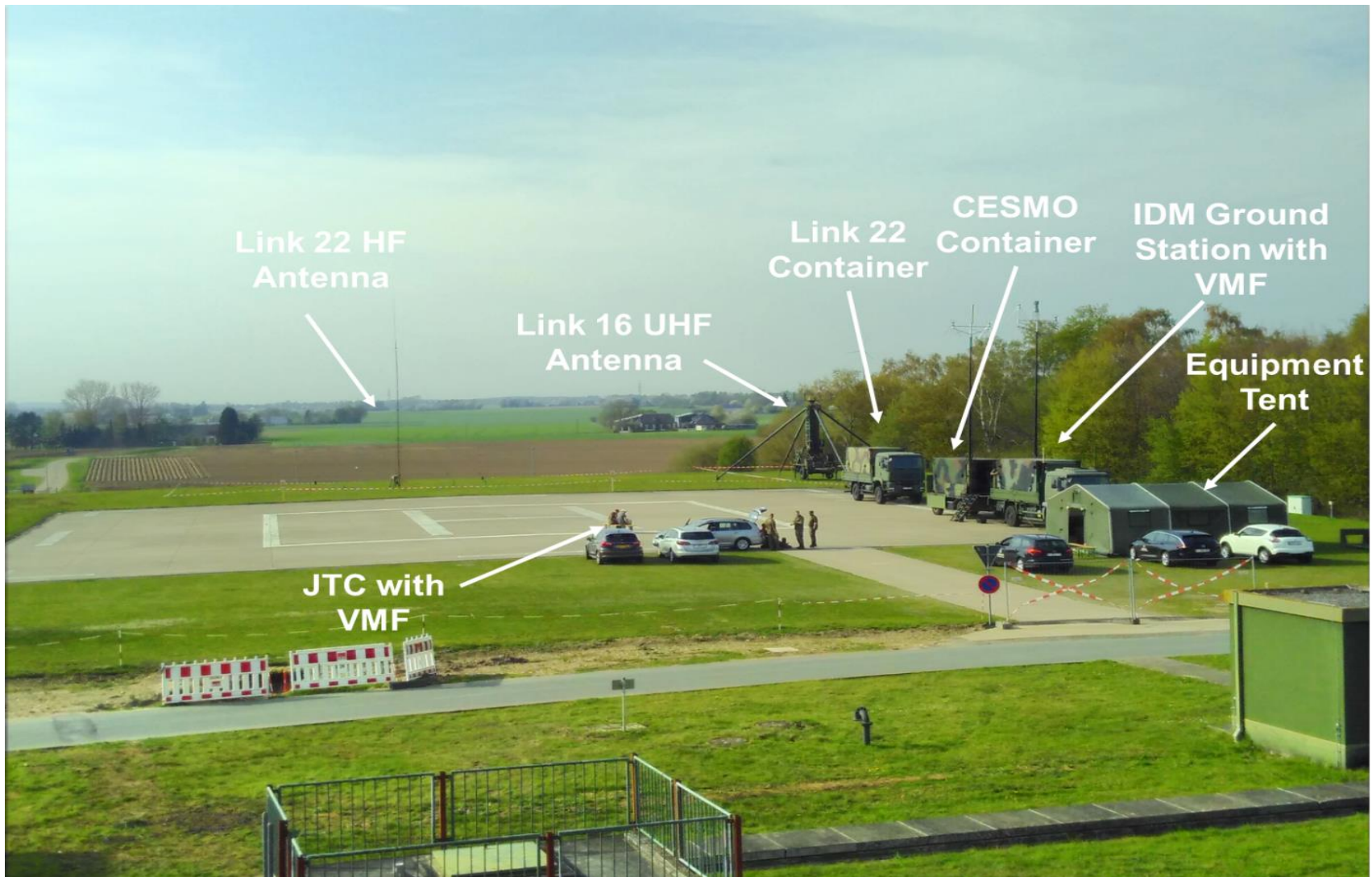   – 6 Participants (Army, Air Force, Navy)

4. **Policy „Strategic"**
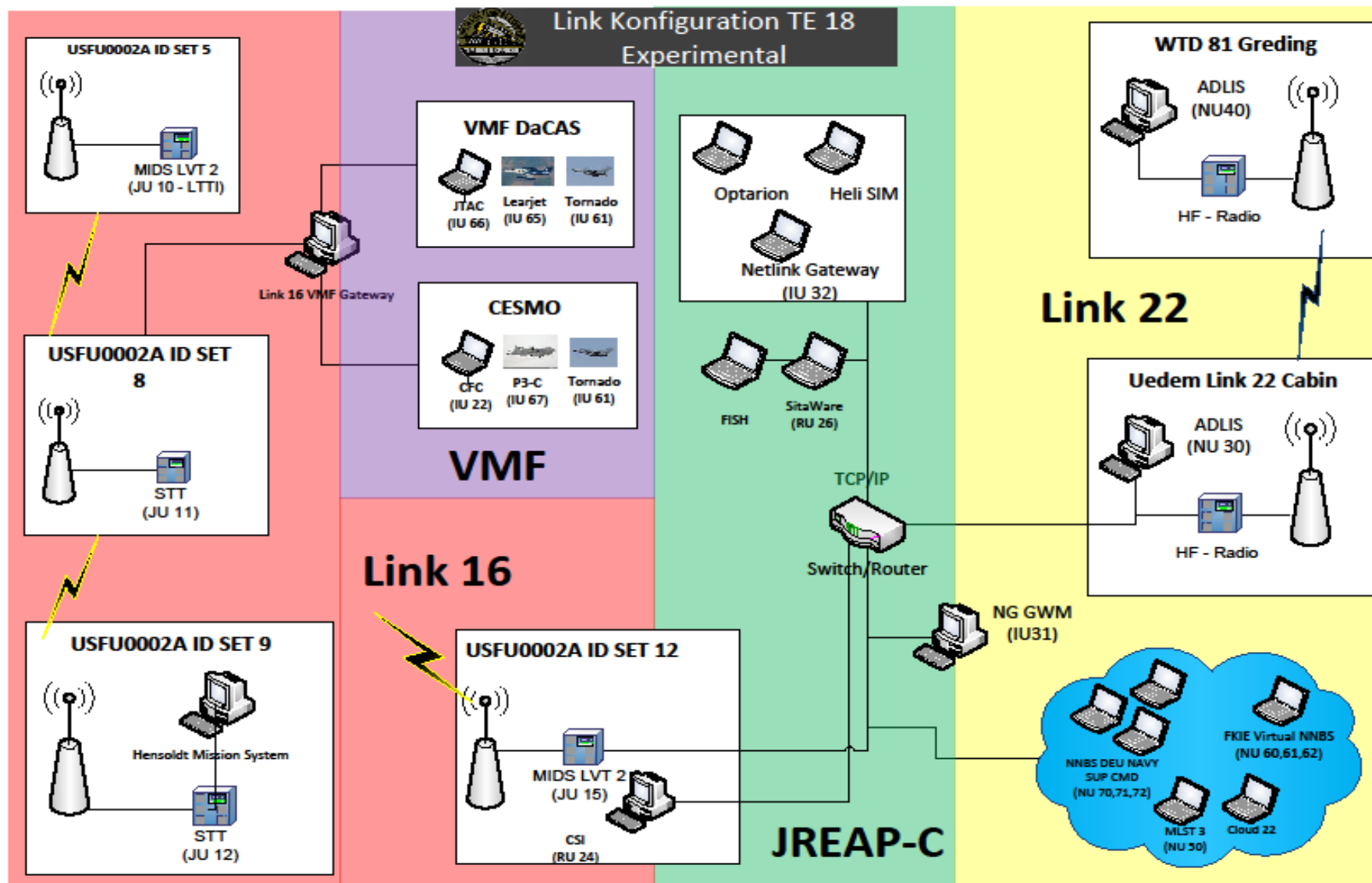   – „Liaison" HAFB

Exercise Setup

Link Konfiguration TE 18 Experimental

- Air Operations
- Information-Management
- Other Recognized Pictures
- Decision making processes
- Mobile COP
- Military Evacuation
- Mission Threads
- Communication Management
- CD&E-results: KD; Information environment
- TBD
- Information-space UN/EU/NATO
- Cyber
- Training
- Test-environment
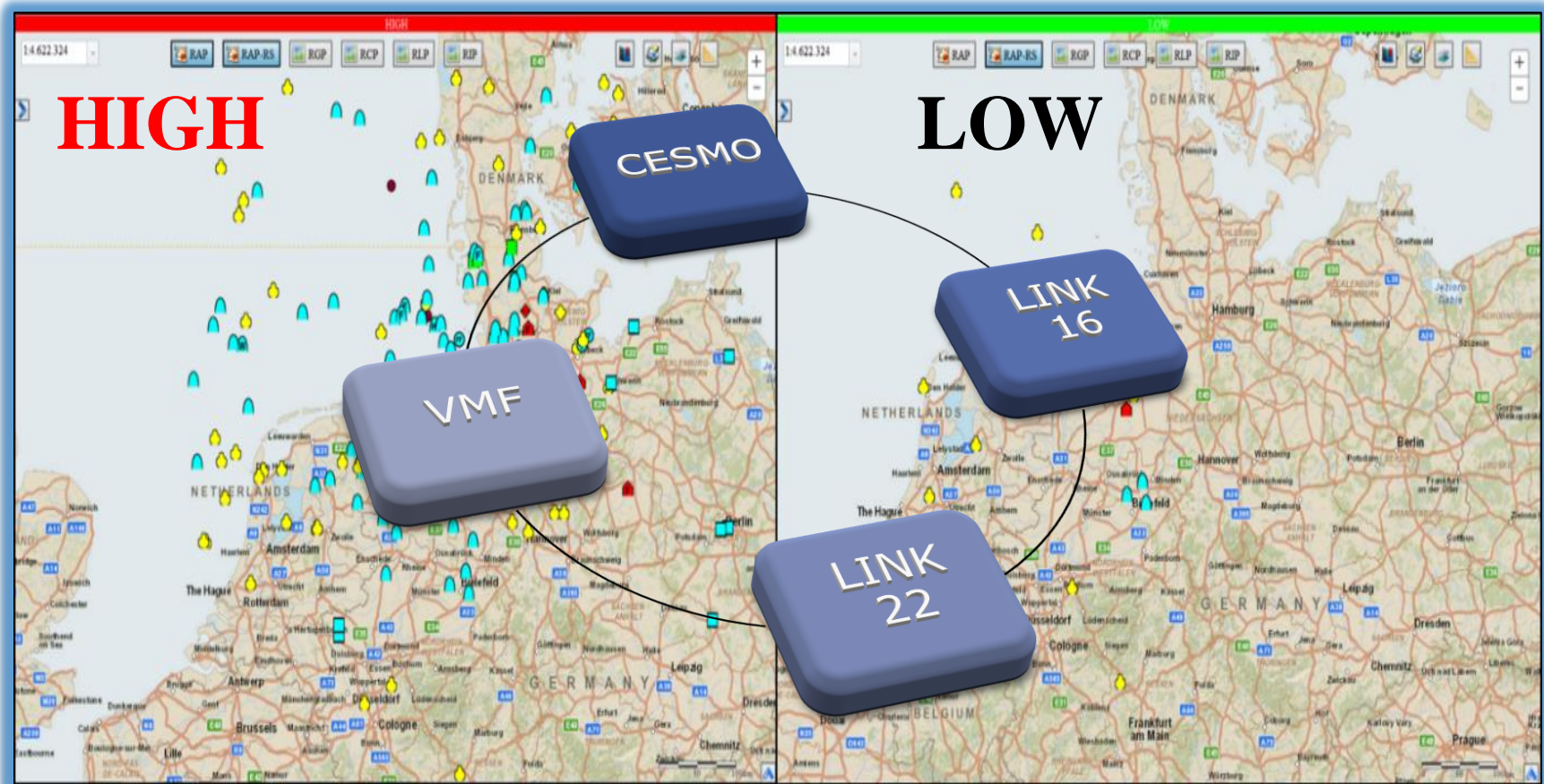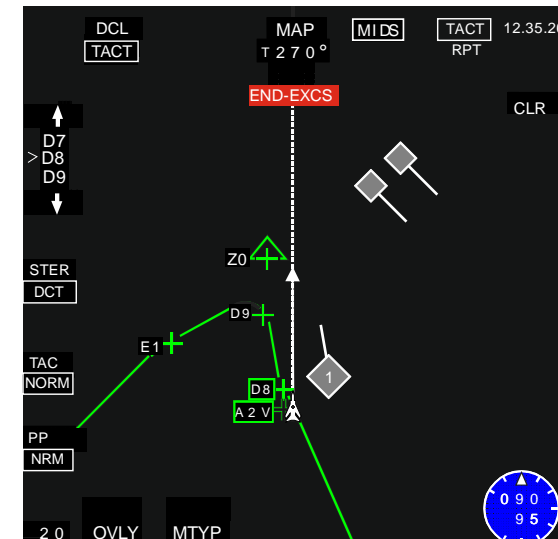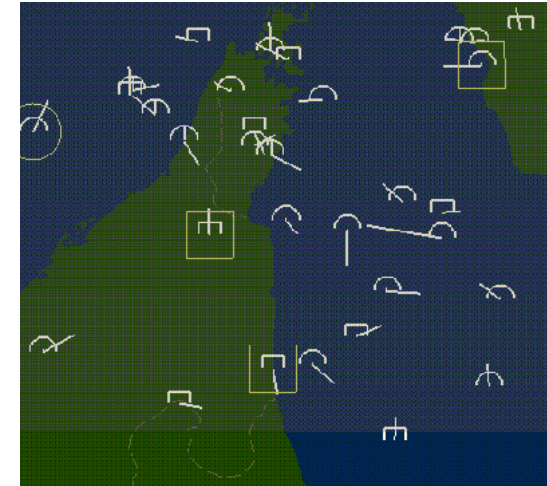
„Bring together multiple Data Link standards into „different" Domains"

Requirement: Structured Data Link

- "Forwarding" (transfer) Air Picture

  ➢ e.g.Target Information without

    Identification and Source

- Support by Co-operated ESM Operations

  or Tactical Air Reconnaissance
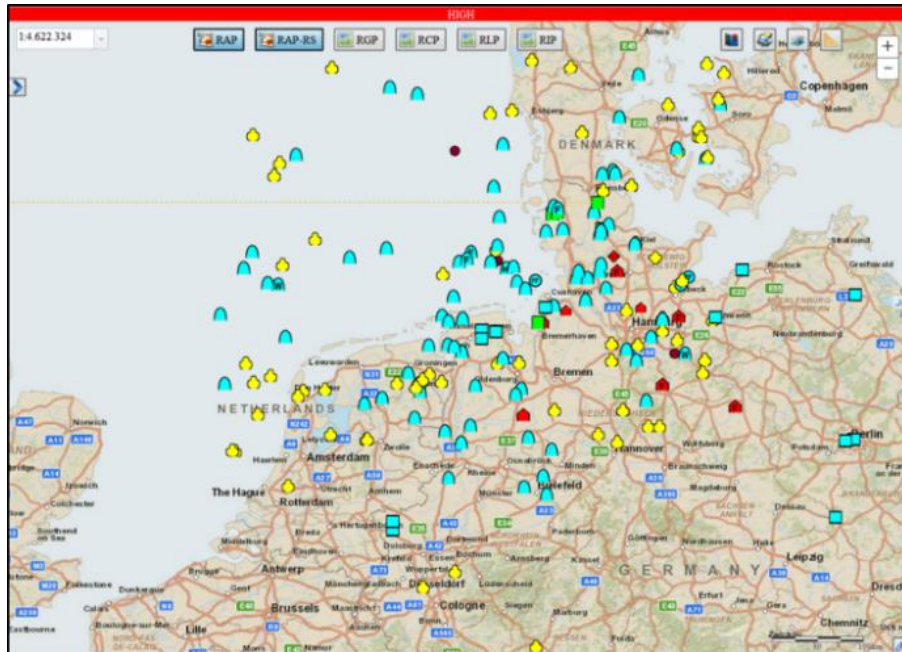
  ➢ e.g.Own Position (PPLI) and Special Point

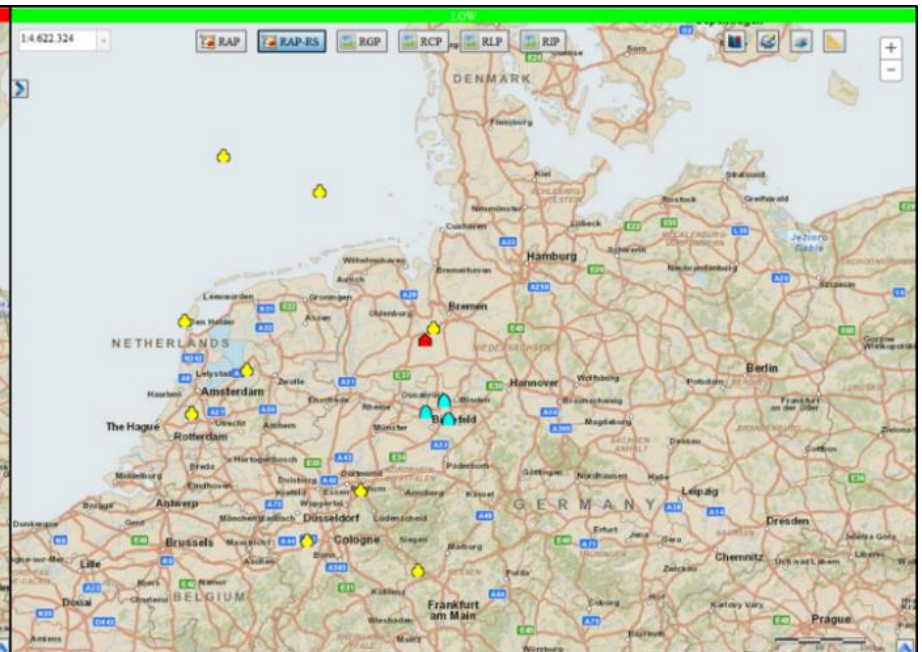# Visualization of L16 tracks in different security domains.

HIGH

- Display of all tracks based on J-messages, incl. PPLI.
- Complete air picture available in HIGH domain.

LOW

- Display of filtered air picture.
- Track information is not present in LOW network.

- ➢ **Enhance** operational awareness.

- ➢ **Provide** crucial operational information to users outside or different TDLs.

- ➢ **Improve** COP of all players.

- ➢ **Improve** knowledge of operators.

- ➢ **Improve/Establish** Interoperability.

- ➢ **Establish** a multi-Link architecture to exchange information of tactical data between Army, Navy and Air Force and Hanscom Air Force Base (HAFB), USA

- ➢ **Remote** control of DEU MIDS LVT out of HAFB via secure Internet connection

- ➢ **Integration** of Link 22

- ➢ **Forwarding** between Link 16, Link 22, VMF & CESMO

- ➢ **Integration** of experimental/simulation Systems, e.g. Helo SIM

- ➢ **Improve** knowledge of operators

- ➢ **Improve/Establish** Interoperability.

- ➢ **Graduation** of 6 DEU TDL Managers

- ➢ **Planning** for TE 19 in progress

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