

# AIR DEFENSE INTEROPERABILITY VALIDATION SYSTEM (ADIVS II)

## Interoperability Testing and Analysis with Automated Error Checking

### SIMULTANEOUS TACTICAL DATA LINK SUPPORT

ADIVS II simultaneously supports numerous tactical data links (TDL) including:

- Link 16 (Platform D and J interfaces) allows the operators to define which version of the STANAG 3, 4, 6, 7, and 8 to use on a unit-by-unit basis
- SIMPLE - Standard Interface for Multiple Platform Link Evaluation
- JREAP C - Joint Range Extension Application Protocol
- DIS - Distributed Interactive Simulation
- Link 22
- Link 11B

### AUTOMATED ERROR CHECKING

ADIVS II Data Reduction (DR) performs real-time automated error and rule checking of individual messages and message sequences. Real-time Illegal Message Sequence Alerts (IMSA) perform numerous checks including:

- Illegal and unrealistic values for message fields
- Time sequence checks
- Bad message length or word order
- ID inconsistencies along with IFF/SIF value checks
- Illegal Reporting Responsibility (R2) shifts
- Drop track messages from non R2 units
- Same track reported by different units
- IFF Difference from invalid reporting unit
- Position of track with respect to land/water not consistent with track identity

Messages flagged as Illegal, Undefined, or Disused values are highlighted inside DR. IMSA thresholds can be defined by the user.

### COMPREHENSIVE DATA EXTRACTION AND REDUCTION

The ADIVS II DR collects all TDL messages in real time and records them for future analysis and playback.

- Views of the data can be manipulated using extensive filtering and search capabilities
- Data is displayed according to the Multi-TDL Data Extraction Guide (DERG)
- Message counts are available based upon link, message type, and transmit/receive status
- All messages are time stamped using local, Zulu, or link received time
- Recorded information can be exported as CSV files

### REAL-TIME DISPLAY CAPABILITIES

The ADIVS II Situational Display (SD) presents a real-time display of the current tactical situation overlaid on maps.

- Tracks are displayed with a small definable Track Block
- Detailed information presented in a continuously updated Auxiliary Read Out
- The SD features user-definable levels of history, time-out values, filtering, etc., all of which can be saved as a profile and restored on any future run of ADIVS II

### BACKGROUND

ADIVS II is a Microsoft Windows®-based system that runs on commercial off-the-shelf hardware and has Windows 10 NATO security compatibility and German accreditation.

For more than 34 years the ADIVS II system has been used to provide situational awareness across the battlespace. ADIVS II is used during military exercises and in lab environments to validate concepts, procedures, and system implementations—essential to ensuring data link interoperability among participants for flawless exchanging of information.

### CONTACT US

To learn more about ADIVS II, contact [adivs@peraton.com](mailto:adivs@peraton.com).

