

# Product brief: SMD

## Sensor monitoring display

SMD enables ANSPs and radar manufacturers to monitor and analyse ATC surveillance data. Its quality assurance and diagnostic features are supported by integrated recording and replay capabilities. These features make SMD an indispensable tool for use at operational ATM facilities and/or manufacturers' test and analysis environments. It can be customised with additional features to perform in-depth analysis at various levels, including optional sensor simulation capabilities making the solution an ideal testbench for radar equipment manufacturers.

### Key features

#### Technical air situation display

for the depiction of surveillance data and presentation of detailed target information received from radars, sensors, trackers, and ADS-B/MLAT systems (in real-time and from recorded data).

#### Weather data display

for the depiction of weather information received from weather radars and weather services provided in ASTERIX CAT8/9 together with real-time or pre-recorded air traffic data.

#### Status monitoring

for system status supervision and sensor data observation. Logging of all major status events from all types of data sources, including operator notification by visual and acoustic warning alerts.

#### Recording and archiving

by an independent technical raw data recorder with time-stamping and daily data archiving. The recorded data can be replayed or easily extracted for investigations or exported to other systems.

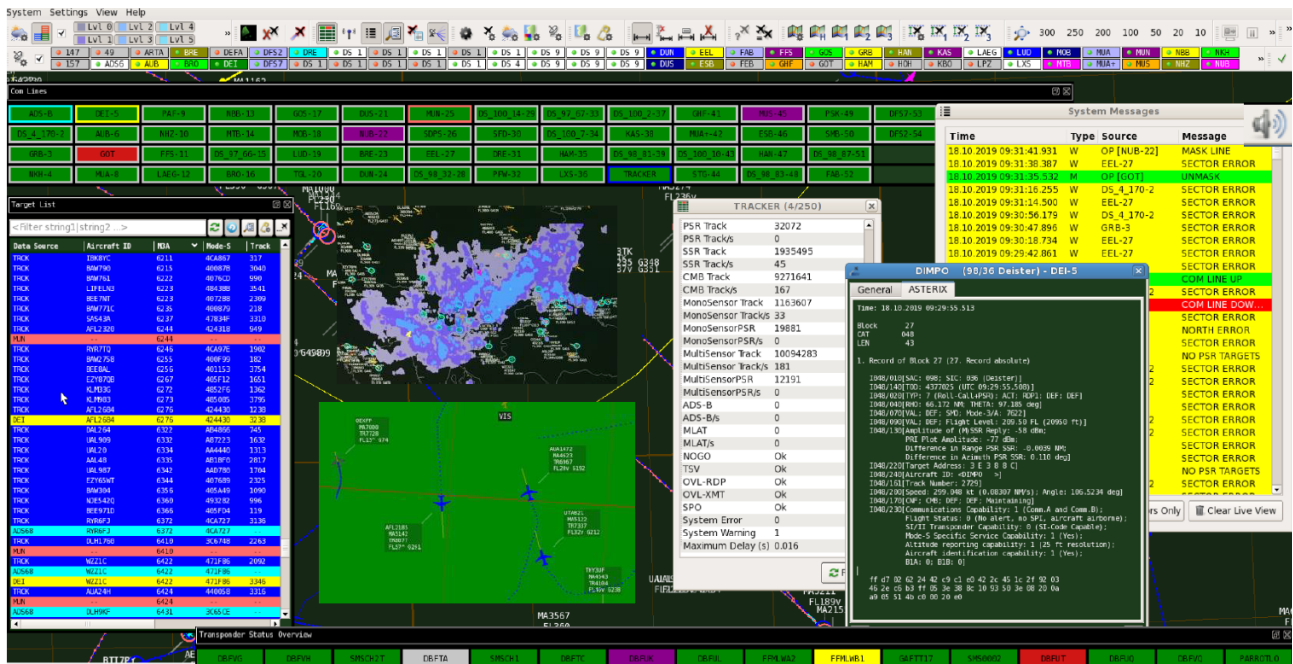
#### Analysis and investigation

for post-event and in-depth analysis of surveillance issues on a communication level, including ASTERIX format verification, sensor quality level and flight inspection. Automated reports can be generated from pre-defined analysis suites.



### SMD at a glance

- Technical monitoring for operational or test and validation environments
- Real-time air situation picture of raw unprocessed target data
- Monitoring of sensor status with user notification and alarming
- Data source diagnostics and event logging
- Recording of data in the background
- Offline analysis of recorded data



## Benefits

### Securing high-quality standards

For surveillance engineers and maintenance staff, SMD offers the ability to monitor multiple data sources simultaneously and to set up automated alerts in case data quality falls below a pre-defined threshold.

### Facilitating the resolution of technical problems

In critical situations such as unexpected surveillance system behaviour, SMD can be used for continuous recording of data, facilitating the identification and resolution of technical problems.

### Enabling tests and certifications

The replay of surveillance events makes SMD a valuable tool for testing and certifying sensors, communications and data-processing systems for further deployment into an existing operational environment. These capabilities can be augmented by optional simulation features.

## Facts and figures

Platforms	Available as a fixed high-performance server or portable workstation
Channels	Up to 64 surveillance channels can be monitored simultaneously
Protocols	ISO LLC1, TCP/IP, UDP/IP BC/MC/UC, IPv4/IPv6, HDLC-Frame, HDLC-LAP/B, SYNC, ASYNC (further on request)
ASTERIX	EUROCONTROL Standard, NATO STANAG5535, multi-version support, current & previous versions, custom or dialect, user-defined versions
Installations in 2019/2020	LPS (Slovakia), Slovenia Control (Slovenia), Isavia (Iceland), IAA (Ireland), Lux ANA (Luxembourg), ASELSAN (Turkey)

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