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Automatic Safety Monitoring Tool

Keynote

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April 2017

JLG CONSULTING
EUROCONTROL External Technical Support

Key Use Cases



Improve
air traffic
safety



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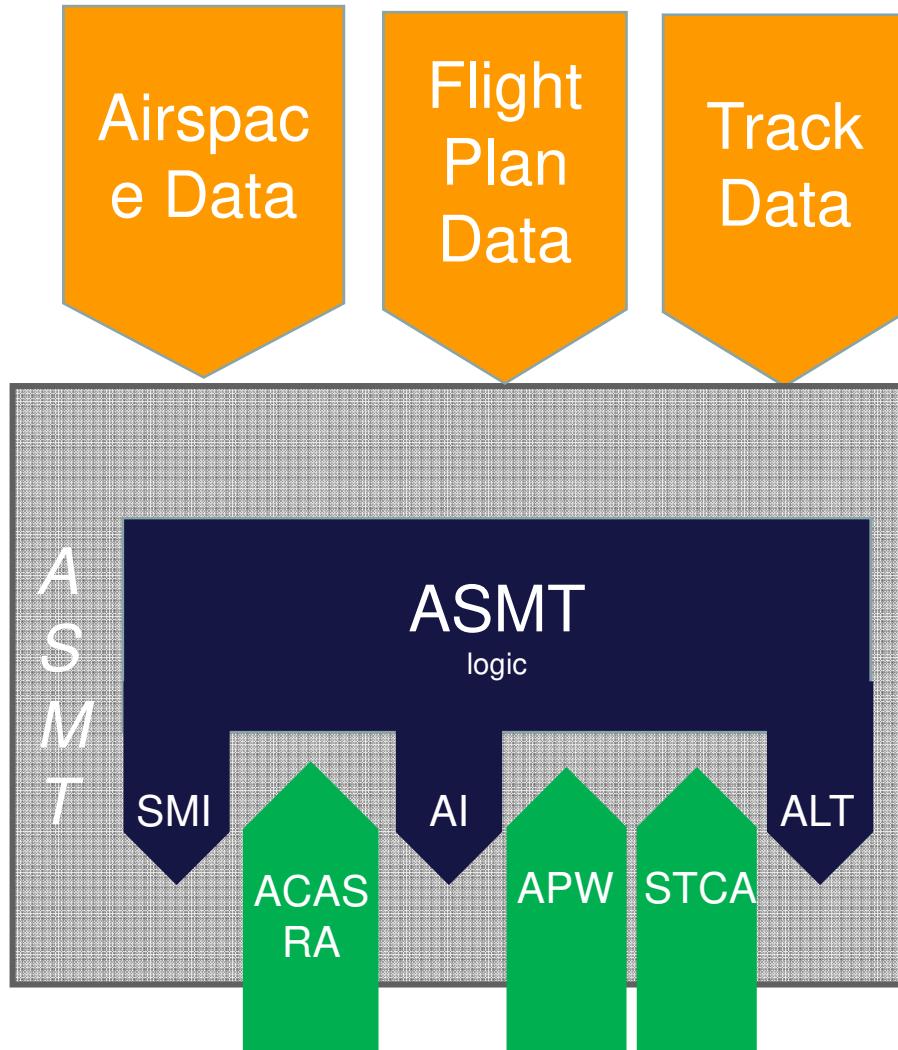
AVAPS

Key Use Cases



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INTERNAL MODULES

- SMI: Separation Minima Infringement
- AI: Airspace Infringement
- ALT: Altitude Deviation

EXTERNAL MODULES

- ACAS-RA
- APW: Airspace Proximity Warning
- STCA: Short Term Conflict Alert



Data Flows



- The ASMT can support two data flow scenarios
 - **Directly from MRT (Cat-062) – Recommended Approach**
 - Directly from Mono Radars (Cat-048) – Legacy Systems

Cat-062 (MRT)

- SMI
- STCA
- MSAW
- APW
- AP
- ALT
- ACAS-RA

Cat-048 (Mono Radars)

- SMI
- ACAS-RA



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AVIATION

Deployment



- The ASMT can be deployed on a multitude of environments
 - Virtual Machine (VMWARE)
 - Physical Loan Box
- The ASMT can work on all operating systems
 - Linux Red Hat
 - Windows 7+
- The HMI works on all **modern** browsers
 - Chrome
 - Firefox



Performance



- Performance is key to collecting safety occurrences in real time, so the tool was adapted for this scenario.
 - It can collect data from up to 12 radars in parallel
 - It can follow up to 1200 targets at the same time and capture safety events
 - It can store up to 1 million occurrences in the database for statistical analysis
 - It can run on a medium spec computer (no need for enterprise machine or server farms)

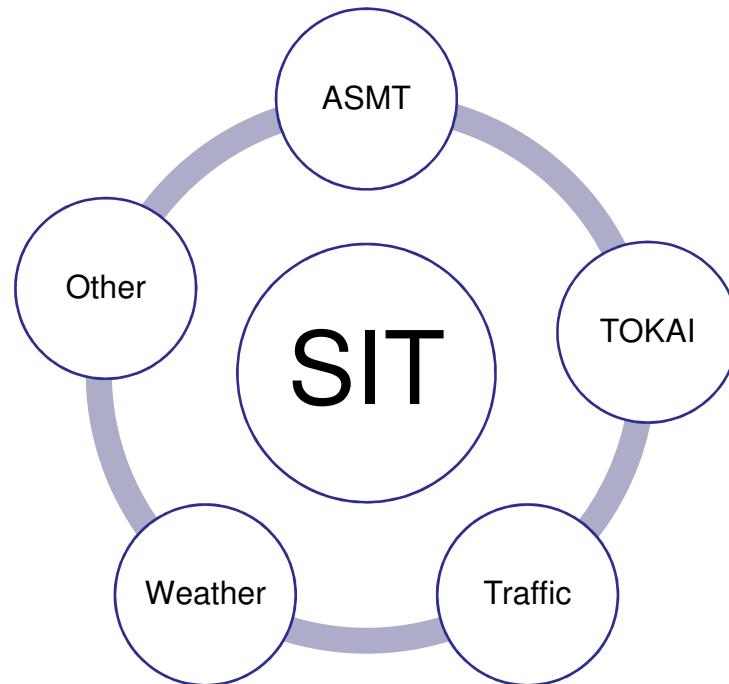


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Integration with other EUROCONTROL tools



- The industry is moving towards **safety intelligence**
 - Collect and enhance data from multiple sources in order to offer meaningful and useful information for the end-user



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