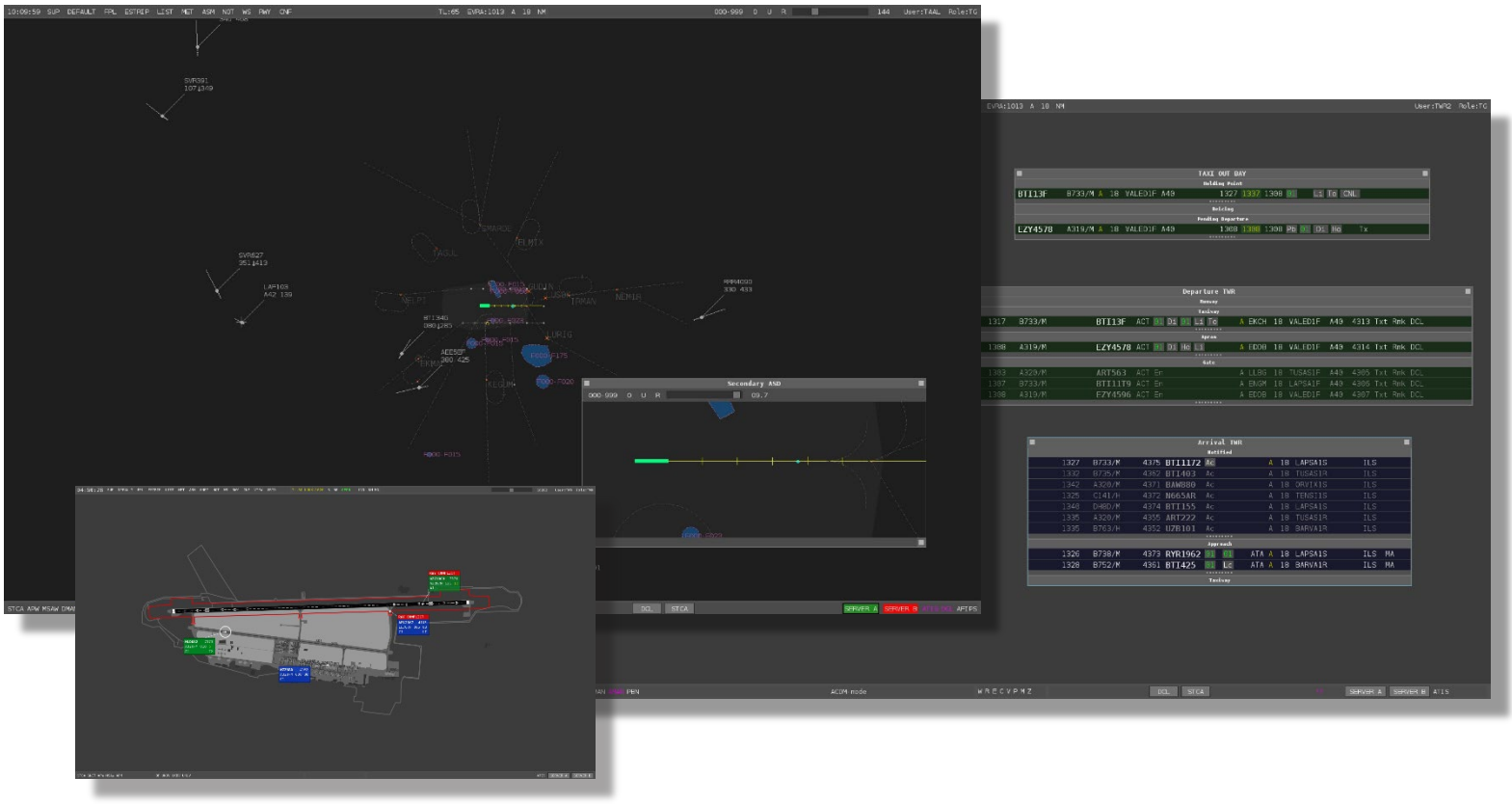
SiATMS

The complete ATM solution

Well established operational system which supports En-route, Approach and Tower/Ground operations. Modular design with diverse levels of features and functionality.

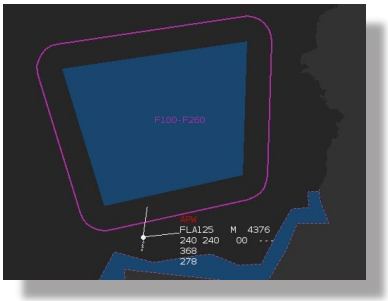


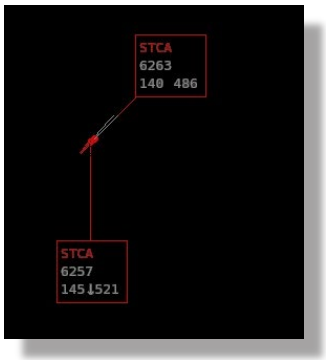
- *Fully compliant with ICAO and Eurocontrol requirements*
- *Safety nets (SNET) including STCA, APW, MSAW, NTZ etc*
- *Advanced MTCD*
- *Highly configurable – perfectly tailored to each Customer*
- *EFS Integration*
- *State of the art tracking and surveillance data processing*
- *Advanced trajectory and route calculation*

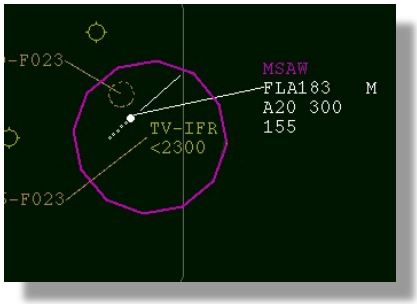
Operation

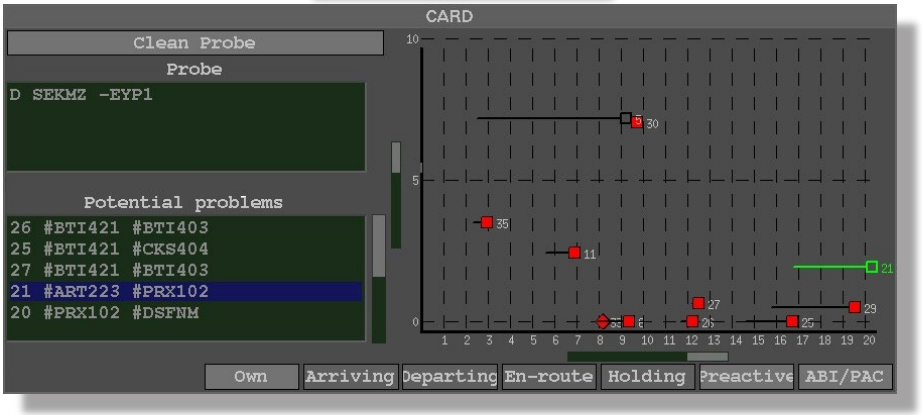
SiATMS provides a broad range of useful Controller tools, as well as the following functions:

- Multi sensor tracking, SDPS, Radar, WAM, MLAT, ADS-B, ADS-C, mode S, GNSS etc.
- Fully automatic flight plan data processing with route analysis and trajectory prediction
- 4D trajectory management for trajectory-based operations
- Tailored HMI with integrated electronic flight progress strips (EFPS)
- OLDI/AIDC – both can be implemented within the same system
- Recording and playback
- System monitoring and control with SNMP
- Advanced Medium Term Conflict Detection (MTCD)
- Datalink applications DLIC and CPDLC
- iSWIM
- Technically advanced fault-tolerant solutions built upon several levels of redundancy
- Safety nets, including STCA, MSAW, APW and APM
- Monitoring aids with conformance monitoring and reminder handling
- Integration with A-SMGCS and A-CDM systems
- Flexible Use of Airspace (FUA) including integration with external systems where required
- Provision of departure clearance delivery by means of datalink (DCL)
- Supports paper strip printing functions on request









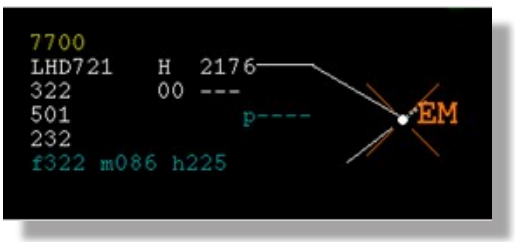
Controller HMI

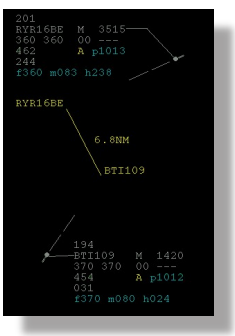
The Controller HMI is fully tailored during an in-depth "HMI Customisation Activity". This includes functionality as well as presentation/appearance. As standard, a rich array of tools is included within the SiATMS HMI, including:

- Electronic flight strips with highly intuitive and efficient Controller input
- Predicted separation tool (in addition to MTCD and STCA)
- Fully customisable, interactive flight lists
- Datalink HMI for CPDLC, DCL etc
- Selectable map objects
- Silent route coordination between sectors
- Dynamic route editor with automatic FPL update and probe function, supports PBN
- Flight data input via labels, lists or strips – all are updated regardless of chosen method
- Flight plan tracks with the ability to reposition based on position reports
- Automatic and manual handover
- Pointer function for use between selectable sectors
- Safety net suppression
- Customisable flight filters
- VFR map overlay containing pertinent VFR references
- Range & bearing lines
- Lat/long indicator

Customisable position symbols and label indicators for advisories and alerts are included:

- Emergency indicators for 7500, 7600 and 7700 SSR codes
- Double SSR code warning
- Resolution advisories
- Non-RVSM indicator
- PBN capability indicator
- More/fewer can be implemented as required





Optional Functionality

DEPARTURE MANAGER (DMAN)

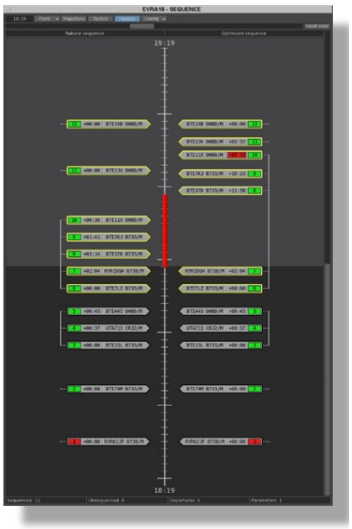
The DMAN system is sophisticated planning tool with full integration with EFPS, flight data, A-CDM, AMAN and cross-sector/ATSU coordination. Automatic processing of slot messages (SLA, SRM, SLC, FLS, DES), calculation of TSAT and TTOT, communication with ATFM (DPI messages) etc.

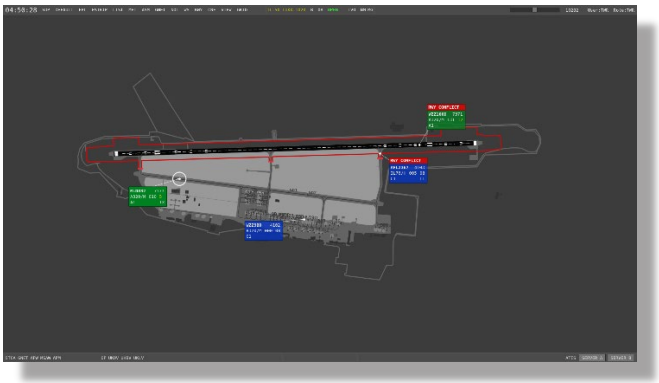
ARRIVAL MANAGER (AMAN)

The purpose of AMAN is to plan the optimised arrival sequence and monitor its implementation. The SiATMS AMAN system uses sophisticated logic to provide turn/altitude/speed/hold advisories, which allows the Controller to execute the calculated arrival sequence.

ADVANCED SURFACE MOVEMENT GUIDANCE & CONTROL SYSTEM (A-SMGCS)

A An integrated A-SMGCS system can be provided. This system is closely linked to the Tower EFPS system, as well as DMAN/AMAN systems, A-CDM and ATFM. In addition, it provides surface movement guidance and monitoring as well as ground safety nets (GNET) such as RIMCAS.





Complies with Single European Sky (SES) legislative framework 2018/1139, 550/2004, 716/2014 and 409/2013, to prepare European ATM system for network operations. Si ATM has achieved compliance with the SESAR functionality of the Pilot Common Project (PCP) and Common Project 2 (CP2):

1. Extended arrival management and performance-based navigation
2. Airport integration and throughput, including departure management
3. Flexible airspace management and Free Route
4. Network Collaborative Management
5. Initial System Wide Information Management (iSWIM)
6. Initial (4D) trajectory information sharing