

TCM

Traffic Complexity Management

TCM has been developed for LOCAL FLOW MANAGER as the main tool helping ATCO load forecasting and get the system ready for more efficient provision of Air Traffic Services. TCM can be fed with either NM or local FDPS data based on Flight Plan data and capacity figures processing computes ATCO load forecast in individual logical sectors respecting current sectorization and identifies traffic demands limits.



MAIN FEATURES

- Based on FPL and flight data provides the overview of sector loads with respect to current sector configuration - sectorization.
- Identifies traffic figures expected on individual logical sectors and provides the graphical presentation of the overloading limits.
- Provides the list of the flights in question and allows to perform „WHAT IF“ flights re-organization to solve the overloading.
- Allows the „WHAT IF“ re-sectorization - possibility to create non-existing sector configuration to simulate load forecasting to design a new sector configuration.
- Takes into account the adjacent ACC sectors traffic figures in terms not to loading them by TCM traffic adjustments which may lead to the traffic problems in the neighbourhood.
- TCM identifies unanticipated traffic (so called „Intruders“) - the flights which because of any reasons do not cope with planned flight trajectory. These flights should be handled in different way with lower priority.

USER FEATURES

Sector configurations

- User customization of sector configurations.
- User can define sector time span to forecast ATCO load.

Graphical traffic display linked to ATS route structure

- Display of Traffic expected in chosen time period.
- The monitoring of WHAT IF effect on Traffic shifting in time and/or level.
- The capability of traffic filtering.
- Prohibited areas, TSAs, Area reservations can be displayed as well as their planned and real times of activation.

WHAT IF analysis

- Selecting a hot spot in the tracking sector load.
- The possibility of level change for selected flights and perform WHAT IF analysis.
- Overview of sector loads with WHAT IF results and availability to compare with origin sector loads.
- The monitoring of predicted traffic WHAT IF results in graphical way on map background.
- The flowing time „shifting“ of the expected traffic.

Adjacent FIRs sectors traffic load

- Dynamic display of currently sectorized sectors in adjacent FIRs.

- Sector load in time visualized in colours expressing percentage of expected and maximum load.

Sector configuration optimization

- Optimization of the ACC configuration plan from the assumed load point of view.

Data sources

- Flight Data derived from the local FDPS.
- Flight Data derived from NM via B2B.
- Enhanced Tactical Flow Management System Flight Data.
- The data sources can be combined to match the local system capability.