



# ICZ LETVIS® - CWS

## Controller WorkStation

ICZ LETVIS® SYSTEM USER INTERFACE

ICZ LETVIS CWS is the main tool for air traffic operators in the ICZ LETVIS system, which allows them to effectively manage and monitor the air situation and ensure the safe flow of air traffic.

ICZ LETVIS CWS is one of the basic components of the operator's position, which ensures effective monitoring and management of the air situation. As the main graphical application and part of the interface of the ICZ LETVIS system, it provides operators with the necessary tools and information to accurately track air traffic and ensure safe flights.

### [ BASIC FUNCTIONS ]

The ICZ LETVIS CWS application provides the operator with radar windows as his primary means of interaction with the application, in which map, overview, planning and additional information is combined into one resulting image.

- ▶ Display of the surveillance situation from one or more sources of system tracks
- ▶ Possibility to monitor local tracks directly from the radar
- ▶ Plot and scan information directly from radars
- ▶ Display of meteorological images
- ▶ Planning information in the form of flight strips and trajectories of planned flights
- ▶ Airspace management plans in the form of strips and display of spaces
- ▶ Display and calculation of Safety nets warnings, incl STCA, NCW, LBA, APW, DAIW, MSAW
- ▶ Support for connection with ICZ LETVIS SIM and for station connection in the simulation - exercise

### [ SUPPLEMENTARY FUNCTIONS ]

- ▶ Calculation of heights according to QNH
- ▶ Sectorization for the coordination of flight management between sectors within the ICZ LETVIS system
- ▶ The possibility of using different projections on the map base
- ▶ Vector, raster and tiled map support for more flexibility
- ▶ Tools like measuring distance and checking the spacing between tracks Dynamic map data
- ▶ Display of historical track trajectories for analysis, evaluation and creation of reports
- ▶ The possibility of creating and editing vector maps using the integrated map editor
- ▶ Archiving and playback of air situation and operator activity
- ▶ Tracking the descent trajectory of landing flights
- ▶ Local – auxiliary tracks from multiple sources at the same time
- ▶ Track display configuration – form content and position, prediction, history
- ▶ Suppress display based on attributes, source or position of tracks
- ▶ Flight plans in the form of planned routes
- ▶ Airspace management plans in the form of areas
- ▶ Scan information (raw video) from several radars at the same time
- ▶ Plot information from several radars simultaneously
- ▶ Cloudiness - meteorological picture
- ▶ Static maps – vector, raster and tiled maps displayed by the user
- ▶ Dynamic maps - automatically displayed based on FUA and sectorization
- ▶ Track journal – historical locations along with track information at a given time
- ▶ Additional tools - distance measurement, separation tool, Quick maps

### RADAR Windows

- ▶ Tracks
  - System tracks from multiple sources

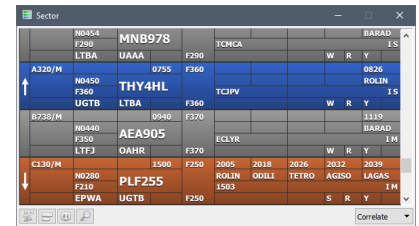
## ICZ LETVIS CWS



[ ICZ LETVIS® - CWS ]

### FPL plans

ICZ LETVIS CWS receives information about flight plans and their classification into the groups from the ICZ LETVIS FDP system and displays them in the form of strips in the separate windows with the option of filtering and customizing their view. At the same time, the application displays the flight plans and planned flight routes in the radar window. The application allows to create, modify and perform actions over the flight plans.

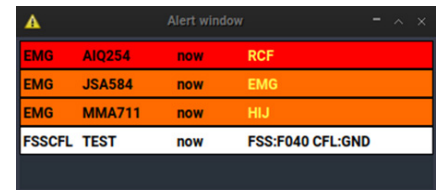


### FUA plans

ICZ LETVIS CWS receives information about FUA plans from the ICZ LETVIS FDP system and displays them in the form of strips in the separate windows with the option of filtering and customizing their view. The application also allows the creation and modification of these plans.

### Safety Nets

ICZ LETVIS CWS has an integrated module for calculating conflict warnings. Warnings are displayed in the form of strips and as part of the system track form. The operator or supervisor has the option to enable, disable or change the calculation profile while the application is running.

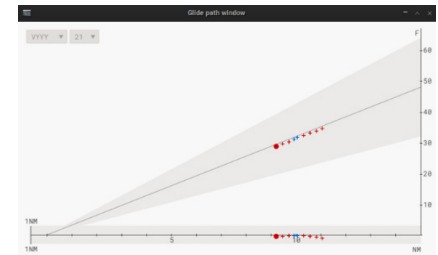


### Sectorization

ICZ LETVIS CWS receives information about sectorization from the ICZ LETVIS FDP system and enables coordination of flight management between workplaces in the LETVIS system, display of information about current sectorization and change of the sectorization scheme.

### Glide path window

ICZ LETVIS CWS provides a display of the descent trajectory for individual airport runways together with a display of the current horizontal and vertical position of the tracks relative to the descent trajectory and threshold point of the airport runway.



■ APPLICATION SW, HW AND PARAMETERS

OPERATING SYSTEM	LINUX SLED
Basic HW	COTS – INTEL/AMD platform x 86 - 64
LAN	Ethernet, TCP/IP, UDP/IP
Special HW	Graphics adapter and high-resolution monitor
Display resolution	2048x2048, 1920x1200, 1600x1200, 1280x1024, 4K
Input data protocol	ALAS 6 (ASTERIX 62/65 s ALES SDI) Asterix 01/02, 34/48, 62/65-standard, 19, 20, 21 ALES (FPL, ASM, Safety Nets, etc.) ALES-scan, meteo Asterix 8/9 (meteo)
Guaranteed number of plots per source/64 sources	1 000/64 000
Guaranteed number of local tracks per source/64 sources	1 000/64 000
Guaranteed number of strips	1 000
Map files	Shp, ALES map format, tiles
Guaranteed number of map objects	1 000 000 WGS coordinates, 100 display layers

#### COMMERCIAL CONTACT

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