

# Si ATM *OLDI-Tools*

”An OLDI simulation, shadowing and monitoring system”

**NEW**

## FMTTP HANDLING!

On-Line Data Interchange (OLDI) is a standard defined by EUROCONTROL to handle flights which are being provided with an ATC service to be transferred from one ATC unit to the next in a manner designed to ensure complete safety. This is accomplished with the OLDI standard procedure that the passage of each flight across the boundary of the areas of responsibility of the two units is coordinated between them beforehand and that the control of the flight is transferred when it is at, or adjacent to, the said boundary.

### Si ATM OLDI-Tools

The OLDI-Tools is a testing tool to facilitate an efficient and safe implementation of OLDI as well as monitoring existing OLDI lines.

The OLDI-Tools is used for:

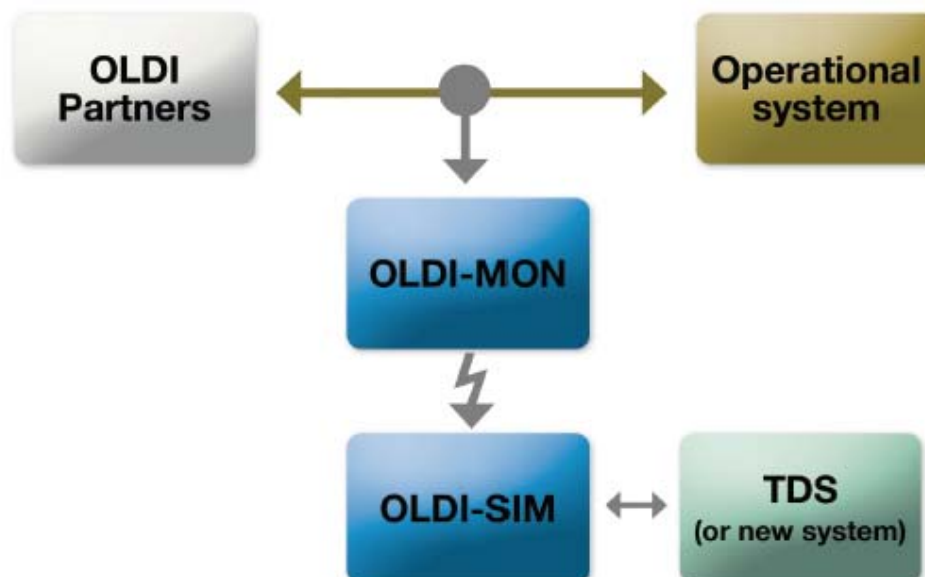
- OLDI testing in new ACC systems before taken into operational use
- OLDI testing in an TDS (Test and Development System) environment
- OLDI monitoring in an operational environment
- Testing with new OLDI partners

### System concept

The system consists of two major parts, the OLDI\_MON system and the OLDI\_SIM system.

The purpose with OLDI\_SIM is to supply a “new” system under test with simulated OLDI messages and/or “real” OLDI messages, depicting real traffic in an “old” system, in order to test new SW releases, new OLDI lines, etc.

The purpose with OLDI\_MON is to supply OLDI\_SIM with “real” OLDI messages, representing real traffic in the currently operational system. The design of this system is more or less site dependent. OLDI\_MON is also used for monitoring OLDI communication in the operational ACC system for maintenance and logging purposes.



## OLDI-Tools modes of operation

### Shadow mode

- The live OLDI traffic is monitored and distributed to OLDI\_SIM in order to achieve a realistic test scenario in the “new” system

### Simulation mode

- The OLDI connection is simulated by OLDI\_SIM

### Monitoring mode

- OLDI communication real time monitoring on all protocol levels including logging and recording facilities is performed by OLDI\_MON

## Handled messages

The following OLDI messages are handled:  
ABI, ACT, PAC, MAC, REV, COF, MAS, LAM.

OLDI messages can be manually handled through an Operator window or automatically through a Scenario window.

Manual Operator functionality:

- Create and store OLDI messages
- Edit stored messages
- Send messages
- Select format
- Preview messages
- Import messages from log file

Scenario functionality:

- Automatically send predefined messages
- Scenarios control, scenarios can be paused, restarted or stopped
- Messages handling, OLDI messages can be created/changed or removed
- Messages are sent with an offset time from each other
- Result display, all sent or received messages are displayed with related errors messages if any
- Statistics, message counts for sent/received messages
- Import messages from log files

## **NEW** FMTP HANDLING!

OLDI-Tools now also handles FMTP and supports transition between old FDE-ICD format (X.25) to FMTP (TCP/IP) by acting as a gateway between “old” and “new” systems in a mixed environment where some are adapted to FMTP and some not.

Hence, the system is a part of the operational system but still is used for testing and monitoring as before.

