

Supporting
European
Aviation



OLDI system changes



Main systems affected by OLDI deployment

- OLDI exchanges might be used to support the coordination and transfer process with adjacent ACC / APP / TWR units within the same FIR or with cross-border enroute, approach and TWR ATS unit.
- The main affected system is the Flight Data Processing System (FDPS). The FDPS needs to be capable of performing OLDI communication with up to predefined number of external / internal co-ordination partners.
- The FDPS shall be capable of sending and receiving defined set of OLDI messages in ICAO/ADEXP format, including RVSM and 8.33khz fields.
- As an integral part of each system flight plan (SFPL), the FDPS needs to maintain a copy of all OLDI messages which have been correlated to the SFPL.
- The FDPS needs to be sufficiently flexible in the selection of items to be used in the sending of OLDI messages with an external ATS unit, per COP and next ATS Unit.
- The FDPS shall permit the configuration of messages and parameters as defined in the EUROCONTROL OLDI specification for coordination with each external partner and optionally per COP.
- The system also needs to check the syntax and semantics of received OLDI messages and return LAM if the are OK.
- The received OLDI messages will be used to update the trajectory or trajectory elements of the concerned flight.

CWP adaptation required by OLDI deployment-1

- The exchanged OLDI messages need to be presented on the Controller Working Position (CWP) with an adequate interface (HMI).
- The OLDI messages need to be presented in the track label or different flight lists to support the inter-sector co-ordination and full OLDI / OLDI dialogue co-ordination. The OLDI data **needs to** be presented in the track label, extended track label and corresponding FP lists and co-ordination windows.
- The CWP functionalities need to support the co-ordination with adjacent ATS units with OLDI links as well as co-ordination between ARS unit without OLDI.
- The CWP needs to indicate that the transmission of the OLDI message is in progress or has been successfully transmitted as appropriate.
- The HMI at ATC positions using OLDI **needs to** provide a warning if the OLDI facility is not available.

CWP adaptation required by OLDI deployment-2

- The CWP needs remind the operator to use the telephone in order to perform the co-ordination data exchange with adjacent ATS units when the following events happen:
 - the LAM message does not arrive within the parameter time (time out), indicating that the other sector might not have received the OLDI message
 - there is a general fault in the OLDI communication / application;
 - OLDI message (REV) is not supported;
 - Exceeding time parameters for OLDI messages exchanges (REV/RRV).
- The FDPS / CWP needs to provide a mechanism by which an estimate can be rapidly entered for a flight for which automatic notification is not available (e.g., no OLDI link with upstream ATSU);
- The ATC supervisor needs to monitor the availability of OLDI links;
- The Flight Data Assistant (FDA) positions need to be equipped with capability for reception and handling of incorrect OLDI messages, as well as handling of incoming and outgoing verbal coordination with adjacent ATS units not equipped with OLDI facilities (or failed OLDI link) and inserting verbal coordination data in the system.

Other system affected by OLDI deployment

- The reminder (part of ATC toolkit) for manual co-ordination is derived from the relevant Letters of Agreement (LoA) or Standard Operating Procedures (SOP). This reminder is used in case the OLDI functionality is not available.
- Additional reminders as change of frequency and potential co-ordination failure are also needed.
- The OLDI links and functionality need to be monitored and controlled by Technical Monitoring and Control System (TMCS).
- LOF / NAN OLDI messages are used for air-ground data link applications.
- OLDI also affects the Recording and Reply System (RRS) as all OLDI messages entering / leaving the system need to be recorded.