

Supporting
European
Aviation



OLDI performance requirements



OLDI RAM figures

Availability

- In principle, the OLDI facility needs be available 24 hours every day, but especially during the hours of normal and peak traffic flows between the two units concerned. Any scheduled down-time periods (and thus the planned availability time) needs be bilaterally agreed between the two units concerned.

Reliability

- Reliability on every OLDI link shall be at least 99.86 % (equivalent to a down-time of not more than 12 hours per year based on 24-hour availability).
- Where operationally justified, a reliability of at least 99.99% (equivalent to a down-time of not more than 52 minutes per year, based on 24 Hour availability) should be provided.

Data security / integrity

- Data security methods (e.g., access rights, source verification) and, where applicable, network management should be applied to OLDI facilities. The failure rate at application level shall be less than or equal to one transmission error per 2000 messages.

Operational evaluation

- Each new OLDI facility, including a new facility on an existing link, shall be subject to an evaluation period to verify the data integrity, accuracy, performance, compatibility with ATC procedures and overall safety prior to its operational implementation.

OLDI message transaction / response times

- The OLDI transaction times specified include transmission, initial processing at the receiving / accepting unit, creation of the acknowledgement message, its transmission and reception at the transferring unit.
- The **maximum transaction times** for the OLDI messages in **90% of cases** need to be **below 4 seconds**, while for **99,8% of cases** should not **below 10 seconds**.
- If no acknowledgement has been received within the specified time after transmission, a message shall be considered to have been unsuccessfully transmitted or processed and a warning output as specified in the pertinent section in this document.
- The OLDI response times is addressed
 - time necessary to generate an OLDI message which has to leave the system as a result of an operator action;
 - time necessary for data entering the system to be processed, acknowledged and be available for display at concerned positions.
- The OLDI message **response time** in the generation and reception phases shall **not exceed 2 seconds**.

Time out handling

- A time-out value addresses the case of no reception of LAM. If no acknowledgement has been received within the specified time after transmission:
 - a message needs to be considered to have been **unsuccessfully transmitted or processed** and
 - a **warning output** as specified in the specification for each process.
- Usual time-out values are between 15-30 seconds, depending on bilateral agreements for the exchanges of OLDI messages.