

# Case: Electronic Cabin Log (ECL)

High efficiency potential resulting from process innovation

## Initial position and result

Technical airline management will soon receive a critical role to play. In addition to ensuring the basic requirements of flight safety, the airlines must at the same time be capable of addressing the high levels of economic challenge which they face.

Increased efficiency resulting from innovative maintenance concepts offers an attractive way for airlines to sink costs which are caused by operational delays and loading periods. At the same time these process innovations offer considerable turnover potential for maintenance suppliers.

The Swiss IT specialist, Itartis Ltd. from Winterthur has developed in cooperation with SR Technics a pro-active maintenance concept, with the aid of this concept the technical management demands for aircraft can be anticipated, accelerated and can thus be designed in a more cost effective manner.

The basic idea grew from the requirement to achieve an optimal utilization of aircraft and create a high level of client satisfaction. Currently around 30 aircraft in the Swiss fleet are fitted with the mobile ECL equipment – an upward trend. In this way an efficient technical service for the airline fleet is ensured.

## ECL: Functionality

ECL is an independent and fully fledged „on board“ notebook, with this equipment it is possible for flight staff to electronically record non-critical cabin defects during the flight and if necessary to send these to the target airport.

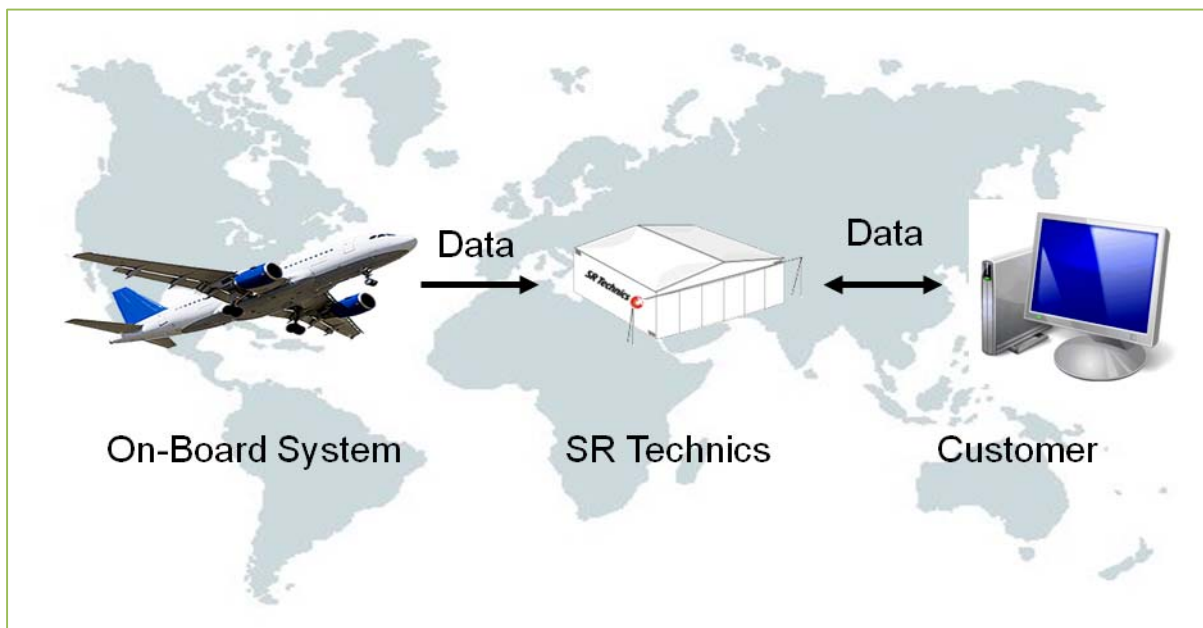
In addition an automatic troubleshooting code of practice will be generated for the ad-hoc rectification of cabin defects. In the case of failure, a corresponding measures and replacement parts catalogue will be forwarded to the maintenance provider at the target airport. The data transfer will take place over WLAN or GRPS.

In this way the maintenance can effectively take place at the target airport (i.e. defective seats or utility services can be quickly replaced).

Up till now the recording of such defects and complaints took place in writing – as a result the maintenance process was slowed down considerably. The rectification of defects often took too long, or could not even be carried out at the target airport. In addition to increased client satisfaction as a result of a constant high level of cabin standards and shorter periods of delay, a considerable improvement is achieved in maintenance throughput times. Double recordings of defects and the resulting error costs can from now on be avoided.

ECL has proven to have considerable potential – for instance, in the future it will be possible to carry out client complaint or satisfaction analysis directly in the aircraft as well as this material being processed in real time.

*Image1: Data flow*

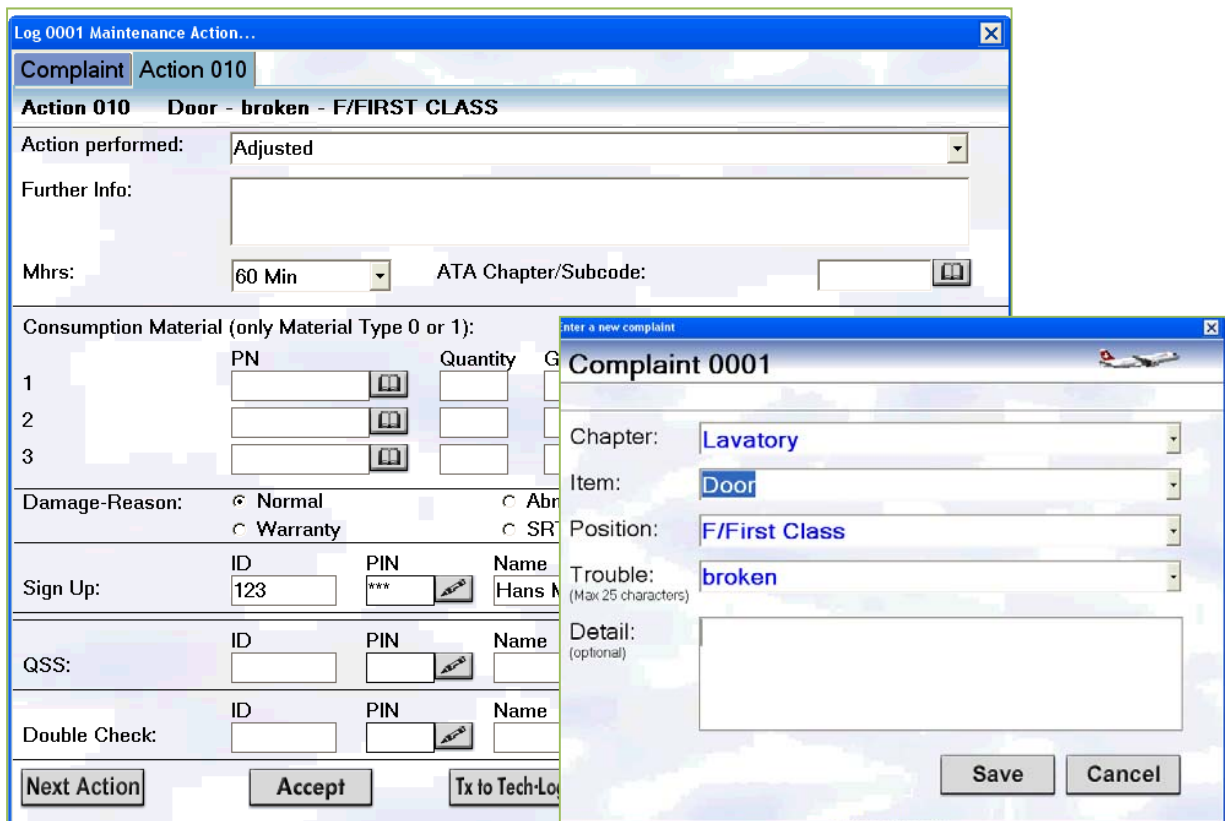


## Potential uses

The potential uses which can be achieved by deploying ECL reach much further than any quick-win situation – far more relevant is the possibility to open up strategic potential:

- Improved capacity utilization due to low level of down time and set up periods
- Improved planning of maintenance procedures
- Process acceleration as a result of fast documentation and information transfer
- Higher cabin standards and the resulting higher levels of client satisfaction
- Transparency resulting from clearly laid out scheduling, low error costs (no double entry recording) and is also easy to use
- Pro-active provisioning of replacement parts
- High level of client satisfaction
- Individual customisation of the solution to the specific requirements of the airlines

Image 2: User mask



**Log 0001 Maintenance Action...**

**Complaint** Action 010

**Action 010 Door - broken - F/FIRST CLASS**

Action performed: Adjusted

Further Info:

Mhrs: 60 Min ATA Chapter/Subcode:

Consumption Material (only Material Type 0 or 1):

	PN	Quantity	G
1			
2			
3			

Damage-Reason:  Normal  Warranty  Abr  SR

Sign Up: ID 123 PIN \*\*\* Name Hans M

QSS: ID PIN Name

Double Check: ID PIN Name

Next Action Accept Tx to Tech-Lo

**Enter a new complaint**

**Complaint 0001**

Chapter: Lavatory

Item: Door

Position: F/First Class

Trouble: broken (Max 25 characters)

Detail: (optional)

Save Cancel