

First introduction of ACM CPDLC service on ODS: a new transfer tool for controller

Laurent Lapasset, Benoit Hermeline

► **To cite this version:**

Laurent Lapasset, Benoit Hermeline. First introduction of ACM CPDLC service on ODS: a new transfer tool for controller. INO 2009, 8th SESAR Innovative Research Workshop

Exhibition, Dec 2009, Brétigny-sur-Orge, France. <hal-01511738>

HAL Id: hal-01511738

<https://hal-enac.archives-ouvertes.fr/hal-01511738>

Submitted on 21 Apr 2017

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

First introduction of ACM CPDLC service on ODS: a new transfer tool for controller

Yet another tool?

Towards a new reality, controller centered: a new HMI. Data Link (DL) can't exist without an HMI, any evaluation of DL can't be done without the evaluation of the associated HMI. For a successful introduction, the key points are:

1/ **SHOOT** is not any more an atomic not interruptible action: beginning; end; and possible blocking according to pilot's answer !

Speed
Aircraft ID >

Speed
Aircraft ID >

Speed
Aircraft ID >>

=> Controllers must apply a different working method for transfer data link aircraft (Data link was recommended for non time-critical controller orders, while voice was retained time for critical orders)

2/ Delay in reception or loss of the response of the pilot could lead to an unsafe situation: its the operational state **ASSUME** (Transfer of Responsibility) which will use to (re)synchronize the two OLDI/SYSCO grounds systems of respectively sector giving and receiving sector.

3/ **Synthesis** of the communication state of the DL channel of in order to anticipate the time of transmission of messages, to plan the display of the presence of DL equipment on the flights (transition period with mixed traffic), as soon as possible, the only visualized states will be:



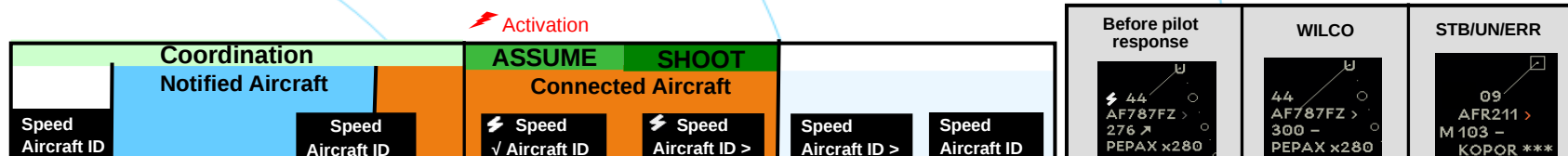
: DL channel is available for controller (for immediate use)



: DL channel is « notified center » or available but not activated

The state the «Data Link connection errors » are not relevant to show.

4/ **Synthesis** of the states of the DL communication and the states of the flights:



About Capgemini

Capgemini, one of the world's foremost providers of consulting, technology and outsourcing services, enables its clients to transform and perform through technologies. Capgemini provides its clients with insights and capabilities that boost their freedom to achieve superior results through a unique way of working, the Collaborative Business Experience. The Group relies on its global delivery model called Rightshore®, which aims to get the right balance of the best talent from multiple locations, working as one team to create and deliver the optimum solution for clients. Present in more than 30 countries, Capgemini reported 2008 global revenues of EUR 8.7 billion and employs over 90,000 people worldwide. More information is available at www.capgemini.com.

Contacts :

Laurent Lapasset laurent.lapasset@capgemini.com – Ingénieur R&D ATM
Benoît Hermeline benoit.hermeline@capgemini.com - Manager ATM Unit
Tel : 05 61 31 52 00