



“What to do” Slides (updated 13 Feb 2023)

- **Key messages** in one slide
- To **promote communication and awareness**
- Covering users:
 - **Pilots** and **AOs**
 - **ATCOs** and **ANSPs**
- Based on **observations** and **frequently reported problems**



Pilots: What to do?

- **Logon early and re-logon if necessary unless requested otherwise by controller**
 - If late (and close to transitioning to next ACC/NDA), logon directly to next ACC
 - In case of connectivity difficulties, disconnect CDA and re-logon to next ACC
- **Use datalink**
 - Execute UL's immediately after answering CPDLC dialogue (except "when ready" is part of UL)
 - Be aware of observed issues with some messages, for example:
 - WHEN CAN YOU ACCEPT [FL] (UM148) is a question not a clearance
 - Depending on a/c HMI, route clearances including a VIA point (UM79) are not displayed to FC on same screen
- **When needing to disconnect CPDLC**, always advise ATC via voice (ABC123 disconnecting CPDLC due ...)
- **Report technical and ops problems**
 - report to ATC and after landing to maintenance when the aircraft is unable to connect to CPDLC;
 - report to ATC on initial call or on a failed logon attempt, preferably stating reason (equipment, ATC COMM FAILURE, NOTIFICATION FAILED, etc.)
- **Be aware of impact of voice on datalink: jamming datalink**
 - Do not use VDR3/VHF3 for voice, when datalink is active
 - Do not tune (or check to avoid accidental miss-tuning) voice radios to datalink channels (band 136.7 MHz to 136.975 MHz)
- **Be aware of impact of using "Disable CPDLC" feature** in a/c with Collins CMU-900/RIU-40x0 avionics (AEA, EXS, JAF, LGL, OVA, SRR, THY, TOM, TUI, TVS, ...): can lead to PAs
 - Do not use feature in datalink airspace
 - Verify feature is set to "Enabled" before flight (current avionics require power cycle or HMI pilot action for resetting after enabling)
- **Avoid unnecessary use of typed free text** – Use predefined FREE TEXT messages



Airlines/operators: What to do?

- **Register a/c to Logon List and keep updated avionics information** on registered a/c (i.e. following updates), including updating the 24-bit address, when there is a change
- **Review and update SOPs to promote use of datalink** and support fast execution of ULs
 - Request flight crews to actively use CPDLC and systematically logon on every flight and to re-logon when necessary
 - Clarify pilot action on disconnects – need to harmonize approach
 - Make available CPDLC information (availability, issues, maps with ground NSAP codes) in pilot preflight briefings
- **Offer recurrent FC training on using CPDLC** and highlight known errors, for example:
 - WHEN CAN YOU ACCEPT [FL] (UM148) is a question (report request) not a clearance
 - Depending on a/c type HMI, the VIA part in CLEARED TO [position] VIA [routeClearance] (UM79) may not be directly displayed
- **File correctly all datalink fields in FPL and ensure the correct 24-bit a/c address is in the field 18 (CODE)**
- **Make crews aware of**
 - Airspace where datalink is provided and where is not provided
 - Jamming impact from voice use on datalink channels
 - Known datalink issues to be potentially encountered
- **Update to latest software version** of avionics and consider updates of equipment with known bad performance and issues (refer to list of avionics with observed good performance)
- **Report technical and ops problems** and support problem investigations
 - Provide logs and information when requested
 - Speed up authorization for CSPs to share ground logs involving operator

ANSPs: What to do?

- **Review and update SOPs to promote use of datalink**
 - Request ATCOs to actively use CPDLC in general and for transfers (CONTACT) in particular
 - Remind / train ATCOs to avoid uplinking clearances and then give, unnecessarily, the same clearance over voice
- **Support harmonization and share/adopt best practices** (OEP groups, DSG/OFG, ..)
- **Ensure/implement an easy-to-use HMI** for intuitive CPDLC usage by the ATCOs
- **Address identified problems affecting performance**
 - Address LOF/NAN issues
 - Deploy solutions and fixes
 - Resolve logon transfer issues, i.e. implement ED-110B Change 1 (send UM160 before CM contact request)
- **Report technical and ops problems** and support problem investigations (i.e. disconnects)
 - Provide logs and information when requested
 - Investigate ATCO/other reports, follow-up issues with neighbouring ANSPs and airlines
- **Clarify and harmonise AIPs datalink content as needed:** CPDLC support, flight level, use of LL ...
- implement the possibility for ATCOs to **uplink own sector frequency** to individual aircraft in support of COMLOSS incidents



ATCOs: What to do?

- When needed, **ask crews to log on** (on voice contact)
- **Use CPDLC**, at least for transfers (CONTACT)
- **Do not mix voice and datalink**
- Do not “cancel” CPDLC clearance with CPDLC, revert to voice
- When needing to revert to voice, **use correct phraseology**
- **Following transfer, make appropriate system inputs**, i.e. even when aircraft is transferred via voice, in order to allow next ATC unit to become CDA
- **Report technical and ops problems**, such as unable to log on, erratic behaviour, unexpected logoff, non-standard behaviour, pilot complaints
- **Avoid unnecessary use of typed free text** – Use predefined FREE TEXT messages