



# **Manual on Requirements for Communication Failure**

**TP ANS 03**

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## DOCUMENT APPROVAL

This document, **Manual on Requirements for Communications Failure**, reference **TP ANS 03**, Issue 01 of September 2018, is approved by the Head Air Navigation Standards and Air Traffic Controller Licensing Inspectorate of the Safety Regulation Division.

**Signature:** \_\_\_\_\_

**Date and official stamp:**

01<sup>th</sup> September 2018





### RECORD OF AMENDMENTS

<b>Amendment No.</b>	<b>Subject</b>	<b>Source</b>	<b>Section affected</b>	<b>Entered by (Date)</b>	<b>Effective Date</b>
-	Initial issue				Sept 2018



## FOREWORD

1. The manual is issued under the authority of the Chief Executive Officer of the Seychelles Civil Aviation Authority.
2. The manual is provided pursuant to SERA.8035 (b) of adopted Commission Implementing Regulation (EU) 923/2012 of 26<sup>th</sup> September 2012 under SCAA CAD ANS/68 and is based on ICAO Annex 10 Vol. II, to the Chicago Convention, Voice and Data Communications Failure Standards and Recommended Practices and ICAO PANS-ATM (Procedures for Air Navigation Services – Air Traffic Management) Doc. 4444.
3. The manual is directed at air traffic services personnel and pilots who are expected comply with the communication failure procedures. Operational communication failure procedures are found in the Seychelles Aeronautical Information Publication, herein referred to as AIP.
4. The latest version of this manual, in PDF format, is available on the SCAA website at the following link: [http://www.scaa.sc/index.php?option=com\\_content&view=article&id=140:scap-ans&catid=48&Itemid=836](http://www.scaa.sc/index.php?option=com_content&view=article&id=140:scap-ans&catid=48&Itemid=836) and is also available on request by email to [ANSI@scaa.sc](mailto:ANSI@scaa.sc).
5. The content of this document is controlled by an approved amendment system and is not to be removed and used in any other format where it may be outside the control of the amendment system. The manual will only be distributed electronically by the Head Air Navigation Standards & Air Traffic Controller Licensing Inspectorate as a complete document and as such a list of effective pages is not considered necessary.
6. Amendments of this manual shall be incorporated into the manual on receipt and the manual distributed as a complete revised document with amendment status indicated in the Record of Amendments page. All changes to the text from the previous version shall be identified by the use of strikethrough of the previous text and grey highlight of the new text until a subsequent amended manual is issued. Each page will also indicate the amendment date and issue number. For clarity and simplification, all pages of the respective section will have the same amendment status upon amendment of one or more pages.
7. The Head Air Navigation Standards & Air Traffic Controller Licensing Inspectorate is responsible for amendments to this manual. Readers should forward advice of errors, inconsistencies or suggestions for improvement to the Head Air Navigation Standards & Air Traffic Controller Licensing Inspectorate at the email in 4 above or the address below.

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## ACRONYMS

For the purpose of this manual, the acronyms defined in Article 2 Definitions of CIR (EU) 2015/340 shall apply. The following acronyms, with definitions, used in this manual are not defined in Article 2 of CIR (EU) 2015/340.

<b>ANS</b>	Air Navigation Services or Air Navigation Standards, as applicable
<b>ANS &amp; ATCLI</b>	Air Navigation Standards and Air Traffic Controller Licensing Inspectorate
<b>ATC</b>	Air Traffic Control
<b>ATCO</b>	Air Traffic Controller
<b>ATCU</b>	Air Traffic Control Unit
<b>ATS</b>	Air Traffic Services
<b>ATSU</b>	Air Traffic Services Unit
<b>FSSS</b>	ICAO Location Indicator for Seychelles Area Control Center
<b>HANS &amp; ATCLI</b>	Head Air Navigation Standards and Air Traffic Controller Licensing Inspectorate
<b>SRD</b>	Safety Regulation Division



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## **Chapter 1**

### **INTRODUCTION**

#### **1.1 Purpose of this manual**

- 1.1.1 The purpose of the manual is to provide a means of complying with the technical standards set out in SERA.8035 Communications, (b) of the CIR (EU) 2015/340, as appropriate provisions on communication failures in accordance with ICAO SARPs to the Chicago Convention. as have been adopted under the Chicago Convention.
- 1.1.2 The manual is applicable to air traffic services (ATS) personnel and pilots and provides a set of standardised procedures and associated guidance for radio and datalink communication failure in the Seychelles airspace.

#### **1.2 Definitions and terminologies**

For the purpose of this manual, the definitions of Article 2 - Definitions of CIR (EU) 2015/340 shall apply.





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## Chapter 2

### COMMUNICATIONS FAILURE

#### 2.1 Voice communication failure

##### 2.1.1 *Air-Ground*

- 2.1.1.1 In the event that an aircraft station fails to establish contact with the appropriate aeronautical station on the designated channel, it shall attempt to establish contact on the previous channel used and, if not successful, on another channel appropriate to the route being flown. If these attempts fail, the aircraft station shall attempt to establish communication other aeronautical stations or other aircraft using all available means and advise the aeronautical station that contact on the assigned channel could not be established. In addition, an aircraft operating within a network shall monitor the appropriate VHF channel for calls from nearby aircraft.
- 2.1.1.2 If the attempts specified in 2.1.1.1 fail, the aircraft station shall transmit its message twice on the designated channel(s), preceded by the phrase "TRANSMITTING BLIND" and, if necessary, include the addressee(s) for which the message is intended.
- 2.1.1.3 Where a transmitter failure is suspected, the aircraft station shall check or change the headset if the mouth-piece is attached or the mouth piece if separated from the headset. If still unable to transmit, the aircraft station shall use the backup transmitter, if equipped. Should it not be equipped with a backup transmitter or unable to transmit on the backup transmitter, the aircraft station shall listen out on the designated frequency for instructions.
- 2.1.1.3. When an aircraft station is unable to establish communication due to receiver failure, it shall transmit reports at the scheduled times, or positions, on the channel in use, preceded by the phrase "TRANSMITTING BLIND DUE TO RECEIVER FAILURE". The aircraft station shall transmit the intended message, following this by a complete repetition. During this procedure, the aircraft shall also advise the time of its next intended transmission.
- 2.1.1.4 An aircraft which is provided with air traffic control or advisory service shall, in addition to complying with 2.1.1.3, transmit information regarding the intention of the pilot-in-command with respect to the continuation of the flight of the aircraft.
- 2.1.1.5 When an aircraft is unable to establish communication due to airborne equipment failure it shall, when so equipped, select the appropriate SSR code to indicate radio failure.
- 2.1.1.6 An aircraft shall comply with the specific procedures applicable to IFR and VFR flights in the event of air-ground voice communications failure contained in the Seychelles AIP, FSIA 2.22 Flight Procedures, 2.22.3 Radio Communication Failure Procedures and FSPP 2.22 Flight Procedures, 2.22.1 Radio Communication Failure Procedures – Praslin Aerodrome.

##### 2.1.2 *Ground-to-Air*

- 2.1.2.1 When an aeronautical station has been unable to establish contact with an aircraft station after calls on the frequencies on which the aircraft is believed to be listening and attempts on backup and emergency communications equipment, it shall:
- request other aeronautical stations to render assistance by calling the aircraft and relaying traffic, if necessary;
  - request aircraft on the route to attempt to establish communication with the aircraft and relay traffic, if necessary.
- 2.1.2.2 The provisions of 2.1.2.1 shall also be applied:
- on request of the air traffic services unit concerned;
  - when an expected communication from an aircraft has not been received within a time period such that the occurrence of a communication failure is suspected.
- 2.1.2.3 If the attempts specified in 2.1.2.1 fail, the aeronautical station shall transmit messages addressed to the aircraft, other than messages containing air traffic control clearances, by blind transmission on the frequency(ies) on which the aircraft is believed to be listening. These may consist of:
- The level, route and EAT (or ETA) to which it is assumed the aircraft is adhering;



- b) The weather conditions at the destination aerodrome and suitable alternate and, if practicable, the weather conditions in an area or areas suitable for descent through cloud procedure to be effected.

2.1.2.4 Blind transmission of air traffic control clearances shall not be made to aircraft, except at the specific request of the originator.

**2.1.3 Notification of communications failure**

The air-ground control radio station shall notify the appropriate air traffic services unit and the aircraft operating agency, as soon as possible, of any failure in air-ground communication.



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## Chapter 3

### DATALINK INITIATION FAILURE

#### 3.1 System indication

In the case of a data link initiation failure, the data link system shall provide an indication of the failure to the appropriate ATSU(s). The data link system shall also provide an indication of the failure to the flight crew when a data link initiation failure results from a logon initiated by the flight crew.

**Note:** *When the aircraft's logon request results from responding to a contact request by a transferring ATSU, then both ATSUs will receive the indication.*

#### 3.2 ATSU procedures

The ATSU shall establish procedures to resolve, as soon as practicable, data link initiation failures. Procedures shall include, as a minimum, verifying that the aircraft is initiating a data link request with the appropriate ATSU (i.e. the aircraft is approaching or within the ATSU's control area); and if so:

- a) when a flight plan is available, verify that the aircraft identification, aircraft registration, or aircraft address and other details contained in the data link initiation request correspond with details in the flight plan, and where differences are detected verify the correct information and then make the necessary changes; or
- b) when a flight plan is not available, create a flight plan with sufficient information in the flight data processing system, to achieve a successful data link initiation; then
- c) arrange for the re-initiation of data link.

#### 3.3 Aircraft operator procedures

The aircraft operator shall establish procedures to resolve, as soon as practicable, data link initiation failures. Procedures shall include, as a minimum, in the order given, that the pilot:

- a) verify the correctness and consistency of the flight plan information available in the Flight Management System or equipment from which data link is initiated, and where differences are detected make the necessary changes;
- b) verify the correct address of the ATSU; and
- c) re-initiate data link.



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## Chapter 4

### CONTROLLER PILOT DATALINK COMMUNICATION (CPDLC) FAILURE

#### 4.1 Complete CPDLC failure

4.1.1 Air traffic controllers (ATCOs) having a requirement to transmit information concerning a complete CPDLC ground system failure to all stations likely to intercept should preface such a transmission by the general call 'ALL STATIONS CPDLC FAILURE', followed by the identification of the calling station.

*Note: No reply is expected to such general calls unless individual stations are subsequently called to acknowledge receipt.*

4.1.2 When CPDLC fails and communications revert to voice, all CPDLC messages outstanding should be considered not delivered and the entire dialogue involving the messages outstanding should be recommenced by voice.

4.1.3 When CPDLC fails, but is restored prior to a need to revert to voice communications, all messages outstanding should be considered not delivered and the entire dialogue involving the messages outstanding should be recommenced via CPDLC.

#### 4.2 Intentional shutdown of CPDLC

4.2.1 When a system shutdown of the communications network or the CPDLC ground system is planned, a NOTAM shall be published to inform all affected parties of the shutdown period and if necessary, the details of the voice communication frequencies to be used.

4.2.2 Aircraft currently in communication with the FSSS ACC shall be informed by voice or CPDLC of any imminent loss of CPDLC service.

4.2.3 The ATCO and pilot shall be provided with the capability to abort CPDLC.

#### 4.3 Failure of a single CPDLC message

When an ATCO or pilot is alerted that a single CPDLC message has failed, the controller or pilot shall take one of the following actions, as appropriate:

- a) via voice, confirm the actions that will be undertaken with respect to the related dialogue, prefacing the information with the phrase:  
CPDLC MESSAGE FAILURE;
- b) via CPDLC, reissue the CPDLC message that failed.

#### 4.4 Discontinuation of the use of CPDLC pilot requests

4.4.1 When an ATCO requires all stations or a specific flight to avoid sending CPDLC requests for a limited period of time, the following phrase shall be used:

(*Call sign* or ALL STATIONS) STOP SENDING CPDLC REQUESTS [UNTIL ADVISED] (*reason*)

*Note: Under these circumstances, CPDLC remains available for the pilot to, if necessary, respond to messages, report information, and declare and cancel an emergency.*

4.4.2 The resumption of the normal use of CPDLC shall be advised by using the following phrase:

(*call sign*) or ALL STATIONS) RESUME NORMAL CPDLC OPERATIONS

#### 4.5 Testing CPDLC

4.5.1 Where the testing of CPDLC with an aircraft could affect the air traffic services being provided to the aircraft, coordination shall be effected prior to such testing.



## **Appendices**

*'Reserved'*