



SEYCHELLES TECHNICAL STANDARDS

STS-SCF

Standards for Communications Failure

Seychelles Technical Standards

STS-SCF

Standards for Communications Failure

Issue 01

April 2019

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FOREWORD

- 1 STS-SCF is issued pursuant to SERA.8035 (b) of the adopted Commission Implementing Regulation (EU) 923/2012 of 26th September 2012, referred to herein as STS-RoA, under SCAA CAD ANS/68 and addresses the ICAO Annex 2 and ICAO Annex 10 Vol. II, to the Chicago Convention, Voice and Data Communications Failure Standards and Recommended Practices. It is intended by these set of requirements that air traffic services, aircraft, flight crew members and aircraft operators follow a common standard.
- 2 The basic organisation of STS-SCF (Subparts and standard numbers) follows strict conformance with that adopted for other European standards promulgated by EASA.
- 3 STS-SCF will only be distributed electronically by the Authority as a complete document and as such a list of effective pages is not considered necessary. Amendment to the initial issue will be distributed as a complete revised document with deleted text indicated by a strikethrough and new text highlighted with grey shading until a subsequent amended issue is published. Each page will also indicate the amendment date and amendment number. For clarity and simplification, all pages of the respective section will have the same amendment status upon amendment of one or more rules. The Amendment Records page will detail each amendment.

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AMENDMENT RECORDS

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SPECIFIC REQUIREMENTS FOR COMMUNICATIONS FAILURE**SECTION 1 GENERAL REQUIREMENTS****SUBPART A – APPLICABILITY AND DEFINITION OF TERMS****SCF.1001 Applicability**

STS-SCF prescribes specific requirements applicable to air traffic services, aircraft, flight crew members and aircraft operators, providing such services and operations both for national and international air navigation.

SCF.1005 Definitions of terms

For the purpose of this STS, the definitions of Article 2 - Definitions of the STS-RoA shall apply.

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SECTION 2 TECHNICAL REQUIREMENTS**SUBPART A – COMMUNICATIONS FAILURE****SCF.2001 Voice communications failure**

(a) Air-Ground

- (1) If communications failure precludes SERA.8035 (a) of STS-RoA, an aircraft shall comply with the following:
 - (i) In the event that an aircraft fails to establish contact with the appropriate air traffic services 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 shall attempt to establish communication with other air traffic services or other aircraft using all available means and advise 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.
 - (ii) If the attempts specified in (i) fail, the aircraft 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. In network operation, a message which is transmitted blind should be transmitted twice on both primary and secondary channels. Before changing channel, the aircraft station should announce the channel to which it is changing.
 - (iii) Where a transmitter failure is suspected, a flight crew member 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 flight crew member shall use a backup transmitter, if equipped. Should the aircraft not be equipped with a backup transmitter or unable to transmit on the backup transmitter, the flight crew member shall listen out on the designated frequency for instructions.
 - (iv) When an aircraft 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 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.
 - (v) An aircraft which is provided with air traffic control or advisory service shall, in addition to complying with (iv), transmit information regarding the intention of the pilot-in-command with respect to the continuation of the flight of the aircraft.
 - (vi) 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) An aircraft experiencing air-ground voice communications failure shall attempt to establish communications with the appropriate air traffic control unit using all other available means. In addition, the aircraft, when forming part of the aerodrome traffic at a controlled aerodrome, shall keep a watch for such instructions as may be issued by visual signals.
- (3) An aircraft shall comply with the specific procedures, as are appropriate, 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, applicable for IFR and VFR flights in the event of air-ground voice communications failure.

(b) Ground-to-Air

- (1) When an air traffic services unit has been unable to establish contact with an aircraft after calls on the frequencies on which the aircraft is believed to be listening and attempts on backup and emergency communications equipment, it shall:
 - (i) request other air traffic services unit to render assistance by calling the aircraft and relaying traffic, if necessary; or
 - (ii) request aircraft on the route to attempt to establish communication with the aircraft and relay traffic, if necessary.
- (2) The provisions of (1) shall also be applied:
 - (i) on request of the air traffic services unit concerned; and

- (ii) 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.
- (3) If the attempts specified in (1) fail, the air traffic services unit 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:
 - (i) The level, route and EAT (or ETA) to which it is assumed the aircraft is adhering;
 - (ii) 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.
- (4) Blind transmission of air traffic control clearances shall not be made to aircraft, except at the specific request of the originator.
- (c) 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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SUBPART B – DATALINK INITIATION FAILURE

SCF.2005 System indication

- (a) In the case of a data link initiation failure, the data link system shall provide an indication of the failure to the appropriate air traffic services unit. The data link system shall also provide an indication of the failure to the aircraft 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 air traffic services unit, then both air traffic services units will receive the indication.

SCF.2010 Air traffic services unit procedures

- (a) An air traffic services unit shall establish procedures to resolve, as soon as practicable, data link initiation failures. The procedures shall include, as a minimum, verifying that the aircraft is initiating a data link request with the appropriate air traffic services unit (i.e. the aircraft is approaching or within the air traffic services unit control area); and if so:
 - (1) 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
 - (2) 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
 - (3) arrange for the re-initiation of data link.

SCF.2015 Aircraft operator procedures

- (a) An 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 a pilot:
 - (1) 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;
 - (2) verify the correct address of the air traffic services unit; and
 - (3) re-initiate data link.

SUBPART C – CONTROLLER PILOT DATALINK COMMUNICATION (CPDLC) FAILURE

SCF.2020 CPDLC failure detection and alert

- (a) A CPDLC failure shall be detected in a timely manner.
- (b) An air traffic controller and pilot shall be alerted to a failure of CPDLC as soon as a failure has been detected.
- (c) When an air traffic controller or pilot is alerted that CPDLC has failed, and the air traffic controller or pilot needs to communicate prior to CPDLC being restored, the air traffic controller or pilot shall revert to voice, if possible, and preface the information with the phrase ‘CPDLC FAILURE’.
- (d) Air traffic controllers 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 air traffic services unit.

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

- (e) 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.
- (f) 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.

SCF.2025 Intentional shutdown of CPDLC

- (a) 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.
- (b) Aircraft currently in communication with the air traffic services unit shall be informed by voice or CPDLC of any imminent loss of CPDLC service.
- (c) The air traffic controller and pilot shall be provided with the capability to abort CPDLC.

SCF.2030 Failure of a single CPDLC message

When an air traffic controller 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.

SCF.2035 Discontinuation of the use of CPDLC pilot requests

- (a) When an air traffic controller requires all aircraft or a specific aircraft 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.

- (b) 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

SCF.2040 Testing CPDLC

- (a) 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.

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APPENDICES

Reserved

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ACCEPTABLE MEANS OF COMPLIANCE AND INTERPRETATIVE/EXPLANATORY MATERIAL (AMC & IEM)

1 GENERAL

1.1 This Section contains Acceptable Means of Compliance and Interpretative/Explanatory Material that has been agreed for inclusion in STS-SCF.

1.2 Where a particular STS paragraph does not have an Acceptable Means of Compliance or any Interpretative/Explanatory Material, it is considered that no supplementary material is required.

2 PRESENTATION

2.1 The Acceptable Means of Compliance and Interpretative/Explanatory Material are presented in full page width on loose pages, each page being identified by the date of issue and/or the Amendment number under which it is amended or reissued.

2.2 A numbering system has been used in which the Acceptable Means of Compliance or Interpretative/Explanatory Material uses the same number as the STS paragraph to which it refers. The number is introduced by the letters AMC or IEM to distinguish the material from the STS itself.

2.3 The acronyms AMC and IEM also indicate the nature of the material and for this purpose the two types of material are defined as follows:

Acceptable Means of Compliance (AMC) illustrates a means, or several alternative means, but not necessarily the only possible means by which a requirement can be met. It should however be noted that where a new AMC is developed, any such AMC which may be additional to an existing AMC will be amended into the document following consultation under the NPA procedure.

Interpretative/Explanatory Material (IEM) helps to illustrate the meaning of a requirement.

2.4 Explanatory Notes not forming part of the AMC or IEM text appear in a smaller type face.

2.5 New, amended or corrected text is enclosed within heavy brackets.

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