



Telecommunications equipment – Private Branch Exchanges (PBXs) – Signalling requirements in analogue interface for exchange line with direct dialling-in service – Amendment 1

Telekommunikationsutrustning – Abbonentväxlar – Signaleringskrav i analogt gränssnitt för huvudledning med direktval – Tillägg 1

0 Introduction

This amendment refers to Edition 2 ("utgåva 2") of SS 63 63 47. It results from a general review of Swedish standards for attachment to PSTN in order to align their mandatory content with the requirements of the teleterminal directive (91/263/EEC). The publication of this amendment is also a consequence of the withdrawal of SS 63 63 27.

1 Official language

By this amendment the Swedish language version of SS 63 63 47 is withdrawn.

2 Transfer of texts to notes

Clause 5.2.1.1 shall be deleted from the mandatory part of the standard and the text included for information in a note under 5.2.1. Consequently, the sub-clause 5.2.1.2 shall be deleted and the text shall be included in clause 5.2.1.

Clause 5.3.11 shall be deleted from the mandatory part of the standard and the text shall be included for information only and amended to read in full:

"5.3.11 Register recall

NOTE – Register recall signal in conversation state, if implemented, should consist of a break in the DC-loop. The break should have a duration of 90 ± 40 ms and present a resistance ≥ 100 k Ω . There are, however, no approval requirements for this supplementary service."

3 Deletions

Clause 1, in total, shall be deleted (for practical reasons the remaining clauses will keep their numbering).

Page 2, Footnote, shall be deleted.

Clause 5.2.2.3 shall be deleted.

Clauses 5.2.5 up to and including 5.2.5.2 shall be deleted.

Clause 5.3.3. The paragraph starting "500-line pulsing" shall be deleted.

Clauses 5.3.5 up to and including 5.3.5.5 shall be deleted.

Clause 5.6 shall be deleted.

Page 20: Signalling states No 4b and 5b shall be deleted.

Page 24, left column with PBX-times: The rows t113, t114, t115, t116, t119, t120, t121 and t122 shall be deleted; the time limit t122 → t124 shall be deleted.

Page 25: The time limits t01 → t13, t13 → t14, t14 → t15, t19 → t20, t20 → t21, t21 → t22, t15 → t16, t15 → t19, t12 → t13, t18 → t19, t16 → t17 and t22 → t23 shall be deleted.

Page 28, figure: "SCS1" and "SCS2" shall be deleted.

Page 28, Legend: The line "SCS1,2 Signal Converter System 1, 2" shall be deleted.

Annex B shall be deleted.

Annex C shall be deleted.

4 New wordings

Clause 5.2.2.2 shall be amended to read in full:

"5.2.2.2 Detection of ringing signals

The ringing signal detector shall detect ringing signals with a voltage ≥ 30 V and a frequency of 25 Hz for pulses with a duration of ≥ 200 ms. Ringing signals with a voltage < 10 V shall not be detected."

Clause 5.2.3 shall be amended to read:

"5.2.3 Low-ohmic loop

The resistance towards the line in low-ohmic state (the resistance L in the attached signalling diagram) shall be $< 600 \Omega$ (measured at 10 and 30 mA line current). Under existing current feed conditions, this will normally give a current of at least 10 mA. The PBX shall, at a line current of 10 mA, be able to detect a polarity reversal of, or break (≥ 180 k Ω) in, the current feed from the telephone network. A polarity"

Clause 5.3.3, the note, shall be amended: The words "one, two or all three" shall be changed to "one or both".

Clause 5.3.6, first sentence: Change "multi-frequency pushbutton dialling (MFPB)" to "DTMF signalling".

Clause 5.3.7, last sentence shall be amended to read: "This signalling state shall be kept for at least 450 ms."

Clause 5.3.8 shall be amended to read in full:

"5.3.8 Calling an extension

Through connection of the call and sending of ringing signals to an available extension shall not take place until 600 ± 100 ms after the end of the last break pulse in a received digit, or 0 ms after the end of the last received DTMF digit. At the same time as the ringing starts a ringing tone shall be sent to the network. The ringing tone shall last as long as the ringing signals are sent to the extension. If the extension is busy the PBX can send a busy tone to the network, or, if preferred, a ringing tone, and redirect the call to another answering device, e.g. the operator.

NOTE – The supplier may choose to make the time limit project dependent. In this case it may be set to 0 ms for decadic pulsing when connected to an electronic exchange."

Clause 5.3.10, second sentence shall be amended to read: "When a periodic clearing signal is sent, a high ohmic loop shall be connected to the line during $1 \pm 0,15$ s, repeated with an interval (pause) of 8 - 10 s."

Annex A, page 23, end of the page: "MFPB" shall be changed to "DTMF".

Annex A, page 28, the figure: "Telephone exchange" shall be changed to "Analogue public exchange" and "AXE" to "Digital public exchange".

Annex A, page 28, Electrical conditions: "L = 100 - 300 ohms" shall be changed to "L < 600 ohms".

5 New requirement (moved from SS 63 63 27)

A new clause shall be inserted:

"5.3.16 Signalling requirements for external call transfer.

External call transfer may be performed in a PBX or in a PBX network if the incoming (analogue or digital) exchange line is connected to a digital public exchange, and if clearing signals from the incoming to the outgoing exchange line, or vice versa, are forwarded within 3 s."