ATAAB ADVISORY NOTE

TRAC Analogue Type Approval Advisory Board

Proposed

ATAAB Advisory Note Number: AN 02rev 1

Date: 1998-06-02

Subject: Additional requirements for attachment to the Swiss and Norwegian PSTN.

APPLICABILITY

This note is specifically applicable for proper interworking with the Public Switched Telephone Network in Switzerland and Norway in addition to:

[X] **CTR 21 (When published)**

Note Until CTR 21 is available, reference should be made to ETSI document TBR 21.

Annexes to this Advisory Note:

A: Additional requirements and tests for attachment to the Swiss and Norwegian PSTN.

In consideration of the following:

- The ringing voltage delivered by the Swiss and Norwegian PSTN may be as low as 24 Vrms;

- TE approved to CTR 21 will need to note these additional requirements when a TE is intended for connection to the Swiss and Norwegian Public Switched Telephone Network.

ATAAB advises the following:

To be able to inter-work properly with the Swiss and Norwegian Public Switched Telephone Network, the TE shall, in addition to the requirements of CTR 21, comply with the requirements found in Annex A of this Advisory Note.

Conformity to these additional requirements is not subject to approval.

It is the responsibility of the supplier to provide information for users as to whether the Terminal Equipment complies with the additional requirements for the Swiss and Norwegian Public Switched Telephone Network specified in this Advisory Note.

Annex A also specifies the method to assess compliance with the additional requirement, including reference to the additional test to be performed to dynamically assess compliance with the additional requirement.

ATAAB

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Annex A (Normative)

to

ATAAB Advisory Note Number: AN02rev

Date: 1997-02-27

Subject: **Additional requirements and tests for attachment to the Swiss and Norwegian Public Switched Telephone Network.**

INTRODUCTION

Terminal Equipment approved to CTR 21 may not inter-work properly with the Swiss and Norwegian Public Switched Telephone Network.
This Annex specifies requirements to which a TE shall comply, in addition to the requirements of CTR 21 in order to inter-work properly with the Swiss and Norwegian Public Switched Telephone Network. It also specifies the method to assess compliance with these requirements, including reference to additional tests to be performed to dynamically assess compliance with the additional requirements.

NORMATIVE REFERENCES

CTR21; Terminal Equipment (TE). Attachment requirements for pan-European approval for connection to the analogue Public Switched Telephone Networks (PSTNs) of TE (excluding TE supporting the voice Telephony Service) in which network addressing, if provided, is by means of Dual Tone Multi-Frequency (DTMF) signalling.

NOTE: This document makes reference to CTR 21. Until CTR 21 is available, reference should be made to TBR 21.

REQUIREMENTS and ASSOCIATED TESTS

NOTE: The following requirements are in addition to those in CTR 21 Clause 4.5 and the associated tests in Clause A.4.5. The changes introduced by this Advisory Note reduce the ringing voltage available to the TE at 25 Hz from 30V to 24V.

Ringing signal detector sensitivity (Requirement - Based on CTR 21: Clause 4.5)

Justification: 91/263/EEC, Article 4(f); Inter-working with the PSTN is assured by requiring the TE to detect valid ringing signals. The Swiss and Norwegian PSTN may not be capable of providing a TE with a ringing voltage that exceed 24 Vrms.

Requirement: If a ring detect function is provided and enabled, the TE shall be able to respond to ringing signals of 24 Vrms at 25 Hz with a cadence of 1 s ON and 5 s OFF, superimposed on a 50 VDC feeding voltage.

The response shall be as stated by the supplier.

Test: The test shall be conducted according to Clause A.3.2

Ringing signal detector sensitivity (Test- Based on CTR 21: Clause A.4.5)

Requirement: Subclause A.3.1.

Purpose: To determine the ability of the TE to respond as stated to ringing signals as specified by the supplier.

Measurement principle:

Preamble: Set the TE in quiescent state with answering facility enabled.

Test state: Quiescent state.

Test configuration:

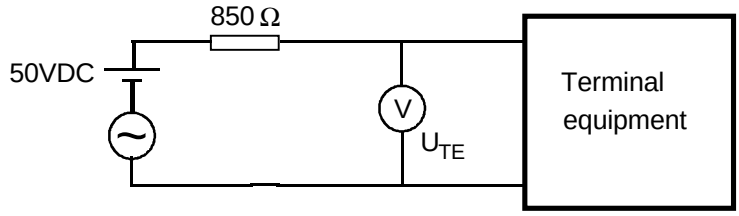

Figure A.1

DC feeding arrangement: Feed Voltage = 50 V DC.

Measurement points: The ringing signal shall have a sinusoidal source of 25 Hz and a cadence of 1 s ON and 5 s OFF.

U_{TE} = 24 Vrms

Safety Warning: This test presents the potential for a shock hazard. Ensure satisfactory safety

precautions are implemented to reduce the risk of electric shock.

Measurement execution:

Using the test configuration shown in figure A.1, apply, the ringing signal described in "Measurement points" to the circuit to determine whether it is detected by the TE as stated by the supplier.

Formal processing: None.

Verdict: If the TE detects the ringing signal described above in "Measurement points" then Pass; else Fail.

Guidance: For automatic answering TE, after the stimulation to cause the seizure, the requirement stated in CTR 21, subclause 4.6.2 and its associated test case apply.

Requirements Table (CTR-RT)

The requirements table of CTR 21, Annex B is still applicable.