



**Speech and multimedia Transmission Quality (STQ);
Requirements and tests methods for terminal
equipment incorporating a handset when connected to the
analogue interface of the PSTN**

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Foreword

This final draft ETSI Standard (ES) has been produced by ETSI Technical Committee Speech and multimedia Transmission Quality (STQ), and is now submitted for the ETSI standards Membership Approval Procedure.

The present document has been produced by ETSI in order to update the contents of initial standards for PSTN (e.g. TBR 038 [14]).

In particular, the update aims to take benefits of recent improvements in test methods and test equipments. Even the purpose of the standard is to consider Narrowband speech characteristics and test methods, the new test methods leave the door open for further services (e.g. wideband speech).

In this release 1 of the present document, no new measurement will be added except limitation of acoustic shock which is a requirement for safety. Previous requirements and test methods are kept in an annex in order to be used for terminals designed with LRGP method. Status of this annex is planned to be informative, but only in release 2.

The new measurements needed for handset terminal including speech processing functions will be introduced in a further release taking into account this type of terminal.

Introduction

The present document specifies only the technical characteristics for handset telephony and is intended to be used in conjunction with an appropriate access standard.

1 Scope

The present document specifies the technical characteristics (electrical and acoustic requirements and measurement methods) to be provided by a single, handset telephony, terminal equipment which is intended for connection by 2 wires to an analogue interface of a PSTN. This interface is characterized by a d.c. loop to indicate seizure and clearing, low frequency a.c. ringing signals below the speech passband to indicate an incoming call and the transmission phase having an approximate bandwidth of 3 kHz at the network terminating point.

The objective of the present document is to ensure minimum speech quality when interworking via the public network between two single items of equipment.

The present document only applies to terminal equipment supporting handset telephony.

The present document is applicable to handset telephony function. In the case of multiple functions provided in the same terminal equipment, the present document does not apply when those other functions are active in conjunction with handset telephony.

The present document also applies to any type of analogue handset terminal intended to be connected to a gateway.

The present document specifies the functions necessary to provide 2-way real-time speech conversation. Where a function is indicated as optional, it needs not to be provided, but, where such a function is provided, the terminal needs to conform to the requirements and tests specified in the present document.

A test is given for each requirement in the present document including measurement methods. The terminal equipment may be stimulated to perform the tests by additional equipment if necessary.

The present document gives requirements for new test methods based upon use of HATS and new tests signals.

In an annex, requirements with test methods corresponding to previous tests methods (LRGP) and test signals are given.

The application of the present document is intended also for handset telephony function employing a radio link (e.g. DECT).

The application of the present document is not intended for:

- a handset telephony function with speech transmission performance specially designed for the less abled (e.g. with amplification of received speech as an aid for the hard of hearing);
- a handset telephony function with speech transmission performance specifically designed to cater for hostile environments;
- any handsfree or loudspeaking voice telephony function;
- a handset telephony function employing speech processing techniques other than coding.

NOTE: The terminal equipment may provide additional functions or facilities to those of handset telephony.

2 References

References are either specific (identified by date of publication and/or edition number or version number) or non-specific. For specific references, only the cited version applies. For non-specific references, the latest version of the reference document (including any amendments) applies.

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