



## **Speech and multimedia Transmission Quality (STQ); Speech samples and their use for QoS testing**

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**Reference**

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# Contents

Intellectual Property Rights .....	4
Foreword.....	4
Modal verbs terminology.....	4
Introduction .....	4
1 Scope .....	5
2 References .....	5
2.1 Normative references .....	5
2.2 Informative references.....	5
3 Abbreviations .....	6
4 Devices and network access .....	6
4.1 Mobile devices .....	6
4.2 ISDN/PSTN.....	7
4.3 Test scenarios .....	7
4.3.1 General aspects .....	7
4.3.2 Narrowband telephony and narrowband test scenario .....	7
4.3.3 Wideband telephony and super-wideband test scenario .....	8
5 Speech samples .....	9
5.1 General aspects.....	9
5.2 Pre-filtering of speech signals .....	9
5.2.1 Emulation of handsets.....	9
5.2.2 Filter for narrow-band test scenarios .....	9
5.2.2.1 IRS send Filter .....	9
5.2.2.2 MSIN Filter .....	10
5.2.2.3 Recommended filters to use in narrowband mobile test scenarios.....	11
5.2.3 Filter for wideband and super-wideband telephony test scenarios.....	11
5.2.3.1 14 kHz bandpass .....	11
5.2.3.2 Recommendation ITU-T P.341 .....	11
5.2.3.3 Recommended filters to use in super-wideband mobile test scenarios .....	11
5.2.4 Reference signals .....	12
5.3 Audio level .....	12
5.3.1 Nominal level.....	12
5.3.2 Level adjustment with Recommendation ITU-T P.56 .....	12
5.3.3 Input level at test devices.....	12
6 Scenarios .....	13
6.1 Narrowband-Measurement Land to Mobile .....	13
6.2 Narrowband-Measurement Mobile to Land .....	13
6.3 Mobile to Mobile.....	14
6.3.1 Narrowband .....	14
6.3.2 Wideband and super-wideband.....	14
7 Synopsis .....	15
<b>Annex A: Coefficients for the reconstruction lowpass filter .....</b>	<b>16</b>
<b>Annex B: Bibliography .....</b>	<b>17</b>
<b>Annex C: Speech Samples .....</b>	<b>18</b>
C.1 Introduction .....	18
C.2 Design.....	18
C.3 Example results .....	18
C.4 Technical specification.....	20
History .....	22

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## Foreword

This Technical Report (TR) has been produced by ETSI Technical Committee Speech and multimedia Transmission Quality (STQ).

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## Modal verbs terminology

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## Introduction

Conducting drive test in multi technology environment presents a challenge to all parties. And the complexity and variance of the different scenarios need to be broken down to handy instructions for those who actually configure and conduct the measurements, such as Network Operators, Service Providers, Equipment Vendors and Regulatory Authorities.

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# 1 Scope

The present document introduces and explains the use and application of speech samples to determine the objective listening quality (LQO) in narrowband (NB), wideband (WB) and super-wideband (SWB) for different scenarios such as connections between fixed networks and mobile terminals.

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## 2 References

### 2.1 Normative references

Normative references are not applicable in the present document.

### 2.2 Informative 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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The following referenced documents are not necessary for the application of the present document but they assist the user with regard to a particular subject area.

- [i.1] Recommendation ITU-T P.48: "Specification for an intermediate reference system".
- [i.2] Recommendation ITU-T P.800: "Methods for subjective determination of transmission quality".
- [i.3] Recommendation ITU-T P.830: "Subjective performance assessment of telephone-band and wideband digital codecs".
- [i.4] Recommendation ITU-T P.862: "Perceptual evaluation of speech quality (PESQ): An objective method for end-to-end speech quality assessment of narrow-band telephone networks and speech codecs".
- [i.5] Recommendation ITU-T P.862.1: "Mapping function for transforming P.862 raw result scores to MOS-LQO".
- [i.6] Recommendation ITU-T P.862.2: "Wideband extension to Recommendation P.862 for the assessment of wideband telephone networks and speech codecs".
- [i.7] Recommendation ITU-T P.862.3: "Application guide for objective quality measurement based on Recommendations P.862, P.862.1 and P.862.2".
- [i.8] Recommendation ITU-T P.863: "Perceptual objective listening quality assessment (POLQA)".
- [i.9] Recommendation ITU-T P.863.1: "Application Guide for the Recommendation ITU-T P.863".
- [i.10] Recommendation ITU-T G.711: "Pulse code modulation (PCM) of voice frequencies".
- [i.11] Recommendation ITU-T G.191: "Software tools for speech and audio coding standardization".
- [i.12] Recommendation ITU-T P.341: "Transmission characteristics for wideband digital loudspeaking and hands-free telephony terminals".
- [i.13] Recommendation ITU-T P.56: "Objective measurement of active speech level".
- [i.14] Recommendation ITU-T P.501: "Test signals for use in telephony".