



COVERING NOTE

GENERAL SECRETARIAT INTERNATIONAL TELECOMMUNICATION UNION

Geneva, 30 September 2003

ITU – TELECOMMUNICATION
STANDARDIZATION SECTOR

Subject: Amendment 1 (09/2003) to

ITU-T Recommendation P.330 (03/2003), *Speech processing devices for acoustic enhancement*

In clause 4.5.1, Acoustic echo path

All the text at the end of the paragraph belongs to the NOTE. It should be indented and amended as follows:

NOTE – It is recommended to avoid extremely long rooms (Length $\gg$ Width, Height) and rooms with extremely low ceilings (Height $\ll$ Length, Width), and also rooms with all the side dimensions nearly identical.

Large, flat, parallel room-limiting surfaces, and surface areas that provide broadband sound reflection, and in particular reflecting wall surfaces at an average height of 0.8 m to 1.8 m above the floor should be avoided, since they can cause flutter echoes and flutter-echo-like disturbances (echoing, roughness), especially if the test setup is in an unfavourable position.

Measuring the local frequency-dependent distribution of sound pressure levels within a selected room in the steady state can help to determine the optimum position of the test setup.

As a general measure, the minimum distance between the test setup and room limiting surfaces should be 1 m, regardless of the acoustic properties of these surfaces. This can prevent disturbances due to initial reflections and the rise in sound pressure level that can occur locally at low frequencies. The same recommendation applies to geometrically large furniture surfaces that may reflect sound.



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

P.330

(03/2003)

SERIES P: TELEPHONE TRANSMISSION QUALITY,
TELEPHONE INSTALLATIONS, LOCAL LINE
NETWORKS

Subscribers' lines and sets

Speech processing devices for acoustic enhancement

ITU-T Recommendation P.330

ITU-T P-SERIES RECOMMENDATIONS

TELEPHONE TRANSMISSION QUALITY, TELEPHONE INSTALLATIONS, LOCAL LINE NETWORKS

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For further details, please refer to the list of ITU-T Recommendations.

ITU-T Recommendation P.330

Speech processing devices for acoustic enhancement

Summary

This Recommendation applies to the generic transmission characteristics, performance and testing principles of Speech Processing Devices for Acoustic enhancement (SPDA) intended for use in terminals, whatever the applications.

A Speech Processing Device for Acoustic enhancement is defined as any signal processing function integrated in terminals that performs voice enhancement. Voice enhancement functions include the control of acoustic echo and noise reduction.

The purpose of this Recommendation is to define a framework for specifying performance constraints for terminals which include SPDA, and when appropriate, to define tests that may be performed on such terminals to verify that these constraints are met. This Recommendation covers generic characteristics that are applicable to both analogue and digital terminals.

Source

ITU-T Recommendation P.330 was prepared by ITU-T Study Group 12 (2001-2004) and approved under the WTSA Resolution 1 procedure on 16 March 2003.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

NOTE

In this Recommendation, the expression "Administration" is used for conciseness to indicate both a telecommunication administration and a recognized operating agency.

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As of the date of approval of this Recommendation, ITU had not received notice of intellectual property, protected by patents, which may be required to implement this Recommendation. However, implementors are cautioned that this may not represent the latest information and are therefore strongly urged to consult the TSB patent database.

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