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Supplement 1

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SERIES H: AUDIOVISUAL AND MULTIMEDIA SYSTEMS

**Application profile – Sign language and
lip-reading real-time conversation using low
bit-rate video communication**

ITU-T H-series Recommendations – Supplement 1

(Previously CCITT Recommendations)

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AUDIOVISUAL AND MULTIMEDIA SYSTEMS

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SUPPLEMENT 1 TO ITU-T H-SERIES RECOMMENDATIONS**APPLICATION PROFILE – SIGN LANGUAGE AND LIP-READING REAL-TIME
CONVERSATION USING LOW BIT-RATE VIDEO COMMUNICATION****Summary**

Sign language and lip-reading are two important application areas of video communication. For the successful transmission of the components of visual language, certain quality requirements must be met.

This supplement is an application profile document that gives the background to the requirements and offers as well guidance on how these requirements can be met. The purpose of this supplement is not to propose new video coding schemes, but rather to indicate how current and future video coding schemes can be applied to these two areas of application, with good results.

Source

Supplement 1 to ITU-T H-series Recommendations was prepared by ITU-T Study Group 16 (1997-2000) and was approved under the WTSC Resolution No. 5 procedure on 27 May 1999.

FOREWORD

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The World Telecommunication Standardization Conference (WTSC), which meets every four years, establishes the topics for study by the ITU-T Study Groups which, in their turn, produce Recommendations on these topics.

The approval of Recommendations by the Members of the ITU-T is covered by the procedure laid down in WTSC Resolution No. 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.

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Included CD-ROM: "Irene" video clip

Introduction

Millions of deaf people use a sign language as their first language and are eager to use sign language for long distance conversation. The conversation speed of sign language is comparable to the speed of voice conversation.

People with varying degrees of hearing loss are considerably aided in "perceiving" speech by viewing the face of the speaker for lip-reading.

This supplement describes the importance of different factors that should be taken into account in the application of low bit-rate video coding for acceptable use in sign language and lip-reading.

The requirements set out in this supplement have been drawn from user experience but should not, however, be taken as fixed and absolute values. Different situations may call for either more stringent, or more relaxed, requirements.