



INTERNATIONAL TELECOMMUNICATION UNION

**ITU-T**

TELECOMMUNICATION  
STANDARDIZATION SECTOR  
OF ITU

**J.1**

(07/96)

**TRANSMISSION OF SOUND-PROGRAMME  
AND TELEVISION SIGNALS**

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**TERMINOLOGY FOR NEW SERVICES  
IN TELEVISION AND SOUND-PROGRAMME  
TRANSMISSION**

**ITU-T Recommendation J.1**

(Previously "CCITT Recommendation")

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## FOREWORD

The ITU-T (Telecommunication Standardization Sector) is a permanent organ of the International Telecommunication Union (ITU). The 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 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 (Helsinki, March 1-12, 1993).

ITU-T Recommendation J.1 was prepared by ITU-T Study Group 9 (1993-1996) and was approved under the WTSC Resolution No. 1 procedure on the 11th of July 1996.

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### 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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## **INTRODUCTION**

In the pursuit of its work aimed towards the standardization of the transmission of television and sound programme signals and of related data signals for purposes of contribution, primary distribution and secondary distribution, including cable television, SMATV and similar services, ITU-T has often found it necessary to develop new terminology, or to adapt it from current technical parlance.

This continuing work has resulted in a small glossary of terms, acronyms and definitions, that is specific to that area of activity, and that should desirably find wide recognition and application.

The purpose of this Recommendation is to formalize this small glossary of terms, acronyms and definitions, and to recommend its use in all the texts that address the services and technologies listed above.

It is expected that the glossary will continue to gradually grow over the years, as new terms are developed or adapted.

## TERMINOLOGY FOR NEW SERVICES IN TELEVISION AND SOUND-PROGRAMME TRANSMISSION

(Geneva, 1996)

### 1 Scope

The scope of this Recommendation is to provide a glossary of terms, acronyms and definitions for application to new services related to the transmission of television and sound programme signals and of related data signals for purposes of contribution, primary distribution and secondary distribution, including cable television, SMATV and similar services.

### 2 Terms, acronyms and definitions

**2.1 broadcast channel:** A radio-frequency channel, operated by an operating agency and used for the broadcast or cable distribution of programming; it is characterized irrespective of the programme channel(s) it delivers, and it may carry a (reconfigurable) multiplex of programme channels.

**2.2 broadcast network:** A set of interconnectable broadcast channels, operated by an operating agency; it is characterized irrespective of the programme channels it carries, and it may carry the same programme channel in several broadcast channels.

**2.3 hybrid link:** A link capable to carry analogue signals in parts of its band, and digital signals in other parts of it.

**2.4 interactive service:** A service in which the end user navigates through the available content of the programme delivered to him, by sending messages to the service origination point.

NOTE – The definition does not cover those services in which the user locally interacts with data downloaded to him, although this may give him an impression of interactivity.

**2.5 MATV:** A collective antenna installation similar to SMATV in its functionality, whose head-end is intended for reception of terrestrial television signals only. (Most current SMATV systems were originally installed as MATV and were later upgraded to also distribute satellite signals.)

**2.6 multimedia service:** A service in which the programme information consists of more than one type, such as text, graphics, sound, image and video, and where the information is organized to provide more than one way of access (a decision-tree access).

**2.7 non-homogeneous network:** A mixed analogue and digital network architecture used in cable television distribution, in which the digital links are used for the main distribution path, while the analogue links are used as the final link into the users' premises.

**2.8 programme channel:** A programming schedule (sequence of programmes), generally provided by a programme provider company for distribution to viewers; it is characterized irrespective of the type of broadcast channel or network used to deliver it, and it may simultaneously be delivered over several different broadcast channels or networks (terrestrial broadcasting, satellite broadcasting, cable television, etc.).

**2.9 return channel:** A communication channel established between the end user and the service origination point, to allow the user to interact with the service origination.

**2.10 SMATV network:** A Satellite Master Antenna TV network intended for the broadband distribution of television, sound and data signals received directly from one or more satellites, possibly in frequency-division multiplex with similar terrestrial VHF/UHF signals, to households located in one or more adjacent buildings. Where intended also for the distribution of new digital multiprogramme television, sound and data services, such networks are known as “Digital SMATV networks” and the digital configuration for this purpose is known as “Digital multiprogramme SMATV System”.

**2.11 SMATV system:** A system intended for the unattended distribution of television, sound and data signals received directly from one or more satellites, possibly in frequency-division multiplex with similar terrestrial signals, to households located in one or in a few adjacent buildings; it is characterized by the use of consumer-type equipment throughout. Also known as “community antenna installations” or as “domestic TV cable networks”.

**2.12 SMATV-D system:** A SMATV system equipped to receive QPSK modulated digital television satellite signals and to distribute them, still in digital form, using QAM or QPSK modulation (the term “D” refers, in a generic way, to the ability to process digital television signals).

**2.13 SMATV-DTM system:** A SMATV-D system based on digital transmodulation performed at head-end from a QPSK-modulated satellite signal to a QAM-modulated cable signal, which is then distributed to users in the VHF/UHF bands (the approach is called “transparent”, since the satellite carrier content is transferred to the cable carrier without demultiplexing or other baseband processing).

**2.14 SMATV-IF:** A SMATV-D system based on the direct distribution of the QPSK-modulated television satellite signal, taken from the LNB and distributed in the extended IF band (e.g. 950-2050 MHz in Europe) without further processing apart from a possible frequency conversion within the IF band.

**2.15 SMATV-S:** A SMATV-D system based on the direct distribution of the QPSK-modulated television satellite signal, taken from the LNB and distributed in the “Extended Superband” (e.g. 230-470 MHz in Europe) without any further processing apart from frequency conversion.

**2.16 transparent digital transmodulator (TDT):** A head-end device for SMATV-DTM systems that transparently processes the QPSK-modulated television satellite signal, just adapting its modulation and coding so that it can be fed through the SMATV system using QAM modulation.



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