



INTERNATIONAL TELECOMMUNICATION UNION

ITU-T

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

J.150

(03/98)

SERIES J: TRANSMISSION OF TELEVISION, SOUND
PROGRAMME AND OTHER MULTIMEDIA SIGNALS

Digital television distribution through local subscriber
networks

**Operational functionalities for the delivery of
digital multiprogramme television, sound and
data services through multichannel, multipoint
distribution systems (MMDS)**

ITU-T Recommendation J.150

(Previously CCITT Recommendation)

ITU-T J-SERIES RECOMMENDATIONS

TRANSMISSION OF TELEVISION, SOUND PROGRAMME AND OTHER MULTIMEDIA SIGNALS

General Recommendations	J.1-J.9
General specifications for analogue sound-programme transmission	J.10-J.19
Performance characteristics of analogue sound-programme circuits	J.20-J.29
Equipment and lines used for analogue sound-programme circuits	J.30-J.39
Digital encoders for analogue sound-programme signals	J.40-J.49
Digital transmission of sound-programme signals	J.50-J.59
Circuits for analogue television transmission	J.60-J.69
Analogue television transmission over metallic lines and interconnection with radio-relay links	J.70-J.79
Digital transmission of television signals	J.80-J.89
Ancillary digital services for television transmission	J.90-J.99
Operational requirements and methods for television transmission	J.100-J.109
Interactive systems for digital television distribution	J.110-J.129
Transport of MPEG-2 signals on packetised networks	J.130-J.139
Measurement of the quality of service	J.140-J.149
Digital television distribution through local subscriber networks	J.150-J.159

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

ITU-T RECOMMENDATION J.150

OPERATIONAL FUNCTIONALITIES FOR THE DELIVERY OF DIGITAL MULTIPROGRAMME TELEVISION, SOUND AND DATA SERVICES THROUGH MULTICHANNEL, MULTIPOINT DISTRIBUTION SYSTEMS (MMDS)

Source

ITU-T Recommendation J.150 was prepared by ITU-T Study Group 9 (1997-2000) and was approved under the WTSC Resolution No. 1 procedure on the 18th of March 1998.

FOREWORD

ITU (International Telecommunication Union) is the United Nations Specialized Agency in the field of telecommunications. The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of the 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.

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.

INTELLECTUAL PROPERTY RIGHTS

The ITU draws attention to the possibility that the practice or implementation of this Recommendation may involve the use of a claimed Intellectual Property Right. The ITU takes no position concerning the evidence, validity or applicability of claimed Intellectual Property Rights, whether asserted by ITU members or others outside of the Recommendation development process.

As of the date of approval of this Recommendation, the 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.

© ITU 1998

All rights reserved. No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the ITU.

CONTENTS

1	Introduction	1
2	Scope	1
3	References	1
4	Definitions	1
5	Abbreviations and acronyms	2
Annex A – Digital multiprogramme MMDS System A		2
A.1	Introduction	2
A.2	MMDS system concept	2
A.3	MPEG-2 transport layer	4
A.4	Framing structure	4
A.5	Channel coding	4
A.6	Byte-to-symbol mapping	4
A.7	Modulation	4
A.8	Baseband filtering characteristics	4
Annex B – Digital multiprogramme MMDS System B		5
Annex C – Digital multiprogramme MMDS System C		5
C.1	Introduction	5
C.2	MMDS System C concept	5
C.3	MPEG-2 transport layer	6
C.4	Framing structure	6
C.5	Channel coding	6
C.6	Modulation	6
Annex D – Digital multiprogramme MMDS architecture System D		7
D.1	Introduction	7
D.2	MMDS VSB system concept	7