

## RECOMMENDATION ITU-R BT.1564\*

**Interaction channel using local multipoint distribution systems**

(Question ITU-R 16/6)

(2002)

The ITU Radiocommunication Assembly,

*considering*

- a) the need to avoid proliferation of protocols for interactive services;
- b) that work on return channels is being carried out in ITU-R and ITU-T Sectors;
- c) the approval by ITU-T of ITU-T Recommendation J.116 – Interaction channel for local multipoint distribution systems; and by ITU-R of Recommendation ITU-R F.1499 – Radio transmission systems for fixed broadband wireless access based on cable modem standard,

*recommends*

1 that, for relevant applications in sound and television broadcasting, the systems included in ITU-T Recommendation J.116<sup>1</sup> and Recommendation ITU-R F.1499<sup>2</sup> should be used. Summaries of Recommendation ITU-T J.116 and Recommendation ITU-R F.1499 are provided in Annexes 1 and 2 respectively to this Recommendation<sup>3</sup>.

## ANNEX 1

**Summary of ITU-T Recommendation J.116 – Interaction channel for local multipoint distribution systems**

This Recommendation is the baseline specification for the provision of an interaction channel for local multipoint distribution systems (LMDS) networks as a digital broadcasting delivery medium. It makes provision for bidirectional data over wireless access for interactive services.

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\* Radiocommunication Study Group 6 made editorial amendments to this Recommendation in 2002 in accordance with Resolution ITU-R 44.

<sup>1</sup> The text of ITU-T Recommendation J.116 can be found on:  
<http://www.itu.int/rec/recommendation.asp?type=folders&lang=e&parent=T-REC-J.116>.

<sup>2</sup> The text of Recommendation ITU-R F.1499 can be found on:  
<http://www.itu.int/rec/recommendation.asp?type=folders&lang=e&parent=R-REC-F.1499>.

<sup>3</sup> The future of this Recommendation will take into account the evolution of ITU-T Recommendation J.116 and Recommendation ITU-R F.1499.

ITU-T Recommendation J.116 contains Annexes in recognition of different existing media environments. The Annexes represent complementary approaches which reflect existing media environments. Annex A is based on work associated with interfaces to TV receivers, whilst Annex B is based on work associated with PC modems. However, there is substantial commonality in the services and protocols supported. The Annexes are intended to be read in conjunction with the relevant wireless distribution Recommendations which are under study in the Radiocommunication Sector.

It is recommended that for the introduction of interactive broadcast services, delivered via LMDS, the systems in this Recommendation should be used to achieve the benefits of economies of scale and facilitate interoperability.

## ANNEX 2

### **Summary of Recommendation ITU-R F.1499 – Radio transmission systems for fixed broadband wireless access based on cable modem standards**

This Recommendation presents technical requirements for radio transmission systems for broadband wireless access (BWA) based on cable modem standards described in Annex B of ITU-T Recommendation J.112. The main content includes functional assumptions, physical (PHY) layer specifications (for both physical media dependent sublayer and downstream transmission convergence sublayer), media access control (MAC) layer specifications and future BWA modem capabilities.

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