## RECOMMENDATION ITU-R BR.1216

## RECORDING OF TELEVISION PROGRAMMES ON MAGNETIC TAPE IN THE CASE WHEN SEVERAL PROGRAMMES ARE BROADCAST IN THE SAME DIGITAL MULTIPLEX

(Question ITU-R 229/11)

(1995)

The ITU Radiocommunication Assembly,

## considering

- a) that bit-rate reduction techniques applied to digital video and digital audio can lead to substantial reduction in the bit rate required for the delivery of digital television programmes and of their ancillary components;
- b) that this might allow to multiplex two or more digital television programmes on a bit stream commensurate with the delivery capabilities of a digital emission channel;
- c) that such a multiplexed bit stream might carry programme components whose programming contents are related to each other, or are independent and unrelated;
- d) that there will be a need to record those programme components at the origination studio or at the continuity studio, and to also record them upon reception in the home;
- e) that the technical specifications for television home recording are the responsibility of the International Electrotechnical Commission (IEC), to which the ITU-R has a duty to offer relevant user requirements from the viewpoint of the broadcasters;
- f) that § 7.4 of Recommendation ITU-R BR.469 specifies that "separate programmes should always be on separate spools", and a similar requirement is also specified in § 1 of Recommendation ITU-R BR.779;
- g) that there are operating advantages in recording on the same tape a television programme complete with all the components that are related to its programming content (e.g. multichannel audio), while the recording of possible multiplex components that are not related to the programme content might place a penalty on the maximum programme duration that can be recorded on a tape or cassette,

## recommends

- that, when several television programmes are multiplexed on the same emission channel, each programme should be placed on a separate tape or cassette when it is recorded at the origination studio and at the continuity studio;
- that such television recordings should as far as possible contain all the components that are related to the content of the programme (e.g. multichannel audio);
- 3 that those possible multiplex components that are not related to the content of the programme (e.g. conditional access) should preferably be recorded separately, if they need to be recorded at all.