

RECOMMENDATION ITU-R BT.809^{*,**}**Programme delivery control (PDC)
system for video recording**

(1992)

The ITU Radiocommunication Assembly,

considering

- a) that a programme delivery control (PDC) system assists the user of broadcast services (video, sound and data) by the transmission of accompanying data signal specifically related to the programme;
- b) that the use of the PDC system in conjunction with video recording can simplify the process of data entry for selected programmes and can ensure accurate timing of recording;
- c) that Radiocommunication Study Group 6 stresses the importance of issuing a Recommendation on PDC for video recording to avoid a proliferation of standards;
- d) that the actual Teletext systems described in Recommendation ITU-R BT.653 are suitable means for the development and introduction of a PDC service,

recommends

- 1 that any new PDC system for video recording should have regard to the characteristics listed in Annex 1;
- 2 that for a country wishing to initiate a PDC service for video recording, one of the systems based on Teletext systems B, C and D is preferred.

ANNEX 1

**Main characteristics of a programme delivery
control (PDC) system for video recording****1 Service definitions**

Programme delivery control for video recording is a broadcasting service for home use which allows suitably equipped video recorders to record preselected programmes automatically and substantially completely.

* This Recommendation should be brought to the attention of the IEC.

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

2 Service requirements

In order to provide automatic recording of preselected programmes a PDC system would ideally fulfil the following requirements:

- programmes which differ from the scheduled time of transmission should be recorded properly;
- facilities for the recording of non-scheduled programmes should be provided;
- interruption of a transmitted programme for any reason may, at the discretion of the broadcaster, be accompanied by a corresponding interruption of the recording process;
- to facilitate the complete recording of a programme the system should allow for the continuation of a programme on a different channel;
- the presentation constraints on existing services (e.g. Teletext and television services) should be minimized;
- the service should allow both manual or automatic preselections;
- the service should be user-friendly;
- the service should be reliable. In the case of failure of the automatic recording control of the PDC system, normal timer control of the recorder should operate;
- the service should operate consistently regardless of time-zone boundaries and changes to and from daylight-saving time. The use of Unified Date and Time (UDT) can assist in achieving this;
- the rate of transmission of recording controls must be such that error detection/correction schemes and frequency scanning by the receiver are possible;
- the start of the recording process should be close to the start of the required programme; however, in signalling the latter, the broadcaster should make allowance for the “run-up” characteristics of recording equipment;
- the service should operate for programmes with and without conditional access;
- the data capacity for the recording control and other background functions should be minimized;
- provision should be made for the announced date and time to be changed one or more times by the broadcaster without adverse effect on the service.

3 Main functions

Programme delivery control for video recording is made up of two distinct functions (see Fig. 1).

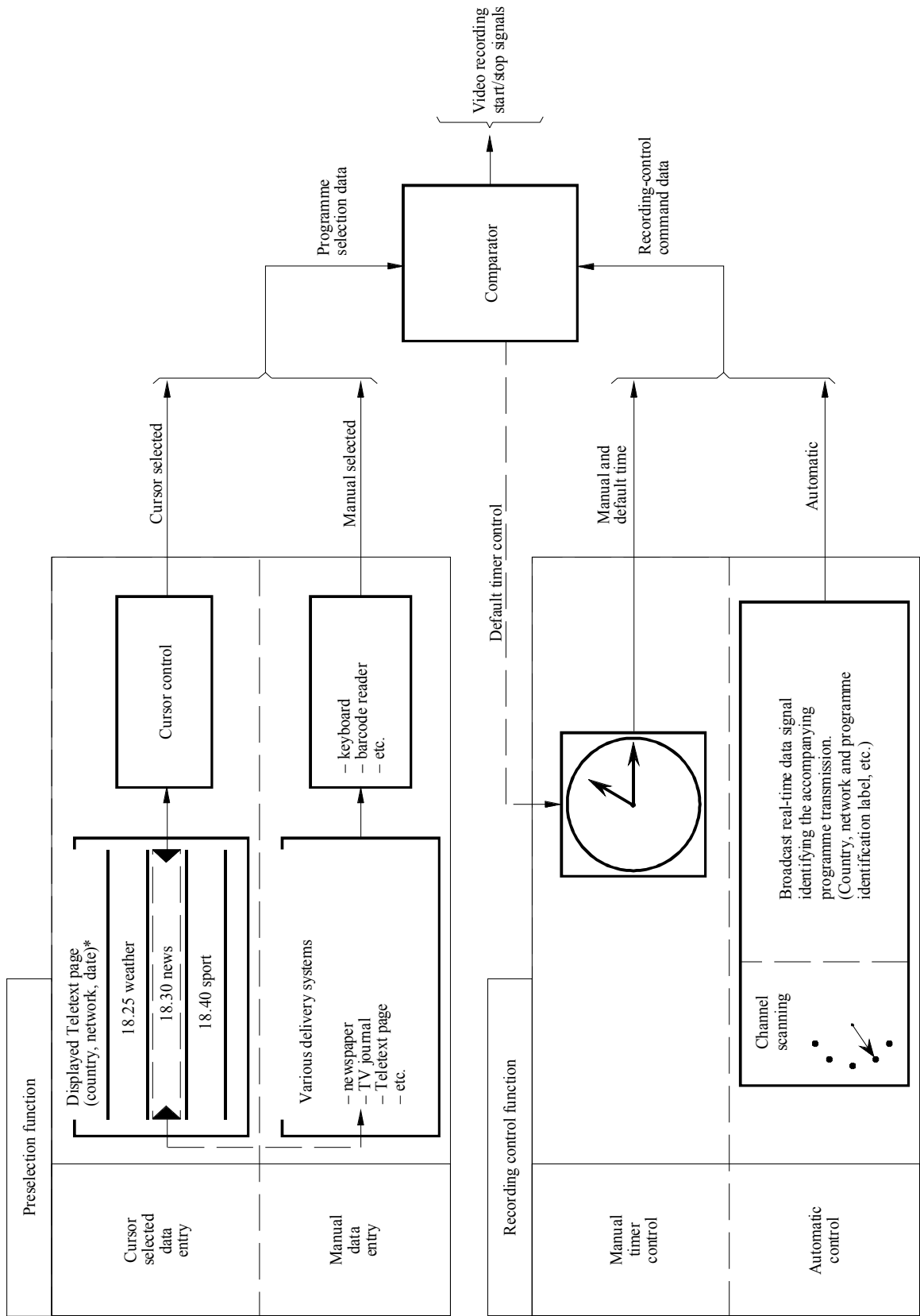
- *The preselection function*

The preselection function for recording control of suitably-equipped recorders performs the loading of the controller memory of the recorder with the information about all programmes required to be recorded. The viewer chooses the required programmes from television programme guides such as newspapers, magazines or Teletext pages. He then enters the relevant information into the recorder, for example manually via keyboard or barcode reader or interactively using a cursor on the display screen.

- *The recording-control function*

The recording-control function remotely controls suitably equipped recorders from the source of transmission. Such a function depends on the broadcaster sending a programme label in coded form together with the programme. In the case where no programme label is transmitted, the recording must be done under timer control of the recorder.

FIGURE 1
 Illustration of typical programme delivery control (PDC) functions for video recording



* Data explicitly or implicitly associated with the displayed Teletext page.

4 Programme identification parameters

A PDC system has to provide appropriate parameters for identifying a television programme in order to fulfil the preselection and recording-control functions for the automatic recording of preselected programmes. Depending on the situation in which the PDC system is used, some of these parameters could be considered essential while other parameters may be only desirable or optional, as can be seen in the example given in Table 1. A glossary of parameters included in Table 1 is also given.

TABLE 1

Application of programme identification parameters within the programme preselection and recording-control function of a PDC system

	Programme preselection	Programme recording control
Essential	Country and network identification Announced date Original announced time Menu cursor position	Country and network identification Programme identification label
Desirable	Programme title Local time offset Announced time Programme duration	Programme control status
Optional	Programme type Controlled access flag	Programme type Unified date and time