

1. SCOPE

This document recommends the method of usage and application of descriptors within the Event Information Table (EIT) present/following¹ sections to convey program information, for digital terrestrial television broadcasting in Australia.

For information regarding the transmission of EITp/f_{other} and EITschedule_{actual} and EITschedule_{other} tables, please refer to OP 58 Implementation Guide for DVB EIT Schedule Information (EITschedule_{actual}).

In the Australian application of the EITp/f, detailed information regarding a program event is added by the use of DVB descriptors. There are four descriptors in use :

- short_event_descriptor (tag value 0x4D),
- extended_event_descriptor (tag value 0x4E),
- parental_rating_descriptor (tag value 0x55), and
- content_descriptor (tag value 0x54) (aka Genre)

Other descriptors may also be present such as the component_descriptor but are not necessarily carried by all broadcasters.

Within the EIT table sections, the use of these descriptors comply with the Australian digital terrestrial television transmission standard, AS 4599 [1] and references Clauses 6.2.36 and 6.2.15 of ETSI standard EN 300 468 [2]

2. APPLICATION

2.1 DVB Recommendations

The following rules apply to the EITp/f:

- 1) Transmission of the EIT is mandatory for the actual delivery system and shall be in PID 0x0012 with a table_id value of 0x4E.
- 2) All sections of the EITp/f shall be transmitted at least every 2 seconds.

2.2 short_event_descriptor

This descriptor provides text for :

- the name of the event (limited to 40 characters), and
- a short description of the event in text form (limited to 200 characters).

Text strings shall be coded using the Latin Alphabet as specified in ISO/IEC 6937 [3] (i.e use of the full table of values including primary and supplementary sets of graphic characters and non-spacing diacritical marks for text communication as in Figure A.1 of Annex A of ETSI EN 300

¹ Known locally in Australia as "now/next"

468 [1]). This descriptor shall be broadcast at least in English, as signalled in the ISO_639_language_code field as 'eng'.

Note that the length of the text fields given below could be up to 256 bytes but are limited to accommodate the display space on the receiver screen. The actual number of bytes required will represent the displayable characters (including spaces) and depend on the use of control codes and whether one or two byte character representation is used.

2.2.1 event_name_char Field

Broadcasters shall provide the scheduled EVENT name, as the name of the scheduled program event, within the event_name_char field according to the syntax of Table 83 of ETSI EN 300 468 [2].

For example the Scheduled Event name might be "SATURDAY FAMILY MOVIE".

2.2.2 text_char Field

Broadcasters shall provide either the "episode" name (as the title of the scheduled episode), or other brief information further describing the program, in the text_char field according to the syntax of Table 83 of ETSI EN 300 468 [2].

For example, the Scheduled Episode title might be "Daddy Daycare" or a brief synopsis of the event.

It is intended that receivers will decode the values of the short_event_descriptor in accordance with ETSI EN 300 468 Clause 6.2.36 [2].

2.3 extended_event_descriptor

The purpose of the extended_event_descriptor is to provide a longer text description or synopsis of an event, which may be used either in addition, or complimentary to, the short_event_descriptor.

For example, the synopsis text might state;

"Two fathers lose their jobs at a large food company and are forced to take their sons out of the exclusive Chapman Academy and become stay-at-home fathers. With no job possibilities on the horizon, the two dads open their own day care facility. As 'Daddy Day Care' starts to catch on, it launches them into a rivalry with Chapman Academy's tough-as-nails director who has driven all previous competitors out of business. Stars Eddie Murphy, Steve Zahn and Anjelica Houston."

Broadcasters may provide the synopsis text (illustrated above) as extended text in the text_char field of the extended_event_descriptor (Table 51 of ETSI EN 300 468 [2]).

In accordance with ETSI EN 300 468 [2], the number of displayable characters in the text_char field shall be limited to 253 bytes, i.e.; the maximum 256 byte descriptor length less three bytes

of header information. To permit even longer lengths of text, Clause 6.2.15 in ETSI EN 300 468 [2] prescribes a mechanism allowing **repetitive instances of the extended_event_descriptor** and thereby permitting long text to be transmitted in 256 byte multiples.

The synopsis example above contains 473 characters (including spaces) which will fit into two (2) instances of the extended_event_descriptor.

It is intended that receivers will decode the values of the extended_event_descriptor in accordance with Clause 6.2.15 in ETSI EN 300 468 [2].

The text contained in each instance of the extended_event_descriptor *should be appended for display in the correct order.*

Broadcasters will limit the amount of extended text to the minimum amount necessary to adequately describe the synopsis information. In general, no more than three (3) instances of the extended_event_descriptor should be required.

The order of the information contained in each instance of the extended_event_descriptor is controlled by the use of the descriptor_number and last_descriptor_number fields of the extended_event_descriptor.

2.4 parental_rating_descriptor

This descriptor incorporates the country code (AUS) followed by an 8-bit number that corresponds to the parental guidance rating as per the classification code in the Australian Parental Guide Code. Coding of the rating value is specific to Australian classifications according to Table 4.10 of AS4599 [1]. Note : this is different to the DVB use of this 8-bit number.

2.5 content_descriptor (Genre)

This descriptor is fully described in Free TV Operational Practice OP-39 [4].

3.0 RECEIVER BEHAVIOUR

It is recommended that:

- 1) Receivers display the short_event_descriptor text_char field appended with information from the extended_event_descriptor text_char field when displaying event information details.
- 2) A scrolling navigation function is employed in the receiver to ensure that all information transmitted by broadcasters can be displayed.

4.0 REFERENCES

[1]	Australian Standard, Digital television – Terrestrial broadcasting Part 1: Characteristics of digital terrestrial television transmissions	AS4599.1-2007
[2]	Digital Video Broadcasting (DVB);Specification for Service Information (SI) in DVB systems	ETSI EN 300 468 V1.8.1 (2007-10)
[3]	Information technology – Coded graphic character set for text communication – Latin alphabet	ISO / IEC 6937 2001
[4]	Free TV Operational Practice OP-39, Content Descriptor	OP-39 Issue 2 March 2001
[5]	Free TV Operational Practice OP-58, Implementation Guide for DVB EIT Schedule Information (EITschedule _{actual})	Issue 1 January 2009