TPEG Application WG	TISA (Traveller Information Services Association)	SP11018
TISA Confidential		**2014-02-27**
TISA Specification: TPEG1-LRC Corrigendum		

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Corrigendum to:

Intelligent transport systems — Traffic and Travel Information (TTI) via Transport Protocol Expert Group, Generation 1 (TPEG1) binary data format — Part 11: Location Referencing Container (TPEG1-LRC_1.0/002)

(Referenced to ISO/TS 18234-11:2013)

TPEG-LRC_1.0/002

Contents

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In other circumstances, particularly when there is an urgent market requirement for such documents, a technical committee may decide to publish other types of normative document:

— an ISO Publicly Available Specification (ISO/PAS) represents an agreement between technical experts in an ISO working group and is accepted for publication if it is approved by more than 50 % of the members of the parent committee casting a vote;

— an ISO Technical Specification (ISO/TS) represents an agreement between the members of a technical committee and is accepted for publication if it is approved by 2/3 of the members of the committee casting a vote.

An ISO/PAS or ISO/TS is reviewed after three years in order to decide whether it will be confirmed for a further three years, revised to become an International Standard, or withdrawn. If the ISO/PAS or ISO/TS is confirmed, it is reviewed again after a further three years, at which time it must either be transformed into an International Standard or be withdrawn.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO/TS 18234-11 was prepared by Technical Committee ISO/TC 204, *Intelligent transport systems*, Subcommittee SC , .

ISO/TS 18234 consists of the following parts, under the general title *Intelligent transport systems — Traffic and Travel Information (TTI) via Transport Protocol Expert Group, Generation 1 (TPEG1) binary data format*:

⎯ *Part 1: Introduction, numbering and versions (INV)*

⎯ *Part 2: Syntax, Semantics and Framing Structure (SSF) (see also Annex A and B of this document)*

⎯ *Part 3: Service and Network Information (SNI) Application*

⎯ *Part 4: Road Traffic Message (RTM) Application*

⎯ *Part 5: Public Transport Information (PTI) Application*

⎯ *Part 6: Location referencing for applications (LOC)*

⎯ *Part 7: Parking Information (PKI) Application*

— *Part 8: Congestion and Travel Time application (TPEG1-CTT)*

— *Part 9: Traffic Event Compact application (TPEG1-TEC)*

— *Part 10: Conditional Access Information application (TPEG1-CAI)*

— *Part 11: Location referencing Container (TPEG1-LRC)*

TPEG-LRC_1.0/002

Introduction

TPEG technology uses a byte-oriented data stream format, which may be carried on almost any digital bearer with an appropriate adaptation layer. TPEG-messages are delivered from service providers to end-users and used to transfer information from the database of a service provider to an end-user's equipment.

The brief history of TPEG technology development dates back to the European Broadcasting Union (EBU) Broadcast Management Committee establishing the B/TPEG project group in autumn 1997 with the mandate to develop, as soon as possible, a new protocol for broadcasting traffic and travel-related information in the multimedia environment. TPEG technology, its applications and service features are designed to enable travel-related messages to be coded, decoded, filtered and understood by humans (visually and/or audibly in the user's language) and by agent systems.

One year later in December 1998, the B/TPEG group produced its first EBU specifications. Two documents were released. Part 2 (TPEG1-SSF, which became CEN ISO/TS 18234-2 [1]) described the Syntax, Semantics and Framing structure, which is used for all TPEG applications. Part 4 (TPEG1-RTM, which became CEN ISO/TS 18234-4 [B4]) described the first application, for Road Traffic Messages.

Subsequently CEN/TC 278/WG 4, in conjunction with ISO/TC 204/WG 10, established a project group comprising the members of B/TPEG and they have continued the work concurrently since March 1999. Since then two further parts were developed to make the initial complete set of four parts, enabling the implementation of a consistent service. Part 3 (TPEG1-SNI, CEN ISO/TS 18234-3 [2]) describes the Service and Network Information Application, which should be used by all service implementations to ensure appropriate referencing from one service source to another. Part 1 (TPEG1-INV, CEN ISO/TS 18234-1), completes the series, by describing the other parts and their relationship; it also contains the application IDs used within the other parts. Additionally Part 5, the Public Transport Information Application (TPEG1-PTI, CEN ISO/TS 18234-5) and TPEG1-LRC, CEN ISO/TS 18234-6), were developed.

This document adds a powerful mechanism for the CEN ISO 18234-series allowing detailed road event information to be encoded and transmitted to the user; it was developed specifically to satisfy the need for a number of location referencing methods for Navigation Systems for worldwide markets. This specification includes new datatypes - as specified in the Annex.

TPEG applications are developed using UML modelling and a software tool is used to automatically select content which then populates this TS. Diagrammatic extracts from the model are used to show the capability of the binary coding in place of lengthy text descriptions; the diagrams do not necessarily include all relevant content possible.

During the development of the TPEG technology a number of versions have been documented and various trials implemented using various versions of the specifications. At the time of the publication of this specification, the original parts are fully inter-workable and no specific dependencies exist. Now however, at least for TPEG1-TEC, profiles are used to define which Applications should be used together. So for example TPEG1-TEC is used only with TPEG1-LRC containing DLR1 and never with TPEG1-LOC

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Intelligent transport systems — Traffic and Travel Information (TTI) via Transport Protocol Expert Group, Generation 1 (TPEG1) binary data format — Part 11: Location Referencing Container (TPEG1-LRC_1.0/002)

1   Scope

This TISA specification describes a corrigendum identified by TISA that corrects an inconsistency in the published ISO specification.

In the published ISO specification, the numbering assignment for the various location referencing methods were determined to be inconsistent. Notably the assigned numbers for the KoreanNodeLinkLocationReference and the VICSLinkReference were observed to be inconsistent between clause 7.1 and clauses 7.6 and 7.7 respectively. This Corrigendum corrects clause 7.1 to reflect properly the assignments set forth in clause 7.6 for the KoreanNodeLinkLocationReference and clause 7.7 for the VICSLinkReference.

Users of this TISA specification must satisfy themselves as to the validity of using all details described and the accuracy of all related information and must accept all due consequence. TISA is not liable for any incidental, special or consequential damages arising out of the use or inability to use this specification, whether in transmission or reception client equipment.

2   References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

2.1   Normative References

[1]   ISO/TS 18234-11:2013 Intelligent transport systems — Traffic and Travel Information (TTI) via Transport Protocol Expert Group, Generation 1 (TPEG1) binary data format — Part 11: Location Referencing Container (TPEG1-LRC_1.0/001)

3   Terms and definitions

For the purpose of this TISA Specification, no new terms and definitions apply.

4   Abbreviations

For the purposes of this TISA Specification, no new abbreviations apply.

5   Replacement of 'Introduction'

Delete Introduction and replace, as follows:

TPEG technology uses a byte-oriented data stream format, which may be carried on almost any digital bearer with an appropriate adaptation layer. TPEG-messages are delivered from service providers to end-users and used to transfer information from the database of a service provider to an end-user's equipment.

The brief history of TPEG technology development dates back to the European Broadcasting Union (EBU) Broadcast Management Committee establishing the B/TPEG project group in autumn 1997 with the mandate to develop, as soon as possible, a new protocol for broadcasting traffic and travel-related information in the multimedia environment. TPEG technology, its applications and service features are designed to enable travel-related messages to be coded, decoded, filtered and understood by humans (visually and/or audibly in the user's language) and by agent systems.

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This Corrigendum to the Technical Specification, ISO/TS 18234-11:2013, corrects an inconsistency in the published ISO specification.

This Technical Specification has the technical version number TPEG-LRC /1.0/002.

6   Corrigendum to Referenced Specification – detailed change

6.1   Delete 7.1. and replace as follows:

7.1 List of Generic Component IDs

Name	Id
TPEGLocationReference	0
DLR1LocationReference	1
TMCLocationReference	2
KoreanNodeLinkLocationReference	3
VICSLinkReference	4
ETLLocationReference	5
GLRLocationReference	6