TECHNICAL SPECIFICATION

CEN/TS 13149-3

SPÉCIFICATION TECHNIQUE

TECHNISCHE SPEZIFIKATION

July 2007

ICS 35.240.60; 43.080.20; 45.060.01

English Version

Public transport - Road vehicle scheduling and control systems - Part 3: WorldFIP message content

Transports publics - Systèmes d'ordonnancement et de contrôle des véhicules routiers - Partie 3 : Contenu de messages WorldFIP Öffentlicher Verkehr - Straßenfahrzeuge Planungs- und Steuerungssysteme - Teil 3: WORLDFIP Nachrichteninhalt

This Technical Specification (CEN/TS) was approved by CEN on 5 September 2006 for provisional application.

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Foreword

This document CEN/TS 13149-3:2007 has been prepared by Technical Committee CEN/TC 278 "Road transport and traffic telematics", the secretariat of which is held by NEN.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Specification: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Introduction

This Technical Specification is intended to be developed into part 3 of EN 13149, which gives rules for onboard data transmission systems.

This part 3 together with part 1 and part 2 of EN 13149 describes a complete solution independent from part 4, part 5 and part 6.

This document uses terms which are already used in other standards e.g. EN 12896 Road transport and traffic telematics - Public transport - Reference data model, when applicable.

1 Scope

This Technical Specification specifies the choice and the general application's rules of an onboard data transmission bus between the different equipment for service operations and monitoring of the fleet. This applies to equipment installed onboard buses, trolley-buses and tramways only as part of a bus fleet operation. It excludes tramways when they are operated as part of a train, subway or metro operation. This equipment includes operation aid systems, automatic passenger information systems, fare collection systems, etc.

The equipment directly related to the safety-related functioning of the vehicle (propulsion management, brake systems, door opening systems, etc...) are excluded from the scope of the present standard and are dealt with in other standardisation bodies.

For the described application two bus systems are standardised. Part 1 to part 3 of EN 13149 describe the WorldFIP bus system and part 4 to part 6 describe the CANopen bus system. There is no ranking between the two bus systems.

The present Technical Specification covers the link between equipment inside a single vehicle. Although it could be applied to multiple vehicles, this application is not explicitly covered by this standard.

Part 1 of EN 13149 specifies the WorldFIP-based network. This specification describes the general architecture in terms of hierarchical layers according to the ISO reference model for Open Systems Interconnection (OSI) specified in ISO 7498.

Part 2 of EN 13149 specifies in detail the connectors and the connector pin assignment and the cabling.

Part 3 (this Technical Specification) specifies in detail the application profiles for a simple network.

2 Normative 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.

EN 12896:2006, Road transport and traffic telematics - Public transport - Reference data model

EN 13149-1; Public transport - Road vehicle scheduling and control systems - Part 1: WORLDFIP definition and application rules for onboard data transmission

EN 13149-2; Public transport - Road vehicle scheduling and control systems - Part 2: WORLDFIP cabling specifications

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12896:2006 apply.

4 Vehicle related identifiers and numbers

4.1 General

The Vehicle ID is assigned uniquely by the system designer to the vehicle. Usually it refers to the vehicle ID containing the number given inside of the main computer or the number is coded by a fixed connector at the main computer (see Figure 1: x).

The Body ID assigned by the system designer refers to the body ID containing the readable identification on the vehicle body. Usual this text is printed on the vehicle body (see Figure 1: v).

The Radio ID assigned by the system designer refers to the radio ID containing the textual radio address of the bus. This address is necessary for selective calls to this bus (see Figure 1: z).

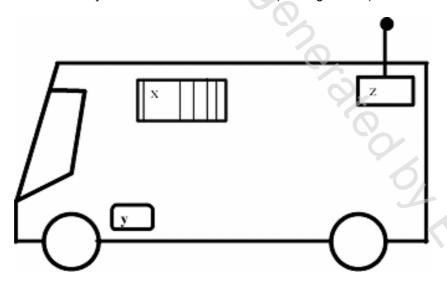


Figure 1 — Vehicle related identifiers and numbers