

TECHNICAL REPORT



Infotainment Services for Public Vehicles (PVIS) – Part 1: General

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

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IEC TR 63479-1 has been prepared by technical area 17: multimedia systems and equipment for vehicles, of IEC technical committee 100: audio, video and multimedia systems and equipment. It is a Technical Report.

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A list of all parts in the IEC 63479 series, published under the general title *Infotainment services for public vehicles (PVIS)*, can be found on the IEC website.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn, or
- revised.

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INTRODUCTION

It is noted that the markets and industries on infotainment services for vehicles (as known as in-vehicle infotainment services) have been growing rapidly. It is envisioned that a variety of infotainment (or multimedia) devices and services will be newly developed for personal and public vehicles in the future. Such devices include navigation systems, cameras, speakers, headrest displays, air-conditioners, thermometers and heated seats, and lights.

IEC TC100 have so far developed a set of standards on Configurable Car Infotainment Services (CCIS) with the IEC 63246 series. However, the CCIS standards have been basically designed for personal users, such as car owners. In the meantime, there is also a crucial need to provide a variety of infotainment services for public vehicles (PVIS), such as buses or trains.

PVISs have different requirements and features from CCISs. For user type, CCIS is targeted for one or two users (such as car owner), whereas PVIS is for a large number of guests or passengers within the public vehicle. For device type, CCIS deals with the personal devices (property or belonging) in the car, whereas PVIS will be targeted for a variety of public devices that are contained in a public vehicle. Some PVIS services can be provisioned by interworking with the external networks, as shown in the bus information service. For service duration, CCIS usually provide long-term services, whereas PVISs are intended to provide short-term service during which a guest stays within a public vehicle.

From these observations, it is noted that there are many different features and requirements between CCIS and PVIS. Accordingly, there is a need of standardization on PVISs. In particular, PVISs needs to employ a set of agents to effectively manage a large number of users or devices.

The PVIS series (IEC 63479) describes infotainment (multimedia) services for terrestrial public vehicles, such as buses, trains, or underground railways. It is not applicable to public vehicles, such as aeroplanes or ships. For this purpose, the following issues are addressed:

- 1) identification of a variety of functional requirements for provisioning of PVISs;
- 2) designing of the PVIS framework, based on the identified requirements.

The PVIS standards are expected to provide guidelines on PVIS services for a large number of users/devices, and to encourage development of new (enhanced) PVIS services (possibly by interworking with the external systems).

The IEC 63479 series consists of the following parts:

- Part 1: General,
- Part 2: Requirements, and
- Part 3: Framework.

IEC 63479-1 (this document, Technical Report) describes general considerations and system model for PVIS, with some examples of PVIS services.

IEC 63479-2 (International Standard) describes the functional requirements for PVISs.

IEC 63479-3 (International Standard) describes the framework, including the functional information flows between functional entities.

INFOTAINMENT SERVICES FOR PUBLIC VEHICLES (PVIS) –

Part 1: General

1 Scope

This Technical Report describes general considerations and system model for infotainment services for public vehicles (PVIS), with the relevant service examples.

2 Normative references

There are no normative references in this document.