
**Intelligent transport systems —
Localized communications — Optical
camera communication**

*Systèmes intelligents de transport — Communications localisées —
Communication par caméra optique*

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Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Symbols and abbreviated terms	2
5 IEEE 802.15.7	3
5.1 General requirements	3
5.2 OCC PHY and MAC architecture	3
5.3 PHY mode	4
5.4 Modulation schemes	4
5.5 MAC frame format	5
5.6 Dimming	5
5.7 Mitigation of flickering	5
6 ITS station	5
6.1 ITS station and communication architecture	5
6.2 ITS-S service access points	8
6.2.1 General	8
6.2.2 Communications SAPs	8
6.2.3 Management SAPs	8
6.2.4 Security SAPs	8
6.3 Hybrid communications support	8
7 Communication interface protocol stack	8
7.1 Communication interface parameters	8
7.2 Physical layer	8
7.3 Data link layer	10
7.3.1 General	10
7.3.2 Communication adaptation sub-layer	10
8 Communication interface management	10
8.1 General management	10
8.2 Management adaptation entity	10
8.2.1 OCC parameters and I-Parameters	10
8.2.2 OCC management commands and MI-SAP commands and requests	10
9 Procedures	11
9.1 Transmit procedure	11
9.2 Receive procedures	11
9.3 Management procedures	11
10 Conformance	11
11 Test methods	11
Annex A (normative) Communication interface parameters	12
Annex B (normative) MI-COMMANDs	16
Annex C (normative) MI-REQUESTs	17
Annex D (normative) ASN.1 definitions	18
Annex E (informative) Frequency band and frequency allocation	21
Annex F (informative) Dimming method	22
Bibliography	25

Foreword

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This document was prepared by Technical Committee ISO/TC 204, *Intelligent transport systems*.

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Introduction

Localized communications are an essential component of hybrid communications in Intelligent Transport Systems (ITS). Various access technologies are suited for localized communications. An increasing interest of ITS stakeholders for Cooperative ITS (C-ITS), Urban ITS (U-ITS), and Advanced Driver Assistance Systems (ADAS) is on the access technology in OCC (Optical Camera Communication) specified by IEEE.

OCC is capable of:

- a) interoperating with cameras and LEDs devices, and
- b) receiving messages from LED sources, and transmitting messages from back light and front light of vehicles to other vehicles.

The purpose of OCC is broadcast dissemination of ITS information from:

- light sources (traffic light, street light, traffic sign), and
- vehicles

to other vehicles (one-to-many); see [Figure 1](#).

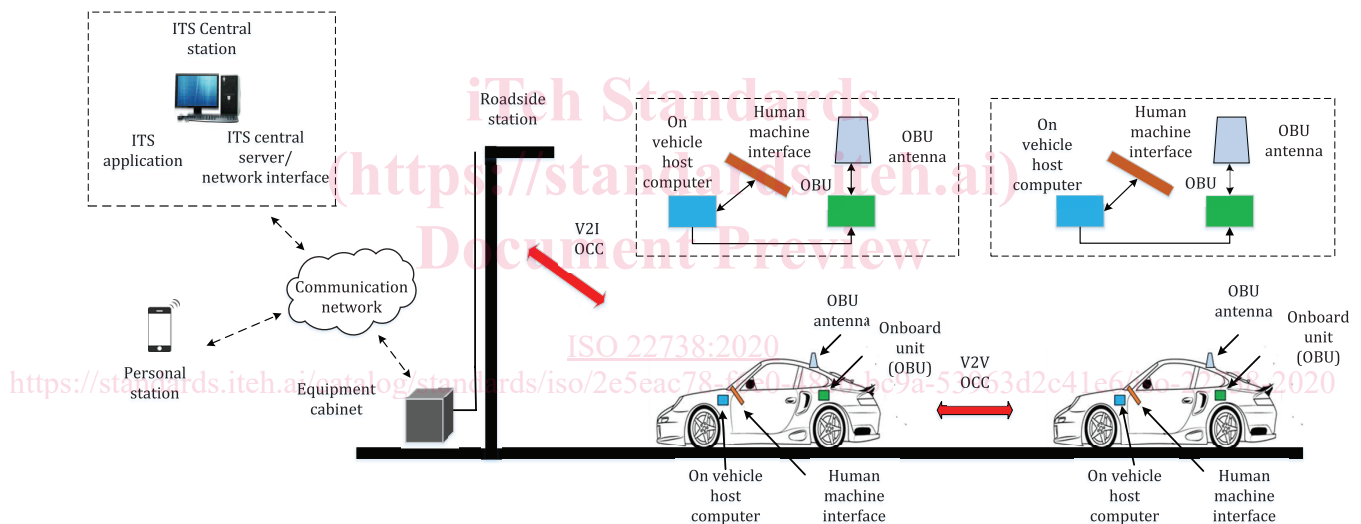


Figure 1 — OCC based ITS Communication

OCC is considered for usage in:

- 1) roadside ITS station units (ITS-SUs), and
- 2) vehicle ITS-SUs.

OCC is intended to provide information to vehicles, see [Figure 2](#).