

ISO/TS 19321:2020 (E)

Intelligent transport systems — Cooperative ITS — Dictionary of in-vehicle information (IVI) data structures

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Abbreviated terms
5	In-vehicle information data structure
5.1	Structural model
5.1.1	General model
5.1.2	Conceptual zones
5.2	Location referencing
5.2.1	General
5.2.2	Geographic positioning
5.2.3	Map-based location referencing
6	IVI Containers
6.1	IVI Management Container
6.1.1	Definition
6.1.2	Usage — IVI Management Container
6.2	IVI Location Containers
6.2.1	General
6.2.2	Geographic Location Container (GLC)
6.2.2.1	Definition
6.2.2.2	Usage
6.2.3	Map Location Container (MLC)
6.2.3.1	Definition
6.2.3.2	Usage
6.3	IVI Application Containers
6.3.1	General
6.3.2	General IVI Container
6.3.2.1	Definition
6.3.2.2	Usage
6.3.3	Road Configuration Container
6.3.3.1	Definition
6.3.3.2	Usage
6.3.4	Text Container
6.3.4.1	Definition
6.3.4.2	Usage
6.3.5	Layout Container
6.3.5.1	Definition
6.3.5.2	Usage
6.3.6	Automated Vehicle Container
6.3.6.1	Definition
6.3.6.2	Usage
6.3.7	Road Surface Container
6.3.7.1	Definition
6.3.7.2	Usage

7 Description of data frames and data elements

- 7.1 General
- 7.2 Data Frames
 - 7.2.1 AbsolutePosition
 - 7.2.2 AbsolutePositionWAltitude
 - 7.2.3 AnyCatalogue
 - 7.2.4 AutomatedVehicleRule
 - 7.2.5 CompleteVehicleCharacteristics
 - 7.2.6 ComputedSegment
 - 7.2.7 DeltaPosition
 - 7.2.8 ISO14823Attribute
 - 7.2.9 ISO14823Code
 - 7.2.10 LaneInformation
 - 7.2.11 LaneCharacteristics
 - 7.2.12 LayoutComponent
 - 7.2.13 LoadType
 - 7.2.14 MapReference
 - 7.2.15 PlatooningRule
 - 7.2.16 PolygonalLine
 - 7.2.17 RoadSurfaceDynamicCharacteristics
 - 7.2.18 RoadSurfaceStaticCharacteristics
 - 7.2.19 RSCode
 - 7.2.20 Segment
 - 7.2.21 Text
 - 7.2.22 TractorCharacteristics
 - 7.2.23 TrailerCharacteristics
 - 7.2.24 TrainCharacteristics
 - 7.2.25 VcCode
 - 7.2.26 VehicleCharacteristicsFixValues
 - 7.2.27 VehicleCharacteristicsRanges
 - 7.2.28 Zone
 - 7.2.29 Data frames which are lists
- 7.3 Data Elements
 - 7.3.1 BankingAngle
 - 7.3.2 ComparisonOperator
 - 7.3.3 Condition
 - 7.3.4 DefinitionAccuracy
 - 7.3.5 Depth
 - 7.3.6 Direction
 - 7.3.7 DriverCharacteristics
 - 7.3.8 FrictionCoefficient
 - 7.3.9 GapBetweenVehicles
 - 7.3.10 GoodsType
 - 7.3.11 IviIdentificationNumber
 - 7.3.12 IviLaneWidth
 - 7.3.13 IviPurpose
 - 7.3.14 IviStatus
 - 7.3.15 IviType
 - 7.3.16 LaneDelimitation
 - 7.3.17 LaneId
 - 7.3.18 LaneMarkingStatus
 - 7.3.19 LaneStatus
 - 7.3.20 LaneType
 - 7.3.21 MarkingColour
 - 7.3.22 MaterialType
 - 7.3.23 MaxLenghtOfPlatoon
 - 7.3.24 MaxNoOfVehicles
 - 7.3.25 PriorityLevel
 - 7.3.26 Provider
 - 7.3.27 RSCUnit
 - 7.3.28 SaeAutomationLevel
 - 7.3.29 Temperature
 - 7.3.30 TreatmentType

- 7.3.31 VcClass
- 7.3.32 VcOption
- 7.3.33 WearLevel
- 7.3.34 Zid

Annex A (normative) ASN.1 modules

Annex B (informative) Visual examples of location container

- B.1 Overview
- B.2 Geographic Location Container (GLC)
 - B.2.1 GLC with one reference zone per carriageway
 - B.2.2 GLC with one reference zone per lane
 - B.2.3 GLC with one chained reference zones
 - B.2.4 GLC with lane closure and re-opening
- B.3 Map Location Container (MLC)
 - B.3.1 MLC with relevance zones on an intersection

Page count: 48