

ISO/TS 15638-16:2013-08 (E)

Intelligent transport systems - Framework for collaborative Telematics Applications for Regulated commercial freight Vehicles (TARV) - Part 16: Vehicle speed monitoring (VSM)

Contents		Page
1	Scope	1
2	Conformance	1
3	Normative references	2
4	Terms and definitions	2
5	Symbols (and abbreviated terms)	7
6	General overview and framework requirements	9
7	Requirements for services using generic vehicle data	10
8	Application services that require data in addition to basic vehicle data	10
8.1	General	10
8.2	Quality of service requirements	10
8.3	Test requirements	10
8.4	Marking, labelling and packaging	10
9	Common features of regulated TARV application services	11
9.1	General	11
9.2	Common role of the jurisdiction, approval authority, service provider and user	12
9.3	Common characteristics for instantiations of regulated application services	12
9.4	Common sequence of operations for regulated application services	12
9.5	Quality of service	12
9.6	Information security	12
9.7	Data naming content and quality	12
9.8	Software engineering quality systems	12
9.9	Quality monitoring station	12
9.10	Audits	12
9.11	Data access control policy	12
9.12	Approval of IVSs and service providers	13
10	TARV Vehicle speed monitoring (VSM)	13
10.1	TARV VSM service description and scope	13
10.1.1	TARV VSM use case	13
10.1.2	Description of TARV VSM regulated application service	13
10.1.3	Description of TARV `vehicle speed monitoring' (TARV VSM) application service	14
10.2	Concept of operations for TARV VSM	14
10.2.1	General	14
10.2.2	Statement of the goals and objectives of the TARV VSM system	16
10.2.3	Strategies, tactics, policies, and constraints affecting the TARV VSM system	16
10.2.4	Organisations, activities, and interactions among participants and stakeholders for TARV VSM	17
10.2.5	Clear statement of responsibilities and authorities delegated for TARV VSM	18
10.2.6	Equipment required for TARV VSM	19
10.2.7	Operational processes for the TARV VSM system	20
10.2.8	Role of the jurisdiction for TARV VSM	21

10.2.9	Role of the TARV VSM prime service provider	21
10.2.10	Role of the TARV VSM application service provider	21
10.2.11	Role of the TARV VSM user	21
10.2.12	Generic characteristics for all instantiations of the TARV VSM application service	21
10.3	Sequence of operations for TARV VSM	22
10.3.1	General	22
10.4	TARV VSM service elements	23
10.4.1	TARV VSM service element (SE) 1: Establish `Vehicle speed monitoring' regulations, requirements, and approval arrangements	23
10.4.2	TARV VSM SE2: Request system approval	24
10.4.3	TARV VSM SE3: User (operator) contracts with prime service provider	24
10.4.4	TARV VSM SE4: User (operator) equips vehicle with a device to read the driver licence (DLR)	24
10.4.5	TARV VSM SE5: User contracts with application service provider	24
10.4.6	TARV VSM SE6: application service provider uploads software into the TARV equipped vehicles of the operator	24
10.4.7	TARV VSM SE7: The driver obtains an electronic drivers licence device (eDL)	24
10.4.8	TARV VSM SE8: Driver use of vehicle routines	24
10.4.9	TARV VSM SE9: Time series recording of vehicle speed	25
10.4.10	TARV VSM SE10: Map matched recording of vehicle speed infringement (VSMI)	26
10.4.11	TARV VSM SE11: `Interrogated' request for vehicle speed monitoring data	27
10.4.12	TARV VSM SE12: End of session	27
10.5	Generic TARV VDSM data naming, content and quality	27
10.6	TARV VSM application service specific provisions for quality of service	31
10.7	TARV VSM application service specific provisions for test requirements	31
10.8	TARV VSM application specific rules for the approval of IVSs and `Service Providers'	31
11	Declaration of patents and intellectual property	31
Annex A (informative) Independent testing of the protocols defined in this Part of ISO 15638		32
A.1	Objectives	32
A.2	TEST SCRIPT SERVICE: VSM VEHICLE SPEED MONITORING	34
CTP 8.1.1 Instigated Vehicle Speed Monitoring using 2G		36
CTP 8.1.2 Interrogated Vehicle Speed Monitoring using 2G		38
CTP 8.1.3 Interrogated Vehicle Speed Monitoring using 5.9GHz and responding using 2G or 3G 40		
CTP 8.2.1 Instigated Vehicle Speed Monitoring using 3G		42
CTP 8.2.2 Interrogated at 5.9 GHz and send of Vehicle Speed Monitoring using 3G		44
CTP 8.3.1 Instigated Vehicle Speed Monitoring using 802.11p (WAVE) 5.9 GHz		46
CTP 8.3.2 Interrogated Vehicle Speed Monitoring using 802.11p (WAVE) 5.9 GHz		48