DIN EN ISO 18750:2025-07 (E)

Intelligent transport systems - Local dynamic map (ISO 18750:2025); English version EN ISO 18750:2025

Contents

Page

Foreword ..... **v**

Introduction ..... **vi**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **1**

4 Abbreviated terms **3**

5 Architectural environment **4**
5.1 General 4
5.2 Local dynamic map 4
5.3 LDM in an ITS-S 4
5.4 LDM in an ITS-SU 5
5.5 LDM related processes 7
5.5.1 Synchronization of LDMs 7
5.5.2 Archiving of LDM Data Objects 7
5.6 LDM for road safety and vehicle-to-vehicle applications 7
5.7 Security perspective 8
5.7.1 Authorized access to LDM 8
5.7.2 Initialisation and installation of applications to the BSMD 8
5.7.3 Privacy 9
5.8 An LDM versus other similar functionalities in an ITS-SU 9

6 Functionality **9**
6.1 General 9
6.2 Terms and conventions 9
6.3 Structure of an LDM 10
6.4 LDM Data Storage 12
6.5 LDM services 14
6.5.1 Registration, deregistration, and revocation of ITS-S application processes 14
6.5.2 Security checking in access requests 14
6.5.3 Access request management 14
6.6 LDM maintenance 17
6.6.1 LDM Area of Maintenance 17
6.6.2 Outdated data management 17
6.7 LDM knowledge base 17
6.7.1 Metadata 17
6.7.2 Utility functions 17
6.8 Interfaces 18
6.8.1 Types of interfaces 18
6.8.2 Parameters of interface functions 18
6.8.3 LDM application management interface 20
6.8.4 LDM data interface 22
6.8.5 Security interface 25
6.8.6 LDM management interface 26
6.8.7 Service access points 27

7 Procedures **29**
7.1 General 29

7.2 LDM services 30
7.2.1 Registration, deregistration, and revocation of ITS-S application processes 30
7.2.2 Security checking in access requests 30
7.2.3 Access request management 30
7.2.4 Second level filtering 32
7.3 LDM maintenance 32
7.3.1 Area management 32
7.3.2 Outdated data removal 33
7.4 LDM knowledge data base 33
7.5 Interfaces 33
7.6 LDM management 33
7.6.1 Registration of LDM at ITS-S management entity 33
7.6.2 Multiple ITS-SCUs 33
Annex A (normative) **ASN.1 modules** **34**
Annex B (normative) **LDM Data Dictionary** **46**
Annex C (informative) **Examples of LDM-DOs** **48**
Annex D (informative) **Location-referencing** **55**
Annex E (informative) **Time-referencing** **59**
Annex F (normative) **Implementation Conformance Statement proforma** **60**
Bibliography **67**