

DIN EN ISO 18750:2018-09 (E)

Intelligent transport systems - Co-operative ITS - Local dynamic map (ISO 18750:2018); English version EN ISO 18750:2018

Contents		Page
Foreword		v
Introduction		vi
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	Symbols and abbreviated terms	3
5	Architectural environment	4
5.1	Local Dynamic Map	4
5.2	LDM in an ITS-S	4
5.3	LDM in an ITS-SU	5
5.4	LDM related processes	7
5.4.1	Synchronization of LDMs	7
5.4.2	Archiving of LDM Data Objects	7
5.5	LDM for road safety and vehicle-to-vehicle applications	7
5.6	Security perspective	8
5.6.1	Authorised access to LDM	8
5.6.2	Initialisation and installation of applications to the BSMD	8
5.6.3	Privacy	9
5.7	An LDM versus other similar functionalities in an ITS-SU	9
6	Functionality	9
6.1	Terms and conventions	9
6.2	Structure of an LDM	11
6.3	LDM Data Storage	12
6.4	LDM services	14
6.4.1	Registration, deregistration, and revocation of ITS-S application processes	14
6.4.2	Security checking in access requests	14
6.4.3	Access request management	15
6.5	LDM maintenance	17
6.5.1	LDM Area of Maintenance	17
6.5.2	Outdated data management	17
6.6	LDM knowledge base	17
6.6.1	Metadata	17
6.6.2	Utility functions	18
6.7	Interfaces	18
6.7.1	Types of interfaces	18
6.7.2	Parameters of interface functions	19
6.7.3	LDM application management interface	20
6.7.4	LDM data interface	22
6.7.5	Security interface	25
6.7.6	LDM management interface	26
6.7.7	Service access points	27
7	Procedures	30
7.1	LDM services	30
7.1.1	Registration, deregistration, and revocation of ITS-S application processes	30
7.1.2	Security checking in access requests	30
7.1.3	Access request management	30
7.1.4	Second level filtering	32

7.2	LDM maintenance.....	33
7.2.1	Area management.....	33
7.2.2	Outdated data removal.....	33
7.3	LDM knowledge data base.....	33
7.4	Interfaces.....	33
7.5	LDM management.....	33
7.5.1	Registration of LDM at ITS-S management entity.....	33
7.5.2	Multiple ITS-SCUs.....	33
Annex A (normative) ASN.1 modules.....		35
Annex B (normative) LDM Data Dictionary.....		48
Annex C (informative) Examples of LDM-DOs.....		50
Annex D (informative) Location-Referencing.....		57
Annex E (informative) Time-Referencing.....		61
Annex F (normative) Implementation Conformance Statement proforma.....		62
Bibliography.....		68