

ISO 17419:2025-05 (E)

Intelligent transport systems - Globally unique identification

Contents

Page

Foreword..... v

Introduction..... vi

1 Scope..... 1

2 Normative references..... 1

3 Terms and definitions..... 1

4 Abbreviated terms..... 3

5 Management issues..... 4

5.1 General.....4

5.2 ITS communications architecture.....5

5.3 PKI architecture.....6

5.4 Regulations and policies.....6

5.5 ITS station.....6

5.5.1 ITS station architecture.....6

5.5.2 Instantiations of an ITS station.....8

5.6 Applications and messages.....8

5.6.1 ITS application.....8

5.6.2 ITS application class.....8

5.6.3 ITS message sets.....9

5.7 Communications.....9

5.7.1 Addressing in the communication protocol stack.....9

5.7.2 ITS-S management.....10

5.7.3 ITS-S Security.....10

5.8 Identifiers and addresses summary.....10

6 GCMA organizational framework..... 11

6.1 Overview.....11

6.2 Registration of globally unique identifiers.....12

6.3 Certification of ITS-S equipment.....13

6.4 Certification of ITS-S application processes.....14

6.5 Issuance of ITS-SCU credentials.....15

6.6 Issuance of certificates for real-time operation.....16

6.7 ITS application repository.....16

6.8 Secure installation and maintenance of facilities and communication protocols.....17

6.9 Registries.....17

6.9.1 General.....17

6.9.2 ITS application objects.....17

6.9.3 ITS message sets.....17

6.9.4 ITS regulatory regions.....18

6.9.5 ITS policy regions.....18

6.9.6 ITS port numbers.....19

6.9.7 ITS flow types.....19

6.9.8 ITS logical channels.....19

6.9.9 ITS station units.....19

6.9.10 ITS station communication units.....19

6.9.11 ITS-S application process provisioner.....20

6.9.12 ITS-S equipment manufacturers.....20

6.9.13 ITS application object owners.....20

6.9.14 ITS message set owners.....20

6.9.15	ITS-S application process developers	21
6.9.16	ITS-S facility layer services	21
6.9.17	ITS-SCU configuration management centres	21
6.9.18	ITS communication protocol stacks	21
6.9.19	ITS protocol identifier	22
6.9.20	IANA registries	22
6.9.21	IEEE registries	22
6.10	Wrong behaviour reporting	22
7	GCMA technical framework	23
7.1	Addresses and identifiers	23
7.1.1	Overview	23
7.1.2	ITS-AID	23
7.1.3	ITS-SAPID	24
7.1.4	ITS-MsgSetID	24
7.1.5	ITS-PN	24
7.1.6	ITS-FlowTypeID	25
7.1.7	ITS-LCHID	25
7.1.8	ITS-SUID	26
7.1.9	ITS-SCUID	26
7.1.10	ITS-S-APPID	26
7.1.11	ITS-RRID	26
7.1.12	ITS-PRID	26
7.1.13	ITS-SEMID	27
7.1.14	ITS-AOIID	27
7.1.15	ITS-ATT	27
7.1.16	ITS-MSOIID	27
7.1.17	ITS-SAPIIID	28
7.1.18	ITS-S-APDID	28
7.1.19	ITS-SAPSSID	28
7.1.20	ITS-SecAlgID	28
7.1.21	ITS-S-FSID	29
7.1.22	ITS-SCU-CMCID	29
7.1.23	ITS-ProtStckID	29
7.1.24	ITS-ProtID	29
7.2	Online management	29
7.2.1	Secure installation and maintenance of ITS-S application processes	29
7.2.2	Secure installation of ITS-S protocols and control functions	29
7.2.3	Registration of ITS-S application processes with the ITS-S management entity	29
7.2.4	Data flow management	30
7.2.5	Management of certificates for real-time communications	30
7.2.6	Exception reporting	30
	Annex A (normative) ASN.1 modules	31
	Annex B (normative) Closed polygons and their associated regions	42
	Bibliography	45