

ISO 14819-1:2013-12 (E)

Intelligent transport systems - Traffic and travel information messages via traffic message coding - Part 1: Coding protocol for Radio Data System - Traffic Message Channel (RDS-TMC) using ALERT-C

Contents		Page
Foreword		v
Introduction		vii
1	Scope	1
1.1	General scope	1
1.2	Content	1
1.3	Message management	2
1.4	Transmission	2
1.5	Event list	2
2	Normative references	2
3	Terms, definitions and abbreviated terms	2
3.1	Terms and definitions	2
3.2	Abbreviated terms	5
4	Application	7
4.1	General	7
4.2	Definition of the TMC "travel service"	7
4.3	TMC virtual terminal	8
4.4	Event-oriented end-user information messages	8
4.5	Strategic and tactical information	8
4.6	Geographic relevance	9
4.7	Transmitted message priority	9
4.8	Event List	10
4.9	Future extensions	10
5	Presentation	10
5.1	General	10
5.2	TMC virtual language	10
5.3	Message content	11
5.3.1	General	11
5.3.2	Event Description (11 bits)	11
5.3.3	Primary Location (16 bits)	11
5.3.4	Direction and Extent (4 bits)	12
5.3.5	Duration (3 bits)	13
5.3.6	Diversion Advice (1 bit)	14
5.4	Implicit information	15
5.4.1	Road class and road number	15
5.4.2	Road segment	15
5.4.3	Area, region and country	15
5.4.4	Pre-assigned diversion advice	15
5.4.5	Urgency within the terminal	15
5.4.6	Directionality	15
5.4.7	Duration type	16
5.4.8	Nature	16
5.4.9	Update class	16
5.4.10	Quantifier type	16

5.5	Optional message content	16
5.5.1	General	16
5.5.2	Combination of additional information	17
5.5.3	Control codes (label 1)	18
5.5.4	Length of route affected (label 2)	18
5.5.5	Speed limit (label 3)	18
5.5.6	Additional quantifiers (labels 4 and 5)	19
5.5.7	Supplementary information (label 6)	19
5.5.8	Start and stop times (labels 7 and 8)	19
5.5.9	Multi-event messages (label 9)	19
5.5.10	Detailed diversion instructions (label 10)	20
5.5.11	Destinations (label 11)	20
5.5.12	Precise location reference (label 12)	20
5.5.13	Cross linkage to source of problem (label 13)	21
5.5.14	Separator (label 14)	22
5.5.15	Other information as defined by sub-labels (label 15)	22
5.5.16	Reference to telephone services (label 15, sub-label 1-2)	22
6	Message management	25
6.1	General	25
6.2	System messages	26
6.2.1	General	26
6.2.2	Location table	26
6.2.3	Terminal requirements	26
6.2.4	Change of database numbers	27
6.3	Message repetition	27
6.4	Message updating	28
6.5	Message deletion	28
6.5.1	General	28
6.5.2	Message persistence	28
6.5.3	Detailed stop-time	29
6.5.4	Silent cancellation message	29
6.5.5	Null message	29
6.6	Message presentation	30
6.7	Out of area referencing	30
6.7.1	Structure of the INTER-ROAD concept	30
6.7.2	INTER-ROAD messages	31
6.7.3	Updating and cancellation of INTER-ROAD messages	31
7	Transmission	32
7.1	General	32
7.2	Format of type 8A groups	32
7.3	Immediate repetition	32
7.4	Single-group user messages	33
7.5	System messages	34
7.5.1	General	34
7.5.2	System information	34
7.5.3	Tuning information	38
7.6	Multi-group messages	40
7.6.1	First group	40
7.6.2	Subsequent groups	41
7.7	Summary of X-bit usage in RDS-TMC type 8A groups	43