

Road transport and traffic telematics — DATEX traffic and travel data dictionary (version 3.1a)

ICS 01.040.35; 35.240.60

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National foreword

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Comments arising from the use of this Draft for Development are requested so that UK experience can be reported to the European organization responsible for its conversion into a European Standard. A review of this publication will be initiated 2 years after its publication by the European organization so that a decision can be taken on its status at the end of its three-year life. The commencement of the review period will be notified by an announcement in *Update standards*.

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A list of organizations represented on this committee can be obtained on request to its secretary.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

Summary of pages

This document comprises a front cover, an inside front cover, the ENV title page, pages 2 to 108, an inside back cover and a back cover.

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English version

Road transport and traffic telematics - DATEX traffic and travel data dictionary (version 3.1a)

This European Prestandard (ENV) was approved by CEN on 22 April 2000 as a prospective standard for provisional application.

The period of validity of this ENV is limited initially to three years. After two years the members of CEN will be requested to submit their comments, particularly on the question whether the ENV can be converted into a European Standard.

CEN members are required to announce the existence of this ENV in the same way as for an EN and to make the ENV available promptly at national level in an appropriate form. It is permissible to keep conflicting national standards in force (in parallel to the ENV) until the final decision about the possible conversion of the ENV into an EN is reached.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Contents

1. FOREWORD (INFORMATIVE).....	4
2. INTRODUCTION (INFORMATIVE).....	4
3. SCOPE (NORMATIVE)	4
4. NORMATIVE REFERENCES	5
5. PRESENTATION OF THE DICTIONARY ITEMS.....	6
5.1 GENERAL DEFINITIONS.....	6
5.2 ENTITIES	6
5.3 ATTRIBUTES	8
5.4 PRESENTATION OF PHRASES AND SUPPLEMENTARY INFORMATION	36
6. CLASSIFICATIONS OF VEHICLES (NORMATIVE).....	61
6.1 INTRODUCTION	61
6.2 SILHOUETTE CLASSIFICATION.....	62
6.3 LENGTH CLASSIFICATION	66
6.4 SPEED CLASSIFICATION	68
6.5 WEIGHT CLASSIFICATION	70
7. RELATIONSHIP BETWEEN DATA OBJECTS AND ATTRIBUTES (INFORMATIVE).....	72
7.1 ATTRIBUTE CLASSIFICATION	72
7.2 MANAGEMENT ATTRIBUTES.....	72
7.3 THE DATA OBJECT STRUCTURE.....	72
7.4 COMMON DATA AND META-DATA ATTRIBUTES	74
7.5 OBJECT SET TRD TRAFFIC DATA	76
7.5.1 AVS Average Speed	76
7.5.2 CTT Concentration	76
7.5.3 FLO Flow.....	77
7.5.4 IVD Individual Vehicle Data	77
7.5.5 OCC Occupancy	78
7.5.6 TTM Travel Time.....	78
7.6 OBJECT SET: TTC TRAFFIC/TRAVEL CONDITIONS.....	79
7.6.1 ACC Accident.....	79
7.6.2 DEC Delays and Cancellations	80
7.6.3 FER Ferries/Trains.....	81
7.6.4 INC Incident	81
7.6.5 LOS Level of Service.....	82
7.6.6 PAR Car Parks.....	83
7.7 OBJECT SET: AMB AMBIENT CONDITIONS.....	84
7.7.1 EXH Exhaust Pollution.....	84
7.7.2 FOS Fog/Smoke/Dust	85
7.7.3 PRE Precipitation.....	85
7.7.4 WDA Weather Data.....	86
7.7.5 WIN Wind	87
7.8 OBJECT SET: RCO ROAD CONDITIONS.....	87
7.8.1 ACT Activities.....	87
7.8.2 MHZ Moving Hazards.....	88
7.8.3 OHZ Obstruction Hazards	89
7.8.4 RMT Road maintenance	90
7.8.5 SHZ Skid Hazards	

7.8.6 SNO Snow on the Road	91
7.9 OBJECT SET: TRR TRAFFIC MANAGEMENT	92
7.9.1 APL Action Plans	92
7.9.2 INF Service Information	93
7.9.3 OPA Operator Actions	93
7.9.4 RES Traffic Restrictions	94
7.9.5 ROU Rerouting	95
7.9.6 SNE Snow/Ice Equipment	95
7.9.7 EQU Traffic Equipment Status	96
7.9.8 SIG Traffic Signal Plans	96
8. USER GUIDE (INFORMATIVE)	97
8.1 TRAFFIC AND TRAVEL SITUATIONS, ELEMENTS, AND VERSIONS	97
8.1.1 Introduction	97
8.1.2 Traffic/Travel Situations	97
8.1.3 Elements	97
8.1.4 Traffic/Travel Situation Versions	98
8.2 UNDERSTANDING AND USING THE DATA DICTIONARY	98
8.2.1 Introduction	98
8.2.2 Structure of the Data Dictionary	98
8.2.3 Using the Data Dictionary	99
8.2.3.1 Principles of the Data Object Approach	99
8.2.3.2 Data Management and Exchange using the Data Object Approach	99
8.2.3.3 Providing Traffic and Travel-Related Measurement Data using the Data Object Approach	101
8.2.3.4 Principles of Constructing Messages for use with ALERT C	102
8.2.3.5 Systems not based on either approach	102
8.3 MESSAGE MANAGEMENT ISSUES	102
8.3.1 Identifying situations	103
8.3.2 Identifying versions	103
8.3.3 Sender/source identification	103
8.3.4 Message priority and urgency	103
8.3.5 Time stamping of messages	103
8.3.6 Updating messages	104
8.3.7 Cancelling messages	106
8.4 DEVELOPING A TRAFFIC AND TRAVEL DATABASE USING THE DATA DICTIONARY	106
8.5 PHRASES AND CAUSES	107
8.6 HOW TO LINK INFORMATION	107
BIBLIOGRAPHY	109

1. Foreword (informative)

This European Prestandard has been prepared by Technical Committee CEN/TC 278 "Road transport and traffic telematics", the secretariat of which is held by NNI

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this European Prestandard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

A first data dictionary has been issued as ENV 13106-1:1998, which was designed as a first part only containing the highest level items. It did not include the list of phrases which was being finalised by WG 4 of CEN/TC 278 and published as ENV 12313-2.

This draft, produced from the DATEX-Net specifications and data dictionary is a complete one, encompassing expansions and additions, intended to serve the general needs and in particular the data exchange applications as specified by DATEX. This European Prestandard replaces ENV 13106-1:1998.

2. Introduction (informative)

Information system applications are increasingly interconnected. A predominant trend towards standardisation has been a major theme throughout DRIVE and its successors, which is found in national projects as well. The minimum need for project interoperability is a common dictionary. This is why the DATEX Task since its creation in the ATT programme released several versions of the Traffic/Travel Data Dictionary which have been provided to the CEN WG8 as working documents and became the basis of ENV 13106-1:1998

In December 1996, DATEX had prepared both versions 3.0 of the dictionary and the first version, numbered 1.1, of the Specifications for Interoperability. This package was then submitted CEN/TC 278 which in turn sent it in 1997 to stage 32 for TC comments.

The resulting comments have been processed by the last DATEX effort, funded by the EC, which has produced this dictionary version 3.1 proposed as a draft European Prestandard to CEN/TC 278/WG 8 as well as version 1.2 of the Specifications for Interoperability.

This dictionary has a dual aim:

1. it serves general purposes, by enabling a normative common understanding of data and information and proposing informative pre-defined codes, units and formats for system design,
2. it is to be used as a companion book of the DATEX-Net Specifications for Interoperability also proposed for standardisation in data/information exchange.

For this reason this European Prestandard contains common normative elements and specific informative parts.

3. Scope (normative)

This standard defines terms used for data and information in the fields of traffic and travel. The standard is applicable to traffic and transport engineering in general, and particularly data and information exchange.

This ENV supersedes ENV 13106-1:1998.

The normative terminology is provided in tables 1 to 3. Table 1 provides general definitions; it is normative. Table 2 lists the entities and their instances; it is normative. Table 3 lists the attributes with their definitions, values, units, data type, field width and default format. The columns of table 3 have various statuses which are defined in 5.3.

Table 4 provides a list of units, partially based on Edifact, given as informative.

Tables 5 and 6 list the instances of the attributes phrase, cause and supplementary advice, a majority of which are Alert C and copied from ENV 12313-2. Only the names and definitions are normative.

Clause 7 gives normative information on vehicles classes and classification. These vehicle classes and classifications need not be used in electronic tolling and automatic fee collection systems, during the time that a European classification standard for such systems is being determined.

Clause 8 defines the relationship between data objects and attributes, for information only.

To help understanding and using the dictionary a User Guide is provided in Clause 9. Its content, including the simplified data model for the data object approach, is informative.

This document is comprehensive, but it is recognised that extra requirements for dictionary entries will exist. In this case, new codes can be used. However, in order to keep the standard up-to-date, and to avoid inappropriate usage, it is requested that all additional codes are reported to the CEN TC278 secretariat and not used before registration. All such additions will then be included in the formal maintenance of the standard.

4. Normative references

This European Prestandard incorporates by dated and undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and publications are listed below. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Prestandard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

ENV 12313-2:1997	Traffic and traveller Information (TTI) - TTI Messages via traffic message coding - Part 2: Event and information codes for Radio Data System - Traffic Message Channel (TMC)
EN ISO 3166-1	Codes for the representation of names of countries and their subdivisions - Part 1: Country codes (ISO 3166-1:1997)

5. Presentation of the dictionary items

5.1 General definitions

Table 1 provides a general terminology used in the data dictionary

Table 1 - Glossary of general definitions (normative)

Coded name	Full name	Definition
ATT	Attribute ; data item	Elementary information that may characterise entities or messages. Examples: a message number may be used as an attribute of a message; a vehicle class may be used as an attribute of an entity "vehicle". A synonym commonly used is data item
RED	Data record	A representation of a message exchanged or stored in a database.
ENT	Entity	Any type of "thing" in the real world (abstract or concrete) about which information is maintained. An entity is characterised by attributes
EVE	Event	A disturbance to the normal traffic/travel equilibrium state (e.g., an incident, road closure, accident, etc).
SEL	Situation element	A traffic/travel circumstance related to one data object and one location.
STT	Status	A characterisation of the traffic/travel situation whether normal or abnormal (e.g., flows, travel times, speeds, weather, level of service).
TEQ	Traffic equipment	Any equipment used to measure traffic or influence it, or to be used by end users: e.g. variable message signs, traffic signals, emergency call boxes, measurement outstation, etc.
TOP	Traffic operator	An organisation responsible for the operation of a stretch or network of roads.
TME	Traffic/travel message	Traffic/travel information being exchanged between two systems, characterising the traffic/travel situation, or giving other relevant (e.g., supporting) information.
TTS	Traffic/travel situation	A set of traffic/travel circumstances linked by a causal relationship which apply to a common set of locations. A situation can be composed of situation elements.
VER	Version	A snapshot of the situation at a point in time. It is characterised by a set of attributes, which collectively give details of the traffic/travel situation.

5.2 Entities

The basic entity is the **data object**, on which data (attributes) are collected. Some logical grouping of these objects in categories was felt necessary which led to the so-called **object sets**, e.g. traffic conditions.

Table 2 - List of the entities and their instances (normative)

Coded name	Full name	Definition
Entities		
DOB	Data object	A logically related set of traffic/travel situations (e.g. "level of service" within the object set "traffic conditions").
OBS	Object set	A logically related set of data objects (e.g. "traffic conditions")
UPC	Update class	A group of mutually exclusive phrases, used in Alert C applications for transmitter and receiver management
Instances of the entity Object Set		
AMB	Ambient conditions	This object set describes potential interactions between travellers and the environment, including possible effects of the environment on travel, and the effects of travel on the environment. Examples include precipitation, weather data, and pollution.
RCO	Road conditions	This object set includes information related to the road availability and ease of use: obstruction and skid hazards, roadworks, etc
TRD	Traffic data	This object set comprises data objects, which describe the fundamental characteristics of traffic, measured in quantitative terms. Examples include traffic flow, speed, occupancy, etc.
TRR	Traffic management	This object set includes all forms of traffic management intervention by operators and authorities. Examples range from action plans and operator intervention through to snow clearing equipment and traffic orders.

Coded name	Full name	Definition
TTC	Traffic/travel conditions	This object set consists of data objects and description categories, which describe situations arising from the traffic stream itself, described in primarily qualitative terms. Examples include level of service, accidents, delays, etc.
Instances of the entity Data Object		
ACC	Accident	Situations in which one or more vehicles lose control and do not recover. They include collisions between vehicle(s) or other road user(s), between vehicle(s) and obstacle(s), or they result from a vehicle running off the road.
APL	Action plans	Action plans are pre-planned regulations or schemes, which are prepared and implemented by the authorities or by a traffic operator. Action plans are triggered either on a periodic basis (e.g. yearly, weekly) or according to operational criteria.
ACT	Activities	Deliberate human actions external to the traffic stream or roadway which could disrupt traffic.
AVS	Average speed	Is the average of individual vehicle speeds. The different ways of computing this average are defined in the attribute COM, computation method. The average speed may be a single value or an n-dimensional matrix; a one-dimensional matrix is often used for speeds per vehicle class.
PAR	Car parks	The availability of spaces and of park and ride services.
CTT	Concentration	Is the total number of vehicles present on a specified section of road at a particular time, divided by the length of the section. It may be a single value or an n-dimensional matrix.
DEC	Delays/Cancellations	Disruptions to traffic or public transport services resulting in hold-ups, lateness or unavailability of service.
EXH	Exhaust pollution	Air pollution due to exhaust fumes.
FER	Ferries/Trains	The availability of ferry and train services and information relating to departures.
FLO	Flow	Is the number of vehicles, axles, axle-pairs or pcu (passenger car units) which pass a fixed point in a specified measurement period. It may be a single value or an n-dimensional matrix; a one-dimensional matrix is often used for flows per vehicle class.
FOS	Fog/smoke/dust	Environmental or weather conditions (other than precipitation) which prevent drivers from seeing clearly.
INC	Incident	Abnormal traffic situation adversely affecting the normal traffic flow.
INF	Service information	This item gives information about the availability of the information service and about items presented over the audio channel.
IVD	Individual vehicle data	The attributes of a single vehicle including its intrinsic features and its specific traffic parameters.
LOS	Level of service	A qualitative measure describing traffic flowing conditions and their perception by motorists and passengers.
MHZ	Moving hazards	Chance occurrences due to abnormal loads or dangerous vehicles, which could disrupt or endanger traffic.
OHZ	Obstruction Hazards	Motionless chance occurrences involving earlier causes (e.g. earlier accidents) or causes external to the traffic stream (e.g. physical obstacles other than vehicles), which could disrupt or endanger traffic.
OCC	Occupancy	The proportion of time that a vehicle presence sensor is activated within a measurement period. It may be a single value or an n-dimensional matrix.
OPA	Operator Actions	The actions that a traffic operator can decide or implement to prevent or help correct dangerous or poor driving conditions.
ODM	Origin-destination matrix	Flows of vehicles or passengers according to their origin and destination
PRE	Precipitation	Precipitation is rainfall, snowfall, sleet or hail and includes both qualitative and quantitative measurements per unit time.
ROU	Rerouting	An action which involves diverting traffic, whether mandatory or advisory.
RMT	Road maintenance ; road works	Highway maintenance activities that may potentially affect traffic operations.
SHZ	Skid hazards	Situations in which the normal risks of skidding are increased, other than those resulting from snow on the road.
SNO	Snow on the road (s)	Presence of snow on the road, which may cause skid or obstruction hazards, or both.
SNE	Snow/Ice Equipment	The requirements for special equipment to improve vehicle adhesion on snow or ice.
EQU	Traffic Equipment Status	The situation of the traffic equipment: operating status, position or information displayed.

Coded name	Full name	Definition
RES	Traffic Restrictions	Restrictions on road usage, whether by legal order or by operational decisions. It includes road and lane closures, weight and dimensional limits, banned turns, contraflows and alternate traffic operations.
SIG	Traffic Signal Plans	Signal plan settings.
TTM	Travel time	The time taken to travel between 2 specified points, by a specified route, including any time taken by involuntary stops and delays. It may be a single value or a n-dimensional matrix.
WDA	Weather data	Meteorological data: e.g. temperatures, pressure and humidity.
WIN	Wind	Wind conditions on the roads.

5.3 Attributes

Attributes give information on data objects and on message and information management. A classification in data and management is defined in the column “ class ”, to ease the use of the table. More information is provided on the attribute classification and their relationship with data object in clause 7. The class codes are:

D: traffic/travel data

MD: meta-data

M: system/message management

The columns of table 3 have various statuses:

- the full name and definition are normative,
- the coded name is normative to identify the items and to cross-reference translations. It shall be used for Edifact-based data exchange. When another exchange format is preferred, it need not be used,
- the attribute class is informative
- the attribute values are normative,
- the attribute units and unit codes, data type, field width and default format are informative, as recommendation.

Table 3 - List of attributes

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
AAD	Chemical name	This is a free text facility to add the chemical name of a hazardous substance associated with a traffic/travel situation.	D	Free text		an..350	
ACU	Accuracy	The extent to which data may be subject to error. It can be indicated by the relative value, or an absolute value	MD		%; PER	n..3	NNN
AFV	Axle flow numerical value	A specific numerical value of the axle flow.	D		axles in the measurement period: AXL; axles/hour: AXH (d); axles/day: AXD	n..15	
ALG	above stated altitude	An altitude above which an event is expected or is occurring, normally weather related.	D		m: MTR	n..6	NNNNN N
AMH	AM frequency	This indicates the AM radio frequency being used to report a traffic/travel situation.	D		kHz: KHZ	n..4	NNNN
API	Action plan identifier	The code or identifier of an action plan.	D	Text		an..35	
APR	Atmospheric pressure at sea level	The force per unit area exerted by the atmosphere, measured at ground level and converted to an equivalent sea level pressure.	D		hPa: HPA	n..6	NNNNN N
ARI	Area of interest	The extent to which an item of information should be distributed.	MD	1: continent-wide 2: neighbouring countries 3: national 4: regional 5: not specified		n1	N
ARR	ALERT C area reference	ALERT C location code of an Area referred to by an other ALERT C location code. RDS-TMC uses a hierarchical structure of pre-defined locations Note: a system of pointers provides upward references to higher-level locations containing the specified locations	DL			n..5	NNNNN
ATP	Air temperature	The air temperature measured in the shade between 1,5 and 2 metres above ground level.	D		°C: CEL	n..3	NNN
ATS	Arrival time	The time of the arrival of an individual vehicle on a detection zone.	D		Local or universal time: UTC (d) local time: LTI	an..35	CCYYM MDDH HMMZ ZZ

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
AVV	Average speed numerical value	A specific numerical value of the average speed.	D		km/h: KMH(d); m/s: MTS	n..6	NNNNN N
AXC	Axle class	The type which the axles of an individual vehicle belong to. <u>Note:</u> This a one-dimensional matrix. E.g. E2E2E1E3 corresponds to the following axle structure:  . This reference section of the dictionary provides for the classification method in which this example is coded KZ29.	D	1 single axle 2 dual axle 3 triple axle		n1	N
AXN	Axle number	The total number of axles of an individual vehicle.	D			n..3	NNN
AXs	Axle spacing	The spacing of the s th interval between the axles of an individual vehicle from front to back of this vehicle.	D		m: MTR	n..15	NNNNN N
AXw	Axle weight	The weight of the w th axle of an individual vehicle from front to back of this vehicle.	D		t: TNE	n..15	NNNNN N
BRO	Broadcast	Indication as to whether the data may be re-sent by the recipient.	MD	Y: yes; N: no		a1	A
BSA	below stated altitude	An altitude at or below which an event is expected or is occurring, normally weather related.	D		m: MTR	n..6	NNNNN N
CAN	Cancel	Indication that all the element information previously sent is not considered valid, due to an incorrect content.	MD	Y: Yes; N: No		a1	A
CAT	Catalogue reference	Identification of a supplier data catalogue in a data exchange context	M				
CAV	number of caravans	The number of caravans involved.	D			n..3	NNN
CFI	Confidentiality	The extent to which the information may be circulated, according to the recipient type.	MD	1: Internal use; 2: Restricted to Authorities; 3: Restricted to Authorities and traffic operators; 4: Restricted to Authorities, traffic operators and publishers; 5: No restriction		n1	N
CH ₄	Methane concentration	The hourly average concentration of methane	D		parts per million : PPM	n..6	NNNNN N
CLA	Vehicle classification	The classes into which other attributes are classified. A class can be defined by a single value, or a range of values. For example, where traffic is classified by vehicle classes, the classification attribute refers to a list of classes which could be "cars, heavy vehicles, others". Where traffic is classified by speed, the classification attribute could refer to a list such as 0-20 km/h, 20-40 km/h, etc	D	Re section on Classification of vehicles <u>Note:</u> when all vehicles are grouped together in a single class, this attribute is void		an..3	

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
CLI	Client identification	In a data exchange process, the organisation which receives information from another called “ supplier ”.	M	In DATEX-Net the code is the 2-alpha code as given in EN ISO 3166-1 followed by the user id in the country. Example: GBAAR		an..5	
CLR	Catalogue line reference	Identification of a line of a supplier data catalogue in a data exchange context	M				
CLV	Code list version number	Identification of the version of the list of codes used in an application	M			n..3	NNN
CMC	Carbon monoxide concentration	The concentration of CO in the air, i.e. the volume of CO contained in unit volume of air, usually measured in parts per million.	D		parts per million : PPM	n..6	NNNNN N
CNT	Confirmation time	The date/time at which the information containing in the element was last verified, e.g. by a direct observation or new information associated with the element has been confirmed.	D		universal time: UTC (d) local time: LTI	an..35	CCYYM MDDH HMMZ ZZ
COM	Computation method	Method of computation which has been used to compute data	MD	1: arithmetic average of measures in a time period; 2: harmonic average of measures in a time period; 3: moving average of measures; 4: arithmetic average of measures based on a fixed number of measurements		n1	N
COS	Cost for the duration indicated	This indicates a cost (normally for parking) for the associated time period.	D	In DATEX-Net the currency code used is the ISO 4217 3-alpha code	Currency unit: CUR	n..18	NNNN. NN
CTV	Concentration numerical value	A specific numerical value of the concentration.	D		vehicles/km: VPK	n..6	NNNNN N
CVR	Capacity remaining	The ratio of the current capacity to the normal road capacity, as a percentage. The capacity is the maximum number of vehicles that can pass a specified point on the road, in unit time.	D		%; PER	n..3	NNN
DAD	Diversion advice	A binary attribute (Y/N) indicating whether travellers are recommended to find and follow an alternative route around a traffic/travel situation.	D	Y: yes; N: no		a1	A
DAAR	Detection array	The area of detection is made up of one or more associated sensors. There may be several detection arrays for the same traffic lane.	MD	The arrays are numbered as odd or even according to the direction of traffic		n..35	

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
DBK	Delivery break	Indicates that a data delivery is stopped for unplanned reasons, i.e. excluding the end of the order validity (attribute FIL) or the case when the filter expression is not met (attribute OOR).	M	Y: yes; N: no		a1	A
DDV	Data dictionary version	The version of the data dictionary currently used in the application	M			an..6	
DEA	Number of deaths	The number of persons fatally injured in an accident.	D			n..4	NNNN
DEN	Entering delay	This is the delay time expected to enter a parking area.	D		h m: HOM	an..4	HHMM
DGF	Dangerous goods flash-point	This is temperature at which the vapour from a hazardous substance will ignite in air.	D		°C: CEL	an..3	NNN
DGR	Data group	A series of traffic data items corresponding to a sequence in time: e.g. 24 hourly flow for a given day, or 12 average speeds in a given hour. This attribute aims at grouping data for transmission effectiveness	MD	to be defined		an..35	
DIH	Distance headway	The distance between the front (respectively back) of this vehicle and the front (respectively back) of the preceding vehicle.	D		m: MTR	n..6	NNNN N
DIN	Delivery interval	Value of the interval of data delivery in the delivery mode "periodic"	M		d h m: DHM	an..35	NNNN NDDHH MM
DIR	Direction bearing	The direction of traffic flow concerned by a situation or traffic data given as a bearing.	D		DEG	n..3	NNN
DIS	Message display	The message displayed by a variable message sign.	D	Free text		an..350	
DLC	Coded delay time	The coded additional travel time due to adverse travel conditions of any kind, when compared to "normal conditions".	D	3 hours <1< 6 h; 1 h <2< 3 h; 30 min <3< 1 h; 4: < 30 minutes; 5: negligible		n1	N
DLE	Leaving delay	This is the delay time expected to leave a parking area.	D		h m: HOM	an..4	HHMM
DLT	Delay time value	The value of the additional travel time due to adverse travel conditions of any kind, when compared to "normal conditions".	D	Days: 0-99 Hours: 0-23 Minutes: 0-59	d h m: DHM; h m: HOM (d)	an..35	HHMM
DMD	Delivery mode	The way in time the data are or will be delivered by the supplier to a client. The three ways are: on occurrence: the information is delivered as soon as it is available periodic: the information is delivered at specified intervals one shot: the information is delivered once	M	O: on occurrence P: periodic S: one shot		a1	A

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
DOW	Day of week	The day of the week at which the associated event will occur	D	1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5: Friday 6: Saturday 7: Sunday		n1	N
DPH	Depth	The depth of flooding or of snow on the road.	D		mm: MMT(d); cm: CMT	n..3	NNN
DPL	ALERT C distance from primary location	When using ALERT C location referencing: distance to the primary location of a situation	D	Positive Integer	m : MTR	n..6	
DRC	Compass point direction	The direction of traffic flow concerned by a situation or traffic data given in compass point form.	D	The following codes for a 4, 8 or 16 position compass card: N: north NNE: north north east NE: north east ENE: east north east E: east ESE: east south east SE: south east SSE: south south east S: south SSW: south south west SW: south west WSW: west south west W: west WNW: west north west NW: north west NNW: north north west		a..3	AAA



General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
DRE	Dangerous goods regulations	This item indicates a code defining the regulations, international or national, applicable for a means of transport.	D	ADR: European agreement on the international carriage of dangerous goods on road. ICA: IATA ICAO Regulations covering the international transportation of dangerous goods issued by the International Air Transport Association and the International Civil Aviation Organisation. IMD: IMO IMDG code. Regulations regarding the transportation of dangerous goods on ocean-going vessels issued by the International Maritime Organisation. RID: Railroad dangerous goods book (RID). International regulations concerning the international carriage of dangerous goods by rail.		an..3	AAA
DSL	ALERT C distance from secondary location	when using ALERT C location referencing: distance to the secondary location of a situation	D	Positive integer	m : MTR	n..6	
DUN	Day until	The day of the week until which the associated event will occur.	D	1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5: Friday 6: Saturday 7: Sunday		n1	N



General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
DUR	Coded duration	The coded expected period over which the information contained in an element is thought likely to continue. This will equate to the difference between the start and stop times if they are both defined.	D	D0 or L0: unspecified; 1/4 hour <D1< 1/2 h; 1/2 h <D2< 1 h; 1 h <D3< 2 h; 2 h <D4<3 h; 3 h<D5< 4 h; D6> 4 hours; L1: throughout the morning/ afternoon/night; L2: for the rest of the day; L3: until tomorrow evening; L4: for the rest of the week; L5: until the end of next week; L6: until the end of the month; L7: for a long period		an..2	AN
DUV	Duration value	The value of the expected period over which the information contained in an element is thought likely to continue. This will equate to the difference between the start and stop times if they are both defined.	D		y m d h: YXH; h m: HOM (d)	an..35	HHMM
ELT	ALERT C extended location-type coded	ALERT C location-type and sub-type	D			an..5	
END	End	A binary attribute specifying whether the situation element is finished (yes) or not (no).	D	Y: yes; N: no		a1	A
ERF	Element reference	This is a unique alphanumeric reference for the situation element described by the message (e.g. 1), when used in combination with the message sender, and situation reference. Other messages may refer to the same traffic/travel situation element.	M	Text		an..35	
EXP	Expiry time	The date/time at which a data record shall be considered to be invalid and be deleted from the active part of a database.	M		universal time: UTC (d) local time: LTI	an..35	CCYYM MDDH HMMZ ZZ
EXT	Exit time	The time when an individual vehicle leaves a detection zone.	D		universal time: UTC (d) local time: LTI	an..35	CCYYM MDDH HMMZ ZZ
	measurement point reference	identification of a measurement point	D			an..35	

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
FIA	Filter action	Indicates the action to be taken when a filter is satisfied in the process of updating a situation	M	E : Element only W : Whole situation		a1	A
FIL	Filter end	Indicates that a data delivery is stopped, due to the end of the data order validity, i.e. when the validity data order stop time has been exceeded	M	Y: yes N: no		a1	A
FLV	PCU flow numerical value	A specific numerical value of the passenger car unit flow.	D		pcu in the measurement period: PCU; pcu/hour: PCH (d); pcu/day: PCD	n..10	
FMH	FM frequency	This indicates the FM radio frequency being used to report a traffic/travel situation.	D		MHz: MEZ	n..4	NNNN
FOR	Forecast	Forecast is a binary item ,item, the value of which may be yes or no. "Yes" means that the indicated situation element version is a forecast, while "no" means that this is an actual situation. Any version may be forecast, from the beginning to the end of an event.	D	Y: yes; N: no		a1	A
GAP	Distance gap	The distance between the front of this vehicle and the rear of the preceding one.	D		m: MTR	n..6	NNNNN N
GAT	Time gap	The time interval between this vehicle front's arrival at a point on the roadway, and that of the departure of the rear of the preceding one.	D		s: SEC	n..6	SSSS
GVW	Gross vehicle weight	The maximum permitted weight of an individual vehicle and its load, including any trailers.	D		t: TNE	n..6	NNNNN N
HCI	Hazard code identification	This is a dangerous goods description code.	D			an..7	
HEI	Vehicle height	The height of the highest part, excluding antennae, of an individual vehicle above the road surface.	D		m: MTR	n..6	NNNNN N
HSI	Hazard substance/item/page no.	This is a number giving additional hazard code classification of a goods item within the applicable dangerous goods regulation.	D			an..7	
HUM	Relative humidity	The amount of water vapour in the air, as a percentage of the amount of water vapour in saturated air at the same temperature and at atmospheric pressure. The measurement is taken between 1.5 and 2 m above the ground and behind a meteo screen.	D		%: PER	n..3	NNN
HZZ	Hazard code version number	The version/revision number of date of issuance of the hazardous material code used.	D			n..10	NNNNN N
INJ	Number of injured	The number of persons injured in an accident.	D			n..4	NNNN

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
INP	Input time	The date/time of the input of the information in a system-	D		universal time: UTC (d) local time: LTI	an..35	CCYYM MDDH HMMZ ZZ
ITC	ALERT C intersection code	the intersection code is a cross-reference to one or more location codes, representing the same point location, but related to one or more other roads. It includes the country code and the database number (for inter-databases references)	D			an..8	
IVS	Vehicle speed	The distance travelled by an individual vehicle divided by travel time.	D		km/h: KMH(d); m/s: MTS	n..6	NNNNN N
JRN	Journey number	This indicates a public transport journey number.	D			n..3	NNN
LCO	ALERT C location code	pre-defined ALERT C code of a location. According to the location referencing method used, this location number can be used as primary (and secondary) location number.	D			n..5	
LDN	ALERT C direction, named	ALERT C name of a direction e.g. Brussels -> Lille	D			an..70	
LDO	location domain	code of the domain to which a list of location type codes belongs	D	RA: road/area location		an..2	
LEN	Length affected	This indicates the length of road affected by the associated traffic/travel situation.	D		km: KMT	n..6	NNNNN N
LEX	ALERT C extent	Extent measures how far a situation spreads. It is the number of steps (number of pre-defined location codes) along the road, from a pre-defined primary location, through other pre-defined locations, to reach the pre-defined secondary location. It is composed of a sign (+ or-) and a number of steps. The sign indicates the direction of queue growth, not the direction of traffic flow.	D			n..2	
LEN	ALERT C first name	name of a location or “ negative end name ” in case of linear location	D			an..35	
LEN	Location name	name of a location. For ALERT C see first name and second name and the rules to apply when fulfilling these attributes	D			an..35	
LEN	Link with other traffic/travel situation	Attribute provided to enable the establishment of links between situation data, whether or not belonging to the same data objects, which could appear unconnected. This attribute has the value of the situation reference.	MD	Text		an..35	

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
LNP	Lane	The lateral position in a road cross-section of a situation or data	D	The lanes are coded from the hard shoulder to the central reservation from 1 to n H: hard shoulder 1: first lane 2: second lane N: n th lane C: central reservation A or *: all lanes from 1 to n: I: Entry slip road O: Exit slip road S: slip roads P: parallel carriageway R: rest or service area T: toll plaza <u>Note</u> : when several lanes are concerned, their numbers are put together (e.g. the two left lanes of a 4 lane carriageway are coded 34)		an..10	



General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
LOA	Type of load	The type of load carried by a vehicle, especially in respect of hazardous loads.	D	AMM: Ammunition; CHI: children; CHM: chemicals; COM: combustible materials; COR: corrosive materials; DAE: materials dangerous for the environment; DAN: materials dangerous for people; DEB: debris; EXN: explosive materials; FUE: fuel; GLA: glass; HAZ: hazardous materials; LIV: livestock; MAT: materials; OIL: oil; ORD: ordinary; NEG: perishable products; NET: petrol; NHA: pharmaceutical materials; NRS: persons; RAD: radioactive materials; REF: refuse; SIC: sick people; TOX: toxic materials; VIP: VIP; XND: exceeds normal dimensions		an..3	AAA
LDL	Longitude/Latitude	Position expressed by an ordered co-ordinate pair (longitude/latitude). The co-ordinate system used is WGS84.	D			an..32 (sign/8characters/sign/8characters)	

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
LOT	Location usage	This indicates the usage of the associated location information. <u>Note:</u> the distribution area (DIL) specifies the geographical area within which the associated information may be re-distributed. This permits centres to re-send the information to other centres within this area. The presentation area (PAL) specifies the geographical area within which the associated information may be broadcast.	D	DIL : distribution area LOC: element location LSP: location of source of problem MPL : measurement point location PAL : presentation area RDD: element rerouting locations RDL: element rerouting destination location RDP: element rerouting decision point RGL : route guidance location TDL : traffic data location		an..3	AAA
LRA	code list responsible agency	code of the organisation in charge of maintaining and publishing the list of location code.	D			an..3	
LRM	location referencing method	location referencing method	D	Location referencing method used in DATEX are : 1: RDS-TMC based - predefined primary location + extent 2: RDS-TMC based - predefined primary and secondary location 3: RDS-TMC based - predefined primary location + extent + distance 4: RDS-TMC based - predefined primary and secondary location + distances		an..3	N
LSN	ALERT C second name	“ positive end name ” in case of linear location.	D			an..35	
LTN	ALERT C location table number	Number allocated to an ALERT C table in a country. Ref. for the allocation of a location table number	D			an..3	
LTR	ALERT C table reference	An ALERT C table reference is an unique reference composed of the : EBU country code + an ALERT C location table number	D	Ref. for the allocation of this reference.		an..3	
LTT	Link time	The value of the time taken to travel from the origin to the end of a link, including any time taken by involuntary stops and delays.	D		h m s: HMS (d)	an..35	HHMMSS
LTV	ALERT C location table version number	Version number associated to an ALERT C table reference	D			n..6	
MAW	Maximum permitted axle weight	The maximum permitted weight of an individual axle	D		t: TNE	n..15	NNNNN N

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
MBY	Mobility	Indicating whether an activity or a roadwork is mobile (e.g.. a march or parade) or static (e.g. a crowd, or sign-post maintenance).	D	M: mobile; S: stationary		a1	A
MCH	Message chain	This indicates the identification of previous message sender(s) of the same message when a situation element is forwarded by a recipient to a further recipient. This is useful to track the sending history of a message when is forwarded in a network <u>Note</u> : in DATEX-Net there may be several occurrences of this attribute, listed in chronological order.	M	In DATEX-Net the code is the 2-alpha code as given in EN ISO 3166-1 followed by the user id in the country. Example: GBAAR		an5	
MEP	Measurement period	The time elapsed between the beginning and the end of measurements. This item may differ from the unit attribute; e.g. an hourly flow can be estimated from a 5-minute measurement period.	MD		h m: HOM	an..35	HHMM
MFU	Message function	The function performed by the message in the DATEX-Net specifications	M	N: New order U: Update an earlier data order E: End, this means that the Supplier will modify the order stop time to his computer time C: Cancel, this deletes the data order from the Supplier database RSU: rejection with suggestion APP: approval 1: information only (default value) 16: diversionary route request 29: approval of diversionary route 27: rejection of request for diversionary route ALT: alternative diversionary route proposal SVR: vehicle route request CVR: approval of vehicle route RVR: rejection of request for vehicle route AVR: alternative vehicle route proposal		an...3	
MIT	minimum temperature	The expected minimum temperature during the forecast period.	D		°C: CEL	n..3	NNN

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
MLE	Measurement length	The length of road on which a measurement has been performed. This is used in particular to specify the length of the detection zone for occupancy measurements. This item may differ from the unit of the value; e.g. concentration in veh/km can be measured over a 2 km section of road.	MD		km: KMT (d); m: MTR	n..6	NNNNN N
MOT	Motoring conditions	Global estimate of the driving conditions resulting from an event or situation.	D	1: Normal; 2: Difficult; 3: Impossible		n1	N
MPN	measurement point name	name of a measurement point	D			an..70	
MPR	Message priority	The degree to which an item of information should be processed or transmitted without delay by the recipient.	M	1: highest priority; 2: high priority; 3: normal priority; 4: low priority; 5: lowest priority		n1	N
MRE	Message recipient	Identification of the addressee of a message	M	In DATEX-Net the code is the 2-alpha code as given in EN ISO 3166-1 followed by the user id in the country. Example: GBAAR		an..5	
MRF	Message reference	Identification of a message	M			an..35	
MSE	Message sender	The organisation which sends a message. This identifier must be unique in the exchange network.	M	In DATEX-Net the code is the 2-alpha code as given in EN ISO 3166-1 followed by the user id in the country. Example: GBAAR		an..5	
MSN	measurement side name	side of the road on which measurement are acquired, corresponds to the direction of the road	D	e.g. : Brussels → Lille		an..35	
MST	Message sending time	This is a date/time that is included by the message sender's software to indicate when the message was exchanged.	M		universal time: UTC (d) local time: LTI	an..35	CCYYM MDDH HMMZ ZZ
MTE	maximum temperature	The expected maximum temperature during the forecast period.	D		°C: CEL	n..3	NNN
MTT	Measurement time	The time associated with a measurement. It may be the time of the beginning, the end or the middle of the measurement period.	D		universal time: UTC (d) local time: LTI	an..35	CCYYM MDDH HMMZ ZZ
MTQ	Measurement equipment reference	This indicates the reference given to traffic measurement equipment	D			an..35	

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
MWS	Maximum wind speed	The maximum wind speed in a measurement period of 10 minutes.	D		km/h: KMH(d); m/s: MTS	n..6	NNNNN N
N2C	Nitrogen dioxide concentration	This is the concentration of NO2 in the air, i.e. the volume of NO2 contained in unit volume of air, usually measured in parts per million.	D		parts per million : PPM	n..6	NNNNN N
NAC	number of accidents	The number of accidents contained with the situation as a whole.	D			n..3	NNN
NAL	Nationality	Specification of the country in which a vehicle or other entity is registered	D	2-alpha code in accordance with EN ISO 3166-1		an2	AA
NAT	Nature	In ALERT-C, description of how a message shall be presented to the traveller, with the description sandwiched between appropriate wording.	MD	(blank): information; F: forecast; S: silent event		a1	A
NBP	number of burst pipes	The number of burst pipes (water, gas, etc.) involved in the situation disrupting traffic.	D			n..3	NNN
NBR	number of bridges	The number of bridges on which construction or blasting works are occurring.	D			n..3	NNN
NBU	number of buses	The number of buses or public transport vehicles involved.	D			n..3	NNN
NBV	number of broken down vehicles	The number of broken down vehicles involved.	D			n..3	NNN
NCH	Channel number	This indicates the channel number being used to report a traffic/travel situation.	D			n..2	NN
NCY	number of convoys	The number of convoys or groups of vehicles involved.	D			n..3	NNN
NEG	ALERT C negative offset	In case of segment or point location: ALERT C location of the subsequent segment or point (referring to the positive direction adopted in a conventional way when coding the locations)	D			n..5	
NFT	number of fallen trees	The number of fallen trees that are partly or wholly obstructing the road.	D			n..3	NNN
NHL	number of heavy lorries	The number of heavy lorries involved.	D			n..3	NNN
NHV	number of heavy vehicles	The number of heavy vehicles	D			n..3	NNN
NIC	number of incidents	The number of incidents included in a situation.	D			n..3	NNN
NLD	number of loads	The number of vehicle loads involved.	D			n..3	NNN
NLM	number of lanes	The number of lanes operational.	D			n..3	NNN
NLO	Number of queues	The number of parallel lanes of queuing traffic caused by a situation.	D			n..4	NNNN

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
NMC	Non methane hydrocarbons concentration	The hourly average concentration of non-methane hydrocarbons	D		parts per million : PPM	n..6	NNNNN N
NOB	number of obstructions	The number of obstructions that are partly or wholly blocking the road.	D			n..3	NNN
NOC	Nitrogen monoxide concentration	This is the concentration of NO in the air, i.e. the volume of NO contained in unit volume of air, usually measured in parts per million.	D		parts per million : PPM	n..6	NNNNN N
NOJ	number of objects	The number of objects involved.	D			n..3	NNN
NPS	Number of vacant parking spaces	This indicates the number of vacant parking spaces available in a specified parking area.	D			n..6	NNNNN N
NRC	number of ramp controls	The number of ramp controls involved.	D			n..3	NNN
NRD	number of drivers	The number of drivers involved in a specific situation.	D			n..3	NNN
NSE	number of situation elements	The number of traffic/travel situation elements active at a point in time.	M			an..35	NN
NSH	number of shed loads	The number of shed loads involved in a traffic situation.	D			n..3	NNN
NSL	Number of service lanes	The number of service lanes open to traffic at a toll plaza, customs point, etc.	D			n..4	NNNN
NSW	number of sewers	The number of sewers involved in the situation disrupting traffic.	D			n..3	NNN
NTI	Next departure time	The next time of departure of a ferry, or any public transport.	D		universal time: UTC (d) local time: LTI	an..35	CCYYM MDDH HMMZ ZZ
NTL	sets of temporary traffic lights	The number of sets of temporary traffic lights involved.	D			n..3	NNN
NVE	Number of vehicles	The number of vehicles involved in a traffic/travel situation such as an accident.	D			n..6	NNNNN N
NVF	number of vehicles on fire	The number of vehicles that are on fire at the specified location.	D			n..3	NNN
NWV	Number of waiting vehicles	The number of vehicles waiting in a queue.	D			n..6	NNNNN N
O3C	Ozone concentration	This is the concentration of O3 in the air, i.e. the volume of O3 contained in unit volume of air, usually measured in parts per million.	D		µG/m ³ : MGM parts per million : PPM (d)	n..6	NNNNN N
OCF	minimum car occupancy	The minimum number of persons in a vehicle required to satisfy a traffic restriction or a special fare condition.	D			n..3	NNN

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
OCV	Occupancy numerical value	A specific numerical value of the occupancy.	D		%; PER	n..3	NNN
ONL	original number of lanes	The normal number of lanes that the carriageway has before reduction due to roadworks or traffic events.	D			n..3	NNN
OOR	Out of range	Indicates that a data delivery is stopped, due to the fact that the filter expression is no more met, i.e. when the attribute used for filtering has passed back the threshold	M	Y: yes N: no		a1	A
ORN	Order number	The number of the data order sent by a client to a supplier	M			an..35	NNNN
OST	Order status	The answer of the supplier in response to an order	M	AN: Accepted as new CS: Cancelled successfully IDM: Incompatible delivery mode OER: Other error RC: Rejected on confidentiality grounds RE: Ignored TCC: Criteria too complex TLL: Location definition too complex UDM: Unknown delivery mode UDO: Unknown data object UDR: Unknown data order ULO: Unknown location URQ: Request not understood US: Updated successfully UTE: Unknown traffic equipment		an..3	AAA
PAD	Parking duration	A duration indicating a period of time which the cost of parking is provided for.	D		d h m: DHM; h m: HOM(d)	an..35	HHMM
PAS	Passage time	The time elapsed between the beginnings (or the ends) of activation of two sensors	D		s: SEC	n..6	SSSS
PDD	Precipitation or deposition depth	The equivalent depth of the water layer resulting from precipitation or deposition on a non-porous horizontal surface. Non liquid precipitation are considered as melted in water	D		mm: MMT	n..6	NNNNN N
PDY	Period of each day	In the filtering process of data exchange, specification of the period of time within which the filter has to be applied each day. It is composed of 2 times.	M		h m: HOM	an..35	HHMM HHMM

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
PHC	Cause	An attribute describing the origin of the situation element.	D	The values of this attribute are to be taken out of the list of phrases provided in this reference section of this dictionary, table 5		an..3	AAA
PHQ	Probability, coded	This identifies additional information which is used to qualify the associated phrase	D	d: danger of e: expected		a..3	A
PHR	Phrase	A phrase is a partial description of a traffic/travel situation or traffic data. It can be considered as a specific situation data attribute which specifies the state of the data object concerned (e.g. "stationary traffic" for the data object "level of service"). Each data object has a suggested set of phrases, but these are not mandatory and exclusive.	D	the list of Phrases is provided in this reference section of the dictionary, table 5		an..3	AAA
PIN	Precipitation intensity	The height of the precipitation received per unit time. This measure is usually coded according to the type of precipitation {rain, drizzle, snow} and the intensity in mm/h.	D		mm/h: MMH	n..6	NNNNN N
POC	car park occupancy	The percentage value of car parking spaces occupied.	D		%; PER	n..3	NNN
POS	ALERT C positive offset	In case of segment or point location: ALERT C location of the preceding segment or point (referring to the positive direction adopted in a conventional way when coding the locations)	D			n..5	
PPP	Primary particulate concentration	The hourly concentration of primary particulate particles, emitted in the atmosphere by natural and artificial sources.	D		µG/m³:MGM parts per million : PPM (d)	n..6	NNNNN N
PRB	Probability value	This indicates a degree of the likelihood of the reported event occurring.	MD		%; PER	n..3	NNN
PRT	Presence time	The time during which a vehicle activates a presence sensor.	D		s: SEC	n..6	SSSS
PWK	Period of each week	In the filtering process of data exchange, specification of days of the weeks for which the filter has to be applied each day	M	1: Monday 2: Tuesday 3: Wednesday 4: Thursday 5: Friday 6: Saturday 7: Sunday e.g.: Monday to Friday: 15; Saturday to Monday: 61		an..35	NN
QIN	Quality index	The confidence that the sender has in the information.	MD	1: certain; 2: very reliable; 3: reliable; 4: probably reliable; 5: unconfirmed		n1	N

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
QUE	Queue length	The length of a queue or the average length of queues in separate lanes due to a situation.	D		km: KMT	n..6	NNNNN N
RAR	Rerouting agreement request reference	This is a unique alphanumeric reference that identifies a rerouting agreement request and responses to that request, when used in combination with the message sender.	MD	Text		an..35	
RDI	RDS direction	The direction of traffic flow concerned by a situation or traffic data. In Alert C the positive (resp. negative) direction corresponds to the positive offset direction within the RDS location table. Note: this attribute is addressed by the CEN-WG 7.3	D	P or p: positive; N or n: negative; B or b or *: both ; U or u: unknown		a1	A
REQ	Request time	The date/time of a request sent by an organisation to another one	M		universal time: UTC (d) local time: LTI	an..35	CCYYM MDDH HMMZ ZZ
RNM	road name	name of a road	D			an..35	
RNO	road/junction number	official number of a route or a junction	D			an..5	
RPD	Rate per day	This indicates a cost per day (normally for parking) for the associated time period.	D	In DATEX-Net the currency code used is the ISO 4217 3-alpha code	CUR: Currency unit/day	n..18	NNNN. NN
RPH	Rate per hour	This indicates a cost per hour (normally for parking) for the associated time period.	D	In DATEX-Net the currency code used is the ISO 4217 3-alpha code	CUR: Currency unit/hour	n..18	NNNN. NN
RTE	Road surface temperature	The temperature measured on the road surface.	D		°C: CEL	n..3	NNN
RTI	Reference time	An attribute indicating whether local or universal time is used	MD	L: local; U: universal		a1	A
S2C	Sulphur dioxide concentration	This is the concentration of SO2 in the air, i.e. the volume of SO2 contained in unit volume of air, usually measured in parts per million.	D		parts per million : PPM	n..6	NNNNN N
SAD	Supplementary information	One or more supplementary information phrases can be added to any element, using the codes defined in this dictionary . The order in which supplementary information is received must be respected in retransmission of the information.	D	Re table 6 List of the instances of Alert C supplementary information		an..3	AAA
SBL	sets of blasting work	The number of blasting or quarrying works at the specified location.	D			n..3	NNN
SCP	sets of construction work	The number of sets of construction work at the specified location.	D			n..3	NNN
SEN	service number	This indicates the number associated with a public transport service.	D			an..5	

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
SEQ	sequential ramp number	The sequential number of an exit/entrance ramp from a given location in a given direction.	D			n..3	NNN
SEV	Severity	The amount of disruption to traffic likely to be caused by a particular situation.	D	1: extremely severe; 2: very severe; 3: severe; 4: low severity; 5: lowest severity; 6: not provided		n1	N
SID	Source identification	A coded information on the organisation or on the traffic equipment which has produced the information relating to this version of the element information, when this is not the message sender.	MD	Text		an..5	
SMF	Smoothing factor	Coefficient required, when a moving average is computed, to give specific weighs to the former average and the new data. A typical formula is, F being the smoothing factor: New average = old average F + new data (1 - F)	MD			n..15	
SMM	sets of slow moving maintenance vehicles	The number of sets of slow moving maintenance vehicles at the specified location.	D			n..3	NNN
SMW	sets of maintenance work	The number of sets of maintenance work at the specified location. This includes work on underground services and cabling.	D			n..3	NNN
SNA	Source name	The name of the organisation which has produced the information relating to this version of the element information, when this is not the message sender.	MD	Free text		an..35	
SNM	Situation reference	This is a unique alphanumeric reference for the situation partly or wholly described by the message (e.g. 101), when used in combination with the message sender. Other messages may refer to the same traffic/travel situation.	M	Text		an..35	

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
SOT	Source type	Information about the technology used for measuring the data or the method used for obtaining qualitative descriptions relating to this version of the element information.	MD	ACP: Automobile club patrol; AIR: Spotter aircraft; BRD: Breakdown service (private); CAM: Camera observation; ESP: Emergency service patrol (non-police); FVO: Freight vehicle operator; IRD: Infrared monitoring station; LOP: Induction loop monitoring station; MIC: Microwave monitoring station; MTC: Mobile telephone caller; OIN: Other information; OVH: Other official vehicle; PPT: Police patrol; PUT: Public and private utilities; RAU: Road Authorities; RMO: Registered motorist observer; RTO: Roadside telephone caller; TMS: Traffic monitoring station; TRO: Transit operator; VDO: Video processing monitoring station; VPM: Vehicle probe measurement		an..3	AAA
SPA	Advisory speed limits	The temporary maximum speed advised as a consequence of the traffic/travel situation.	D		km/h: KMH	n..6	NNNNN N
SPM	Mandatory speed limits	A temporary maximum speed limit legally imposed as a consequence of the traffic/travel situation	D		km/h: KMH	n..3	NNN
SPR	Speed reduction ratio	The ratio of the current average flow speed to the average free-flow speed.	D		?: PER	n..3	NNN
SPV	Speed reduction	The difference between the average free-flow speed and the current average flow speed for a section of road	D		km/h: KMH	n..6	
SRM	sets of road marking work	The number of sets of road marking work at the specified location.	D			n..3	NNN
SRN	Sun net radiation	The hourly average of sun net radiation, i.e. the total radiation minus the fraction of sun radiation outgoing from the ground.	D		Watt/m2: WM2	n..6	NNNNN N

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
SRR	sections of resurfacing work	The number of sections of road resurfacing work at the specified location.	D			n..3	NNN
SRW	sets of roadworks	The number of sets of roadworks at the specified location.	D			n..3	NNN
STA	Start time	The date/time at which the information contained in an element is expected to start, or said to have started.	D		universal time: UTC (d) local time: LTI	an..35	CCYYM MDDH HMMZ ZZ
STL	sets of traffic lights	The number of sets of traffic lights involved.	D			n..3	NNN
STO	Stop time	The date/time at which the information contained in an element is expected to end or said to have ended.	D		universal time: UTC (d) local time: LTI	an..35	CCYYM MDDH HMMZ ZZ
STR	Sun total radiation	The hourly average of sun total radiation, i.e. the sum of the direct solar radiation plus the diffuse radiation coming from the sun and reradiated downwards.	D		Watt/m2: WM2	n..6	NNNNN N
SUP	Supplier Identification	In a data exchange process, the organisation which organisation that sends information to another, called “ client ”.	M	In DATEX-Net the code is the 2-alpha code as given in EN ISO 3166-1 followed by the user id in the country. Example: GBAAR		an..5	
SUR	Comment (text)	Free text facility that can be offered to the operator for uncoded observations, not intended for eventual end users (e.g. a vehicle brand).	D	Free text		an..350	
SUT	Subscription	This item specifies whether the information is subject to a subscription by the recipient	M	1: required; 2: not required		n1	N
SVE	Specification version	The specification version of the application using this dictionary (e.g. DATEX-Net).	M			an..9	
TAB	Situation timetable	To be defined later	D			an..35	
TAT	number of trailers	The number of trailers involved.	D			n..3	NNN
TDT	traffic data type	this indicates whether the data are identified by a measurement point reference or by a complete set of attributes	M	CUR: current MPD: measurement point data		a3	AAA
TES	test message number	This indicates the numerical reference given in test messages	D			an..5	

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
TET	Traffic equipment type	The type of traffic equipment used.	D	ACC: motorway access control system; DVM: diversion variable message sign; EBO: emergency call boxes; ENU: emergency phone number; FOG: fog detection station; ICE: black ice detection station; IVM: information VMS; LCL: lane control lights; LVC: level crossing; MEA: traffic measurement station; MET: weather measurement station; PME: pollution measurement station; RME: roadside measurement station; RVM: road variable message sign (VMS); TLI: traffic lights		an..3	AAA
THC	Total hydrocarbons concentration	The hourly average concentration of total hydrocarbons, i.e. including methane and non-methane	D		parts per million : PPM	n..6	NNNNN N
TIH	Time headway	The time interval between this vehicle's arrival at (or departure from) a point on the roadway, and that of the preceding one.	D		s: SEC	n..6	SSSS
TMN	TMC message reference	Identification of a TMC message associated with the situation element	M			an..35	
TOD	time of day	The time at which the associated event will occur.	D		h min: HOM	an..35	HHMM
TRN	TREM card number	The identification of a transport emergency card giving advice for emergency actions.	D			an..10	AAAAA A
TTI	Travel time increase	The ratio of the current average travel time on a link to the free-flow travel time.	D		%: PER	n..3	NNN
TTN	Travel time numerical value	A specific numerical value of the travel time.	D		h m s: HMS (d)	an..35	HHMM SS
UNI	Unit	Each quantitative value, having a dimension, must be qualified explicitly or implicitly by a "unit" an attribute specifying which unit is used.	MD	Re table 4 List of Units		an..3	
UNDG	UNDG number	This item is a unique serial number assigned within the United Nations to substances and articles contained in a list of the dangerous goods most commonly carried.	D			n4	NNNN

General information						DATEX-Net specific	
Coded name	Full name	Definition	Class	Values	unit(s) codes	Data type/field width	Default format
UPR	ALERT C linear reference	ALERT C location code of a linear reference (road, segment..) referred to by an other ALERT C location code (point or segment). RDS-TMC uses a hierarchical structure of pre-defined locations Note: a system of pointers provides upward references to higher-level locations containing the specified locations	D			n..5	
URB	Alert C urban code	code indicating if a point location has mainly an urban or inter-urban character	D	0: inter-urban 1 : urban		n..1	N
URG	Urgency	This indicates the urgency with which a message recipient or Client should distribute the enclosed information. Urgency particularly relates to functions within RDS-TMC applications. This attribute indicates the appropriate receiver response mode for an automated receiving system. It has three values: normal (N) - routine processing; urgent (U) - draw to user's attention subject to established filters; extremely urgent (X) - override all filters and draw to user's attention immediately.	M	X: Extremely urgent; U: Urgent; N: Normal urgency		a1	A
UTM	time until	The time until which the associated event will occur.	D		h min: HOM	an..35	HHMM
V	measurement point value	the numerical value that is associated with a measurement point. The measurement point defines the nature of the measurement recorded, the units used and its location	D			n..15	
VAA	Validity start time	The date/time at which an item in the management of a system becomes applicable	M		universal time: UTC (d) local time: LTI	an..35	CCYYM MDDH HMMZ ZZ
VAO	Validity stop time	The date/time at which an item in the management of a system ceases to be applicable	M		universal time: UTC (d) local time: LTI	an..35	CCYYM MDDH HMMZ ZZ
VCF	Ratio of a vehicle class in a traffic flow	The proportion of a specific vehicle class to a part or the entire traffic flow. The most common use of this attribute is the proportion of heavy vehicles in the entire flow.	D		%: PER	n..3	NNN
VCI	Vehicle class	The vehicle category or type to which an individual vehicle belongs.	D	Re section on Classification of vehicles <u>Note</u> : when every vehicle class is used, this attribute is either void or suffixed 0 (ref. section on classification) e.g. KX0		an..3	