

UN/EDIFACT

DRAFT DOCUMENT

Traffic or travel situation information message

This message has undergone only an initial technical assessment which may have found certain technical and presentation problems. These will be solved before the message is submitted as a request for Status 1. Anything shown under Section 5 (or, in some cases, which should have been shown in Section 5 - directory variations) is NOT approved at this stage. Further information on the development of this message can be obtained from the Rapporteur's EDIFACT Board Secretariat. This document is issued for information and comments and is not intended for implementation.

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0. INTRODUCTION

This specification provides the definition of the Traffic or travel situation information message (TRAVIN) to be used in Electronic Data Interchange (EDI) between trading partners, involved in administration, commerce and transport.

1. SCOPE

1.1 Functional Definition

A message to serve parties that send and/or receive traffic or travel information (e.g. traffic or travel information or control centres, telecommunications services, broadcasters, police, road authorities, public transport operators, breakdown or rescue services, freight operators, individual travellers), conveying information relating to one traffic or travel situation such as an accident, roadworks, public transport delay, snowstorm, or security alert.

1.2 Field of Application

The Traffic or travel situation information message may be used for both national and international trade. It is based on universal commercial practice and is not dependent on the type of business or industry.

1.3 Principles

This message is meant to comply with the operational requirements of

organizations concerning the notification and dissemination of traffic or travel situation information.

1. One TRAVIN message conveys information about one traffic or travel situation. A traffic or travel situation is a set of traffic or travel circumstances with a particular cause, or causes.

This definition refers to an actual, real-life traffic or travel situation (e.g. one specific accident) and not to a class of traffic or travel situations (e.g. accidents in general).

The examples below provide further clarification to the definition of a traffic or travel situation:

EXAMPLE 1: accident at a location in Paris
 accident at a location in Brussels

These are two different traffic or travel situations. Although they share the same 'type' (class) of traffic/travel circumstances, they refer to two unrelated real-life situations.

EXAMPLE 2: snow affecting road E19
 snow affecting road E40

If it is the same snowstorm affecting both locations (likely to be geographically close to one another) then it can be regarded as one traffic or travel situation (having the same particular cause). If it is two separate snowstorms, in different parts of the country, they should be regarded as two traffic or travel situations.

EXAMPLE 3: roadworks on E19, at km 10.4 (primary location)
 slow traffic on E19, from km 9.0 (secondary location)
 to 10.4 (primary location).

Since the slow traffic is related to the roadworks, these constitute one traffic or travel situation. The phrases 'roadworks' and 'slow traffic' (i.e. a set of two phrase codes) relate to a single cause.

EXAMPLE 4: roadworks on E19, at km 10.4
 slow traffic on E19, from km 24.2 to 27.3

Since the slow traffic and roadworks are unrelated, these constitute two traffic or travel situations. The phrase 'roadworks' applies to one location, and the phrase 'slow traffic' applies to the other.

2. One message can convey the information needed to construct one or more views of the situation. A view is a perspective of a situation from a particular approach route, or direction, for which a certain (partial) description (i.e. set of phrases) applies.

If the same description applies to all directions of approach, there is only one view of the situation (e.g. accident, at a location in Paris).

If the descriptions are different according to the direction of approach, there is normally one view per direction of approach.

EXAMPLE 5: roadworks on E19, at km 10.4
 slow traffic on E19, westbound from km 14.2 (secondary
 location) to km 10.4 (primary location)
 stationary traffic on E19, eastbound from km 9.0
 (secondary location) to km 10.4 (primary location)

Since the roadworks, slow traffic and stationary traffic all share the same cause, there is one traffic or travel situation. Since the eastbound and westbound descriptions are not the same, there are two

views. The description 'roadworks, slow traffic' applies to one direction, and the description 'roadworks, stationary traffic' applies to the other.

3. A traffic or travel situation may be an event (e.g. an accident, or roadworks) and/or a traffic or travel status report (e.g. an indication of level-of-service).

4. One message may relate to all relevant information about the situation, or to a part of that information, e.g. a view of the situation. Views are important because some systems are designed from the driver's perspective (for example), so individual messages convey views rather than whole situations. Traffic or travel information may be split in different messages, e.g. as it is known at different times, or for the different routes affected.

5. A traffic or travel situation information message may contain one, or several phrases describing the situation. Each phrase addresses one element of the situation (e.g. element 1 is roadworks; element 2 is slow traffic). Each phrase, with its corresponding attributes (location, time, etc.) relates to a situation element, i.e. a partial description of the situation.

6. The message may address one, or several affected locations.

7. Each message contains information of one particular type (e.g. driver information, public transport). Data element 1001 (Document/message name, coded) of segment BGM can be used to provide further specification of the message type, indicating the operational structure and content of the information.

8. A message may affect one or more routes. Also, a single route or location may contain one or more traffic or travel situations at a particular time.

9. The TRAVIN message has to cater for frequent updates (changes, deletions, or cancellation). For these purposes, a number of generic terms are used in this specification, to be described as:

start time	- the time from which the information in the message will become effective (e.g. the time at which the roadworks is expected to start)
stop time	- the time from which the information in the message will cease to be effective (e.g. the time at which the incident is expected to be cleared)
expiry time	- the time at which the information in the message shall be deleted from the receiving database
end indicator	- indicates that the referenced information is no longer effective (e.g. the event has finished; conditions are once again normal)
cancellation indicator	- indicates that the referenced information was previously distributed in error

10. A TRAVIN message may be sent according to existing agreements with the recipient, or in response to an earlier Traffic or travel information request message (TRAREQ).

2. REFERENCES

See UNTDID, Part 4, Section 2.6, UN/ECE UNSM - General Introduction, Section 1.

3. TERMS AND DEFINITIONS

See UNTDID, Part 4, Section 2.6, UN/ECE UNSM - General Introduction, Section 2.

4. MESSAGE DEFINITION

4.1 Data Segment Clarification

This section should be read in conjunction with the Branching Diagram and the Segment Table which indicate mandatory, conditional and repeating requirements.

0010 UNH, Message header

A service segment starting and uniquely identifying the message. The message type code for the Traffic or travel situation information message is 'TRAVIN'.

Note: Traffic or travel situation information messages conforming to this document must contain the following data in segment UNH, composite S009:

Data element 0065 TRAVIN
0052 0
0054 1
0051 RT

0020 BGM, Beginning of message

A segment to indicate the beginning of a message and to transmit the identifying number, e.g. by situation and version number within the application. The segment can also be used to provide further specification of the message type (e.g. driver information, public transport), through data element 1001: Document/message name, coded. Furthermore data element 1225 can be used to indicate that the message cancels or ends an earlier message, referenced in RFF on message top level.

0030 DTM, Date/time/period

A segment to time-stamp the message. This segment can also be used to indicate other dates and/or times which apply to the message as a whole, such as: - message sending time - input time - expiry time - request time

0040 ERC, Application error information

A segment to indicate that an information request cannot be (wholly) fulfilled, for a reason coded.

0050 GIS, General indicator

A segment to provide a general indicator relating to the whole message, such as: - severity - quality index

- 0060 LOC, Place/location identification
A segment to indicate a location relevant to the dissemination of the information in this message, such as: - distribution area
- 0070 Segment Group 1: RFF-DTM
A group of segments to specify references relating to the whole message, and associated dates and/or times.
- 0080 RFF, Reference
A segment to indicate a reference applying to the whole message, such as: - related earlier message number - contract number - related situation number
- 0090 DTM, Date/time/period
A segment to provide a date and/or time relating to the reference.
- 0100 NAD, Name and address
A segment to indicate the identity of the message sender within the application. It can also be used to specify the source of the information, in case all information in this message originates from the same source.
- 0110 Segment Group 2: STS-NAD-RFF-GIS-QTY-DGS-GDS-FTX-SG3-SG4-SG5
A group of segments to provide details of a traffic or travel situation element (i.e. a partial description of the total situation).
- 0120 STS, Status
A segment to specify the main characteristic (status report or event) of the situation element, by means of a phrase code (e.g. accident) or a supplementary advice code (e.g. follow diversion signs).
- 0130 NAD, Name and address
A segment to specify the source of the information given in this situation element, to be used in cases where different sources are indicated for various situation elements.
- 0140 RFF, Reference
A segment to indicate a reference relating to the situation element, such as: - situation element number - view number
- 0150 GIS, General indicator
A segment to indicate a general indicator relating to this situation element, such as: - severity - urgency - forecast indicator - confidentiality
- 0160 QTY, Quantity
A segment to indicate quantities associated with the situation element, such as number of lanes of queuing traffic, number of injured people, speed reduction, etc.
- 0170 DGS, Dangerous goods
A segment to provide details of dangerous goods, e.g. in connection with a routing advice (see the LIN-segment group

relating to the situation element as triggered by the STS segment).

- 0180 GDS, Nature of cargo
A segment to indicate the type of load associated with a situation element, e.g. a load shed onto the roadway.
- 0190 FTX, Free text
A segment to provide additional free form information related to the situation element, such as: - comment - displayed text - chemical name of dangerous goods
- 0200 Segment Group 3: DTM-MOA
A group of segments to provide a date and/or time associated with a situation element.
- 0210 DTM, Date/time/period
A segment to indicate a date and/or time which applies to this specific situation element, such as: - expiry time - start time - stop time - parking duration
- 0220 MOA, Monetary amount
A segment to specify the cost of parking for the duration indicated in the DTM segment above, or to specify a rate per hour or a rate per day.
- 0230 Segment Group 4: LOC-TDT
A group of segments to specify the main location relating to the situation element (e.g. location of the accident), as well as other locations related to the situation element.
- 0240 LOC, Place/location identification
A segment to specify a location relating to the situation element, such as: - situation element location (e.g. location of roadworks) - location of a missed connection - location of a held connection The situation element location can be specified, for example, in terms of its primary location (in composite C517) and its related secondary location (in composite C519) - see for more clarification EXAMPLE 3 as given in the Principles section (1.3).
- 0250 TDT, Details of transport
A segment to indicate the journey number of a missed or held connection (at a location given in the LOC segment of this segment group). The segment can also be used to indicate the journey number of a public transport vehicle about which information is given in this situation element.
- 0260 Segment Group 5: LIN-LOC
A group of segments to specify a detailed diversion route, routing for hazardous or exceptional load, and/or a detailed destination (e.g. of a detailed diversion route).
- 0270 LIN, Line item
A segment to number each line item, which is a location along the route.

0280 LOC, Place/location identification
 A segment to specify a location, such as the destination of a detailed diversion, or a location along the route.

0290 UNT, Message trailer
 A service segment ending a message giving the total number of segments in the message and the control reference number of the message.

4.2 Data Segment Index (Alphabetical Sequence)

- BGM Beginning of message
- DGS Dangerous goods
- DTM Date/time/period
- ERC Application error information
- FTX Free text
- GDS Nature of cargo
- GIS General indicator
- LIN Line item
- LOC Place/location identification
- MOA Monetary amount
- NAD Name and address
- QTY Quantity
- RFF Reference
- STS Status
- TDT Details of transport
- UNH Message header
- UNT Message trailer

4.3 Message Structure

4.3.1 Segment Table

POS	TAG NAME		S	R
0010	UNH Message header		M	1
0020	BGM Beginning of message		M	1
0030	DTM Date/time/period		M	9
0040	ERC Application error information		C	1
0050	GIS General indicator		C	9
0060	LOC Place/location identification		C	99
0070	ÄÄÄÄÄ Segment Group 1	ÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄ	C	9ÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄ
0080	RFF Reference		M	1 ³
0090	DTM Date/time/period		C	9ÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄ
0100	NAD Name and address		M	9
0110	ÄÄÄÄÄ Segment Group 2	ÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄ	C	99ÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄ
0120	STS Status		M	1 ³
0130	NAD Name and address		C	1 ³
0140	RFF Reference		C	9 ³
0150	GIS General indicator		C	9 ³
0160	QTY Quantity		C	99 ³
0170	DGS Dangerous goods		C	1 ³
0180	GDS Nature of cargo		C	1 ³
0190	FTX Free text		C	9 ³
				3
POS	TAG NAME		S	R
0200	ÄÄÄÄÄ Segment Group 3	ÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄ	C	99ÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄ ³
0210	DTM Date/time/period		M	1 ^{3 3}

	Function:			FU
	C601		C	
	C555	STATUS EVENT	C	DI
	9011	Status event, coded	M an..3	
	1131	Code list qualifier	C an..3	
	3055	Code list responsible agency, coded	C an..3	
	C556	STATUS REASON	C	DI
	9013	Status reason, coded	M an..3	
	1131	Code list qualifier	C an..3	
	3055	Code list responsible agency, coded	C an..3	
	9012	Status reason	C an..35	

5.2.1 Segment Variation

*	STS	STATUS		NA
	Function:			FU
	C601		C	
	C555	STATUS EVENT	C	DI
	9011	Status event, coded	M an..3	
	1131	Code list qualifier	C an..3	
	3055	Code list responsible agency, coded	C an..3	
	C556	STATUS REASON	C	DI
	9013	Status reason, coded	M an..3	
	1131	Code list qualifier	C an..3	
	3055	Code list responsible agency, coded	C an..3	
	9012	Status reason	C an..35	

5.2.2 Composite Variation

*	C601			NA
	Desc:			FU
	9015	Status type, coded	M an..3	DI
	1131	Code list qualifier	C an..3	DI
	3055	Code list responsible agency, coded	C an..3	DI

5.2.3 Data Element Variation