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Translation

O

Compendium of the data to be exchanged between Railway Undertakings (RUs) for the purpose of conveying freight traffic

Répertoire des informations à échanger entre Entreprises Ferroviaires (EF) pour la production des transports de fret ferroviaire

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II - Freight traffic

III - Finance, Accountancy, Costs, Statistics

IV - Operating

V - Transport stock

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4th edition, February 2008

Complete revision of the January 1982 Leaflet bearing in mind the introduction of CIM 1999.

The person responsible for this leaflet is named in the UIC Code

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Summary

This Leaflet contains a compendium of the information to be exchanged between railway undertakings (RUs) when carrying out rail freight traffic.

Appendix A contains a detailed description of the information to be exchanged which is given below:

- Technical characteristics of the wagon in relation to its design;
- Wagon characteristics required for reuse or empty return of a wagon;
- Transport data;
- Data concerning loaded journeys;
- General data concerning a train or a sort group;
- Stoppage of a wagon for technical reasons;
- Information delays for operating reasons

In multilateral rail freight traffic it is necessary to provide data for the movement of a train and the wagons, loading units and other rail vehicles that it contains to the RUs which move the train and carry out the individual transport operations. This is the basis for an efficient and economical operation of the trains and the transport operation.

If this data is transmitted to the following RU at the right time it is not necessary for the participating RUs to collect it and/or capture it.

This Leaflet specifies the type of information which all RUs consider it is appropriate to transmit in order to meet the requirements in *UIC Leaflet 404-1*.

1 - Object

The specification of the data to be exchanged which is necessary for the operation of trains and the forwarding of the wagons.

As a result of the transmission of the data at the right time, it does not have to be collected and captured many times by the RUs involved.

This leaflet specifies the type of information, which all RUs consider it is appropriate to transmit.

The compiling of this information is basically done for all the vehicles in a freight train.

2 - Obligatory nature of the leaflet

This leaflet is obligatory insofar as it defines the information that RUs should strive to exchange when setting up systems for the centralised and integrated operation and control of multilateral rail traffic (COCFT, see List of abbreviations - [page 47](#)) .

When each COCFT is fully developed it must be able to:

- capture the international traffic data specified in this compendium;
- accept and store the same data sent by the COCFT of other RUs;
- transmit data to the COCFT of another RU under the conditions (in terms of presentation and coding) stipulated in this leaflet, generally at the latest prior to the departure of a train from its last scheduled stopping point.

However, this objective (exchange of information of this compendium) can also be achieved in phases, if the RUs decide through bilateral or multilateral agreements to undertake partial exchanges of data commensurate with the stage reached in the development of their COCFT.

3 - Nature and organisation of data

Data exchanged shall be divided into nine groups according to affinity.

This system of classification has been adopted solely for the purpose of clarity and not as a structural framework for data exchanged for international COCFT applications. The structure of data exchanged and transmission procedures shall be described in separate leaflets for each particular application.

Appendix **A** - **page 14** contains a detailed description of the data listed below.

For Groups 1 to 4 and 6 to 9, the wagon registration number (*UIC Leaflet 438-2*) is the reference for identification. For Group 5 the identity of the train is the reference (*UIC Leaflet 419-2*, see Bibliography - **page 48**).

3.1 - Group 1 : Technical characteristics of the wagon in relation to its design

(see point A.1 - **page 14**)

The following are additional technical characteristics which are not immediately apparent from the wagon registration number:

- 1 - Number of axles
- 2 - Maximum speed conditions, depending on wagon design characteristics
- 3 - Length over buffers
- 4 - Tare
- 5 - Forwarding restrictions, depending on design characteristics
- 6 - Heating cable
- 7 - Handbrake
- 8 - Air brake
- 9 - Maximum distance between two adjacent axles
- 10 - Type of coupling
- 11 - Height of loading plane in unladen state
- 12 - Minimum radius curve that can be traversed
- 13 - Minimum vertical radius of yard humps that can be traversed
- 14 - Number of bogies
- 15 - Bogie pivot pitch
- 16 - Bogie pitch
- 17 - Inner wheelbase
- 18 - Keeper, short name

3.2 - Group 2: Wagon characteristics required for re-use or empty return of the wagon

(see point A.2 - page 18)

- 1 - Re-use restricted or prohibited
- 2 - Tables of load limits
- 3 - Effective loading length
- 4 - Effective loading area
- 5 - Effective loading capacity
- 6 - Overhaul
- 7 - Agreement grid
- 8 - Special inspection
- 9 - Removable accessories and special equipment on wagons
- 10 - Speed restrictions due to damage
- 11 - Restrictions to traffic movement due to damage

3.3 - Group 3: Transport data

(see point A.3 - page 22)

Data in this group refers to a loaded journey, or to an empty run under a direct order.

Empty runs under a direct order shall be understood to mean wagons forwarded under a consignment note as well as wagons exchanged between two RUs under the terms of specific bilateral or multilateral agreements, where the end station in the destination country is known before the departure and is stipulated in the relevant agreement.

- 1 - Origin of wagon
- 2 - Destination of wagon
- 3 - Consignee of wagon
- 4 - Date of despatch
- 5 - International routing and identification of destination station
- 6 - Forwarding method, monitoring, guaranteed transit time, programmed movement and transport schedule
- 7 - Effective braked weight
- 8 - Operations to be performed on load or wagon
- 9 - Number of control label
- 10 - Total weight of wagon
- 11 - Load condition of the wagon
- 12 - Consignor of wagon
- 13 - Customs clearance conditions (destination)
- 14 - Monitoring body(ies)
- 15 - International traffic-flow code
- 16 - Location of transport documents

3.4 - Group 4: Data concerning loaded journeys

(see point A.4 - page 28)

This information is required in addition to the data listed in the previous group for loaded journeys:

- 1 - Additional information concerning the shape, type and danger of the product carried
- 2 - Weight for the transport
- 3 - Intermodal traffic data
- 4 - Forwarding restrictions due to the load
- 5 - Information on dangerous goods
- 6 - Nature of freight commodity
- 7 - Loading gear
- 8 - Speed restriction for special load
- 9 - Identification of a special load

3.5 - Group 5: General data concerning a train or a sort group

The data in this category is intended to serve as a basis for train consist and wagon exchange messages. It applies both to trains formed on one RU for despatch to another, and to wagons transferred without a train having been formed.

This data may be divided into 3 sub-groups:

Sub-group 5A: particulars that apply equally to a train or a sort group:

(see point A.5.1 - page 37)

- 1 - Identification of the train or sort group in the pre-advice message
- 2 - Interchange points
- 3 - Composition of the train or the wagon group
 - 3.1 - Direction of checking
 - 3.2 - Number of wagons
 - 3.3 - List of wagon numbers and wagon status
- 4 - Train path number

Sub-group 5B: particulars concerning the operation of a train:

(see point A.5.2 - page 39)

- 1 - First departure station of train
- 2 - Train destination station
- 3 - Maximum train speed
- 4 - Train braking conditions
- 5 - Last train reforming station
- 6 - Scheduled frontier crossing (date and time)
- 7 - Number(s) of the tractive unit(s)

Sub-group 5C: General data concerning wagon exchanges

(see point A.5.3 - page 41)

Contrary to the general rule, the train or sort number shall be the identification reference for this group of data. To avoid any possible ambiguity, the train number shall be completed by the date on which the train is scheduled to cross the frontier.

- 1 - Transfer (date and time)
- 2 - Actual frontier crossing (date and time)

3.6 - Groups 6, 7 and 8: Stoppage of a wagon for technical reasons

The data listed in these groups refers to loaded journeys or to empty wagons forwarded under a direct order.

3.6.1 - Group 6: Data to be transmitted when the decision to stop the wagon is made

(see point A.6 - page 42)

- 1 - Identification of train or sort group in pre-advice message
- 2 - Station where stoppage occurs
- 3 - Date and time of stoppage
- 4 - Cause of stoppage
- 5 - Nature of operation to be performed
- 6 - Probable duration of stoppage

3.6.2 - Group 7: Data to be transmitted when the wagon is put back into service

(see point A.7 - page 44)

- 1 - Station where wagon was put back into service
- 2 - Date and time of bringing back into service
- 3 - Nature of operation actually performed
- 4 - Number of the wagon(s) which received the load

3.6.3 - Group 8: Data to be transmitted when a replacement wagon is put into service to carry the load as a result of the stoppage of another or several wagons

(see point A.8 - page 45)

- 1 - Station where wagon is brought into service
- 2 - Date and time of placing into service
- 3 - Nature of operation actually performed
- 4 - Number of the wagon(s) from which the load was taken

3.7 - Group 9: Data concerning delays for operating reasons

(see point A.9 - page 46)

Delay of a wagon for operating reasons is usually indicated only in cases where forwarding is carried out according to a pre-established schedule (if necessary by specifying the train numbers).

In these circumstances, the following shall be transmitted:

- 1 - Delay recorded
- 2 - Further information concerning forwarding systems, monitoring, guaranteed transit time, programmed movement and transport schedule
- 3 - Departure train number
- 4 - Forwarding station
- 5 - Actual date and time of departure

4 - Coding of data

Unless special bilateral agreements have been entered into, use of the standard codes shall be compulsory for data exchanges between RUs. The numbers of the corresponding leaflets are given in the "Remarks" column of the tables in the Appendix.

Data items which have yet to be allotted a code in series *UIC Leaflets 920* (see Bibliography - page 48) or which differ from the code given in these leaflets shall be identified in Appendix A - page 14 in the "Remarks" column by the symbol (+).

For data expressed in figures, this leaflet specifies the units, the maximum number of characters and the position of the decimal point, if any.

5 - Data capture procedures

The choice of the data source and capture procedure shall be left to the discretion of the RU responsible for the initial input of data concerning a particular journey.

The only requirement imposed is that data input by this RU into the COCFT at international level must comply with the definitions in this leaflet.

6 - Form of data exchanges

The data defined in the present leaflet shall be exchanged between RUs in the form of messages. The procedures and data carriers used for transmission purposes are not specified in this leaflet but shall be fixed by agreement between the RUs concerned.

It shall be possible for RUs to apply special procedures by means of bilateral agreements.

7 - Information to be exchanged between RUs for the purpose of conveying international rail traffic

7.1 - Obligations of the RUs taking part in the exchange of pre-advice messages

Because of the mutual dependency of the RUs on a comprehensive information transmission, for each data element a category is defined that is obligatory regarding the collection, recording and passing on.

There are 3 categories:

- | | |
|-------------|---|
| Category A: | Data which are necessary for the safe operation of a train, or for passing through the frontier or at the interchange station. It is obligatory to capture, store, if necessary to update and to transmit this data. This also applies to consignments and freight wagons of other RUs. |
| Category B: | <p>Data which are necessary for the carrying out of a movement from the despatching station to the destination and for freight wagon management.</p> <p>Consignment and constant vehicle data (for both the RU's and private wagons) shall be collected, stored and if necessary updated and passed on at the beginning of the transport operation. This also applies to consignments and wagons of other RUs.</p> <p>The data supplied by the RU which are not managed in their own system shall be intermediately stored and handed over to the following RU when the wagon is handed over.</p> |
| Category C: | Data which it is not obligatory to capture should however be received, stored for the time being and transmitted to the following RU. |

The RUs that participate in the exchange of the freight train pre-advice shall undertake to install the necessary procedures for achieving these categories when their COCFT is extended.

7.2 - Compendium of data to be exchanged between RUs for the purpose of conveying international freight traffic

Presentation and characteristics of the data

Each data item shall be described as follows:

Column 1:	No. Order number.
Column 2:	Type of information. Full wording accompanied by all the sub-elements and an explanation of the stipulated codes. However, certain code lists are not given in this leaflet because of their excessive length. Such instances are exceptional and are mentioned in the "Remarks" column.
Column 3:	Coding or unit. Coding and list of codes, or measuring unit used. (+): Derogatory coding or coding not existing in <i>UIC Leaflets 920 series</i> .
Column 4:	Number of positions. Number of positions in standard messages and their type as specified in <i>UIC Leaflet 912</i> (see Bibliography - page 48). N: numerical AN: alphanumerical tot.: total number of positions for a data item that may comprise different elements max.: maximum number of positions allotted to a data item comprising a certain number of variable occurrences.
Column 5:	Hermes Category Category of the obligation to which the RUs participating in the exchange of freight train pre-advice messages are subject. Since the RUs cannot meet the categories of the obligation at the same time and not completely because of their different development situation, the current position and the planned conversion to the requirements specified here are described in a special display. This is published as part of the documentation of the continuing specification of the use of freight train pre-advice.
Column 6:	Remarks Observations and delimitation of maximum number of occurrences.

General remarks for the transmission as specified in *UIC Leaflet 912*

When an element or data item has a fixed position within a phrase, the absence of a value for this element or data item shall be indicated by an equivalent number of blank positions, even if this element or data item is identified by numerical positions.

For elements or data items of the numerical type, the values shall be arranged flush right, preceded by zero(s) when the number of significant figures is less than the number of positions provided.

For alphanumerical elements or data items, the characters shall be arranged flush left.