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



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Entities wishing to implement the HERMES 30 message V2.1 but also for V2.0 for bi-lateral use and for compliance with TAF-TSI requirements

Keywords:

HERMES 30, Pre-announce, Train Composition, TAF-TSI compliance, Data Exchange, XSD, XML, IT and Coding

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CONTENTS

Foreword	1
Executive summary	3
Field of application	4
Reference documents	5
Abbreviations and Symbols	6

General Application

1 – Introduction	8
2 – Data types and classification	9
2.1 – File name	10
2.2 – Group H: Message header.....	10
2.3 – Group T: Train-related data.....	10
2.4 – Group GW: Wagon list information (A-Z)	10
2.5 – Group GWC: CIM/CUV consignment data.....	10
2.6 – Group GWL: Wagon load data.....	11
2.7 – Group GWLS: Specific characteristics (load), incl. customs information	11
2.8 – Group GWA: current operational wagon data.....	12
3 – Data exchange format	13
4 – Information to be exchanged between RUs for rail transport operations	14
4.1 – Obligations of participating RUs.....	14
4.2 – Compendium of data to be exchanged	15
Regulatory listing	17
Bibliography	18

Foreword

An International Railway Solution (IRS) is a document drawn up by consensus and applied on a voluntary basis which aims to facilitate and harmonise railway operation.

IRSs are gradually replacing UIC leaflets.

Members of the International Union of Railways (UIC) participate in the creation of IRSs, of which they benefit in full. Furthermore, marketing to railway stakeholders contributes to the sharing and harmonisation of good practices, in accordance with UIC's primary goal.

While IRSs do not have the force of law, they are created and published in a professional manner and with technical approval on the basis of UIC procedures, and have full technical legitimacy in the railway sector.

The "General application" section constitutes the heart of the IRS and contains the working group's expertise applicable in the broadest manner. The addition of a "Specific application" aims to cover factors specific to a region, a type of service, etc.

Some provisions shall be implemented in all cases to ensure correct application and maintain the system's cohesiveness. Certain operational circumstances require that specific provisions be systematically applied by all users of the document.

For the purposes of understanding, the user acknowledges that the expression of:

- obligation indicates requirements to be respected in order to comply with the expertise expressed in the document (usually "shall");
- recommendation indicates options that are favourable but not essential (usually "should");
- permission indicates options that are recognised but without consequence (usually "may");
- capacity indicates possibilities from a technical standpoint and not permissions or probabilities (usually "can").

Obligation, recommendation, and capacity can be expressed in the negative to indicate prohibiting, non-recommendation, and incapacity.

This IRS reflects the following UIC working group expertise:

GRU

It integrates in full or in part the following UIC leaflets:

- UIC Leaflet 404-2

It complements the following standards:

- ITSS_Standard_Specification_Interface1_V1-1

The following IRSs constitute a complementary series:

- none

Executive summary

This IRS specifies the data to be exchanged as necessary for the operation of trains and the forwarding of wagons, intermodal units, or other rail vehicles.

In rail freight transport, data required for operation of a train, and the wagons, loading units and other rail vehicles that it contains, must be shared with the RUs that continue train operation and individual transport operations. This serves as the basis for safe, efficient, and economical train and transport operations.

If such data is transmitted to the next RU in a timely manner, the data does not have to be collected and/or recorded again by the participating RUs.

The RUs ([see Abbreviations and Symbols - page 6](#)) agree bilaterally as to which version is to be used.

Data is exchanged in respect of the train, wagon, loading units and consignments.

Data is exchanged using the XML message format.

The XSD schema (technical description) for version 2.0 ([see Reference documents - page 5](#)) and subsequent versions can be found in a zip folder available with the download file of this IRS.

The XLS representation of the message contents (functional description) for version 2.0 ([see Reference documents](#)) and subsequent versions can be found in a zip folder available with the download file of this IRS.

Information is compiled for all vehicles in freight trains and traction units in principle.

HERMES message timing and updates

The HERMES message ([see Abbreviations and Symbols](#)) should be sent as soon as possible upon completion of train composition before handover to the next RU.

The information concerning traction transmitted in the HERMES message is up to date at the last handling station prior to handover to the next RU.

The HERMES message should be sent as early as possible, even when the traction at the handover location is not yet known. A further HERMES message should be sent when the information on traction is available.