

Proposed amendment: new Appendix 16 and amendments to Article 7.4 and Appendix 1

1. Present the issue (with examples and, if possible, figures outlining the extent of the issue) The technical vehicle data is the data for railway operations and must be provided by the rele- vant keeper.	 2. Show where and why the GCU is lacking in this respect: The GCU takes account of the obligation set out in ATMF paragraph 15, section 15a as follows: In Article 7.4
Supplying this information is the responsibility of the keeper.	However, Article 7.4 gives no details of how this obligation is to be met.
Paragraph 15, section 15a §3 of ATMF - Appendix G to the 1999 COTIF (last updated 1.5.2015) - states that: "The keeper shall make available, as far as necessary for operation, to any rail transport under- taking operating the vehicle, the elements relat- ing to the conditions and limits of use and con- cerning servicing and constant or routing moni- toring."	To ensure the efficient exchange of information between the more than 600 GCU signatories, harmonised conditions must take precedence over individual initiatives.
Article 7.4 of the GCU provides that: "The keeper must provide the impacted user RUs with the information required for safe railway operations in electronic format as soon as possible before the use of new or retrofitted wagons / wagon components. This information shall include the technical data of the wagon and a brief description of any instructions destined for technical inspectors and operational staff. Information is always required if the wagons / components do not comply with Appendix 9 to the GCU."	
3. Explain why the issue can only be resolved via the GCU: In order both to achieve the objectives set by law and enable/optimise the requisite exchange of information, a standard is needed to govern the exchange of data as foreseen by the GCU. This will enable keepers to implement auto- mated solutions and will allow RUs to define ef- ficient data-processing systems and draw on data from different sources, with no need for manual recapture. This standard will also enable digital data ex- change, leading to potential productivity - and thereby competitiveness - gains for railway op- erations.	 4. Outline why the issue should be solved as envisaged by the proposed amendment/addition: The benefits of the new Appendix 16 are clarity, precision and harmonisation.

5. Describe how the proposed amend- ment or addition will help resolve the issue: The data-exchange rules set out in the new Ap- pendix 16 can be implemented by both RUs and	6. Assess the possible positive and nega- tive impacts (operations, costs, admin- istration, interoperability, safety, competi- tiveness, etc.), using a scale from 1 (very low) to 5 (very high):	
keepers quickly and at a reasonable cost.	Costs: +4 Competition: +5	
Both RUs and keepers can thus meet their legal and contractual obligations.	Operations:+4Interoperability:+4Safety:+2	

7. Proposed wording (amendment in blue)

Article 7.4

The text currently in force shall be replaced as follows:

The keeper must provide the impacted user railway undertakings with the information on its wagons required for safe railway operations in electronic format as soon as possible. The provision of this information and additional data - where relevant - is provided for in Appendix 16.

Appendix 1

The text currently in force shall be replaced as follows:

The updated list of signatories, and address details as defined in Article 2.4 of the GCU, can be found in the database on the GCU Bureau website:

www.gcubureau.org/signatories

Each signatory is obliged, depending on its own organisation, to enter the information relating to it directly on the above website in accordance with the format specified therein.

Addition of complementary datasets to the database

New entry into section 2:

- 2.6 Receipt of technical vehicle data (GCU Article 7.4 and Appendix 16)
 - Contact:

Address:

Tel.:

Email:

New entry into section 3:

- 3.6 Provision of technical vehicle data (GCU Article 7.4 and Appendix 16)
 - Contact:

Address:

Tel.:

Email:

A2018-01_enen

Version 13/6/2018

Appendix 16 to the General Contract of Use for Wagons (GCU)

TECHNICAL VEHICLE DATA

Appendix 16 describes in more detail the information-related requirements laid out in article 7.4.

In accordance with pages 5-8, the keeper must provide the administrative and technical vehicle data for all wagons registered in the GCU database as soon as possible prior to the use of a wagon. The RU has access to this data at all times and may use it for its own operational purposes only.

The GCU Bureau provides a communication platform (GCU Message Broker) to the signatories for transmission of technical vehicle data.

Additional information - for example, a brief description of any instructions destined for technical inspectors and operational staff - must be made available bilaterally. Information is always required if vehicle-related technical matters are not provided for in Appendix 9 to the GCU.

Description of elements of technical vehicle data

WagonNumber- FreightMandatoryIdentifies uniquely the freight wagon by its numberPrevious/Wagon Registration-Courn TyOptionalFor identification of a wagon after renumberingRegistration-Courn- Registration-Courn- TyMandatoryISO country code of registration countryDate-PutIntoServiceMandatoryDate of first operationAuthorisationVa- IndubutiConditionalEnd date for restricted authorisation (applicable only in special cases)SuspensionOf-Au- thorisationConditionalInformation if authorisation has been suspended by the authorityDateSuspension- OfuthorisationConditionalDate of the suspension of authorisation; must be provided in case of sus- onforuthorisation is allowed to pease the Coopation place); first entry is the authorising country/railway and following entries are the accepting countries/railwaysChannelTunnel- PermittedOptionalIndication if wagon is allowed to pass the Channel Tunnel - if the transport is planed between UK and France and should use Eurotunnel infrastruc- ture - surger autopaceu/Document-Register/Pages/list-VKM.aspx, col- ummECMMandatoryFull name of the assigned Entity in Charge of MaintenancePlanedChangeOfConditionalDate until the current Entity in Charge of MaintenancePlanedChangeOfConditionalIdentification if the general interoperability capability of the wagon and full mare of the following values/side case is responsed for the usage (defined in the In- repCapability)RecoterMandatoryECM certificate informationInteropCapabilityMandatoryIdentification if the general intero	Element	Status	Definition
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	WheelSetType	Optional	
	WheelDiameter	Optional	

A2018-01_enen

WheelsetGauge	Mandatory	Track Gauge measured in mm; multi-entry for wagons with changeable wheel set gauge
WheelSet-Trans- formation-Method	Conditional	Description of the wheel set transformation method for wagons with a changeable wheel set gauge. Code list: 1 = Automatic, 2 = Bogie/axle change
NumberOfBogies	Conditional	Number of bogies.
BogiePitch	Conditional	Bogie Wheelbase measured in mm.
BogiePivotPitch	Conditional	Largest distance between two adjacent bogie pitches in mm.
InnerWheelbase	Mandatory	Maximum distance between two adjacent axles in mm
CouplingType	Optional	Classification of coupling: 0 = without coupler 1 = non-reinforced coupler less than 85t 2 = reinforced coupler equals to 85t 3 = ultra-reinforced coupler greater than 85t 4 = automatic coupling
BufferType	Optional	Classification of buffer. The following values are mostly used in the sector: A, AX, B, C, CX, L0 (130), L0 (150), L2 (130), L2 (150), L4 (130), L4 (150)
NormalLoading- Gauge	Conditional	Indicates the wagon loading gauge. When the wagon loading gauge is marked on the wagon the information must be provided in the RSRD message. Codes are defined in UIC leaflet 505-1/503 and EN 15273-2:2013 Code list.
MinCurveRadius	Mandatory	Minimum allowed curve radius of the wagon. Measured in Metres.
MinVerticalRadi- usYardHump	Mandatory	Minimum allowed vertical radius over yard humps. Measured in Meters.
WagonWeight- Empty	Mandatory	The weight of an empty wagon according to the entry in the rolling stock database. Measured in kg.
LengthOverBuffers	Mandatory	Length over buffers is expressed in cm.
MaxAxleWeight	Mandatory	Indicates the maximum design axle weight (to).
LoadTable	Mandatory	Indicates the load tables marked on the wagon. When load tables are marked on the wagon the information must be pro- vided in the RSRD message. Several load tables (international, product specific for LPG wagons and ad- ditional/country specific) can be specified by providing the element several times consecutively. For special wagons with specific load tables (e.g. heavy haul wagons) no load table need to be provided. The complete load table must be provided including the empty load row (if existent).
NumberOfBrakes	Mandatory	Number of air brake control valves.
BrakeSystem	Optional	Abbreviation of air brake system. Following values are examples: Kk; Dr; Bo; Hik; Bd; Ch; O; KE; WE; DK; WU; WA; DM; MH, SW; KE 435; through brake pipe
AirBrakeType	Mandatory	Classification of air brake. 0 = through brake pipe 1 = G 2 = P 3 = G/P 8 = No air brake or brake pipe 9 = non coded
BrakingPower-Var- iationDevice	Mandatory	Type of braking power variation device: 0 = No braked weight variation device 1 = Manual or automatic device with 1 changeover weight and 2 positions 2 = 2 or more changeover weights and 2 or more positions 8 = Linear auto continuous device with indication of max braked weight 9 = Non- coded variation device

AirBrakedMass	Mandatory	Different uses depending on air brake variation device: No variation device = sole braked mass of wagon Brake device with changeover weights = braked mass empty Brake with auto continuous device = maximum braked mass
ChangeOver- Weight	Conditional	Change over weight of braked weight in tonnes variation device.
AirBrakedMass- Loaded	Conditional	Braked weight in tonnes loaded for change over weight.
BrakeSpecial- Characteristics	Mandatory	General brake characteristics. Code list refers to UIC leaflet 920-13. 0 = No special characteristic (graduated release brake with cast iron blocks) "GG" 1 = Disc brake 2 = Composite brake blocks 3 = Single release brake 4 = Single release brake with composite brake blocks 5 = L-Brake 6 = LL-Brake 9 = Non-coded information
HandBrakeType	Mandatory	Classification of hand brake: 0 = No hand brake 1 = Ground-operated hand brake 2 = Platform-operated hand brake In case the wagon is equipped with a ground and platform operated hand brake, code 2 (platform-operated hand brake) has to be used.
HandBraked- Weight	Conditional	Braked weight of the hand brake in tons.
ParkingBrakeForce	Conditional	Braked weight of the hand brake in tons.
BrakeBlockName	Optional	Name of the brake block type, including the length in mm.
CompositeBrake- BlockRetrofitted	Conditional	Indication if composite brake blocks are retrofitted or originally equipped.
CompositeBrake- BlockInstallation- Date	Conditional	Date of composite brake block installation, for originally equipped wagon = date put into service.
MaxLengthOfLoad	Optional	Loading length in mm for flat wagons and covered wagons with a flat floor, minus the thickness of any intermediate partitions (useful length).
LoadArea	Optional	Surface area in m ² of the floor of covered wagons and wagons with an opening roof and flat floor.
HeightOfLoading- PlaneUnladen	Optional	Height of the loading plane when wagon is empty measured in mm.
RemovableAcces- sories	Optional	The type and number of removable accessories are to be indicated.
LoadingCapacity	Mandatory	Usable Cube - measured in M3.
MaxGrossWeight	Mandatory	Weight of max Gross Load Weight plus the tare weight of the equipment.
VapourReturn-Sys- tem	Optional	Indication if tank wagon is equipped with a vapour return system.
FerryPermittedFlag	Optional	Indication if wagon is permitted to be used on ferries and the maximum al- lowed angle of the ferry ramp (in grades: °).
FerryRampAngle	Conditional	Maximum allowed angle of the ferry ramp (in grades: °). Applicable if ferry permitted.
Temperature- Range	Optional	Allowed environmental temperature range.
Noise	Optional	Noise limit on reference track and noise level at standstill in decibels

Technical-Forward- ing-Restrictions	Conditional	This element is designed to identify any special aspects or restrictions which might be relevant to wagon handling operations in train formation yards or in trains because of technical feature of the wagon or its load. All codes of transport restrictions for Freight Traffic (cf. UIC 920-13) and Pas- sengers Traffic are in the same list which is contained in the code list Re- strictionCodes. In this element only those codes are used, that have "T - Technical" characteristics and "F - Freight" as type. The codes below are sorted out from the RestrictionCodes. Only these codes should be used in this element. 07 Shunt only when hand brake operable with ground staff 11 Wagon other than bogie wagon with wheelbase of more than 9 metres 12 Bogie wagon with distance between wheels of more than 14 metres and up to and including a distance of 17,50 metres 13 Bogie wagon with distance between wheels of more than 17,50 metres 15 Wagon not allowed over the hump 16 Do not fly shunt or gravity shunt (3 red triangles) 18 Must not use active braking equipment 25 Gas carrying tank wagon with orange side stripe 41 Place this wagon at the front of the train 42 Place this wagon at the rear of the train 63 Special consignment or (for Passengers trains) loading/cinematic gauge larger than the planned one 70 Shunt with care (1 red triangle) 94 Gas carrying wagon without orange side stripe
DateLastOverhaul	Mandatory	Date of the last overhaul. For wagons newly placed on the market, date put into service shall be used.
DateNextOverhaul	Mandatory	Date of next planned overhaul.
Permitted-Toler- ance	Mandatory	Permitted tolerance after date of overhaul (in months). In case no tolerance is allowed, value shall be "0".
DateOfNextTank- Inspection	Conditional	Date of the next tank inspection applies only for tank wagons.

Remarks

The XSD diagram and sample files are available to download from the GCU website.