Technical Annex on the application of the common specifications of the European Vehicle Register

According to Commission Implementing Regulation (EU) 2023/1695 on the European Vehicle Register

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1. Revision History

Revision	Date	Created By	Changes
3.3.0	19-05-2026	ERA	• First Publication

2. Scope of This Guide

2.1. Scope of this guide

This is a browsable version of the Technical Annex on the application of the common specifications of the European Vehicle Register (EVR).
The entities and their relationships within the domain of railway vehicles are compliant with Commission Implementing Regulation (EU) 2023/1695 on the European Vehicle Register.
The applicability and the data format were discussed and agreed within the specific EVR Topical Working Groups.
It is intended to facilitate its application of the EVR Regulation, but it does not substitute it.
This technical annex provides the details needed to identify and complete the technical characteristics of railway vehicle elements.
This document does not introduce any new legally binding advice.
It serves as a clarification tool for legal documents issued for EVR without however dictating in any manner compulsory procedures to be followed and without establishing any legally binding practice.
The guide needs to be read and used only in conjunction with the EVR Regulation.

2.2. Content of the guide

This Guide is the basic document for all participants of the process of building EVR in European scale: for National Vehicle Registers (NVRs) to build registers and collect data of their respective member states (MS) vehicles.
The guide delivers the extended definitions of all the objects and parameters of the EVR.

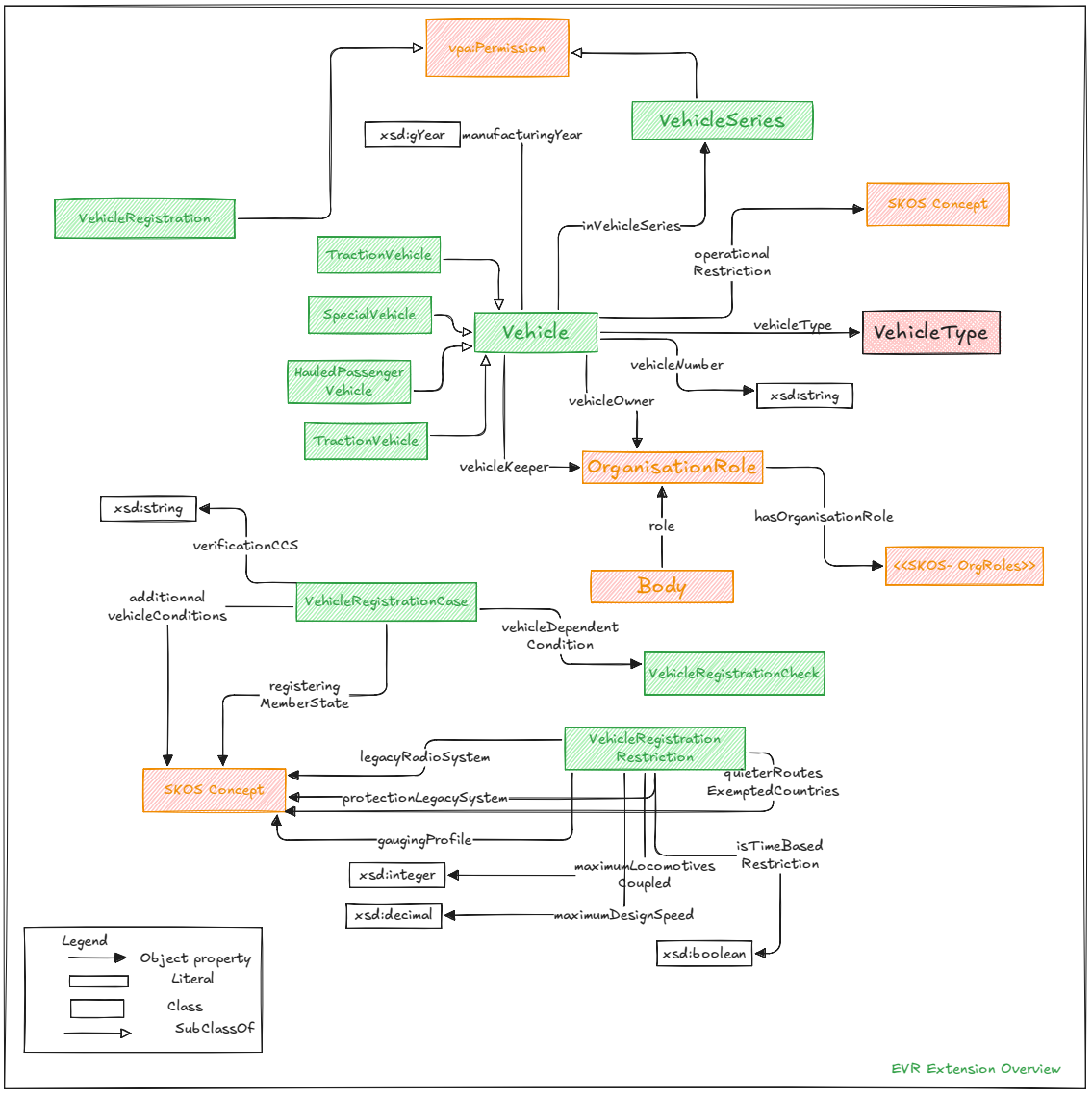
It provides guidance on the most common situations and solutions advised for modelling railway vehicles.
Examples and variety of possible solutions should support and unify constructions of registers of different MS of the EU.
This guide also delivers wide description of parameters, including their format, utility and explanation.
The instructions for use of the EVR via access to EVR application will be published as deliverable of EVR application - they are not included in this guide.

Table 1: Namespaces used in the document

cc	http://creativecommons.org/ns#
dcterms	http://purl.org/dc/terms/
eli	http://data.europa.eu/eli/ontology#
era	http://data.europa.eu/949/
foaf	http://xmlns.com/foaf/0.1/
goodrel	http://purl.org/goodrelations/v1#
gsp	http://www.opengis.net/ont/geosparql#
locn	http://w3.org/ns/locn#
org	http://www.w3.org/ns/org#
owl	http://www.w3.org/2002/07/owl#
prov	http://www.w3.org/ns/prov#
rdf	http://www.w3.org/1999/02/22-rdf-syntax-ns#
rdfs	http://www.w3.org/2000/01/rdf-schema#
sf	http://www.opengis.net/ont/sf#
skos	http://www.w3.org/2004/02/skos/core#
time	http://www.w3.org/2006/time#
unit	http://qudt.org/vocab/unit/
vpa	https://w3id.org/vpa#
vs	http://www.w3.org/2003/06/sw-vocab-status/ns#
xsd	http://www.w3.org/2001/XMLSchema#

3. EVR Parameter Groups Hierarchy

- Manufacturing serial number (5.2)
- Registered Manufacturing Serial Number (5.2)
- Vehicle type (5.3)
- Vehicle series (5.4)
- Vehicle owner (7)
- Vehicle keeper (8)
- Vehicle keeper marking (8.9)
- Vehicle ECM (9)
- Conditions for use of the vehicle and other restrictions on how the vehicle may be used (11.9)
- (Set of) human-readable coded conditions (11.9.1)
- Quieter route exempted country (11.9.1)
- Has national registration property (12)
- VKM status
- VKM Code
- VKM National
- Registration case type
- Is OTIF member



4. EVR Ontology Classes

Application for Vehicle Registration C

Keepers should fill in an application for registration with the required information (Appendix 4 of EVR Decision). A keeper shall submit an application for registration through
the European Vehicle Register to a Member State of its choice within the area of use of the vehicle.

A VehicleRegistrationApplication traces the state of this process, links to the RegistrationCase(s), and a registration entity independent of any railway undertaking which
will be responsible for the processing of the applications and updating of data in the European Vehicle Register.

IRI: *http://data.europa.eu/949/VehicleRegistrationApplication*

Is subclass of

Request

Additional Information

References:

http://data.europa.eu/eli/dec_impl/2018/1614/2018-10-26

Body C

Is an organisation or a physical person

IRI: *http://data.europa.eu/949/Body*

Is subclass of

Organization
Person

Has Properties

Fax number

Validation

Validation Rules:

Body Shape

Concept C

IRI: *http://www.w3.org/2004/02/skos/core#Concept*

Is superclass of
ERTMS error change request

Has Properties
National property mandatory
National property maximum length

National Registration Property C

A property defined at national level by a member state for vehicle registration purposes. Each member state may define its own set of such properties, identified by a national property identifier string. This class avoids creating individual era: predicates for each member-state-specific registration field. The member state is determined by the registeringMemberState of the parent VehicleRegistrationCase.

IRI: *http://data.europa.eu/949/NationalRegistrationProperty*

Has Properties
National property identifier
National property value

Validation

Validation Rules:
National Registration Property Shape

Message: nationalPropertyIdentifier (12.1): The NationalRegistrationProperty {$this} references concept {?concept} but it is not a member of the collection for member state {?msNotation} (derived from registeringMemberState of the parent case).

Additional Information

Example:

```
A Polish registration property (DECISIONNUMBER field):
ex:reg-case-PL-001 a era:VehicleRegistrationCase ;
    era:registeringMemberState
<http://publications.europa.eu/resource/authority/country/POL>
;
    era:hasNationalRegistrationProperty [
        a era:NationalRegistrationProperty ;
        era:nationalPropertyIdentifier
<http://data.europa.eu/949/concepts/national-reg-
props/PL/DECISIONNUMBER> ;
        era:nationalPropertyValue "DEC/2026/00123"
    ] .

# The expected datatype (xsd:string) is declared on the SKOS
concept itself:
# <.../PL/DECISIONNUMBER> era:nationalPropertyExpectedDatatype
#     "http://www.w3.org/2001/XMLSchema#string"^^xsd:anyURI .
# SHACL SPARQL constraints dynamically verify value datatypes
via this path.
```

Restriction [C]

A restriction, condition of use, having its origin in a railway verification/certification/permission process.

IRI: *http://data.europa.eu/949/Restriction*

Is subclass of

Restriction

Is superclass of

CAB assessed addition
CAB restriction
Vehicle Registration Restriction
Vehicle Type Authorisation Restriction

Has EVR parameters

Quieter route exempted country (11.9.1)

Has Properties

Class B or other radio systems installed (Radio Legacy Systems)
Condition based restriction of use
ETCS equipment level
Gauging
Maximum design speed
Minimum radius of horizontal curve
Nominal track gauge
Non coded restrictions
Quieter route exempted country

Strictly local, historical or tourist use
Temperature range
Time based restriction of use
Type of train detection system

Validation

Validation Rules:
Restriction Shape

Running track C

A running track means any track used for train service movements; passing loops and meeting loops on plain line or track connections only required for train operation are not published

IRI: *http://data.europa.eu/949/RunningTrack*

Is subclass of

Track

Has Properties

Class B or other radio systems installed (Radio Legacy Systems)
EC declaration of verification for track relating to compliance with the requirements from TSIs applicable to control, command signalling subsystem
Gauging
Minimum radius of horizontal curve
Nominal track gauge
Temperature range

Additional Information

General explanation:
There might be more than one track within the Section of Line, so then the whole set of data for track has to be repeated for each track within the SoL.

Series of Vehicles C

Collection of Vehicles belonging together, for instance in the scope of an Authorisation or Registration Case.

IRI: *http://data.europa.eu/949/VehicleSeries*

Is subclass of

Bag
Scope

Additional Information

References:
http://data.europa.eu/eli/dec_impl/2018/1614/oj

Siding C

IRI: *http://data.europa.eu/949/Siding*

Is subclass of

Track

Has Properties

Minimum radius of horizontal curve

Additional Information

General explanation:

Sidings are all those tracks where running trains in service movements ends and which are not used for operational routing of a train.

References:

http://data.europa.eu/eli/reg_impl/2019/773/2020-06-16

Subset with common characteristics C

A set of different infrastructure objects sharing the same common technical characteristics. The parameters may not be restricted to only one railway subsystem, but it can include common characteristics from each one of them (infrastructure, energy, track-side CCS)

IRI: *http://data.europa.eu/949/CommonCharacteristicsSubset*

Is subclass of

ERA Feature

Has Properties

Class B or other radio systems installed (Radio Legacy Systems)
EC declaration of verification for track relating to compliance with the requirements from TSIs applicable to control, command signalling subsystem
Gauging
Minimum radius of horizontal curve
Nominal track gauge
Temperature range

Train Detection System C

Safety system used to detect the presence of vehicles on the railway track.

IRI: *http://data.europa.eu/949/TrainDetectionSystem*

Has Properties
Type of train detection system

Vehicle C

A specific vehicle or wagon able and allowed to operate over railway infrastructure.

IRI: *http://data.europa.eu/949/Vehicle*

Is subclass of
Scope

Has EVR parameters
European Vehicle Number (1.1)
Previous Vehicle Number (1.2)
Manufacturing year (5.1)
Manufacturing serial number (5.2)
Vehicle type (5.3)
Vehicle series (5.4)
Vehicle owner (7)
Vehicle keeper (8)
Vehicle keeper marking (8.9)
Vehicle ECM (9)

Validation

Validation Rules:
Vehicle Shape

Vehicle APIS Case C

The process allowing the vehicle authorisation for placing in service (APIS).

This authorisation case supported a Vehicle Application for APIS and was determined by exactly one set of Vehicles and if available a VehicleType.

For the Authorisation as per EU 2018/545, use era:VehicleTypeAuthorisationCase, which covers all authorisations types under that legislation.

IRI: *http://data.europa.eu/949/VehicleAuthorisationCase*

Is subclass of
Case

Has Properties
Area of Use

Validation

Validation Rules:

Vehicle Type Authorisation Case Shape

Message: typeRegistrationMethod: The VehicleTypeAuthorisationCase {$this} has a value {?concept} that is not one of the predefined values in the concept scheme: http://data.europa.eu/949/concepts/vehicle-types/VehicleTypeRegistrationMethods.

Additional Information

See also:

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A02008L0057-20150101#tocId27

References:

http://data.europa.eu/eli/dir/2008/57/2015-01-01

Vehicle Keeper Marking C

The class used to relate a Vehicle Keeper Marking (VKM) properties for the purpose of the VKM register.

IRI: *http://data.europa.eu/949/VehicleKeeperMarking*

Is subclass of

Organisation Role

Has EVR parameters

VKM Code
Is OTIF member
VKM status
VKM National

Additional Information

See also:

https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=OJ%3AL%3A2012%3A345%3ATOC

Vehicle Registration C

Vehicle Registration serves to ensure traceability of vehicles and their history: vehicles should be registered under a European vehicle number in a vehicle register. Each
member state designated a registration entity responsible for the registering of vehicles and the processing and update of information in relation to vehicles that entity has registered in the European Vehicle Register.

A vehicle registration groups the information for a (set of) vehicle(s) as in

Appendix 4 of Commission Implementing Decision (EU) 2018/1614 of 25 October 2018.

IRI: *http://data.europa.eu/949/VehicleRegistration*

Is subclass of

Permission

Additional Information

References:

http://data.europa.eu/eli/dec_impl/2018/1614/2018-10-26

Vehicle Registration Case C

Vehicle Registrations can be created and modified using a specific Registration Case as listed in `3.2.2. Registration cases` of the EVR Decision.

Each registration case will have as its scope:
- a set of vehicles of which the registration needs creating/updating.
- if present, the authorisation delivered for these vehicles and/or vehicle type to which they belong.

IRI: *http://data.europa.eu/949/VehicleRegistrationCase*

Is subclass of

Case

Has EVR parameters

Additional conditions applicable to the vehicle (4.1)
Conditions for use of the vehicle and other restrictions on how the vehicle may be used (11.9)
Has national registration property (12)
Registration case type

Has Properties

EC declaration of verification for track relating to compliance with the requirements from TSIs applicable to control, command signalling subsystem
EC declaration of verification relating to compliance with the requirements from TSIs applicable to locomotives and passenger rolling stock or freight wagons
Member State of Registration.

Additional Information

References:

http://data.europa.eu/eli/dec_impl/2018/1614/2018-10-26

Vehicle Registration Compliance Check C

A verification result as executed by a competent body on a section of a legal reference. The check can be optional, positive or negative, and in the latter case, a restriction is expected.

This Class is used to improve the link between verification outcomes and the verified scope of that process, and support its structured documentation.

It must be used in the context of the Vehicle Registration process.

IRI: *http://data.europa.eu/949/VehicleRegistrationCheck*

Is subclass of

Compliance

Has EVR parameters

Other additional conditions applicable to the vehicle (4.1)
Registered Manufacturing Year (5.1)
Registered Manufacturing Serial Number (5.2)
(Set of) human-readable coded conditions (11.9.1)
Has national registration property (12)

Additional Information

See also:
https://eur-lex.europa.eu/eli/dir/2016/797/oj/eng#anx_IV

Vehicle Registration Restriction C

An `era:Restriction` which originates from a compliance check during the Vehicle's Registration.

IRI: *http://data.europa.eu/949/VehicleRegistrationRestriction*

Is subclass of

Restriction

Has Properties

Class B or other radio systems installed (Radio Legacy Systems)
Condition based restriction of use
Nominal track gauge
Non coded restrictions
Time based restriction of use
Type of train detection system

Validation

Validation Rules:
Vehicle Registration Restriction Shape

Vehicle Type C

A vehicle type that has been authorized to operate on the EU railway infrastructure. Type means a vehicle type defining the basic design characteristics of the vehicle as covered by a type or design examination certificate described in the relevant verification module.

Basic design characteristics means the parameters that are used to identify the vehicle type as specified in the issued vehicle type authorisation and recorded in the European Register of Authorised Vehicle Types ('ERATV').

The above mentioned certificate should be documented using era:certificate.

IRI: *http://data.europa.eu/949/VehicleType*

Is subclass of

Scope

Has Properties

Class B or other radio systems installed (Radio Legacy Systems)
ETCS equipment level
Gauging
Maximum design speed
Minimum radius of horizontal curve
Nominal track gauge
Non coded restrictions
Temperature range
Type of train detection system

Vehicle Type Authorisation Case C

The process, as selected by the Applicant in line with (EU)2018/545, allowing the vehicle type authorisation and/or the vehicle authorisation for placing on the market.
The type of authorisation cases are described in Art. 14 of (EU)2018/545, and for authorisations before the Fourth Railway Package, a HistoricalAuthorisationCase must be used.

Each authorisation case supports a VehicleTypeAuthorisationApplication and is determined by exactly one VehicleType, and a set of Vehicles, which can be empty in some cases.

For authorisations before the (EU)2018/545 legislation, use `era:VehicleAuthorisationCase.

IRI: *http://data.europa.eu/949/VehicleTypeAuthorisationCase*

Is subclass of

Case

Has Properties

Area of Use

Validation

Validation Rules:

Vehicle Type Authorisation Case Shape

Message: typeRegistrationMethod: The VehicleTypeAuthorisationCase {$this} has a value {?concept} that is not one of the predefined values in the concept scheme: http://data.europa.eu/949/concepts/vehicle-types/VehicleTypeRegistrationMethods.

Additional Information

References:

https://data.europa.eu/eli/reg/2018/545/art_14/oj/eng#

Vehicle Type Authorisation Restriction C

Restrictions, like coded and non-coded conditions for use, to be taken into account in the context of a Vehicle (Type) Authorisation.

The restrictions are recorded by the Authorising Entities, possibly deduced during underlying verification and certification processes by competent bodies, and if possible are documented with a link
to the legal reference and sections therein.

In most cases, the Restriction will be dependent of a VehicleTypeConfiguration.

IRI: *http://data.europa.eu/949/VehicleTypeAuthorisationRestriction*

Is subclass of

Restriction

Has Properties

Class B or other radio systems installed (Radio Legacy Systems)
Condition based restriction of use
Nominal track gauge
Non coded restrictions
Time based restriction of use
Type of train detection system

Additional Information

References:

https://data.europa.eu/eli/reg/2018/545/art_14/oj/eng#

Vehicle type configuration parameter set [C]

Stub class linking a VehicleTypeConfiguration (`era:forConfiguration`) with parameters of the VehicleType that depend on that configuration.

IRI: *http://data.europa.eu/949/VehicleTypeConfigParameterSet*

Has Properties

Maximum design speed

5. EVR Parameters

European Vehicle Number [DP]

European Vehicle Number. Numeric identification code as defined in Appendix 6 of Annex II of the EVR Regulation.

IRI: *http://data.europa.eu/949/vehicleNumber*

Also Known As:

Vehicle Number

Parameter of

Vehicle

General Information

Number:

1.1

Belongs to parameters group

Vehicle technical characteristic

Data Format

Data Presentation

String

Flags

Has Characteristics:

Functional property (unique value)

Validation

Validation Rules:

Vehicle Number
Comment: European Vehicle Number.
Message: vehicleNumber (1.1): The value must be exactly one string with exactly 8 or 12 digits.

Additional Information

General explanation:
This must be a valid and not double number with the correct EVN format (8 or 12 digits)

Previous Vehicle Number DP

IRI: *http://data.europa.eu/949/previousVehicleNumber*

Also Known As:
Previous Vehicle Number

Parameter of
Vehicle

General Information

Number:
1.2

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
String

Flags

Has Characteristics:
Functional property (unique value)

Validation

Validation Rules:
Previous Vehicle Number
Comment: Previous Vehicle Number.
Message: previousVehicleNumber (1.2): The value must be exactly one string with exactly 8 or 12 digits .

Additional Information

General explanation:
This must be 8 or 12 numerical digits

Additional conditions applicable to the vehicle OP

Identification of applicable bilateral or multilateral agreements such as RIV, RIC, TEN, TEN-CW, TEN-GE, …. Other conditions can be added elsewhere.

IRI: *http://data.europa.eu/949/additionalVehicleConditions*

Parameter of
Vehicle Registration Case

General Information

Number:
4.1

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
Concept

Taxonomy Reference:
International Vehicle Agreements

Values :

Code	Value
RIC	RIC
RIV	RIV
TEN	TEN
TEN-CW	TEN-CW
TEN-GE	TEN-GE

Validation

Validation Rules:
Additional Vehicle Conditions
Comment: Additional vehicle conditions.
Message: additionalVehicleConditions (4.1): The value must be an IRI pointing to a concept from EVRApplicableAgreements.

Other additional conditions applicable to the vehicle DP

Identification of other applicable bilateral or multilateral agreements other than RIV, RIC, TEN, TEN-CW, TEN-GE, ….

IRI: *http://data.europa.eu/949/additionalOtherVehicleConditions*

Parameter of
Vehicle Registration Compliance Check

General Information

Number:

4.1

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
String

Validation

Validation Rules:
Additional Other Vehicle Conditions
Comment: Additional other vehicle conditions.
Message: additionalOtherVehicleConditions (4.1): The value must be a string.

Manufacturing year DP

Indicates the year in which a vehicle is manufactured.

IRI: *http://data.europa.eu/949/manufacturingYear*

Parameter of
Vehicle

General Information

Number:
5.1

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
G Year

Flags

Has Characteristics:
Functional property (unique value)

Validation

Validation Rules:
Manufacturing Year
Comment: Manufacturing year of the vehicle.
Message: manufacturingYear (5.1): The value must be a 4-digit year (gYear).

Registered Manufacturing Year DP

The manufacturing year as stated during the Registration. May differ from the `era:manufacturingYear` of the Vehicle itself.

IRI: *http://data.europa.eu/949/registeredManufacturingYear*

Parameter of
Vehicle Registration Compliance Check

General Information

Number:
5.1

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
G Year

Validation

Validation Rules:
Registered Manufacturing Year
Comment: The manufacturing year as stated during the Registration. May differ from the manufacturingYear of the Vehicle itself.
Message: registeredManufacturingYear (5.1): The value must be a 4-digit year (gYear).

Manufacturing serial number DP

Manufacturing serial number as marked on the vehicle frame.

IRI: *http://data.europa.eu/949/manufacturingSerialNumber*

Parameter of
Vehicle

General Information

Number:
5.2

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
String

Flags

Has Characteristics:
Functional property (unique value)

Validation

Validation Rules:
Manufacturing Serial Number
Comment: Manufacturing serial number of the vehicle.
Message: manufacturingSerialNumber (5.2): The value must be exactly one string.

Additional Information

References:
http://data.europa.eu/eli/dec_impl/2018/1614

Registered Manufacturing Serial Number DP

The manufacturing serial or series number as stated during the Registration. May differ from the `era:manufacturingSerialNumber` of the Vehicle itself.

IRI: *http://data.europa.eu/949/registeredManufacturingSerialNumber*

Parameter of

Vehicle Registration Compliance Check

General Information

Number:
5.2

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
String

Validation

Validation Rules:
Registered Manufacturing Serial Number
Comment: The manufacturing serial or series number as stated during the registration.
Message: registeredManufacturingSerialNumber (5.2): The value must be a string.

Vehicle type OP

Indicates the vehicle type of a specific vehicle or wagon.

IRI: *http://data.europa.eu/949/vehicleType*

Parameter of
Vehicle

General Information

Number:
5.3

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
Vehicle Type

Validation

Validation Rules:
Vehicle Type Property
Comment: Reference to the vehicle type.
Message: vehicleType (5.3): The value must be an IRI pointing to a VehicleType within http://data.europa.eu/949/.

Vehicle series OP

Manufacturing series of a vehicle.

IRI: *http://data.europa.eu/949/inVehicleSeries*

Parameter of
Vehicle

General Information

Number:
5.4

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
Series of Vehicles

Validation

Validation Rules:

Vehicle Series Evr
Comment: Manufacturing series of a vehicle.
Message: inVehicleSeries (5.4): The value must be an IRI pointing to a VehicleSeries.

Vehicle owner OP

Indicates the organization that owns a vehicle or wagon.

IRI: *http://data.europa.eu/949/vehicleOwner*

Parameter of

Vehicle

General Information

Number:
7

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
Organisation Role

Validation

Validation Rules:

Vehicle Owner Registration
Comment: Owner of the vehicle as stated in the registration.
Message: vehicleOwner (7): The value must be an IRI pointing to an OrganisationRole.

Vehicle keeper OP

Indicates the organization that owns/operated a vehicle or wagon.

IRI: *http://data.europa.eu/949/vehicleKeeper*

Parameter of

Vehicle

General Information

Number:
8

Belongs to parameters group

Vehicle technical characteristic

Data Format

Data Presentation
Organisation Role

Validation

Validation Rules:
Vehicle Keeper Registration
Comment: Keeper of the vehicle as stated in the registration.
Message: vehicleKeeper (8): The value must be an IRI pointing to an OrganisationRole.

Vehicle keeper marking OP

Indicates the Vehicle Keeper Marking (VKM) associated with a vehicle.

IRI: *http://data.europa.eu/949/vehicleKeeperMarking*

Parameter of
Vehicle

General Information

Number:
8.9

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
Vehicle Keeper Marking

Flags

Has Characteristics:
Functional property (unique value)

Validation

Validation Rules:
Vehicle Keeper Marking Property
Comment: Indicates the Vehicle Keeper Marking (VKM) associated with a vehicle.
Message: vehicleKeeperMarking (8.9): The value must be an IRI pointing to a VehicleKeeperMarking.

Vehicle ECM OP

Indicates the organization that is charge of maintenance.

IRI: *http://data.europa.eu/949/vehicleECM*

Parameter of
Vehicle

General Information

Number:
9

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
Organisation Role

Validation

Validation Rules:
Vehicle Ecm
Comment: Indicates the organization that is in charge of maintenance.
Message: vehicleECM (9): The value must be an IRI pointing to an OrganisationRole.

Conditions for use of the vehicle and other restrictions on how the vehicle may be used OP

Conditions for use of the vehicle and other restrictions on how the vehicle may be used

IRI: *http://data.europa.eu/949/vehicleDependentCondition*

Parameter of
Vehicle Registration Case

General Information

Number:
11.9

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
Vehicle Registration Compliance Check

Validation

Validation Rules:

Vehicle Dependent Condition
Comment: Vehicle dependent condition.
Message: vehicleDependentCondition (11.9): The value must be a VehicleRegistrationCheck.

Additional Information

Example:

```
eratv:vac-uuid(type) a era:VehicleRegistrationCase ;
  vpa:concerns evr:ONLY_VEHICLE_IN_SCOPE ;
  era:vehicleDependentCondition [
    a era:VehicleRegistrationCheck ;
    vpa:checkedSection <URI-to-TSI-Section checked> ; # if
available
    vpa:checkedRequirement <URI-to-TSI> ;             # if
available
    vpa:withRestriction evr:nccfu-uuid(vehicle-reg) ;
  ] .

evr:nccfu-uuid(vehicle-reg) a
era:VehicleRegistrationRestriction ;
  era:nonCodedRestrictions ""{{Text of the non-coded
restrictions}}""@en ;
  era:minimumHorizontalRadius 150^^xsd:integer ;
  era:maximumDesignSpeed 200^^xsd:integer ;
  era:temperatureRange <URI-climatic zone> ;
  # other coded CfU.
```

(Set of) human-readable coded conditions DP

The coded conditions as stated during the Registration.

IRI: *http://data.europa.eu/949/registeredCodedConditions*

Parameter of

Vehicle Registration Compliance Check

General Information

Number:

11.9.1

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
String

Validation

Validation Rules:
Registered Coded Conditions
Comment: The coded conditions as stated during the registration.
Message: registeredCodedConditions (11.9.1): The value must be a string.

Quieter route exempted country OP

The quieter routes apply only to wagons in the scope of the Wagon TSI (refer to Article 5a of the Noise TSI).

IRI: *http://data.europa.eu/949/quieterRoutesNoiseCategory*

Parameter of
Restriction

General Information

Number:
11.9.1

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
Concept

Validation

Validation Rules:
Quieter Routes Noise Category Evr
Comment: Quieter routes noise category.
Message: quieterRoutesNoiseCategory (11.9.1): The value must be an IRI pointing to a noise category concept.

Additional Information

See also:
https://www.era.europa.eu/system/files/2022-11/list_harmonised_national_restriction_codes_en.pdf

References:
http://data.europa.eu/949/

Has national registration property OP

Links a vehicle registration case to a national-level registration property defined by a member state. Each member state may define its own set of such properties, identified by a national property identifier string. This avoids creating individual era: predicates for each member-state-specific registration field.

IRI: *http://data.europa.eu/949/hasNationalRegistrationProperty*

Also Known As:
has additional field

Parameter of
Vehicle Registration Case
Vehicle Registration Compliance Check

General Information

Number:
12

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
National Registration Property

Validation

Validation Rules:
Has National Registration Property
Comment: Links a vehicle registration case to national-level registration properties defined by a member state.
Message: hasNationalRegistrationProperty (12): The value must be an instance of era:NationalRegistrationProperty.

Vehicle technical characteristic DP OP

General Information

Related parameters
European Vehicle Number (1.1)
Previous Vehicle Number (1.2)
Additional conditions applicable to the vehicle (4.1)
Other additional conditions applicable to the vehicle (4.1)
Manufacturing year (5.1)
Registered Manufacturing Year (5.1)
Manufacturing serial number (5.2)
Registered Manufacturing Serial Number (5.2)

Vehicle type (5.3)
Vehicle series (5.4)
Vehicle owner (7)
Vehicle keeper (8)
Vehicle keeper marking (8.9)
Vehicle ECM (9)
Conditions for use of the vehicle and other restrictions on how the vehicle may be used (11.9)
(Set of) human-readable coded conditions (11.9.1)
Quieter route exempted country (11.9.1)
Has national registration property (12)
Composite brake block retrofitted
Is OTIF member
Manufacturing country
Operational restriction
Registration case type
Vehicle type authorisation holder
VKM Code
VKM National
VKM status

VKM status OP

IRI: *http://data.europa.eu/949/vkmStatus*

Parameter of

Vehicle Keeper Marking

General Information

Belongs to parameters group

Vehicle technical characteristic

Data Format

Data Presentation

Concept

Flags

Has Characteristics:

Functional property (unique value)

Validation

Validation Rules:

Vkm Status
Comment: Status of the Vehicle Keeper Marking.
Message: vkmStatus: The value must be an IRI pointing to a SKOS Concept.

VKM Code DP

VKM code is an alphanumeric5 code, consisting of 2 to 5 letters.

IRI: *http://data.europa.eu/949/vkmCode*

Parameter of
Vehicle Keeper Marking

General Information

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
String

Flags

Has Characteristics:
Functional property (unique value)

Validation

Validation Rules:
Vkm Code
Comment: VKM code is an alphanumeric code, consisting of 2 to 5 letters.
Message: vkmCode: The value must be a string of 2 to 5 uppercase letters.

VKM National DP

VKM code is an alphanumeric5 code, consisting of 2 to 5 letters.

IRI: *http://data.europa.eu/949/vkmNational*

Parameter of
Vehicle Keeper Marking

General Information

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation
String

Flags

Has Characteristics:
Functional property (unique value)

Validation

Validation Rules:

Vkm National
Comment: VKM national code.
Message: vkmNational: The value must be a string.

Registration case type OP

Type of registration case according to Annex 2 - 3.2.2 Registration Cases (e.g., new registration, modification, change of ECM).

IRI: *http://data.europa.eu/949/registrationCaseType*

Parameter of

Vehicle Registration Case

General Information

Belongs to parameters group

Vehicle technical characteristic

Data Format

Data Presentation

Concept

Taxonomy Reference:

Vehicle authorisation cases

Values :

Code	Value	Explanation
CHANGE_ECM	3.2.2.4. Change of entity in charge of maintenance ('ECM')	When there is a change of ECM of a vehicle, the keeper shall inform the RE in due time, so that the latter may update the EVR. The former ECM shall deliver the maintenance documentation to either the keeper or the new ECM. The former ECM is relieved of its responsibilities when it is removed from the EVR registration. If on the date of de-registration of the former ECM any new entity has not acknowledged its acceptance of ECM status, the registration of the vehicle is suspended.
CHANGE_EVN_EXT	3.2.2.9. Change of EVN and of registering Member State	The EVN may be changed at the request of the keeper through a new registration of the vehicle by a different Member State in the area of use and subsequent withdrawal of the old registration.
CHANGE_EVN_TECHNICAL_CHANGE	3.2.2.8. Change of EVN following technical modifications	The change of EVN consists of a new registration of the vehicle and subsequent withdrawal of the old registration. The EVN shall be changed when it does not reflect the interoperability capability or technical characteristics in accordance with Appendix 6 due to technical modifications of the vehicle. Such technical modifications may require a new authorisation for placing on the market and, where appropriate, a new vehicle type authorisation, in accordance with Articles 21 and 24 of Directive (EU) 2016/797. The keeper shall inform the RE of the Member State where the vehicle is registered of those changes and, if applicable, of the new authorisation for placing on the market. That RE shall assign to the vehicle a new EVN.
CHANGE_KEEPER	3.2.2.3. Change of keeper	Should a keeper of a vehicle change, it is the responsibility of the currently registered keeper to inform the RE in due time, so that the latter may update the EVR. The former keeper shall be removed from the EVR registration and relieved of its responsibilities only when the new keeper has acknowledged its acceptance of

Code	Value	Explanation
		keeper status. If on the date of de-registration of the currently registered keeper no new keeper has accepted the keeper status, the registration of the vehicle shall be suspended.
CHANGE_OWNER	3.2.2.5. Change of owner	When there is a change of owner, the keeper shall inform the RE in due time, so that the latter may update the EVR.
CORRECT_AMEND	Request correction of a published Registration.	Request correction to a published vehicle registration by a Keeper or RE.
LEGACY_SYSTEM	System	
LEGACY_UPDATE_ORG	Update Organisation Data	
NEW	3.2.2.1. New registration	New Registration
NEW-8	3.2.2.1. New registration (8-digit EVNs)	New Registration (8-digit EVNs)
NEW_FOREIGN	Foreign Authorisation Creation	New registration, based on a foreign (non-EU) authorisation
NEW_IMPORT	Vehicle Import	New registration for imported vehicles.
PRERESERVE	Pre-reservation	Pre-reservation
REACTIVATION	3.2.2.6. Reactivation of a registration	A reactivation of a registration after suspension will require the reexamination by the RE of the conditions which caused the suspension and, if applicable, in coordination with the NSA that requested the suspension.
SUSPENSION	3.2.2.6. Suspension of a registration	A vehicle that has its registration suspended may not be operated on the Union rail system.
UPDATE	3.2.2.2. Update of an existing registration	Update existing registration
UPDATE_FOREIGN	Foreign Authorisation Modification	Update a registration, based on a foreign (non-EU) authorisation

Code	Value	Explanation
WITHDRAWAL	3.2.2.7. Withdrawal of a registration	A vehicle that has its registration withdrawn may not be operated on the Union rail system under such registration.

Validation

Validation Rules:

Registration Case Type
Comment: Type of registration case (e.g., new registration, modification, change of ECM).
Message: registrationCaseType: The value must be an IRI pointing to a concept from VehicleRegistrationCase concept scheme.

Is OTIF member DP

Property to identify in VKM register if the era:Body or org:Organization is from OTIF

IRI: *http://data.europa.eu/949/isOTIFMember*

Parameter of

Vehicle Keeper Marking

General Information

Belongs to parameters group

Vehicle technical characteristic

Data Format

Data Presentation

Boolean

Flags

Has Characteristics:

Functional property (unique value)

Validation

Validation Rules:

Is Otifmember
Comment: Identifies if the Body or Organization is from OTIF.
Message: isOTIFMember: The value must be a boolean.

6. Auxiliary Properties for EVR Parameters

Area of Use OP

(32) ‘area of use of a vehicle’ means a network or networks within a Member State or a group of Member States in which a vehicle is intended to be used;

IRI: *http://data.europa.eu/949/areaOfUse*

Parameter of

Vehicle APIS Case
Vehicle Type Authorisation Case

General Information

Number:
3.1

Data Format

Data Presentation
Concept

Validation

Validation Rules:
Area Of Use
Comment: Area of use.
Message: areaOfUse (3.1): The value must be an IRI pointing to a country concept.

Additional Information

General explanation:
Not applicable for Authorisation Cases of `vpa:permissionType era-va-authcase:PRE4RP`.

Class B or other radio systems installed (Radio Legacy Systems) OP

Indication of radio legacy systems installed.

IRI: *http://data.europa.eu/949/legacyRadioSystem*

Parameter of

Restriction
Running track
Subset with common characteristics
Vehicle Registration Restriction
Vehicle Type
Vehicle Type Authorisation Restriction

General Information

Number:
11.9.1

Belongs to parameters group
Radio Legacy Systems

Data Format

Data Presentation
Concept

Taxonomy Reference:
Legacy Radio Systems

Values :

Code	Value	Also Known As
01	UIC Radio Chapter 1-4	
02	UIC Radio Chapter 1-4+6	
03	UIC Radio Chapter 1- 4 + 6 [Irish system]	
08	UIC Radio Chapter 1-4 [TTT radio system installed at Cascais line]	
09	TTT radio system CP_N [RSC – Rádio Solo-Comboio]	
10	PKP radio system	
13	LDZ radio system	
14	CH — Greek Railways radio system [VHF]	
15	UIC Radio Chapter Bulgaria	
16	The Estonian radio system	
17	The Lithuanian radio system	
18	450 Mhz UIC [Channel C]	
19	Analogue Radio Germany - UIC 751	
20	BOSCH [160 MHz]	
21	GSM-P	
22	Multikom [160 MHz and 450 MHz]	
23	OMEGA [160 MHz]	
24	RDZ - in compliance with UIC 751-3	
25	RETB [voice]	

Code	Value	Also Known As
26	Radio Network of CFR	
26	380-430 MHz	
27	SRO [160 MHz]	
27	Analog Radio Mesa 23 UIC 751 (Dual-mode system)	
28	Shunting Radio Communication System	
28	Analog Radio System according UIC 751-3 (Dual-mode system)	
29	Analoger Zugbahnfunk Deutschland	
30	ARB 1MT	
31	Analogue railway radio system [RDU] - in compliance with UIC 751-3	
31	ARM 26/7	
32	SRD	
32	AVG Betriebsfunk	
33	DMR	
33	Cab Radio ARB di Selex Versione SW ARB 1.1.1.0	
34	Cab Secure Radio	
35	CAB-RADIO ALSTOM-FUNKWERK	
36	CM 340-Motorola	
37	CR_SW 04.09.05	
38	DB Analog Radio system	

Code	Value	Also Known As
39	DB Analogue Radio System	
40	DB Analogue Radio System ((MTRS 1 + A RSH))	
41	DB Analogue Radio System ((MTRS 1+A RSH))	
42	EADS	
43	EADS - ZFM21	
44	EMR RAM	
45	FRS 7.4.0 and SRS 15.4.0	
46	Funkwerk MESA 23	
47	Funkwerk MESA 23 (FM 2-70)	
48	Funkwerk MESA 23 Koliber	
49	Funkwerk Mesa 23, Koliber, FM 2-70	
50	GSM-R	
51	GSM-R 900MHz	
52	GSM-R voice cab radio	
53	Handheld GSM-R	
54	HFWK - MESA23	
55	Koliber FM 2-70	
56	La dotación del vehículo incluirá dispositivos de comunicación tipo 'walkie talkie' de largo alcance	
57	MESA 23	
58	MESA 23 dual Mode	

Code	Value	Also Known As
59	MESA 23 dual mode including radio stop function	
60	MESA 23 dual Mode including Radio stop-function	
61	MESA 23 DUAL MODE INCLUDING RADIO STOP-FUNCTION	
62	MESA 23 dualmode included emercency call interruption function	
63	MESA 23 fra Funkwerk er installert, med SW versjon 04.09.05	
64	MESA 23 including MT5E-Card (Dual Mode system GSMR/analogue radio)	
65	Mesa 23 radio station	
66	MESA 23-03	
67	MESA 26	
68	Mesa 26 radio station	
69	MESA23	
70	Mesa23 dualmode	
71	MESA23 dualmode	
72	Mesa23 dual-mode	
73	Mesa23 dualmode included emergency call interruption function	
74	Mode analogique (Bi- mode)	
75	MTR450 Analog	

Code	Value	Also Known As
76	MTR450 Analog (SW 04.09.03)	
77	National Radio Network	
78	National Radio Network (NRN)	
79	National Radio Network (UK)	
80	National Radio Network Radio (UK)	
81	NRN	
82	NRN Radio	
83	Radio Mesa 23 dual-mode	
84	Radio Sol Train analogique - SNCF	
85	Radio Sol Train Analogique SNCF	
86	Radiotelefon Koliber VHF/GSM-R	
87	RST / UIC sans mode td	
88	RST/UIC sans mode td	
89	RV-1.1 MK	
90	RV-4KV2 for trains, Motorolla GM-360, 350 for shuntings	
91	SELEX CRE 2300	
92	SELEX CRE 2300 (SW 1.1.0.0)	
93	SHP	
94	Spanish Analogic Radio System (Tren-Tierra)	
95	Statie radio tip CM 340-Motorola	

Code	Value	Also Known As
96	SWEG Bündelfunk	
97	T-CZ	
98	TETRA	
99	TETRA Motorola MTM5500	
100	None	
101	TETRA/URCA Terrestrial Trunked Radio -Unified Railway Communication and Application System)	
102	Tetra/Virve	
103	Tetra/VIRVE	
104	Tetra/Virve (Airbus TH9)	
105	Tetra/Virve Teltronic	
106	Tren Tierra	Tren-Tierra
107	TREN TIERRA ADIF	
108	TREN TIERRA CONSOLA P. MOVIL	
109	Tren-Tierra ALACATEL TR-100E/2	
110	Tren-Tierra ALCATEL TR-100E/2	
111	TRS (6000)	
112	UIC 751-3	
113	UIC 751-3 Funkwerk Mesa 24B-R2	
114	UIC 751-3 Funkwerk Mesa24B-R1	
115	UIC 751-3 Funkwerk Mesa24B-R2	

Code	Value	Also Known As
116	UIC Chapitres 1 à 5 - Système utilisé uniquement sur RFN	
117	UIC-A; UIC-C; UIC-C*; MÁV-V	
118	VIRVE TETRA Radio	
119	VS 67	
120	VS67 a VO67	
121	Walkie talkie Motorola VX-261 UHF de 16 canales	
122	ZFM21	
123	TRS	
124	UIC Radio Chapter 1-4 + 6 + 7	
125	VR Train Radio	

Flags

Applicability Flags:
Y/N/NYA

Validation

Validation Rules:
Legacy Radio System Evr
Comment: Legacy radio system.
Message: legacyRadioSystem (11.9.1): The value must be an IRI pointing to a concept from LegacyRadioSystems.

OPE TSI References

Part of RCC Algorithm:
true

Appendix D2 Index
3.1.7

Additional Information

General explanation:
The list is in line with ERA/TD/2011-09/INT (v1.17), Table 4, and is now in 3.4 of the annex II of TSI CCS.

Condition based restriction of use DP

The values to be mentioned are the ones defined in the issued vehicle type authorisation and/or vehicle authorisation for placing on the market.

IRI: *http://data.europa.eu/949/isConditionBasedRestriction*

Parameter of

Restriction
Vehicle Registration Restriction
Vehicle Type Authorisation Restriction

General Information

Number:
11.9.1

Belongs to parameters group
Vehicle type technical characteristic

Data Format

Data Presentation
Boolean

Validation

Validation Rules:
Is Condition Based Restriction Evr
Comment: Is condition based restriction.
Message: isConditionBasedRestriction (11.9.1): The value must be a boolean.

Additional Information

General explanation:
The details of any specified condition is to be specified within a non-coded restriction (e.g. concerned constituents where CV modules apply).

EC declaration of verification for track relating to compliance with the requirements from TSIs applicable to control, command signalling subsystem DP

Unique number for EC declarations in accordance with Commission Implementing Regulation (EU) 2019/250.

IRI: *http://data.europa.eu/949/verificationCCS*

Parameter of

Running track
Subset with common characteristics

Vehicle Registration Case

General Information

Number:
6.2

Belongs to parameters group
Declarations of verification for track

Data Format

Data Presentation
String

Format:
CC/RRRRRRRRRRRRRR/YYYY/NNNNNN

Flags

Applicability Flags:
Y/N

Validation

Validation Rules:
Verification Ccsevr
Comment: Verification CCS.
Message: verificationCCS (6.2): The value must be a string in format CC/RRRRRRRRRRRRRR/YYYY/NNNNNN.

Additional Information

General explanation:
(CCS) in title means that here we include only declarations concerning command control and signalling subsystem on the specific track. For the specific track the several EC declarations may be issued, so parameter has to repeated as many times as many numbers of declarations has to be presented.

EC declaration of verification relating to compliance with the requirements from TSIs applicable to locomotives and passenger rolling stock or freight wagons DP

Unique number for EC declarations in accordance with Commission Implementing Regulation (EU) 2019/250.

IRI: *http://data.europa.eu/949/verificationRSTWAG*

Parameter of
Vehicle Registration Case

General Information

Number:
6.2

Belongs to parameters group
Vehicle type technical characteristic

Data Format

Data Presentation
String

Format:
[CC/RRRRRRRRRRRRR/YYYY/NNNNNN]

Validation

Validation Rules:
Verification Rstwag
Comment: Verification RST/WAG.
Message: verificationRSTWAG (6.2): The value must be a string in format CC/RRRRRRRRRRRRR/YYYY/NNNNNN.

Additional Information

General explanation:

ETCS equipment level OP

ETCS equipment on-board and its level.

IRI: *http://data.europa.eu/949/etcsEquipmentOnBoardLevel*

Parameter of
Restriction
Vehicle Type

General Information

Number:
11.9.1

Belongs to parameters group
Vehicle type technical characteristic

Data Format

Data Presentation
Concept

Taxonomy Reference:
ETCS Equipment Levels

Values :

Code	Value
Decision_2006_679_EC_Set_1	Decision 2006/679/EC Set 1
Decision_2006_860_EC_Set_1	Decision 2006/860/EC Set 1
Decision_2008_386_EC_Set_1	Decision 2008/386/EC Set_1
Decision_2012_463_EU_Set_1	Decision 2012/463/EU Set_1
Decision_2012_696_EU_Set_1	Decision 2012/696/EU Set_1
Decision_2012_696_EU_Set_2	Decision 2012/696/EU Set_2
Decision_2015_14_Set_1	Decision 2015/14 Set_1
Decision_2015_14_Set_2	Decision 2015/14 Set_2
Implementing_Regulation__EU_2020_387_Set_2	Implementing Regulation (EU) 2020/387 Set_2
Implementing_Regulation_EU_2019_776_Set_1	Implementing Regulation (EU) 2019/776 Set_1
Implementing_Regulation_EU_2019_776_Set_2	Implementing Regulation (EU) 2019/776 Set_2
Implementing_Regulation_EU_2020_420_Only_German_Set_2	Implementing Regulation (EU) 2020/420 (Only German) Set_2
Implementing_Regulation_EU_2020_420_Only_German_Set_3	Implementing Regulation (EU) 2020/420 (Only German) Set_3
Level_1	Level 1
Level_2	Level 2
Level_3	Level 3
None	None
Regulation_2016_919_Set_1	Regulation 2016/919 Set_1

Code	Value
Regulation_2016_919_Set_2	Regulation 2016/919 Set_2
Regulation_2016_919_Set_3	Regulation 2016/919 Set_3
Regulation_2020_387_Set_3	Implementing Regulation (EU) 2020/387 Set_3

Validation

Validation Rules:

Etcs Equipment On Board Level Evr
Comment: ETCS equipment on board level.
Message: etcsEquipmentOnBoardLevel (11.9.1): The value must be an IRI pointing to a concept from ETCSEquipmentLevels.

Fax number DP

Fax number of a body.

IRI: *http://data.europa.eu/949/faxNumber*

Parameter of

Body

Data Format

Data Presentation

String

Validation

Validation Rules:

Fax Number
Comment: Fax number of a body.
Message: faxNumber: The value must be a string literal.
Fax Number Cardinality

Message: faxNumber: There should be at most one value.

Gauging OP

Gauges as defined in European standard or other local gauges, including lower or upper part.

IRI: *http://data.europa.eu/949/gaugingProfile*

Also Known As:

[ERATV] Reference profile

Parameter of

Restriction
Running track
Subset with common characteristics
Vehicle Type

General Information

Number:

11.9.1

Belongs to parameters group

Line layout
Vehicle type technical characteristic

Data Format

Data Presentation

Concept

Taxonomy Reference:

Gauging Profiles

Values :

Code	Value	Also Known As
10	GA	
20	GB	
30	GC	
40	G1	
50	DE3	DE3 (German network)
60	G2	
70	GB1	
80	GB2	
90	BE1	BE1 (Belgian network)
100	BE2	BE2 (Belgian network)
110	BE3	
120	FR-3.3	3.3 (French network), Gauge 3.3
130	PTb	
140	PTb+	
150	PTc	
160	FIN1	FIN1 (Specific case Finland)
170	SEa	Sea, SEa (Swedish network), SEa (Specific case Sweden)
180	SEc	Sec
190	DE1	
200	DE2	DE2 (German network)
210	Z-GCD	
220	UK1	UK1 (UK network)
230	UK1[D]	
240	W6	

Code	Value	Also Known As
250	FS	
260	S	
270	GHE16	GHE16 (Specific case Spain – upper parts)
280	GEA16	
290	GEB16	
300	GEC16	
310	IRL1	
320	IRL2	
330	IRL3	
340	GI1	GI1 (Specific case Spain – lower parts)
341	FR-3.4.1	
342	FR-3.4.2	
350	GI2	GI2 - lower parts, GI2 (Specific case Spain – lower parts), GI2 (lower part), GI2 according EN 15273-2
360	GI3	
370	GEE10	GEE10 (Specific case Spain - METRIC - lower parts)
380	GED10	GED10 (Specific case Spain - METRIC - upper parts)
389	AFG	
390	AFM 423	
400	NL1	NL1 (Dutch network), NL1 (Specific case the Netherlands)
410	NL2	

Code	Value	Also Known As
411	M30	
412	M80	
413	Tram-train 2.40	
414	Tram-train 2.65	
415	Métrique BA	
416	Métrique SGV	
417	Métrique Cerd.	
418	GB:GČD	
419	GCZ3	
420	GČD	
421	GEI1	
422	GEI2	
423	GEI3	
424	GEI14	
425	AFM 425	
426	EBV2_reduziert	
427	AFM 427	
428	EBV3_reduziert	
429	EBV3	
430	EBV4	
431	EBV1	
432	EBV2	
433	AF4.0 – EP	
434	AF4.1 – EP	
435	AF4.2 – EP	
436	AF4.0 – IP	
437	AF4.1 – IP	
438	AF4.2 – IP	

Code	Value	Also Known As
510	AI4.0-E	
520	AI4.0-I	
530	GE14	
540	GEC14	
csn-28-0312	ČSN 28 0312	
de3-lower-parts-gi2	DE3 (Lower parts GI2)	
dk1	DK1	
g1-gi1	G1+GI1	
g1-gi2	G1/GI2	
g1-gl1	G1/Gl1	
g1-up-and-gi2-down	G1 up and GI2 down	
g1-with-gic2-upper-parts	G1 with GIC2 upper parts	
g2-gl1-with-timber-casette-20-feet	G2/Gl1 (with timber cassette 20 feet)	
galibo-renfe-01-10-86	Galibo Renfe 01/10/86	
gb-gi2	GB/GI2	
gb-m6	GB-M6	
gc-gl1	GC/Gl1	
gl1	Gl1	
n01	NO1	
nl-dutch-network	NL (Dutch network)	
nntr-bek-1465-bilag-3	NNTR BEK 1465 Bilag 3	
ocf-02	OCF-02	
per-altesse-greater-3250-mm-previsto-505-1	Per altezze > a 3250 mm eccede il profilo max di costruzione previsto dalla fiche 505-1	

Code	Value	Also Known As
per-altesse-less-3250-mm-rispetta-uic-505-1	Per altezze <= a 3250 mm rispetta la fiche UIC 505-1	
uic-505-1	UIC 505-1	
uic-505-1-excluding-doorsteps	UIC 505-1 excluding the doorsteps.	
w6a-uk-network	W6a (UK network)	
w6a-upper-lower-sectors-uk-network	W6a upper and lower sectors (UK network)	

Flags

Applicability Flags:
Y

Validation

Validation Rules:
Gauging Profile Evr
Comment: Gauging profile.
Message: gaugingProfile (11.9.1): The value must be an IRI pointing to a concept from GaugingProfiles.

OPE TSI References

Part of RCC Algorithm:
true

Additional Information

General explanation:
[ERATV] It is possible to include other values than the already identified and included in the concept scheme. They will be introduced by the Agency on request via a process of change request
EN15273-3: (2013)+A1:2016: Annex C and Annex D
INF TSI: 4.2.3.1
It is possible to include additional values than the already identified and included in the concept scheme. They will be introduced by the Agency on request via a process of change request.

UK in respect of the Northern Ireland have a reference profile, but defined based on national rule:
7.3.2.2 Specific case Ireland and UK for Northern Ireland ('P')
It is permissible for the reference profile of the upper and the lower part of the unit to be established in accordance with the national technical rules notified for this purpose.

See also:
- Annex D1 OPE TSI
- INF TSI: 4.2.3.1, 4.2.3.2

Maximum design speed DP

Maximum design speed.

IRI: *http://data.europa.eu/949/maximumDesignSpeed*

Parameter of

Restriction
Vehicle Type
Vehicle type configuration parameter set

General Information

Number:
11.9.1

Belongs to parameters group
Vehicle type technical characteristic

Data Format

Data Presentation
Decimal

Unit of Measure:
Kilometre per Hour

Validation

Validation Rules:
Maximum Design Speed Evr
Comment: Maximum design speed.
Message: maximumDesignSpeed (11.9.1): The value must be a decimal (km/h).

Member State of Registration. OP

Indicates the member state where a vehicle type has been registered. Not to be confused with Area Of Use of the registration (deduced from the authorisation).

IRI: *http://data.europa.eu/949/registeringMemberState*

Parameter of

Vehicle Registration Case

General Information

Number:
2.1

Belongs to parameters group
Vehicle type technical characteristic

Data Format

Data Presentation
Concept

Validation

Validation Rules:
Registering Member State
Comment: Registering Member State.
Message: registeringMemberState (2.1): The value must be an IRI pointing to a country concept.

Minimum radius of horizontal curve DP

Radius of the smallest horizontal curve of the track in metres.

IRI: *http://data.europa.eu/949/minimumHorizontalRadius*

Also Known As:

ERATV: Radius of the smallest horizontal curve capability of the vehicle, expressed in metres.

Parameter of

Restriction
Running track
Siding
Subset with common characteristics
Vehicle Type

General Information

Number:
11.9.1

Belongs to parameters group
Line layout
Siding
Vehicle type technical characteristic

Data Format

Data Presentation
Decimal
Integer

Format:
NNNNN

Unit of Measure:
Metre

Flags

Applicability Flags:
Y/N

Validation

Validation Rules:

Minimum Horizontal Radius Evr
Comment: Minimum horizontal radius.
Message: minimumHorizontalRadius (11.9.1): The value must be a decimal or integer (meters).

OPE TSI References

Part of RCC Algorithm:

true

Additional Information

General explanation:

To describe a straight section of line value " 99999" shall be used.

National property expected datatype DP

The URI of the expected XSD datatype for the value of a national registration property (e.g. http://www.w3.org/2001/XMLSchema#string, http://www.w3.org/2001/XMLSchema#integer). This property is asserted on SKOS Concepts in the NationalRegistrationProperties concept scheme, and is used by SHACL SPARQL constraints to dynamically validate the datatype of era:nationalPropertyValue.

IRI: *http://data.europa.eu/949/nationalPropertyExpectedDatatype*

Also Known As:

Additional field expected datatype

General Information

Number:

12.2

Data Format

Data Presentation

Any Uri

Validation

Validation Rules:

National Property Expected Datatype
Comment: Expected XSD datatype URI for the national registration property value.
Message: nationalPropertyExpectedDatatype (12.2): The value must be an xsd:anyURI.

National property identifier OP

Identifies the national registration property by pointing to a SKOS Concept from the NationalRegistrationProperties concept scheme. Each concept carries the field name, expected datatype, and is grouped in a skos:Collection per member state.

IRI: *http://data.europa.eu/949/nationalPropertyIdentifier*

Also Known As:

Additional field identifier

Parameter of

National Registration Property

General Information

Number:

12.1

Data Format

Data Presentation

Concept

Taxonomy Reference:

National Registration Properties

Values :

Code	Value
ADAPTETUK	ADAPTETUK
CA	CA (automatic vigilance)
CABIN_BEDS	Cabin beds
CF_Dossier_Rnr	Dossier Rnr
CF_FRAME_OR_SERIAL_NUMBER	Frame or serial number
CF_Licenses_Rnr	Licenses Rnr
CF_MANUFACTURER	Manufacturer LU
CF_NN_OR_ROTA	NN or ROTA
CF_OPERATING_NUMBER	Operating number
CF_TYPE	CF Type
Cislo_jedn_prvni_registrace	First registration number
Cislo_protokolu_a_misto_TBZ	Číslo protokolu a místo TBZ
Cislo_technickych_podminek	Technical conditions code
COMMENTS	Comments
CONSTRUCTIVE_SPEED	Constructive speed
COUPLING_TYPE	Coupling type
CRITICAL_LOAD_OF_ONE_WHEELSET	Critical load of one wheelset
DATE_FIRST_AUTH	Date of first authorisation
DATEOFDECISION	Date of decision
DATEOFMODERNIZATION	Date of modernization
Datum_TBZ	Datum TBZ
DECISIONNUMBER	Decision number
Druhy_vyrobce_vozidla_reko	Druhý výrobce vozidla reko
ETCS	ETCS

Code	Value
ETCS_softwarova_verze	ETCS softwarová verze
EVN_ORIGINAL	EVN original
FOLDING_SEATS_AVAILABLE	Folding seats available
FORMOFOWNERSHIP	Form of ownership
GROSS_VEHICLE_WEIGHT	Gross vehicle weight
HEIGTH	Height
JOURNAL_NUMBER	Journal number
LENGTH_VEHICLE	Length of vehicle
LOADLENGTH	Load length
MANUFACTURER	Manufacturer PL
MANUFACTURER_SERIAL	Manufacturer serial number
MAX_PERMITTED_LOAD	Maximum permitted load
MAXSPEED	Maximum speed
MODCON	Modernization/conversion
MODEL	Model
MSN	MSN (Manufacturer Serial Number)
NR_OF_WHEELSETS	Number of wheelsets
NUMBEROFAXLES	Number of axles
NUMBEROFBOGIE	Number of bogies
NVR_VEHICLE_ID	NVR Vehicle ID
oldEIN	Old EIN (European Identification Number)
Oznaceni_vozidla_z_vyroby	Factory vehicle marking
PASSENGER_VEHICLE_CLASS	Passenger vehicle class

Code	Value
PLAN_MANTENIMIENTO_CODIGO	Plan de mantenimiento - código
PLAN_MANTENIMIENTO_EDICION	Plan de mantenimiento - edición
PLAN_MANTENIMIENTO_EDICION_FECHA	Plan de mantenimiento - fecha de edición
PLAN_MANTENIMIENTO_REVISION	Plan de mantenimiento - revisión
PLAN_MANTENIMIENTO_REVISION_FECHA	Plan de mantenimiento - fecha de revisión
Pocet_vzduchovych_jimek	Počet vzduchových jímek
POWER	Power PL
POWER	Power EE
POZNAMKA	Note
Poznamky_k_registraci	Registration notes
PURPOSE	Purpose
RADIO	Radio
RADIO_STOP	Radio stop
RCEC	RCEC LT
RCEC	RCEC IT
Remark	Remark
Rok_rekonstrukce	Rok rekonstrukce
RowVer	Row version (timestamp)
RS	RS LT
RS	RS IT
RU_NAME	RU name
RU_ORGANIZATION_CODE	RU organization code

Code	Value
SAGSNRIBRUGTAGNTILL	Sagsnummer ibrugtagningstilladelse
SAGSNRTYPEGODK	Sagsnummer typegodkendelse
SCMT	SCMT IT
SCMT	SCMT LT
SEATS_AVAILABLE	Seats available
SEATS_AVAILABLE_PRM	Seats available for persons with reduced mobility
SERIALNUMBER	Serial number
SERVICEMASS	Service mass
Seznam_rekonstrukci	Seznam rekonstrukcí
SHP	SHP (train protection system)
SPECIAL_EQUIPMENT	Special equipment
SSC	SSC LT
SSC	SSC IT
SUBTYPE	Subtype
SUPPLY	Supply
TARE_WEIGHT	Tare weight
TRACKGAUGE	Track gauge
TS_APPL_GUID	TS APPL GUID
TYP	Vehicle Type
TYPE	Type
TYPE_OF_AUTOMATIC_BRAKE	Type of automatic brake
TYPEOFBOGIE	Type of bogie
TYPEOFROLLING	Type of rolling stock
TYPEOFVEHICLE	Type of vehicle

Code	Value
UKLADOSI	Axle arrangement (układ osi)
UNLADEN_MASS	Unladen mass
UNLADENWEIGHT	Unladen weight
VARIABLEGAUGE	Variable gauge
VEHICLELENGTH	Vehicle length
VIRKSH_KORETOJSNUMMER	Virksomheds køretøjsnummer
VOLTAGE	Voltage
VYRCIS	Production number
Vyrobce_vozidla_prvni	First vehicle manufacturer
WIDTH	Width
Zabezpecovac_ETCS_vyrobce_a_typ	Zabezpečovač ETCS výrobce a typ

Validation

Validation Rules:

National Property Identifier
Comment: Identifies the national registration property by pointing to a SKOS Concept from the NationalRegistrationProperties concept scheme.
Message: nationalPropertyIdentifier (12.1): Each NationalRegistrationProperty must reference exactly one SKOS Concept identifying the national field.

National Property Identifier Skos
Comment: Validates that the national property identifier is a SKOS concept from the NationalRegistrationProperties concept scheme.
Message: nationalPropertyIdentifier (12.1): The NationalRegistrationProperty {$this} has identifier {? concept} which is not a concept in the NationalRegistrationProperties scheme.

National property mandatory DP

Declares whether a national registration property concept is mandatory for the member state context where it applies. This property is asserted on SKOS Concepts in the NationalRegistrationProperties concept scheme and is used by SHACL constraints to verify presence of required national properties.

IRI: *http://data.europa.eu/949/nationalPropertyMandatory*

Also Known As:

Additional field mandatory

Parameter of
Concept

General Information

Number:
12.4

Data Format

Data Presentation
Boolean

Validation

Validation Rules:
National Property Mandatory
Comment: Indicates whether the national registration property is mandatory.
Message: nationalPropertyMandatory (12.4): The value must be a boolean.

National property maximum length DP

Declares the maximum allowed string length for a national registration property concept. This property is asserted on SKOS Concepts in the NationalRegistrationProperties concept scheme and is used by SHACL constraints to validate string literal lengths for era:nationalPropertyValue.

IRI: *http://data.europa.eu/949/nationalPropertyMaxLength*

Also Known As:
Additional field maximum length

Parameter of
Concept

General Information

Number:
12.5

Data Format

Data Presentation
Integer

Validation

Validation Rules:
National Property Max Length
Comment: Maximum allowed string length for the national registration property value.
Message: nationalPropertyMaxLength (12.5): The value must be a non-negative integer.

National property value DP

The actual value of this national registration property. The datatype of the literal should match the expected datatype declared via era:nationalPropertyExpectedDatatype.

IRI: *http://data.europa.eu/949/nationalPropertyValue*

Also Known As:
Additional field value

Parameter of
National Registration Property

General Information

Number:
12.3

Data Format

Data Presentation
Literal

Validation

Validation Rules:
National Property Value
Comment: The actual value of this national registration property.
Message: nationalPropertyValue (12.3): Each NationalRegistrationProperty must have at least one value.

Nominal track gauge OP

A single value expressed in millimetres that identifies the track gauge.

IRI: *http://data.europa.eu/949/wheelSetGauge*

Parameter of
Restriction
Running track
Subset with common characteristics
Vehicle Registration Restriction
Vehicle Type
Vehicle Type Authorisation Restriction

General Information

Number:
11.9.1

Belongs to parameters group
Track parameters

Vehicle type technical characteristic

Data Format

Data Presentation

Concept

Taxonomy Reference:

Nominal Track Gauges

Values :

Code	Value	Also Known As
10	750	750
20	1000	1000mm
30	1435	1435mm
40	1520	1520mm
50	1524	1524mm
60	1600	1600mm
70	1668	1668mm

Flags

Applicability Flags:

Y

Validation

Validation Rules:

Wheel Set Gauge Evr
Comment: Wheel set gauge.
Message: wheelSetGauge (11.9.1): The value must be an IRI pointing to a concept from NominalTrackGauges.

OPE TSI References

Part of RCC Algorithm:

true

Additional Information

General explanation:

In case of multi-rail track, a set of data is to be published separately to each pair of rails to be operated as separate track (the whole set of parameters for the separate track has to be delivered be careful then with the track identification). Nominal track gauges provided by the INF TSI are only 1435, 1520, 1524, 1600 and 1668.

Non coded restrictions DP

Groups the non-coded restrictions, as a set of sentences. Can be used for any subClassOf `era:Restriction`.

IRI: *http://data.europa.eu/949/nonCodedRestrictions*

Parameter of

Restriction
Vehicle Registration Restriction
Vehicle Type
Vehicle Type Authorisation Restriction

General Information

Number:
11.9.2

Belongs to parameters group
Vehicle type technical characteristic

Data Format

Data Presentation
String

Validation

Validation Rules:
Non Coded Restrictions Evr
Comment: Non coded restrictions.
Message: nonCodedRestrictions (11.9.2): The value must be a string.

Quieter route exempted country OP

Country where a vehicle may operate without noise restrictions.

IRI: *http://data.europa.eu/949/quieterRoutesExemptedCountry*

Parameter of

Restriction

General Information

Number:
11.9.1

Belongs to parameters group
Vehicle technical characteristic

Data Format

Data Presentation

Concept

Validation

Validation Rules:

Quieter Routes Exempted Country Evr
Comment: Quieter routes exempted country.
Message: quieterRoutesExemptedCountry (11.9.1): The value must be an IRI pointing to a country concept.

Strictly local, historical or tourist use DP

Strictly local, historical or tourist use

IRI: *http://data.europa.eu/949/hasStrictLocalHistoricalTouristUse*

Parameter of

Restriction

General Information

Number:
11.9.1

Belongs to parameters group
Vehicle type technical characteristic

Data Format

Data Presentation
Boolean

Validation

Validation Rules:

Has Strict Local Historical Tourist Use Evr
Comment: Has strict local historical tourist use.
Message: hasStrictLocalHistoricalTouristUse (11.9.1): The value must be a boolean.

Temperature range OP

Temperature range for unrestricted access to the line.

IRI: *http://data.europa.eu/949/temperatureRange*

Parameter of

Restriction
Running track
Subset with common characteristics

Vehicle Type

General Information

Number:
11.9.1

Belongs to parameters group
Performance parameter

Data Format

Data Presentation
Concept

Taxonomy Reference:
Temperature ranges

Values :

Code	Value	Also Known As
10	T1	T1 (-25 to +40)
20	T2	T2 (-40 to +35)
30	T3	T3 (-25 to +45)
40	Tx	Tx (-40 to +50)

Flags

Applicability Flags:
Y/N

Validation

Validation Rules:
Temperature Range Evr
Comment: Temperature range.
Message: temperatureRange (11.9.1): The value must be an IRI pointing to a concept from TemperatureRanges.

OPE TSI References

Part of RCC Algorithm:
true

Additional Information

General explanation:
T1 (-25 to +40) - 3.1.1
T2 (-40 to +35) - 3.1.2
T3 (-25 to +45) - 3.1.3
Tx (-40 to +50) - 3.1.4

Time based restriction of use DP

Some issued authorisation can include time-limited conditions for use. Time limitation is not a data provided by the applicant but a consequence of an authorisation decision (see Art 46(6) or regulation 2018/545)

IRI: *http://data.europa.eu/949/isTimeBasedRestriction*

Parameter of

Restriction
Vehicle Registration Restriction
Vehicle Type Authorisation Restriction

General Information

Number:
11.9.1

Belongs to parameters group
Vehicle type technical characteristic

Data Format

Data Presentation
Boolean

Validation

Validation Rules:
Is Time Based Restriction Evr
Comment: Is time based restriction.
Message: isTimeBasedRestriction (11.9.1): The value must be a boolean.

Type of train detection system OP

Indication of types of train detection systems installed.

IRI: *http://data.europa.eu/949/trainDetectionSystemType*

Parameter of

Restriction
Train Detection System
Vehicle Registration Restriction
Vehicle Type
Vehicle Type Authorisation Restriction

General Information

Number:
11.9.1

Belongs to parameters group
Other train detection systems

Vehicle type technical characteristic

Data Format

Data Presentation
Concept

Taxonomy Reference:
Train Detection Systems

Values :

Code	Value	Also Known As
10	Track circuit	Track circuits
20	Wheel detector	
30	Loop	Loops
axle-counters	Axle counters	

Flags

Applicability Flags:
Y/N/NYA

Validation

Dependencies:
Not all parameters are applicable to all types of train detection systems; it depends on the applicability condition.

Validation Rules:
Train Detection System Type Evr
Comment: Train detection system type.
Message: trainDetectionSystemType (11.9.1): The value must be an IRI pointing to a concept from TrainDetectionSystems.

OPE TSI References

Part of RCC Algorithm:
true

Additional Information

General explanation:
Verification of compliance with TSI includes application of notified national rules (when they exist).

Explanation on data presentation:
The option of "wheel detector" has to be also selected for: wheel sensor for axle counter, pedal or treadle.

If there is no train detection system (if this parameters is not applicable) it has an impact on parameters "Type of track circuits or axle counter to which specific checks are needed" and "Document with the procedure(s) related to the type of train detection systems declared in 1.1.1.3.7.1.2 (1.2.1.1.6.1, if in OP)", making them also not applicable.
Explanation on data presentation:
The option of "wheel detector" has to be also selected for: wheel sensor for axle counter, pedal or treadle.

[c]: Classes
[op]: Object Properties
[op]: Data Properties
[ep]: External Properties