TAP TSI: ANNEX B.9 **STANDARD NUMERICAL CODING OF LOCATIONS**			
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1.1	05.05.2011	All sections	First release

Introduction

The present document belongs to the set of Technical Documents described in Annex III 'List of Technical Documents referenced in this TSI' of the COMMISSION REGULATION (EU) No 454/2011.

Standard Numerical Coding of locations

Application :

With effect from 5 May 2011.
All actors of the European Union falling under the provisions of the TAP TSI.

Contents

General

1.1 In this Technical Document “location” means a railway location, this can be of administrative, operational, commercial or technical use and which belongs to a public undertaking being in general an Infrastructure Manager (IM) or a Railway Undertaking (RU) or service providers and managers commissioned by these.

Any location, required for the railway operations and the business process of the COMMISSION REGULATION (EU) No 454/2011 is to be coded as railway location.

Railway locations are essentially:

- Central stations, stations, yards, halts;
- Railway frontier-, Transit points;
- Loading points, terminals;
- Sales Points for tickets, Travel Agencies;
- Tariff points ;
- Administrative offices, organisational units, town offices;
- Warehouses, workshops;
- Other action points.

In addition the following locations, which enjoy a special position because of their geographical situation or their importance in international rail traffic, are included in the principles of this coding system:

- Inland waterway or sea ports;
- Specific tariffs intersection points and notional frontier and transit points (for example “mid-sea points”).

1.2 All railway locations in a Member State of the European Union complying with paragraph 1.1 as well as the Subsidiary Codes according to paragraph 5.3 are to be centrally stored, together with the associated data, for public consultation (see chapter 7).

2 Purpose of the Technical Document

2.1 The locations defined in paragraph 1 together with their data are an essential and important source of information for numerous international and national railway systems.

2.2 The purpose of the Technical Document is to set out the principles of standard codes to identify locations clearly and describe their characteristics and operating features for international data exchange.

In addition, the Technical Document set out and describes the standard structure of other codes for special needs or applications.

2.3 The utilisation of standard numerical codes is compulsory for all exchanges of information between IMs and RUs and third parties.

3 Definitions and Abbreviations

3.1 Definitions

Numeric Country code

This element identifies the country to which the location belongs with a two-character code in accordance to the Code List B.9.1.

Infrastructure Manager (IM)

"Infrastructure Manager" means any body or undertaking that is responsible in particular for establishing and maintaining railway infrastructure. This may also include the management of infrastructure control and safety systems. The functions of the infrastructure manager on a corridor or part of a corridor may be allocated to different bodies or undertakings.

Railway Undertaking (RU)

"Railway Undertaking" (operator) means any public or private undertaking the principal business of which is to provide services for the transport of goods and/or passengers by rail with a requirement that the undertaking must ensure traction; this also includes undertakings which provide traction only (including shipping companies, covered by international railway tariffs).

Railway Company

"Railway Company" means any company directly or indirectly involved in rail traffic or having a business relationship with one or more of such companies.

Railway Company Code

Four digit code to identify a railway company as defined by ERA TAP TSI Technical Document B.8.

3.2 Abbreviations

Abbreviation	Definition
IM	Infrastructure Manager
N	Numeric
RU	Railway Undertaking
ERA	European Rail Agency
TAP	Telematic Applications for Passengers
TSI	Technical Specifications for Interoperability

4 Coding Principles

4.1 A railway location is identified by a standard location code:

- The general railway location - Primary Code.

Depending on the specific application

- Several special Subsidiary Codes could be associated to the Primary Code.

4.2 The Primary Code shall be compulsory for all relevant locations of a RU or an IM.

In order to assure uniqueness in one Member State of the European Union, the code shall be allocated by a national authority according to its own rules and to section 5 of this Technical Document. Each Primary Code shall have an unambiguous and compulsory designation which shall be defined by the national authority.

4.3 The relevant national authority attributes to each Primary Code a unique official Location name. Additional shortened names may be attributed.

4.4 Subsidiary Codes may be allocated to IM or RU locations which must be identified or classified for specific applications.

Subsidiary Codes shall be allocated e.g. for:

- Seat reservation in passenger traffic;
- Frontier and transit points.

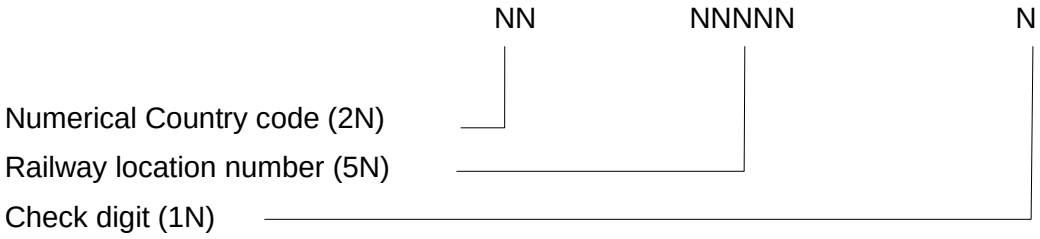
5 Code Structure

Both the Primary Code and the numerical Subsidiary Codes shall have a fixed length. These are positioned right-justified and filled up if necessary with zeros.

5.1 Primary Code

This code identifies a location. A Primary Code may be allocated to any railway location specified in paragraph 1.1. It is up to an Infrastructure Manager to decide which of its locations are to be coded.

The Primary Code shall contain eight alphanumeric characters structured as follows:



- The numerical country code is a two digit code identifying the country as defined in paragraph 3.1.
- The railway location number identifies the location within the relevant country with a five-digit code. The code is allocated according to paragraph 4.2.
- The check digit is calculated from the five digits of the railway location number in accordance with the rules specified in Annex A.

Users may agree to transmit the check digit in international data exchanges. However, the check digit is required each time data is entered manually. It is used for internal computer checks on plausibility of the railway location number.

5.2 Subsidiary Code for computerised reservation

5.2.1 A Subsidiary Code may be allocated to all passenger locations with possibility of reservation by a computerised reservation system, i.e. stations which can be origin or destination stations for a reservation. This Subsidiary Code is allocated in addition to the Primary Code.

5.2.2 The Subsidiary Code for seat reservation contains 7 numeric characters structured as follows:

- The numeric country code is a two digit code identifying the country as defined in paragraph 3.1.
- The seat reservation code is a five-digit code identifying the location where a reservation can start or end.

5.2.3 The five digits of the seat reservation code are defined and allocated by each RU according to its own rules. The RU shall be free to use the railway location number of the Primary Code.

5.2.4 For domestic traffic services the country code may be replaced by “00”.

5.3 Subsidiary Code for frontier and transit points

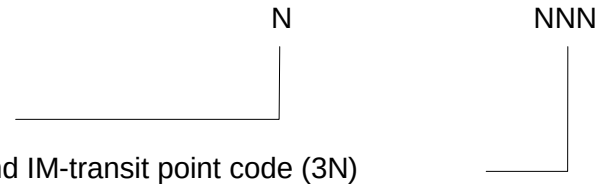
5.3.1 Subsidiary Code for border points and IM transit points (handover or interchange points)

This Subsidiary Code is allocated for interconnections at national borders. It is not necessary that different IM networks are interconnected there.

This Subsidiary Code may also be attributed for transit points between two IM networks or at the beginning/end of an IM within one country. In this case the codification possibilities per country are limited as the second and third position of the code must be unique within one country.

This Subsidiary Code may be attributed to any location situated on one of the above mentioned border or IM- transit points of a railway line, and are relevant for the passenger or freight transport.

5.3.1.1 The Subsidiary Code for frontier and transit points contains 4 numeric characters structured as follows:



- The Type consists of one digit used to indicate the type of location [see code list B.9.2];
- The frontier and IM-transit point code consists of three digits used to identify the frontier and transit point concerned within the different "Type" categories.

5.3.1.2 Because of the particular nature of frontier and IM-transit points and their significance for at least two railway companies, provision has been made for the following procedure for allocation of the Subsidiary Code.

Railway companies which intend to open a frontier or IM-transit point shall apply for a code to the body charged with the allocation of frontier and transit point codes, which are defined in Chapter 7.2 of the Annex I of the COMMISSION REGULATION (EU) No 454/2011, by giving the necessary details. The allocating body as well as required details can be consulted at the ERA Website.

The allocating body tries to achieve agreement between the concerned parties and allocates the Subsidiary Code.

Similarly, any amendments or deletions of this Subsidiary Code shall be subject to the same procedure.

5.3.1.4 Furthermore, code allocation and code descriptions are subject to the following rules:

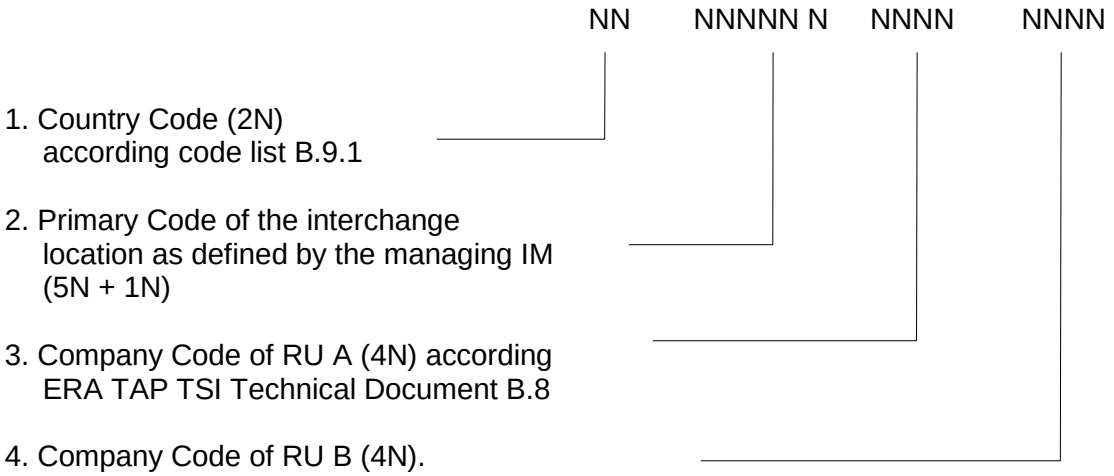
a) For rail frontier and transit points, the exit point from one country must be the same as the entry point into the adjacent country; therefore only one code shall be allocated.
b) The description of the frontier and transit point however should be different for each railway company. Generally, the description of the adjacent frontier stations of both railway companies shall be used as the description of a frontier and transit point. A frontier station is an inland station which has additional operations, commercial and/or customs-related technical duties to perform before or after the frontier and transit point.
c) For IM-transit points located at the same point only one code is allocated. The name of the IM transit point is built in a similar way as for frontier points. If the transit point is located in common station, then the IM transit point name is formed with the station name and the short name of each IM, e.g. „GYOER MAV – GYOER GYSEV“
d) Different codes shall be allocated for ports and ferry ports because the exit point from one country is not the same as the entry point into the other country.
e) Codes shall be allocated so that the three digits in each "Type" (e.g. 0 or 1) shall suffice to identify all frontier and transit points and the two digits on the right shall be adequate to denote the rail frontier and transit points of a country.
f) Consequently, a location which is purely a frontier and transit point for a country can be identified by means of the two right-hand digits in the second part denoting the "frontier and transit point", if in addition the two-position code of one of the two countries involved is known.

5.3.2 Subsidiary Code for RU-Interchange points

Interchange points between RUs, in particular those within one country, are coded differently. No fixed codes are defined as for Frontier and IM-transit Points. In this Technical Document only the code structure is defined.

Two RUs needing a RU interchange point for the operation of their business processes, agree on a specific code according following Structure

This coding is composed out of following codes:



6 Coding of data connected with a location

Some applications require additional codes to supplement information given in identifying codes. These codes are described in paragraph 6.1 onwards and identify locations as specified under section 1: they are mandatory and part of the location database. This supplementary information is in principle not part of international data exchanges as such. It may be obtained from the location database.

Any need for other codes concerning locations and other details concerning commercial, technical or operational aspects or special characteristics shall be transformed into appropriate code lists.

The Chapter 7.2 of the Annex I of the COMMISSION REGULATION (EU) No 454/2011 describes all procedures and methods concerning administration, up-dating and maintenance of the location database insofar as these are not already mentioned under section 7 of this Technical Document.

6.1 Category of location: see code list B.9.3

6.2 Opening status of a location: see code list B.9.4

6.3 Utilisation status of a frontier point: see code list B.9.5

7 Procedure governing, administration and updating of the location database

7.1 The data contents of the location database as well as the processes for the acquisition, updating and utilisation of the data, are defined in the Chapter 7.2 of the Annex I of the COMMISSION REGULATION (EU) No 454/2011, taking into account the already existing reference files created for TAF TSI.

7.2 The management of the location database as well as day-to-day administration, up-dating and publication of the file are also be defined in Chapter 7.2 of the Annex I of the COMMISSION REGULATION (EU) No 454/2011

7.3 The location database shall be published on the ERA Website

8 Administration of the Technical Document

This Technical Document shall be managed in accordance with the Change Control Management of TAP TSI.

9 Annex A

Rules for the determination of the check-digit

The check-digit is determined in the following manner:

- the digits in the even positions of the basic number (counting from the right) are taken at their own decimal value;
- the digits in the odd positions of the basic number (counting from the right) are multiplied by 2;
- the sum formed by the digits in even position and by all the digits which constitute the partial products obtained from the odd positions is then established; the units digit of this sum is retained;
- the complement required to bring the units digit up to 10 forms the check-digit; should this units digit be nought, then the check-digit will also be nought.

Examples:

1. Let the basic number be 3 7 0 2 9 5
   Multiplication factor 1 2 1 2 1 2
   3 14 0 4 9 10

sum: 3 + 1 + 4 + 0 + 4 + 9 + 1 + 0 = 22

The units digit of this sum is 2; the check-digit will therefore be 8 and the basic number thus becomes the registration number 3702958.

2. Let the basic number be 4 5 8 2 6 9 3
   Multiplication factor 2 1 2 1 2 1 2
   8 5 16 2 12 9 6

sum: 8 + 5 + 1 + 6 + 2 + 1 + 2 + 9 + 6 = 40

The check-digit is 0 and the registration number is 45826930.