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Committee of Technical Experts**

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## **NATIONAL TECHNICAL REQUIRMENTS FOR VEHICLES**

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Analysis of the need for further action

## 1. INTRODUCTION

This paper is part of the follow-up to the 11<sup>th</sup> session of the Committee of Technical Experts, which requested WG TECH *to analyse the need for further action concerning National Technical Requirements, including possible modification of the provisions of APTU Articles 12 and 13 (publication and alignment of national technical requirements), and bearing in mind that NTR under COTIF only concern international traffic.*

The UTPs are requirements which are necessary for the objectives set out in APTU and ATMF and which can be harmonised between the Contracting States. An obvious challenge international railway traffic is facing is the diversity of networks between countries, as a result of which it is not possible to harmonise all vehicle requirements. It is therefore necessary to apply specific national provisions in addition to the harmonised requirements.

The paper presents the scope of the national technical requirements and their application to vehicle admissions. It also explains the differences and relationship between NTRs and specific cases in the scope of COTIF.

## 2. NATIONAL TECHNICAL REQUIREMENTS

Provisions related to national technical requirements<sup>1</sup> (NTRs) are laid down in Article 12 of the APTU UR and are limited to vehicles. NTRs in the meaning of the APTU UR cannot cover subsystems other than those related to vehicles.

As the scope of COTIF concerns international traffic only, the scope of NTRs is therefore also limited to vehicles for use in international traffic.

National Technical Requirements are in some cases indispensable to ensure compatibility between vehicles and the network they are intended to run on. At the same, as they are not harmonised, NTRs are by definition undesirable for international traffic and the aim should therefore be either to harmonise them or create the conditions to ensure that they become obsolete.

The overarching objectives related to NTRs could be summarised as follows:

1. NTRs should be accessible and transparent, hence the requirement to notify them.
2. NTRs should be removed if they are not, or are no longer, strictly necessary for the objectives of APTU and ATMF.
3. NTRs which are necessary should be harmonised as far as possible, preferably in the form of UTPs.

With regard to the first objective, Contracting States should identify all the requirements that are necessary in addition to the UTPs for the admission of vehicles in international traffic on their network and notify them in accordance with Article 12 of APTU, including the methods and procedures to prove compliance with them, so that applicants and manufacturers can take them into account in their activities. At least the title and summary of the NTRs must be in one of the official languages of OTIF (French, German and English).

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<sup>1</sup> Although the scope and aims of NTRs partly overlap with the scope and aims of national rules in EU law the two concepts are not identical and should not be confused. One of the significant differences is that the COTIF NTRs only cover international traffic and do not therefore have to specify elements related to specific local or regional features of the network.

With regard to points 2 and 3, until now the requirements relevant to vehicles in international traffic have been set out in UTPs, with the exception of the on-board part of the signalling system.

Another type of national provision is the specific case contained in chapter 7 of the UTP. The main difference between an NTR and a specific case is that a specific case is contained in the UTP and an NTR is specified at national level.

There are several possible justifications why NTRs may be necessary:

- In the absence of UTPs (for vehicles this concerns only the on-board part of the CCS system, as all other vehicle parameters are covered by UTPs)
- To cover open points in the UTPs. (An open point in the UTP means that the parameter is indispensable for the mutual acceptance of vehicles and their free circulation in international traffic, but that it has not yet been possible to harmonise the specification to cover the parameter.)
- To ensure compatibility with the particularities of a network.
- To provide (detailed) specifications related to a specific case.

### **3. THE APPLICATION OF NTR TO VEHICLE ADMISSION**

On the basis of ATMF, three different vehicle admission cases can be distinguished:

**Case 1: An initial vehicle admission in accordance with Article 6 § 3 of ATMF, which is directly valid for international traffic in all Contracting States.**

This is only possible if all the requirements relevant to the vehicle are covered in the UTPs, meaning that there are no open points related to the vehicle in question. Furthermore, the vehicle must not be subject to a specific case or NTR which affects the technical compatibility with the networks of the Contracting States concerned. The vehicle must also have undergone assessment in accordance with all the UTP requirements and not be subject to derogation in the meaning of Annex B to ATMF. Under the existing UTPs, this is only possible for freight wagons and only if these comply with the provisions of section 7.1.2 of the UTP WAG.

**Case 2: An initial vehicle admission in accordance with Article 6 § 4 of ATMF, for which the first admission is not directly valid in other Contracting States and which must therefore be supplemented by an additional admission issued for each further state where the vehicle is to be used.**

This concerns all newly admitted vehicles that do not satisfy the conditions of the first case. It means that the vehicle is not fully covered by harmonised requirements, e.g. because the UTPs contain open points, and will therefore be required to obtain separate admission from each state where it is intended to be used. All vehicles other than freight wagons complying with section 7.1.2 of the UTP WAG come under this case, including e.g. all locomotives, trains sets, etc. These vehicles will be required to meet all the UTP requirements, including the applicable specific cases and, in addition, the NTRs of the state where the vehicle is (first) admitted to international operation.

**Case 3: An additional admission of a vehicle which has already been admitted to international traffic by at least one other contracting state.**

The competent authority/ies issuing the additional admission(s) may ask the applicant for additional technical information and/or tests, including information and tests related to NTR. However, the

verifications of the parts of the vehicle which are compliant with a UTP will be accepted without additional proof.

#### **4. NTR AND SPECIFIC CASES IN THE SCOPE OF COTIF**

Both NTRs and specific cases specify requirements which are particular to a state. The main difference is that NTRs are documented at national level and specific cases are documented in the UTP and, in the case of members of the European Union, in the TSIs<sup>2</sup>.

NTRs are not defined in COTIF, but Article 12 § 2 of APTU sets out the objective and scope of NTRs:

*“...to ensure the technical compatibility between the vehicles and its [the Contracting State’s] network concerned; this includes national rules applicable to “open points” in the technical prescriptions and applicable to the specific cases duly identified in the technical prescription.”*

It should be noted that Article 12 is based on the idea that NTRs should be replaced by UTPs as far as possible. This is expressed in § 1 of Article 12:

*“...[NTR] may stay in force only until it or an analogous requirement is brought into force through the adoption of prescriptions according to the Articles above. The Contracting State may at any time withdraw the temporary provision and notify this to the Secretary General.”*

Furthermore, Article 12 § 2 of APTU requires that every time a UTP is adopted or amended, the Contracting States must notify, with justification, the NTRs that are still required after the UTP enters into force. This notification must be given within 6 months after the entry into force of the UTP. Without such notifications the NTRs are assumed no longer to be required.

Specific Case is defined in Article 2 of ATMF as follows:

*“specific case” means any part of the rail system of the Contracting States which is indicated as a special provision in the UTP, either temporarily or definitively, because of geographical, topographical or urban environment constraints or those affecting compatibility with the existing system. This may include in particular railway lines and networks isolated from the rest of the network, the loading gauge, the track gauge or space between the tracks as well as vehicles strictly intended for local, regional or historical use, and vehicles originating from or destined for third countries;”*

In accordance with Article 8 § 4 of APTU each specific case must include requirements concerning the procedures to be used in order to assess conformity with it. Article 10 § 3a of ATMF stipulates as a general rule that conformity with UTPs (which includes specific cases) may be assessed by any assessing entity. It follows that if assessment of conformity with a particular specific case cannot be carried out by any assessing entity, e.g. because it requires particular tests on a specific section of track, or because it can only be carried out by a specific entity, this should be indicated in the specific case in the UTP.

#### **5. SITUATION THEN AND NOW**

The notification of NTRs and specific cases should be understood from a historical perspective. At the time when APTU and ATMF were developed, there were not yet any UTPs. Until UTPs became

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<sup>2</sup> The UTPs do not deal with the specific case of states which are also members of the European Union, but make reference to the TSIs for this purpose.

available, vehicles were admitted solely on the basis of NTRs. Listing and categorising the NTRs of the various Contracting States was considered an important step towards harmonising the rules. The concept was to put all NTRs on the table, categorise them, identify overlaps between the NTRs of different Contracting States and, where possible, declare them equivalent. Over time, the UTPs would be developed and supersede the NTRs for parameters covered by the UTPs.

The situation has now changed compared to 20 years ago when APTU was drafted and adopted. The vast majority of parameters are now covered by UTP requirements and parameters which cannot be fully harmonised are set out either in NTRs or in specific cases. Compared to when no UTP existed, the different purpose of NTRs and specific cases is no longer so obvious.

An argument for retaining NTRs in addition to UTPs is that UTPs only cover new, renewed and updated vehicles and do not deal with the admission of (older) pre-UTP vehicles. Subsystems not covered by UTPs are, by definition, also covered by national requirements, whether notified as NTR or not. The question therefore remains as to how useful such NTRs are for the admission of pre-UTP vehicles, knowing that in any case, the requirements for pre-UTP vehicles to be used safely on a (foreign) network are tailored to each type of vehicle and each network they intend to run on.

The situation today is that only Switzerland has notified its NTRs in a way that complies with the provisions of Article 12 of APTU. The European Union has notified the Secretary General of the so-called 'notified national technical rules' in accordance with EU law. This notification was made in 2013, but since then, all the relevant UTPs have been adopted or amended.

The European Union, Switzerland and Norway went through the process, as required by EU law, of listing, classifying and harmonising the applicable national requirements of the states concerned. It should be noted that this effort was not limited to compatibility with lines open to international traffic, but also included domestic traffic. It is not therefore obvious that all the results are fully relevant in the scope of COTIF, as certain requirements for local lines are not necessarily the same for international lines.

Subsystems not covered by UTPs are by definition covered by national requirements, whether notified as NTR or not. The failure, for whatever reason, of a Contracting State to fulfil its obligations under APTU Article 12 to notify its national requirements does not mean that no requirements are applicable. For example, signalling systems are not yet covered by UTPs. However, it is safe to assume that before admitting a locomotive, each Contracting State will need to prove that the locomotive can be safely operated with the signalling system on its network. This is why Article 6 § 4 of ATMF permits Contracting States to request additional technical information from the applicant, such as risk assessments and tests, before granting a complementary admission to operation.

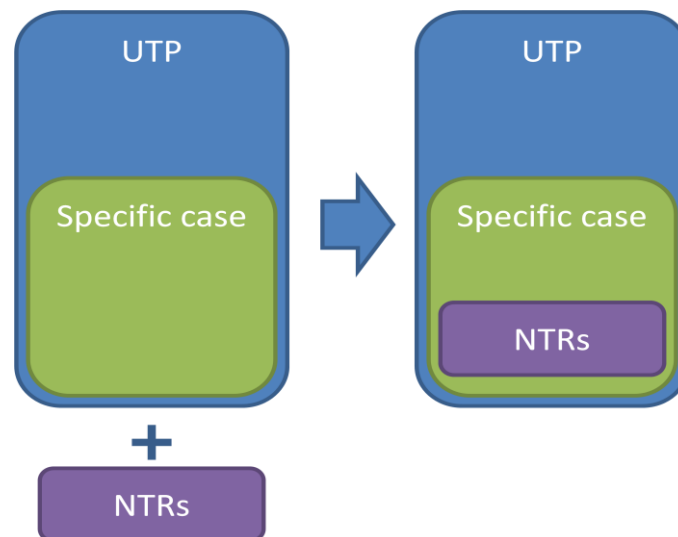
## **6. PROPOSED WAY FORWARD**

The question of whether NTRs in their current form are still needed seems legitimate, particularly if, for a particular network, they can be covered by/added to specific cases in the UTP as well. Having all applicable requirements covered in the specific case of the relevant UTPs will ensure transparency and clarity. The following ideas are therefore proposed as a way forward and as input for further discussion:

1. NTRs could continue to exist for two reasons only, but should be limited to the scope of the provisions under COTIF:
  - a. NTRs concerning parts of vehicles which are not covered by UTPs (this is limited exclusively to the on-board part of the command control and signalling system, because all other relevant parameters are now covered by UTPs)

- b. NTRs referred to by specific cases in chapter 7 of a UTP (this may be relevant for practical reasons, for example if the specifications are voluminous or subject to review by the state concerned).
2. Vehicle provisions required by states which replace or supplement provisions in chapters 4, 5 and 6 of a UTP should not become NTRs, but should be included as specific cases in chapter 7 of the same UTP. A subsystem or part of subsystems covered by UTP specifications should not be subject to NTRs (except when linked to specific cases contained in the UTP). The definition of specific cases in ATMF and the meaning of NTRs set out in APTU should be reviewed and modified, where necessary.
  3. Account should be taken of the fact that there is a difference between the scope and aims of the NTRs under COTIF and the notified national technical rules (NNTRs) defined in European Union law. To ensure consistency, UTPs should make reference to the national rules applicable in the European Union in the form of specific cases.
  4. Specific cases should indicate how conformity should be assessed and, if this cannot be done by any assessing entity, who can do it.
  5. For the additional admission of (older) pre-UTP vehicles, states could work on the basis of Article 6 § 4 of ATMF according to their internal provisions, without notifying their requirements.

The added value and advantage would be that all the requirements applicable to new vehicles are listed in the relevant UTPs, making them the only source (primary reference) for all requirements related to the admission of vehicles in international traffic. This also means that NTRs could only continue to exist when referred to by a specific case in the relevant UTP.



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