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**Commission d'experts techniques
Fachausschuss für technische Fragen
Committee of Technical Experts**

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SIMPLIFICATION OF VEHICLE ADMISSION REQUIREMENTS

Draft discussion paper containing suggestions for the further development of COTIF's technical appendices

1. INTRODUCTION

In 2006, Appendices F and G to COTIF entered into force. Since then the legal framework established by these appendices has been steadily developed. These developments over the past decade have been based on the European Union's legal framework for interoperability and safety of the railway system.

The Secretariat prepared document TECH-17037 for WG TECH 32, which compared the EU and COTIF provisions concerning declarations and interoperability constituents. The document was subsequently reviewed and discussed. On the basis of this discussion the Secretariat was requested to analyse whether it would be possible to simplify the COTIF provisions for vehicle admission. This paper presents suggestions in this context.

Furthermore, one objective in the OTIF work programme for 2018-2019 is to review the provisions related to regional economic integration organisations that have acceded to COTIF. At present, this only concerns the European Union (EU), but it cannot be excluded that other such organisations might also accede in future. It would be important for any of these organisations to be able to enjoy similar legal relations with COTIF. At present, some of the technical provisions of COTIF specifically facilitate relations with the EU. The objective is not to limit in any way the opportunities established between EU law and COTIF, but to review the provisions so that other organisations might enjoy similar opportunities.

In this context this paper reflects on what has been achieved so far and explores the possibilities for further improvement and, in particular, simplification. The aim of this document is to support a discussion, so it does not therefore go into detailed amendment proposals.

2. CONTEXT, SCOPE AND AIMS

2.1. AIM OF THE ORGANISATION

Article 2 COTIF sets out that the aim of the Organisation is to promote, improve and facilitate, in all respects, international traffic by rail, including the following points which are relevant for this paper:

- c) contributing to interoperability and technical harmonisation in the railway field by the validation of technical standards and the adoption of uniform technical prescriptions;*
- d) establishing a uniform procedure for the technical admission of railway material intended for use in international traffic.*

2.2. THE TECHNICAL APPENDICES

Under this umbrella, Appendices F and G to COTIF contribute to these aims. In particular, the APTU Uniform Rules lay down, for railway material intended to be used in international traffic, the procedure for the validation of technical standards and the adoption of Uniform Technical Prescriptions (UTP) and the ATMF Uniform Rules lay down, for railway vehicles and other railway material, the procedure for the admission to circulation or use in international traffic.

The advantage of the COTIF technical provisions could be described as providing both legal provisions and recommended best practices at international level so that states can implement railway interoperability in accordance with their ambitions. The recent developments resulting in a draft proposal for a new Appendix H to COTIF fit in with this.

It is important to understand that not all states have similar ambitions when it comes to interoperability. Article 42 COTIF permits states to declare that they will not apply certain appendices, so that each state can apply the appendices that match their requirements. The practical effect of this is that international railway traffic is improved and facilitated at different levels in different states. This justifies the development of COTIF provisions which cater to the needs of the states with the most far-reaching ambitions. Particular focus should be on states which do not apply EU law, as states which do apply EU law already have a comprehensive legal framework for rail interoperability.

2.3. PRINCIPLES UNDERPINNING FURTHER DEVELOPMENT

It is proposed that the following principles be used as a basis to underpin further development of the technical provisions:

- a) Harmonisation of technical and operational rules is most useful if it is implemented over the widest possible geographical scale. Attracting new Contracting States is therefore relevant.
- b) States may choose the level of interoperability suitable for them, i.e. border crossing of vehicles only or of complete trains. The technical provisions should cater to requirements at all levels and should therefore be appropriately flexible.
- c) Compatibility with the European Union legislation must be maintained to the extent that vehicles authorised in accordance with EU legislation can at the same time be , admitted to operation in accordance with COTIF, as long as all the relevant provisions are equivalent.
- d) The technical provision should consist of:
 - Prescriptive rules to ensure interoperability but limited in scope to what is essential to the aims of the Convention and the scope of its appendices, and
 - Where relevant complemented by recommended practices for efficient and harmonised solutions whose application is voluntary.
- e) The technical provisions of COTIF should be compatible with the possible accession of additional regional economic integration organisations which meet the conditions of Article 38 COTIF. Provided the relevant conditions are met, these organisations should be able to enjoy similar legal relations with APTU, ATMF and the UTPs as the EU currently enjoys.

2.4. PROPOSAL FOR CTE DECISION

The CTE agrees with the principles underpinning further development as set out in point 2.3.

3. COMPARING COTIF WITH EU LAW CONCERNING PRODUCT AND VEHICLE APPROVALS

From their inception the technical provisions of COTIF have been based on EU provisions concerning the interoperability and safety of railways. With the aim of providing some background information, the following sections summarise and compare the main objectives of these provisions.

3.1. EU RAILWAY LAW

Since the early 1990s, the EU has implemented consecutive packages of legislation to harmonise and connect the railway markets of the EU Member States. The objectives include opening the market to provide international and national railway services and opening the railway equipment supply market.

With regard to the opening of the supply market, it was necessary to harmonise the requirements for railway equipment across the EU. To this end, EU railway legislation was aligned with generic EU product legislation referred to as the New Legislative Framework (and previously as the New Approach and Global Approach). This framework not only harmonises the product requirements, but also conformity assessment and market surveillance.

The general principles can be summarised as follows: a directive concerning a particular product group (e.g. medical equipment, machinery, toys, pressure vessels) sets out the so-called essential requirements for a product. No product may be marketed in the EU without meeting the essential requirements. Standards devised by standardisation bodies set out best practices to meet the essential requirements. These are referred to as harmonised standards. Complying with harmonised standards is not mandatory, but provides presumption of conformity with the essential requirements. When not following the harmonised standards the applicant, which is the entity seeking market access for the product, must prove conformity with the essential requirements by other (robust) means. Assessment of conformity with the essential requirements typically involves a Notified Body, which performs third party (independent) assessments. In the end the applicant or manufacturer declares full responsibility for the product's conformity with all legal requirements and will be liable if it later turns out that there are issues with the product.

For the product groups concerned, this EU framework replaces national legislation. It therefore avoids manufacturers' having to receive permission based on national provisions in each state, making it easier to market their product.

The EU Interoperability Directive is based on this framework and distinguishes interoperability constituents (ICs), subsystems (such as rolling stock and infrastructure) and vehicles.

Conformity assessment of subsystems and (most) ICs must be performed by a Notified Body (third party assessor) at the request of an applicant or the manufacturer. Unlike other New Legislative Framework Directives, the checks by a Notified Body are not directly on the basis of the Directive, but, as the railway system is rather complex, on the basis of an additional layer of specifications referred to as TSIs (technical specifications for interoperability). The Notified Body will check whether the subsystem or IC complies with all the applicable TSI provisions. The applicant (in case of subsystems) or the manufacturer (in case of ICs) will bear full product responsibility and has to declare on his sole responsibility that all legal requirements have been complied with.

Vehicles are composed of subsystems and ICs. Vehicles require authorisation by an authorising entity (the EU Agency for Railways or the National Safety Authority). There is no vehicle-level third party assessment.

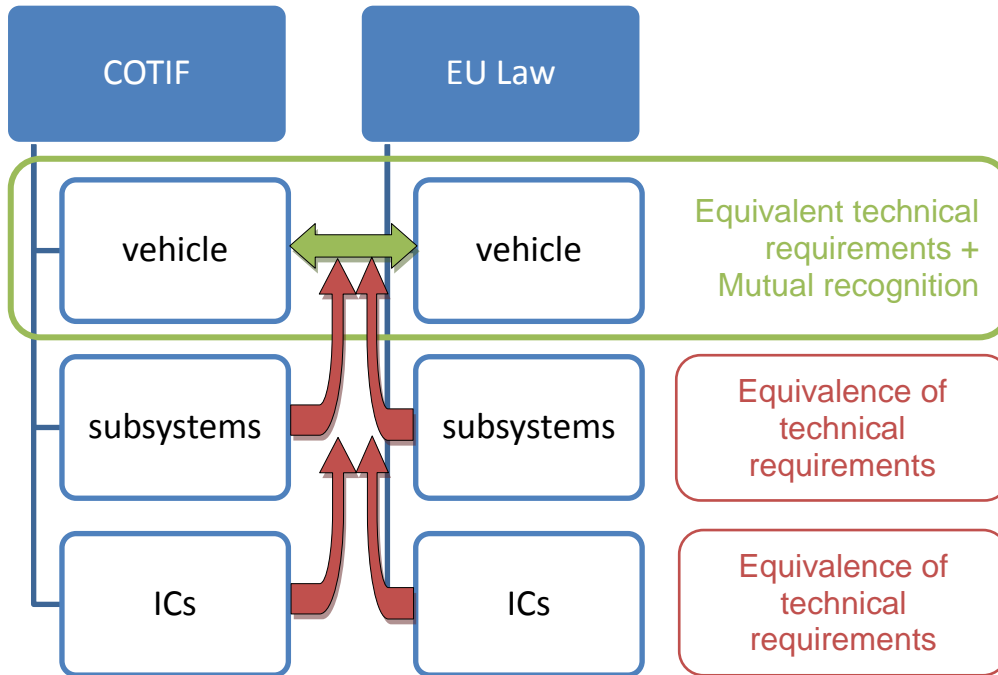
Vehicles which are in conformity with an authorised vehicle type will be authorised on the basis of a declaration of conformity to that type submitted by the applicant.

3.2. COTIF

Unlike EU law, COTIF has no objective in terms of opening the railway supply market. This means that meeting COTIF provisions will not give automatic access to the EU market (or any other market) and products approved according to EU law have no automatic right to be marketed in non-EU states which apply the relevant COTIF provisions.

Nevertheless, the COTIF provisions have largely been harmonised with EU railway law. On this basis, assessments and admissions (OTIF)/authorisations (EU) of railway vehicles (including their ICs) are mutually recognised in all EU and non-EU OTIF Member States that apply APTU and ATMF as far as using these vehicles in international traffic is concerned.

By analogy with EU law, COTIF also has dedicated provisions for vehicles, subsystems and ICs. The difference is that the aim of the COTIF provisions is only to provide for mutual acceptance of vehicles; the subsystems and ICs are subsidiary to this aim.



Whereas an important component in EU law is the declaration by an applicant, contracting entity or manufacturer that an IC or subsystem meets all the requirements, which means that it assumes full liability, such declarations are not mandatory in COTIF.

At present, COTIF provisions for subsystems only cover the subsystem rolling stock. There are currently no harmonised provisions for on-board CCS subsystems. Therefore, a vehicle admission for a vehicle including on-board CCS under OTIF is not equivalent in technical scope to an EU vehicle authorisation. If equivalent CCS specifications were to become available under COTIF the technical scope could become the same. All provisions for vehicles without CCS (e.g. freight wagons) have already been harmonised.

As in EU law, the principle of third party assessment of ICs and subsystems is required in COTIF. A significant difference between EU law and COTIF is that in COTIF, the responsibilities for the different parties involved in the admission of vehicles can be adjusted, to a certain extent, for each state. Each state must notify the Secretary General of OTIF of its Competent Authority, which issues vehicle admissions. It is then up to the Competent Authority whether it performs conformity assessments itself or whether it transfers the competences to a public or private assessing entity. This means that in COTIF the third party assessor and the authorising entity can be the same body.

4. OBJECTIVES FOR IMPROVEMENT AND SUMMARY OF PROPOSALS

4.1. OBJECTIVES

By transposing the EU framework, some complexities for the EU have been copied and there may be a potential to improve some provisions, in particular in the following areas:

1. Modifying legal relations between APTU, ATMF and the UTPs on the one hand, and EU law on the other, in such a way that other regional organisations can also potentially enjoy similar legal relations as the EU now has.
2. Removing complexities related to approval (consisting of verifications, declarations, certifications etc.), which currently takes place at three levels, i.e. IC-level, subsystem-level and vehicle-level, by reducing it to one level only: the approval of vehicles.
3. General improvements to better reflect the purpose and scope of the provisions on the one hand and the roles and responsibilities of authorities, railway entities and the OTIF secretariat on the other.

COTIF and regional organisations

Simplification

Roles and responsibilities

4.2. SUMMARY OF PROPOSALS FOR IMPROVEMENT

The following subjects are elaborated in more detail in the remainder of this document:

- Chapter 0: Removing the 2-column layout of UTPs.
- Chapter 0: Modifying Article 3a ATMF to clarify that OTIF vehicle admissions and EU vehicle authorisations have different meanings.
- Chapter 7: Discussing the feasibility of removing the concept of interoperability constituents and replacing it with the possibility of generic component approval.
- Chapter 0: Removing the provisions concerning the optional UTP declaration of verification of subsystems.

5. REMOVING THE 2-COLUMN LAYOUT OF UTPs

5.1. INTRODUCTION

APTU requires UTPs to be in a 2-column layout, where the right-hand column reproduces EU law.

COTIF and regional organisations

The proposal is to migrate gradually to a situation where EU provisions are no longer reproduced in the UTPs.

5.2. SUGGESTIONS FOR IMPROVEMENT

As a first step, delete or revise Article 8 § 9 so that it is no longer required to reproduce EU law in UTPs and that instead, a cross reference table should list the differences between the COTIF UTPs and

the EU TSIs and, in the future, the provisions of any other regional organisation that might accede to COTIF.

As a second step the UTPs should be modified accordingly.

5.3. JUSTIFICATION

APTU Article 8 § 9 states that: *The UTP shall have a two column format. Text which appears in full width without columns is identical to corresponding texts of the European Union Technical Specifications for Interoperability (TSI). Text which is split into two columns is different for the UTP and for the corresponding TSI or other corresponding European Union regulations. The left-hand column shows the UTP text (OTIF regulations), while the right-hand column shows the European Union TSI text. On the far right the TSI reference is indicated.*

There is an obvious practical use for this requirement to establish UTPs in a 2-column format, as it allows for easy cross-reference between the EU provisions (mostly set out in TSIs) and the UTPs. This is particularly useful for people who have to work with both EU law and COTIF.

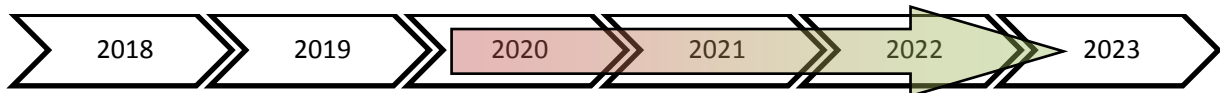
At the same time this requirement has two weaknesses. Firstly it is not a sustainable solution should other regional organisations, in addition to the EU, accede to COTIF and wish to have a similar way of indicating equivalence between COTIF and their provisions. One could imagine a three column layout, but this would be both impractical and difficult to keep up-to-date in case of changes in either of the areas of law. Secondly, COTIF is not only applied in relations between EU and non-EU States but also between non-EU States. It is questionable as to whether states which have no legal relations with the EU concerning railways need to be informed, through UTPs, of the provisions applicable in the EU?

5.4. PLANNING AND IMPLEMENTATION

Article 8 APTU prescribes that UTPs must have a 2-column layout and it does not provide flexibility. Therefore, the removal of the 2-column layout from UTPs can only take place after APTU has been modified.

A modified APTU Article 8 § 9 could for example read: “For the purpose of Article 3a ATMF, provisions of regional economic integration organisations in the meaning of Article 38 COTIF may be declared equivalent with the provisions of a UTP. These equivalences and their exact scope shall be indicated in the UTP concerned.”

Decisions to modify Article 8 APTU are in the competence of the Revision Committee. The Revision Committee has no fixed meeting schedule, but convenes approximately once every three years. Only after APTU has been modified can the subsidiary UTPs be modified by the Committee of Technical Experts.



If the normal schedule of meetings of the Revision Committee is followed, it would convene for its 27th session in 2020/2021, meaning that the modification of UTPs could start from 2021/2022 onwards.

5.5. PROPOSAL FOR DECISION

1. The CTE takes note of chapter 5 and agrees with the suggestion for improvement.

2. The CTE mandates the WG TECH to prepare a proposal to amend APTU for review by the CTE 12 in 2019, with a view to submitting it to the 27th Revision Committee for decision.
3. After APTU has been amended the UTPs should be amended accordingly.
4. For each amended UTP and each future new UTP which is not in a 2-column layout, an equivalence table should identify the general equivalence and the relevant differences between the UTP in question and legal provisions of regional organisations that have acceded to COTIF.

6. MODIFICATION OF ARTICLE 3a ATMF

6.1. INTRODUCTION

Article 3a ATMF describes how EU law concerning railway vehicle authorisation interacts with the vehicle admission provisions of ATMF. These provisions are very important because they allow simultaneously:

COTIF and regional organisations

- EU States to pursue further mutual integration of their railway systems, whilst continuing to apply ATMF, because in their mutual relations EU States could apply EU law and not ATMF;
- Non-EU States to use ATMF as a basis for the admission of railway vehicles so that these can be used in international traffic;
- The mutual acceptance of EU vehicle authorisations and non-EU ATMF vehicle admissions.

The proposals aim at improving the interface provisions concerning EU law and ATMF and creating the possibility for other regional organisations to enjoy, in the future, similar legal interfaces with ATMF.

6.2. SUGGESTIONS FOR IMPROVEMENT

In the future, more regional organisations may wish to accede to COTIF in a similar way to the EU. Multiple disconnection clauses would not necessarily lead to problems, but a complex set of interactions between multiple vehicle admission regimes probably would. For this reason ATMF should define the conditions under which a regional (e.g. EU) authorisation can be considered valid as an ATMF admission as well, but not vice-versa.

For this reason, Article 3a ATMF should be modified so that:

- If specific conditions which also apply today are met, vehicles authorised in the EU will also continue to be admitted in accordance with ATMF.
- Vehicles with an ATMF admission will no longer be deemed to be authorised in the EU. Vehicle admissions are valid in any state that applies ATMF, including the EU States which apply ATMF. It is not therefore necessary for these vehicles to be authorised in addition.
- Any future regional organisation acceding to COTIF could enjoy similar legal relations, provided their technical provisions for vehicles are equivalent to those of COTIF.

6.3. JUSTIFICATION

COTIF, and as a result APTU, ATMF and all subsidiary provisions as well, have a scope which is limited to international traffic. The EU Interoperability Directive is not limited to international traffic (i.e. it also covers vehicles used only domestically). Because of this and other reasons, EU vehicle authorisations and ATMF vehicle admissions are not identical concepts.

Validity of OTIF admission in the EU: In accordance with Article 6 § 1 ATMF, the general principle is that vehicle admissions are valid in all states which apply ATMF. Of course the use of vehicles is limited to the conditions set out in the certificate of operation, which may cover only a limited number of states. At present, all EU Member States with a railway network are Member States of OTIF and all apply ATMF, meaning that the ATMF admission is valid across the EU. As the admission already provides a basis for the use of vehicles in international traffic, it seems superfluous for these vehicles to be authorised in the EU as well.

In addition, the concept of EU authorisation may change over time, independently of COTIF, which has for example happened through the 4th railway package, which has changed the concept of “authorisation for placing in service” to “vehicle authorisation for placing on the market”. As the EU has no full control over the development of COTIF and in particular the timing of modifications, it is possible that unwanted discrepancies may appear.

If, for its internal purposes, the EU were to find it necessary to continue defining an ATMF admission as also being valid as an EU authorisation, this could of course be regulated in EU law. The provisions would then be fully under EU control and, provided these did not limit the validity of ATMF admissions, they would be in accordance with COTIF. In a similar spirit, non-EU States could, at their own initiative, e.g. also define in national law that an ATMF admission is also considered as an admission for domestic traffic.

COTIF and the mutual relations between EU States: The conditions set out in Article 3a ATMF provide for EU law’s taking precedence over ATMF for mutual relations between EU Member States. Therefore, when approving vehicles, EU States will in principle only apply EU provisions and not ATMF, meaning that all new vehicles intended to be first used in EU MSs will be subject to authorisation for placing on the market issued in accordance with the EU Interoperability Directive.

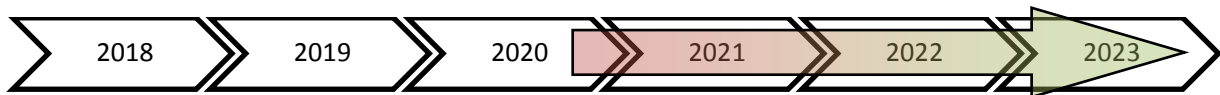
In the future, other regional organisations could enjoy similar provisions of hierarchy and disconnection as the EU has in accordance with these proposals.

Validity of EU authorisation in the OTIF area: EU authorisations are also valid as ATMF admissions at the same time, which avoids undue burdens for EU based applicants. This concept should be kept in ATMF as long as the relevant parts of COTIF and EU law remain equivalent. If the conditions of equivalence are no longer met, the provision can be removed in accordance with the COTIF procedures.

In the future, other regional organisations could enjoy similar legal relations for the acceptance of vehicle authorisation as the EU, provided their regional provisions were fully equivalent with the relevant provisions of COTIF. In this case, ATMF Article 3a should be amended to recognise the vehicle authorisations’ validity as ATMF admissions as well.

6.4. PLANNING AND IMPLEMENTATION

Decisions to modify Article 3a ATMF are in the competence of the Revision Committee. The Revision Committee has no fixed meeting schedule, but convenes approximately once every three years. Only after APTU has been modified can the subsidiary UTPs be modified by the Committee of Technical Experts.



If the normal schedule of meetings of the Revision Committee is followed, it would convene for its 27th session in 2020/2021, meaning that the modification of UTPs could start from 2021/2022 onwards.

6.5. DRAFT PROPOSAL FOR DECISION

1. The CTE takes note of chapter 6 and agrees with the suggestions for improvement.
2. The CTE mandates the WG TECH to prepare a proposal to amend ATMF for review by the CTE 12 in 2019, with a view to submitting it to the 27th Revision Committee for decision.

7. COMPONENT CERTIFICATION INSTEAD OF ICs

7.1. INTRODUCTION

The current COTIF provisions concerning interoperability constituents can be summarised as follows:

Simplification

- Some components are categorised as ICs.
- ICs are components that are intended to be integrated into a subsystem; e.g. the IC wheelset will be integrated into the subsystem rolling stock.
- The conformity assessment of ICs may take place either at IC level or as part of the subsystem verification. (Note: in contrast to COTIF, in EU law verification at IC level is mandatory)
- If the IC is assessed as a component the manufacturer must issue a declaration of conformity or suitability for use. Such a declaration is not required if the component is assessed as part of the subsystem.

The COTIF technical provisions could be simplified by focussing more on their purpose; the international acceptance of vehicles.

7.2. SUGGESTIONS FOR DISCUSSION

The main idea would be to discontinue the concept of Interoperability Constituents (ICs) by means of the following measures:

- Remove the concept of interoperability constituents, as well as their verification processes and procedures from the UTPs, but retain the IC requirements at subsystem level.
- As a consequence, also remove the need for declarations of conformity or suitability for use for ICs.
- Introduce the principle that any component of which at least one parameter can be assessed independently from the vehicle(s) it is intended for may be certified separately.

As a starting point and to facilitate a discussion, the Secretariat suggests the following implementing ideas:

- A component would be any element, complete assembly or subassembly or equipment, tangible or intangible, such as software, intended to be incorporated into a subsystem but which is manufactured or, e.g. in case of software, is developed in a separate process.
- Assessment of a UTP parameter at component level (instead of at vehicle level) is permitted if the nature of the component allows that at least one UTP parameter of the component can be assessed before it is integrated into the subsystem.
- The assessment procedures for subsystems apply mutatis mutandis to components (as at present for the subsystem rolling stock, there are 3 options: SB+SD, SB+SF, SH1).
- A component may be suitable for one or for more than one particular vehicle type.
- If the type of component is intended for use in more than one vehicle type, an intermediate statement of verification (ISV) should be issued by the assessing entity. The ISV indicates which UTP parameter(s) were assessed, including the results of the assessment. The ISV must indicate whether the component is suitable for generic use in any vehicle or for use only in particular types of construction. It should be noted that the concept of ISV already exists in EU law and in COTIF.
- The parameters of a component which have been approved at component level as indicated in the ISV do not require assessment again at vehicle level; all other parameters do.

The simplification would come at the level of the UTPs. As a first step, the vehicle related UTPs could be modified so that sections related to ICs are integrated into the provisions which are currently at subsystem level. UTP GEN-D could be simplified by removing the provisions concerning the assessment procedures for IC assessment and the provisions concerning declarations.

In addition to simplification, this would also add flexibility and potentially improve efficiency as component manufacturers and vehicle system integrators can select the most efficient system of approval. In addition, this would facilitate the replacement of components in the scope of maintenance and repair of vehicles.

According to this logic the UTPs covering requirements related to vehicles can be restructured and simplified by removing the concept of ICs. Any existing IC requirement would become a subsystem requirement. UTP GEN-D could be modified so as no longer to contain procedures for the assessment of interoperability constituents.

The above should be coordinated with the EU to ensure that the two legal frameworks remain aligned at every stage in order to ensure that no negative effects would occur either for vehicles admitted in accordance with COTIF when used in the EU or for vehicles authorised in the EU used outside the EU under COTIF.

It might be useful to analyse the possibility of referring to or recommending the use of the forthcoming ISO 22163 concerning “railway applications -- Quality management system -- Business management system requirements for rail organization”. One of the aims of this forthcoming ISO standard is for companies to demonstrate their ability to consistently provide products and services that meet customer and applicable statutory and regulatory requirements; in particular the fact that it is a global standard is of relevance to COTIF.

7.3. JUSTIFICATION

In order to further its aims concerning the common market and alignment of the rail supply market with other sectors, the EU has adopted a legal framework for the verification of ICs and subsystems

and the authorisation of vehicle types and individual vehicles before placing any of them on the EU market. For the sake of compatibility between the EU and COTIF provisions, this EU framework has partly been taken over in COTIF. Not all these provisions serve a purpose in COTIF, but add unnecessary complexity.

- ➔ A more detailed analysis of the provisions concerning ICs and subsystems and their use in EU law and COTIF can be found in Annexes 1 and 2 to this document.

Unlike vehicles, which can be used internationally on the basis of COTIF, ICs cannot be sold internationally solely on the basis of COTIF, as COTIF is not a trade agreement. At the same time, there is nothing to prevent states from also using COTIF provisions in the scope of their industrial and commercial policies. If a non-EU manufacturer of ICs would like to sell its IC products on the EU market, it could not assert rights under COTIF and would in principle have to apply EU legislation, including IC conformity assessment. Similarly, EU-produced ICs cannot be marketed outside the EU only on the basis of rights asserted under COTIF.

Instead of the concept of ICs, it would be useful to maintain a concept in future revisions of the UTPs for component approval. However, this should not be limited to an arbitrary list of components referred to as ICs, but should be extended to facilitate component approval for new vehicles, as well as for replacement in the scope of repair and maintenance (spare parts). Each manufacturer of components could decide to have its components assessed. The use and replacement of components in internationally used vehicles could be facilitated by a framework for the mutual recognition of components.

7.4. IMPLEMENTATION

Implementing these improvements would require modifications at several levels.

- a) Modify ATMF by replacing the definition in Article 2 g) with a definition of “component”. This modification is in the competence of the Revision Committee.
- b) Modify APTU Article 8 concerning the content of UTPs by deleting or modifying § 4 d). This modification is in the competence of the Revision Committee.
- c) Modify UTP-GEN B (subsystems) so that the subsystem rolling stock is replaced by the subsystem “vehicle”.
- d) Modify the structural UTPs by integrating the requirements for ICs with all other requirements and include provisions allowing conformity assessment at component level.
- e) Modify UTP GEN-C (technical file) so that the provisions concerning ICs are modified accordingly.
- f) Modify UTP GEN-D (assessment procedures) by removing the assessment procedures concerning ICs and by introducing a general concept for the assessment of components.

7.5. DRAFT PROPOSAL FOR CTE DECISION

1. The CTE takes note of chapter 7 and requests the WG TECH, in coordination with the EU, to analyse and discuss the ideas further.
2. Where the outcome of the analysis and discussion is favourable, WG TECH is requested to report its findings to the CTE 12 in 2019, including proposals for the next steps and, where relevant, including draft amendments.

3. Where the analysis is not favourable, WG TECH is requested to report its concerns and, where relevant, prepare justified alternative proposals.

8. REMOVING DECLARATIONS IN THE SCOPE OF VEHICLE ADMISSION

8.1. INTRODUCTION

Where in EU law, declarations by manufacturers and applicants concerning the legal compliance of their ICs and subsystems form an integral part of the EU product marketing framework, under COTIF these declarations are in principle optional and do not serve the same purposes as in the EU.

Roles and responsibilities

The modifications proposed mainly concern UTP GEN-D, which prescribes assessment procedures for ICs and subsystems.

The current requirements concerning declarations today can be summarised as follows:

- At the level of subsystems, UTP declarations of verification are optional. However, the law applicable in the states concerned may require such declarations. The latter is particularly the case in states applying EU law.
- At the level of ICs, declarations of conformity or suitability for use are required to be issued by the manufacturer of the IC. This should however be seen in the context that it is not mandatory in COTIF for ICs to be assessed separately. This means that if an IC is assessed as part of the subsystem, it is probable that no declaration will be issued.

Chapter 7 of this paper addresses ICs. For this reason the proposals will focus on declarations for subsystems.

8.2. SUGGESTIONS FOR IMPROVEMENT

The following modifications would be required:

- Remove the concept of voluntary declarations of UTP verification of subsystems as set out in UTP GEN-D.
- Amend UTP GEN-C, which describes the content of the technical file, by deleting the reference to declarations of UTP verification.

Note: it is not suggested that the concept of UTP certificates issued by the assessing entities be changed.

8.3. JUSTIFICATION

The overarching objective of APTU, ATMF and the UTPs is that state authorities admit vehicles to international traffic (only) if they are in accordance with uniform technical provisions and are approved following harmonised procedures.

Some States, in particular those which apply EU law, require the applicants for vehicle admission to declare on their sole responsibility that all legal requirements have been complied with. Such a declaration has a particular legal value. The legal value of a declaration of verification is not regulated

in COTIF, so a declaration may have a different meaning and may come with different liabilities and responsibilities in different states. This is amplified by Article 18 of ATMF, which lays down that “...the legal consequences resulting from failure to comply with these Uniform Rules and the UTP shall be regulated by the provisions in force in the Contracting State of which the competent authority has granted the first admission to operation, including the rules relating to conflict of laws.”

Moreover the content covered by a declaration is not harmonised between COTIF and EU law; in the European Union, for example, an applicant for vehicle authorisation will declare not only that all the TSI requirements are complied with, but also all other applicable legal requirements. The declaration may therefore cover elements which go beyond what is regulated by COTIF, such as specific environmental requirements. Declarations as specified in the UTP GEN-D are limited to compliance with the UTPs.

Lastly, as declarations are not mandatory, some states could already choose not to use the concept of declarations at all under the existing provisions. The reverse would also be true; even without the specification of declarations in COTIF, under the provisions applicable on their territory, states could still require declarations from entities involved in producing or checking vehicles or components, including the responsibilities and liabilities linked to these declarations.

All these elements lead to the proposal to remove the optional provisions concerning UTP declarations of verification of subsystem.

Of course such a declaration could only be required for the first admission of a vehicle and not for additional admissions, i.e. extension of the area of use of a vehicle. This is no different from the current situation, as declarations for subsystems are already optional in COTIF. In such cases the competent authorities have to accept the results of the assessments made before, including possible declarations. This is the general concept of Articles 6 and 6a of ATMF and there is no suggestion to change this.

8.4. PLANNING AND IMPLEMENTATION

The modifications would fall within the competence of the CTE and could therefore be implemented relatively quickly.

The modifications initially concern UTP GEN-D and UTP GEN-C. If the CTE 11 has a favourable view of the suggestions, proposals could be prepared for adoption by CTE12 in 2019.



8.5. DRAFT PROPOSAL FOR CTE DECISION

1. The CTE takes note of chapter 8 and agrees with the suggestions for improvement.
2. The CTE mandates the WG TECH to prepare for CTE 12 in 2019 proposals for decision to amend UTP GEN-C and UTP GEN-D.

ANNEX I:

INTEROPERABILITY CONSTITUENTS

In EU law, the independent assessment of and declarations for ICs are generally mandatory, whereas under COTIF, it is not mandatory to assess ICs separately. If not assessed separately, they must be assessed as part of the subsystem. In order to avoid ambiguities or discrepancies between EU and national law on the one hand and COTIF on the other, COTIF makes clear that assessment of ICs as part of the subsystem is only possible when permitted by the law applicable in the state concerned.

Interoperability constituents in EU law

The framework allows manufacturers of ICs to certify and place their (IC) products on the EU market independently from rolling stock manufacturers. This allows ICs to be incorporated into different subsystems designed and manufactured by different entities. ICs are defined in the TSIs and if a product is not defined as an IC in the TSIs, it cannot be marketed as an IC, so the list of ICs in the TSIs is exhaustive.

Examples of ICs in the context of rail vehicles are wheels, pantograph, rear-end signals, automatic centre buffer couplers and inlet connections for water tanks. The complexity of designing and manufacturing the different ICs varies greatly (a water inlet connection is not as complex as an automatic coupler); in addition, their relevance to the safety of the rail system also differs.

The principle in EU law is that if a vehicle is fitted with a particular IC, the IC should have been assessed and certified as such before it was placed on the market, i.e. as an independent product. Not all types of vehicles will be fitted with all ICs (e.g. a diesel locomotive is unlikely to have a pantograph). Also, some ICs, such as the automatic centre buffer coupler, are not mandatory per se (other types of couplers may be used), but if a component of this nature is incorporated into a subsystem, then it must be an IC that conforms to the TSI.

The TSI parameters which concern the integration of the IC into the subsystem and the subsystem into the vehicle must, where relevant, subsequently be verified during conformity assessment of the subsystem (called 'EC' verification) or integration of the subsystem into the vehicle.

In order to take account of this variety and to avoid an undue burden for manufacturers, there are no fewer than ten different assessment modules (methods) for ICs. The TSIs define which modules are permitted for which IC.

Following application of (most of) the assessment modules for ICs, the manufacturer must issue a declaration of conformity and/or suitability for use. In so doing, the manufacturer declares, on his sole responsibility, that the IC meets all the TSI requirements and, where relevant, requirements from other EU legal acts applicable to it. For most modules the manufacturer is required to employ a Notified Body, which acts as a third party assessor. If so required by the assessment module, the Notified Body issues a certificate.

Interoperability constituents in COTIF

As it is not the aim of COTIF to open the market, the need for ICs in COTIF is not obvious. Nevertheless, in order to maintain similarity of structure between the EU TSIs on the one hand and the UTPs on the other, the UTPs also define parameters for ICs. For COTIF the ICs may be assessed separately, but they may also be assessed as an integral part of the vehicle.

The situation in COTIF can be summarised as follows:

- APTU Article 8 § 4 d) requires UTPs to determine the ICs and their interfaces which are necessary to achieve interoperability. This is equivalent to how ICs must be covered in EU TSIs. This should be understood in the context that UTPs and TSIs need to be equivalent in order to allow the mutual acceptance of vehicles.
- ATMF Article 2 g) lays down a definition of ICs and Article 3 states that for the admission of ICs the requirements for the admission of vehicles apply *mutatis mutandis*. There are no further requirements in ATMF concerning ICs.
- Neither APTU nor ATMF stipulate whether ICs should be assessed for conformity with the UTPs independently or as part of the subsystem.
- The structural UTPs and UTP GEN-D establish the principle that the separate assessment of ICs is not mandatory in COTIF. However, separate assessment may be required by the law applicable in the state concerned.
- If not assessed separately, the components/parts of a subsystem corresponding to an IC must be assessed for compliance with all requirements as part of the subsystem. In such a case, no separate declaration for the IC will be issued. However, if an IC is assessed separately by application of the relevant modules, the declaration of conformity or declaration of suitability for use must be issued by the manufacturer.

Even if a declaration of conformity or declaration of suitability for use is issued by the manufacturer, it does not guarantee that this declaration is accepted by each state as a basis for marketing the product in the state concerned.

It is worth mentioning here that the Explanatory Report to COTIF (the part concerning ATMF) states the following:

With regard to Article 3 - Admission to international traffic: The possibility of the technical admission of construction elements is useful because this allows simplification of subsequent technical admission, e.g., of a vehicle as a whole. However, in the case of the technical admission of a vehicle whose construction elements have already been approved, it is necessary to examine the way in which the elements operate together. It is self-evident that the approval of construction elements cannot replace the approval of a vehicle as a whole (Report on the 15th session, p. 40/41).

With regard to Article 8 - Prescriptions applicable to railway infrastructure: The procedure for admission of railway infrastructure to operation can remain subject to the national law. This, however, does not necessarily apply to the construction elements and equipment which are produced and technically approved in a Contracting State, but which are not used in that State, being used only in other Contracting States, e.g. rails, electric power supply installations. On this point, the APTU Uniform Rules and ATMF Uniform Rules are of importance for industrial and commercial policy.

The following summary table lists the different declarations and certificates for ICs when assessed independently from the subsystem.

UTP GEN-D Modules for the procedures for assessment of interoperability constituents and corresponding certificates and declarations

<i>Module</i>	<i>Name</i>	<i>Assessing entity</i>	<i>Manufacturer</i>
CA	Internal production control	-	Declaration of conformity
CA1	Internal production control plus product verification by individual examination	Certificate of conformity	Declaration of conformity
CA2	Internal production control plus product verification at random intervals	Certificate of conformity	Declaration of conformity
CB	Type examinations	Type examination certificate	-
CC	Conformity to type based on internal production control	-	Declaration of conformity
CD	Conformity to type based on quality management system of the production process	Quality management system approval	Declaration of conformity
CF	Conformity to type based on product verification	Certificate of conformity	Declaration of conformity
CH	Conformity based on full quality management system	Quality management system approval	Declaration of conformity
CH1	Conformity based on full quality management system plus design examination	Quality management system approval Design examination certificate	Declaration of conformity
CV	Type validation by in-service experience (suitability for use)	Certificate of suitability for use	Declaration of suitability for use

ANNEX 2:

CONFORMITY ASSESSEMENT OF SUBSYSTEMS

There are several subsystems, as defined by UTP GEN-B. This section deals only with conformity assessment of the subsystem rolling stock, as this is the most relevant subsystem in the scope of ATMF. Nevertheless, other subsystems, such as infrastructure and energy, are also relevant to international traffic. The admission, including conformity assessment, of the latter is however subject to the provisions in force in the Contracting State in which the infrastructure is located (cf. ATMF Article 8 § 2).

Vehicles may consist of a combination of two subsystems: rolling stock and the on-board control-command and signalling (CCS). As the latter is not (yet) specified in UTPs, approval and admission in accordance with COTIF is for the time being limited to the rolling stock subsystem. If a vehicle also has an on-board CCS, in the absence of COTIF provisions its approval is subject to the provisions in force in the state concerned.

For these reasons this analysis deals only with the conformity assessment of the rolling stock subsystem.

EU law

The general principles of the EU legal framework are discussed in point 3.1.

Before a vehicle can be authorised, its subsystem(s) must be subject to so called “EC” verification. In this process the subsystem(s) are assessed for conformity to demonstrate that they comply with all applicable legal provisions.

For the ‘EC’ verification the applicant issuing the EC declaration of verification for a mobile subsystem chooses a Notified Body recognised or accredited for this purpose. At the end of the verification procedure the Notified Body will issue a certificate of verification certifying that the subsystem complies with all applicable TSIs.

Where relevant, a so-called Designated Body will also check and certify that the subsystem complies with the national rules notified for this purpose.

Based on the certificate(s) of verification, the applicant will declare, on his sole responsibility, that the subsystem(s) comply with all the legal requirements. Based on this EC declaration of verification the subsystems may be placed in service or on the EU market¹ (note: they may not yet be operated).

Before rolling stock - where relevant in combination with an integrated on-board part of CCS - may be operated as a vehicle, the vehicle must first be authorised. Vehicles are authorised at the request of an applicant by the authorising body, which is either the National Safety Authority or, in future, the EU Agency for Railways as well.

For this purpose the applicant for vehicle authorisation must provide the authorising body, in addition to the “EC” declaration of verification of each subsystem, with evidence of:

- Technical compatibility between the vehicle and the network(s) on which the vehicle is intended to be used (defining the area of use), and

¹ Placing on the market of mobile subsystems is a concept introduced by the EU’s 4th railway package, in Directive (EU) 2016/797. Until this Directive is transposed by all EU Member States the subsystems concerned may be the subject of placing in service in accordance with Directive 2008/57/EC.

- Where relevant (i.e. if the vehicle is composed of the subsystems RST and CCS), the technical compatibility and safe integration of the subsystems within the vehicle.

COTIF

As explained above, the technical provisions and the assessment procedures of subsystems are equivalent in COTIF and EU law. This ensures that if a subsystem complies with the technical provisions in EU law (TSIs), it will also comply with the technical provisions in COTIF (UTPs) and *vice versa*.

The responsibilities linked to the vehicle admission/authorisation and the liabilities are not the same under COTIF and EU law. Under COTIF, a vehicle's certificate of operation is issued by the competent authority of a Contracting State and constitutes proof of the vehicle's admission to international traffic.

It could be said that by applying COTIF, non-EU Member States' authorities may claim a bigger role and take more responsibility for conformity assessment and vehicle admission than EU Member States can under EU law.

Approval of vehicles under COTIF:

- The objective of conformity assessment is to establish whether a subsystem complies with all UTP requirements applicable to it so that a competent authority can use the results of conformity assessment when issuing vehicle admission in accordance with ATMF.
- The applicant applies for assessment by an assessing entity (or the competent authority if this is also the assessing entity).
- Assessing entities must issue a certificate of verification and document the assessments carried out in an assessment report.
- The issuing of a declaration of verification by the applicant is not mandatory in COTIF.

UTP GEN-D Modules for the procedures for assessment of subsystems and corresponding certificates and declarations

<i>Module</i>	<i>Name</i>	<i>Assessing entity</i>	<i>Applicant</i>
SB	Type examination	UTP type examination certificate	-
SD	Quality management system of the production process	Quality management system approval UTP certificate of verification	(Optional) UTP declaration of verification
SF	Verification based on product verification	UTP certificate of verification	(Optional) UTP declaration of verification
SH1	Verification based on full quality management system plus design examination	Quality management system approval UTP design examination certificate UTP certificate of verification	(Optional) UTP declaration of verification