Editorial

One Hundred and Fifty Years of History

The international railway organisation is actually descended from the European Passenger Train Timetable Conference (CEH/EFK) created in Cologne in 1872 and re-established after the First World War in Bern in 1922. CEH/EFK was followed in 1923 by the European Freight Train Timetable Conference (CEM/EGK) which was based for many years in Prague.

The conferences have continued to fulfil their mission of coordinating international timetables, overcoming political crises and accommodating technological developments. The need to continuously adapt to traffic flows and to the policy of liberalised network access handed down from Brussels in the early 1990s sparked a process of major transformation within the two Conferences, resulting in their merging to form Forum Train Europe (FTE) in 1997.

Since FTE can thus claim to be the oldest railway organisation in Europe, it seemed appropriate to publish a book tracing its evolution. We were quickly introduced to the fascinations of its copious archives at SBB Historic in Windisch (Switzerland) which we then systematically exploited. The material we were unable to include in this publication can be explored at a later date.

For the time being, however, this detailed and lavishly illustrated publication will acquaint international timetable specialists with the rituals associated with timely planning that became part of the regular conferences, while lay readers will be able to appreciate the complexity of timetable coordination. All will recognise that the delegates attending these timetable conferences have always been committed to quality and rigour in their efforts to serve the passengers and shippers who have remained loyal to Europe's railways.

Georges Ribeill

Matteo Soldini

European Passenger Timetable Conference CEH/EFK. November 1949 in Lausanne (Switzerland). © SBB Historic

Summary

This magazine was realised by La Vie du Rail. www.laviedurail.com. Legal deposit : 2nd term 2022 - ISBN : 978-2-37062-106-1. Printed at RAS Imprimerie - France (95).

150 years of Forum Train Europe FTE / European Timetable Conferences

Preface by the Executive Board of FTE

Stephan Pfuhl (President)
Maurizio Capotorto (Vice-President)
Catherine Perrinelle (Head of Commission for Passenger Traffic)
Thorsten Dieter (Head of Commission for Freight Traffic)
Wolfgang Fritz (Board member)
Edgar Schenk (Managing Director)

In 1872, the first European timetable conference for passenger traffic took place in Cologne. At that time, the railway companies concluded that timetables and production concepts had to be coordinated across borders. The first conference for freight traffic took place somewhat later, in 1924 in České Budějovice. Here, too, the conferences proved to be beneficial for the participating companies.

It seems almost unbelievable that today - 150 years later - the timetable conferences are still being held and are an important element in the creation of European rail timetables.

Although mountains of paperwork have been replaced by digital solutions in the intervening years, much is still the same today as it was in the past, namely the goal of creating and coordinating customer-oriented timetables and cost-optimised production concepts. And one thing has also remained the same: the participants of the timetable conferences are railway professionals in mind, heart and soul. Many of them have shaped and advanced the organisation and European rail transport over many years.

Of course, much has changed in such a long time, as this commemorative publication shows. In 1997, for example, the European passenger and freight traffic conferences gave rise to the independent organisation Forum Train Europe (FTE). Later, in 2004, with the separation of infrastructure and transport, the infrastructure managers were transferred to a new organisation. This marked the birth of RailNetEurope (RNE), the association of infrastructure managers. FTE became the association of Railway Undertakings (RUs), service providers and applicants as we know it today.

From the moment when the infrastructure managers were split off from FTE into the new organisation RNE, FTE had to be clear about its orientation if it was to have a future. The infrastructure managers remained "monopoly companies" and it was clear that each of them became a member of the RNE association. The RUs, however, were increasingly exposed to intramodal competition, first in freight transport, later also in passenger transport. Why should an RU become or remain an FTE member and at the same time sit at the same table as its competitors?

The timetable conferences remained an important product of the new FTE, but the portfolio had to be expanded. Thus, topics that strengthen the entire sector are included. Today's associations and its working groups are very much in the spirit of the founders 150 years ago: all work within the FTE serves to strengthen and further develop the sector. Especially today in the environment of the "Green Deal" and CO_2 targets, rail transport must be strengthened and play an important role in the mobility and transport market. Even if the policy enjoys support at European level, the improvements have to be worked out and implemented in the sector. FTE makes an important contribution here by developing positions of the RUs in the area of capacity management and supporting them in the sense of a "voice of the RUs" in promoting implementation.


Stephan Pfuhl


Maurizio Capotorto


Catherine Perrinelle


Thorsten Dieter


Wolfgang Fritz


Edgar Schenk

FTE has reinvented itself: in addition to the well-established timetable conferences, new topics have been added within the framework of capacity management and timetabling, where the railways have identified a great need for action and coordination. The issues for which European solutions must be found in the interest of the market and the customers are manifold: better planning and coordination of engineering work with the involvement of the RUs; standardisation of the allocation rules; incentives for all market actors; market-oriented planning and digitalisation to serve business (common technical standards, standardised use of process and IT for national and cross-border traffic) to name a few. In all these areas, the members of FTE are willing to work together to find solutions for the benefit of the sector. We are therefore pleased that more and more RUs are working on these topics within the framework of FTE, because one thing is clear: the market does not wait for the sector, improvements must be achieved without delay. It is also even more gratifying that more and more "new entrants" are opting to join the association.

With all these changes, the occasion of the 150th anniversary is also an appropriate time to reminisce about the history of the organisation. We are proud that we were able to secure the services of the renowned railway historian Georges Ribeill, who spent many days in the FTE archives and brought to light lots of interesting facts. The other authors are also experts on the subject, being former and current personalities who were or are connected with FTE.

It is a great honour for the Executive Board to celebrate this anniversary together with 90 members from 26 European countries united in FTE. We look forward to another 150 years of successful cooperation in the spirit of our forefathers and founders, the strengthening of the railway industry. ■

SBB in the service of Europe since 1922

Preface by Vincent Ducrot, CEO SBB (Swiss Federal Railways)

This year we are looking back on 150 years of European cooperation in rail traffic and 100 years of SBB services for Europe. Already in the early days of the railways, cross-border connections were built and the need for coordination of the respective timetables grew with them. 100 years ago, the railway undertakings of Europe therefore entrusted SBB with the management of the European Timetable Conference (CEH/EFK) in passenger traffic.

The corresponding proposal of the French railway company Paris-Lyon-Méditerranée (PLM) was accepted by acclamation at the Plenary Assembly in Lucerne in November 1922. The mandate was continuously renewed at the following Plenary Assemblies. This year we are not only celebrating 150 years of the European Timetable Conference, but also 100 years of SBB in the service of Europe. SBB is proud to give the European railways a home in Berne and to provide the President and Managing Director.

It is a great honour for me and for SBB to celebrate this anniversary together with all of you. We are joined by 90 members from 26 European countries, united in our association.

In 1997, the then organisations CEH/EFK in passenger traffic and CEM/EGK in freight traffic gave rise to the now legally independent organisation Forum Train Europe (FTE) as a neutral coordination platform for the timetable and production design of cross-border trains. The association has continuously developed and given its members a comprehensive voice in European capacity management.

The trust that the European railways have placed in SBB for 100 years is an honour, but it also means a great responsibility for us. Switzerland is a small country, and traffic across our borders has always played a major role - from our country to and from all points of the compass. For SBB, international timetable coordination has therefore always been a key task.

The timetable is a core product of the railways. In view of the socially and politically demanded "Green Deal", cross-border passenger and freight traffic must become easier and faster.

The European public is becoming increasingly aware of the advantages of travelling across borders by rail. The renaissance of night trains improves the accessibility of destinations that can be conveniently reached by rail.

At the same time, this means that the increasingly congested networks are reaching their limits with today's planning methods and tools.

To improve planning across Europe, common processes, principles, and tools are needed. FTE plays an important role here, working on these issues together with the technical experts of the railways, planning and driving implementation forward. With the TTR (timetable redesign) programme, we are on the way to reducing limits in capacity management. But the realisation is stony, long and characterised by national peculiarities.

Faced with these challenges, it is worth looking back, because only those who understand history can shape the future. We have taken this into account on the following pages: the historical part of this commemorative publication gives an interesting insight into the not always "good old days". I cordially invite you to read the history of the longest train connection, which covered more than 6,000 km. Tough negotiations over many years at various European timetable conferences led to a constant optimisation of train

Vincent Ducrot. © SBB AG

running and travel times for the Simplon-Orient Express and the Taurus Express. Soon both trains, with which one could travel from London and Paris to Baghdad, enjoyed a legendary reputation. The Second World War meant a bitter setback for express train traffic. Due to the consequences of the war, travel times increased significantly, and many new problems had to be solved.

In extensive negotiations, the European timetable conference held in Istanbul in October 1947 not only succeeded in securing the operation of the two trains for the near future, but also in realising improvements. Other legendary cross-border trains such as the *Rheingold* between Zurich and Amsterdam or the Trans-Europ-Express (TEE) also became reality thanks to the planning at the European Timetable Conference.

In freight traffic, trains across several borders have long been normal; the economy firmly counts on them and their punctuality. This makes freight traffic even more dependent on smooth international cooperation, for which the FTE is an important platform.

The second part of this commemorative publication provides an insight into the topics of today's FTE world. Among others, Pierre-Alain Urech and Hans-Jürg Spillmann, two proven railway experts and former FTE presidents, report on how they experienced and advanced the further development of timetable coordination.

To improve planning across Europe, common processes, principles, and tools are needed. FTE plays an important role here, working on these issues together with the technical experts of the railways, planning and driving implementation forward.

The first steps of today's Path Coordination System (PCS) are particularly interesting. This communication system was developed, financed, and put into operation in the FTE between 2001 and 2004 under the name Pathfinder. This was the first step towards the digitalisation of timetable coordination in Europe. Despite PCS: Europe's railways also have a big task ahead of them in the area of digitalisation, in which they are supported by Forum Train Europe.

I wish us all continued successful cooperation for the strengthening of the railway industry and an exciting read. ■

An as-yet unpublished story

by Georges Ribeill, historian

"It is difficult to provide an analysis of the work of the Freight Trains Timetable Conferences. The process by which they adapt timetables is painstaking, but it enables them to schedule connections, reduce the time goods spend in marshalling yards and thus to provide services that ensure freight reaches its destination quickly and in a way that can hardly be described as slow. The complexity of this work is remarkable given the vast range of factors that have to be considered. These include the seasonal nature of some major sources of traffic, ensuring timings are convenient for customs inspections or, in the case of livestock, veterinary examinations, operating necessities such as ensuring empty rolling stock is returned to its home network, making sure shunting and marshalling yards do not get congested, and so on. The outline work that the Conferences do is fleshed out in detail by the adaptation meetings that take place in spring." Thus ran the *UIC Bulletin's* description of the work done by the Freight Trains Timetable Conferences in 1932.

The history of the Passenger Trains Timetable Conference (CEH/EFK) and its freight counterpart CEM/EGK from their inception through to their amalgamation in Forum Train Europe in 1997 has never before been recorded. The carefully ordered archives of CEH/EFK and CEM/EGK occupy no less than 60 metres of shelving space at SBB's historical archives in Windisch near Zurich, and make a somewhat intimidating sight. It was decided to examine the work done by the Conferences as recorded in their minutes. The snapshot nature of these documents – Conferences met annually at first, then biennially – was at odds with the close attention needed to interpret them, their complexity occasionally presenting an obstacle to comprehension. While the group meetings reflected the delegates' key task of adapting service timetables, the fact that timetables and/or routes had to be modified from one session to the next is also indicative of the extreme volatility of services that was itself a unique characteristic of the Conferences. Circumstantial technical factors would frequently outweigh commercial criteria in the process of setting or updating this service offering, and the feature on the Simplon-Orient Express in the years between 1919 and 1962 provides a good illustration of this ongoing task.

For the period up to 1994, attention therefore focuses on the general issues discussed by the plenary assemblies, such as the period to be covered by the international timetable, the terminology used in timetables and applied to trains, the organisation of the conferences themselves, amendment of their statutes, etc. The account of the subsequent period from 1994 to 2022 tracks the creation of Forum Train Europe in 1997, then examines how its organisational structure and modus operandi evolved in the light of EU Directives 91/440, 95/19 and 2001/12–14. The process of splitting historically integrated companies into infrastructure managers (IMs) and railway undertakings (RUs) resulted in the creation of RailNetEurope (RNE) in 2004, since when FTE and RNE have worked in partnership on timetabling.

This history of CEH/EFK, CEM/EGK and FTE deals with their key characteristics. It demonstrates the inertia that dogged decision-making on operational issues – a particular meeting would delegate an issue to a working group, which would report back at the next meeting. The proposals put forward by that working group would generally be adopted in the form of a consensus-based compromise at the session after that, and so forth.

It also highlights the fixed ritual of the assemblies, their ceremonial speeches of welcome, the official languages that could only be used in printed documents, but also the detailed attention to time – on a scale ranging from the local to the international – that the expert timetablers needed to schedule station stops with minute-by-minute precision. Take for example, these timings for the *Alpen-Express* in 1971: Munich 07:16 – Florence 16:58 / 17:33 – Roma Termini 21:04!

There is also amazement that some conferences took place in the shadow of major international events but did not make explicit reference to either the political conflicts that were dividing Europe and its rail network or the economic interests of countries torn between competition and cooperation. Examples include the Marshall Plan (1947), COMECON (1949), the European Coal and Steel Community (ECSC, 1951), the Common Market (1957), the collapse of the USSR (1991) and the founding of the European Union (1993). Without any commotion, trains would cross national borders at times and stations decided one year beforehand. Occasional references to governments were primarily to rebuke them for not coordinating daylight saving time with other countries – a habit that would become the conferences' recurring nightmare. The only external operators mentioned are the railways' competitors – cars, trucks and planes – and the European Commission, whose Directive 91/440 hit traditional integrated railway companies like a bombshell. Finally, in an attempt to bring some meaning to the long process of development the Conferences underwent, this history chronicles the gradual shift from an operations-dominated railway culture to a commercial culture, a transformation that was certainly to the detriment of the timetablers' disciplined ingenuity, which was comparable to the brilliance of experts in the Rubik's Cube – a Hungarian invention of 1974. Piecing together the countless combinations of routes and connections across land and sea borders in an extended Europe that stretched from London to Istanbul and from Valencia to Malmö was a remarkable exercise in collective intellect that did not always align with customers' or freight distributors' needs. In the meantime, the railways' monopoly, which had been secure until well into the inter-war years, has been fragmented in a process of slow but deliberate change from a supply-driven policy to one geared to demand.

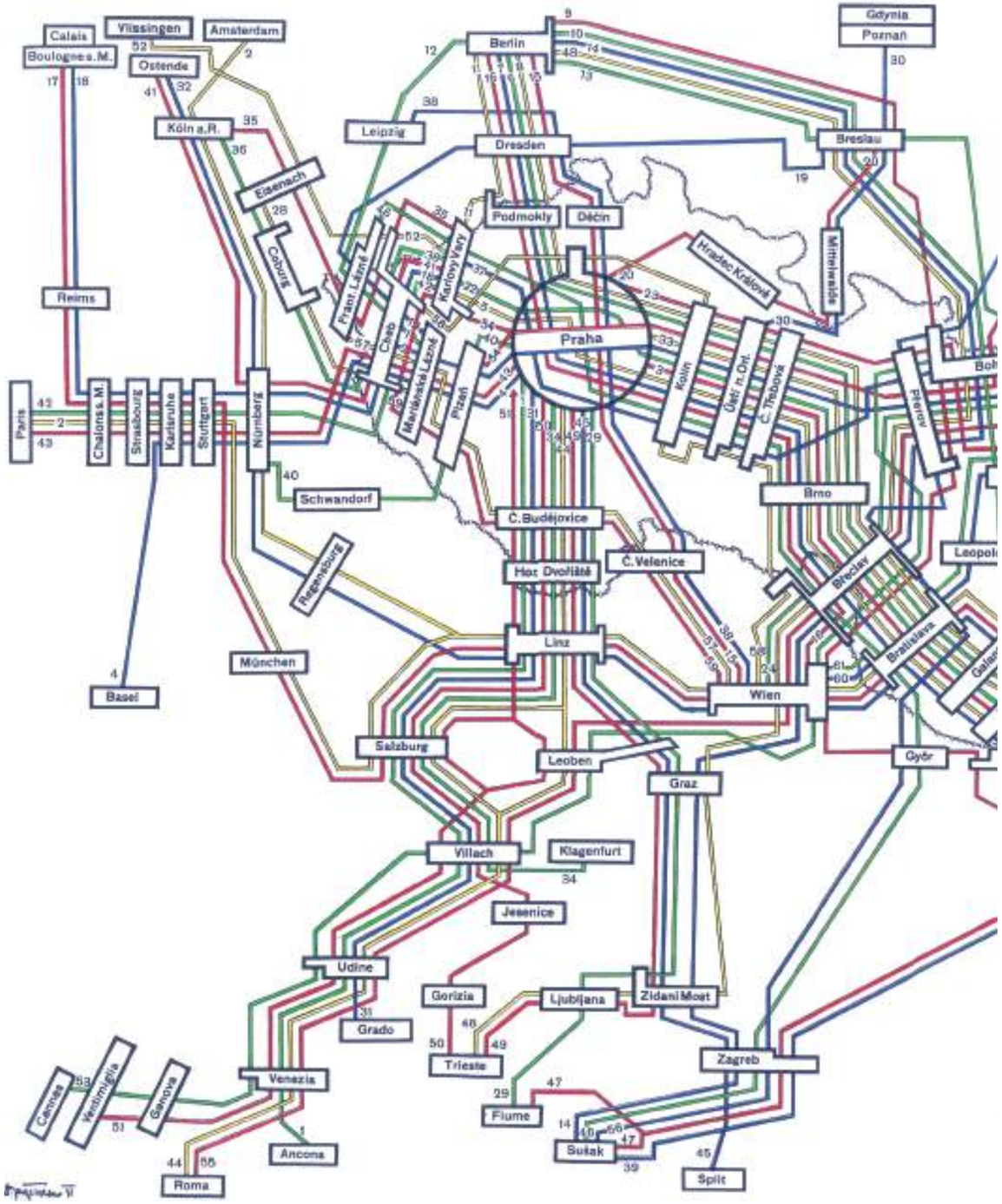
This is an area where the conference minutes are very frustrating in the sense that little is generally known about the loads carried by freight trains – perishable foods, citrus fruit, eggs – but rather more about the people who travelled on the *Orient Express, Italia Express, Sassnitz Express* or *Dolomiten Express.* More generally, in the long term, the question arises of how important international rail traffic is in the overall European market at a time when low-cost medium-haul aircraft and 40-tonne trucks have conquered the lion's share of the market almost everywhere else.

The history of the Passenger Trains Timetable Conference (CEH/EFK) and its freight counterpart CEM/EGK from their inception through to their amalgamation in Forum Train Europe in 1997 has never before been recorded. The carefully ordered archives of CEH/EFK and CEM/EGK occupy no less than 60 metres of shelving space at SBB's historical archives in Windisch near Zurich, and make a somewhat intimidating sight.

A full history of two centuries of Europe's railways, which have undergone the upheaval of two world wars and the globalisation of markets and trade, still needs to be written. For the time being, I would like to express my gratitude to Forum Train Europe for its decision to make a modest contribution to this history, and to Matteo Soldini for inviting me to take on the task and for bringing to it his boundless energy and curiosity. ■

Terminology note: The CEM/EGK and CEH/EFK minutes use the expression "railway administrations" to refer to member organisations with different legal statuses, such as transport ministries, railway agencies, state networks and private companies. In the first three sections of this history, this has been shortened to "administrations", a term that applies unambiguously to private and public-sector integrated railway operators.

In the interests of simplification, the names of these administrations have also been shortened to the abbreviations by which they are or were widely known. It should be added here that SBB and ČSD were the managing administrations of CEH/EFK and CEM/EGK.



PHDr JOS. BĚLOHLAV:
PŘÍMÉ VOZY S ČESKOSLOVENSKEM
DIREKTE WAGEN MIT DER ČECHOSLOVAKEI
VOITURES DIRECTES AVEC LA TCHÉCOSLOVAQUIE
THROUGH CARRIAGES WITH CZECHOSLOVAKIA
15. V. 1931. - 21. V. 1932

01

1872- 1939
Former times

Swiss steam locomotive A 3/5 with 6-wheel coaches, early 1900s, in Geneva (Switzerland). © SBB Historic

Cross-border direct trains in the 19th century: a complex, multi-organisation undertaking

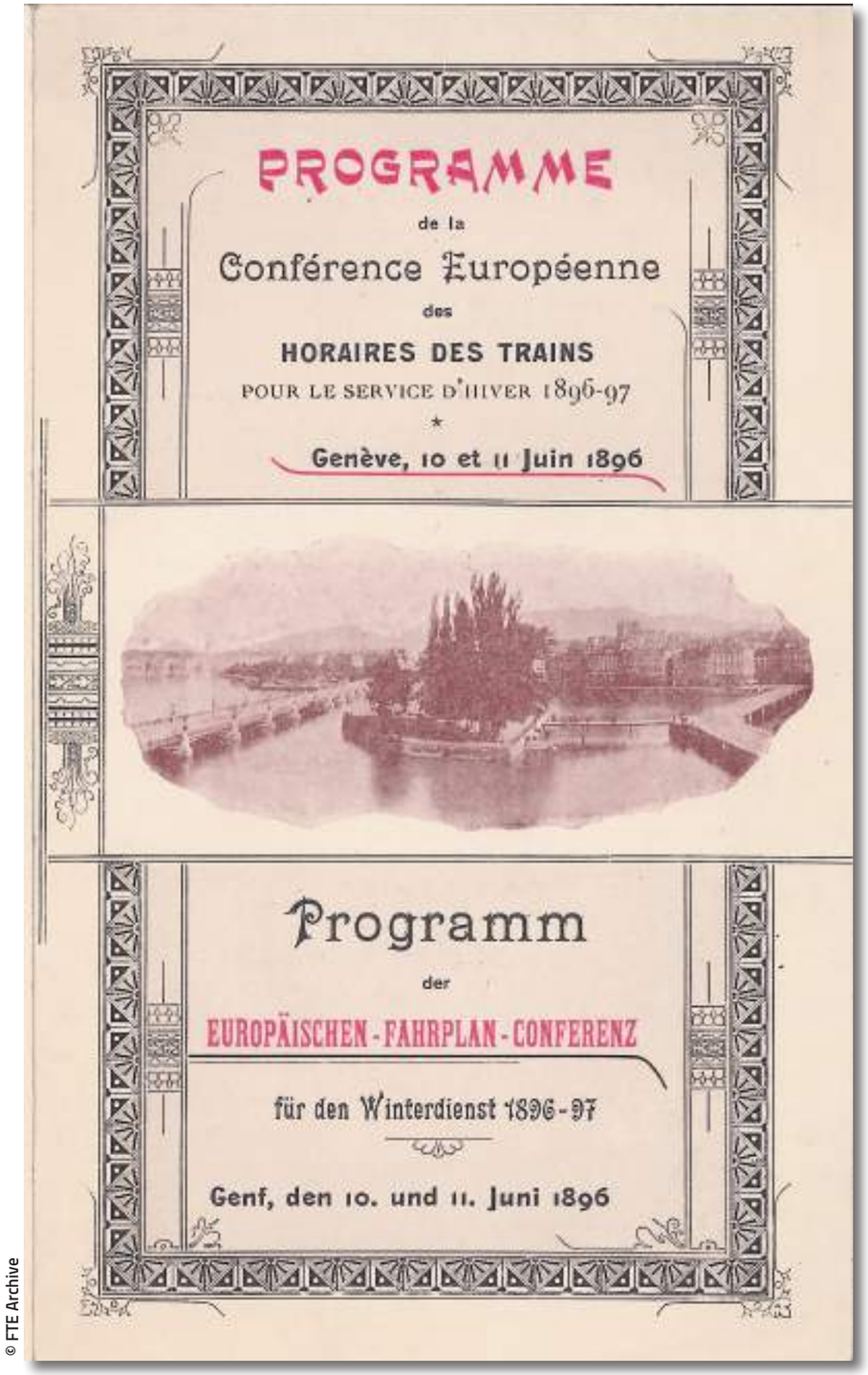
During the 19th century, railway administrations recognised the benefits of transporting passengers and freight as far as possible aboard the same train, either on their own tracks or lines belonging to connecting administrations – one of the advantages, as all understood, of adopting the same track gauge. By virtue of their high fixed operating and maintenance costs, rail networks whose revenues are largely proportional to the traffic they carry conform to the economic principle of growing returns, i.e. they are more profitable if they carry large volumes over long distances. In 19th-century industrialising Europe, specific customer groups – first businessmen, royal court officials, merchants, diplomats and explorers, then tourists and people seeking spa treatment or convalescence – wanted an unbroken service between both ends of their journey. In other words, they wanted direct services.

Inter-network direct trains were the result of a three-phase process. Before private rail companies operating within national boundaries were amalgamated into large, state-run networks, interconnecting administrations signed bilateral agreements that allowed their trains to operate on each others' lines. Something similar subsequently happened at international level with the signing of cross-border agreements. At first these were bilateral in nature, then multilateral. Finally, in the second half of the 19th century, multilateral contractual agreements evolved into agreements within communities of administrations, which undertook to comply with a minimum number of consistent rules to facilitate international train operations. These supranational regulations were drawn up with state involvement. In 1878, the International Convention (CI, latterly CIM), a legal code for international goods transport by rail, was established by treaty, while in 1882, a second treaty provided draft regulations on rolling stock interoperability in the form of the Railway Technical Unity (UT). The first timetable conference in 1872 falls into this third phase.

Germany as a driving force

Paradoxically, Germany's patchwork structure of kingdoms, dukedoms and principalities, each proud of their independence and minor lines, adjacent to the powerful kingdom of Prussia, was ideal for the gradual establishment of a community of interests and regulations. The Association of Prussian Railways was founded in Berlin on 10 November 1846. In 1847, it joined other administrations in founding the Union of German Railway Administrations (VDEV, colloquially known as the *Verein*) in Hamburg. It is worth noting here that the joint rules included the adoption in 1855 of a convention governing the reciprocal use of wagons. With the same aim in mind, a new wagons union was formed in 1868 through the Union agreement on wagons, VWÜ, the regulations for which were revised in 1873.

In 1871, the military lessons learnt during the Franco-Prussian War, the creation of Imperial Germany and the entry into force of Germany's constitution played their part in adding further momentum to the Prussian project to bring all German railways together under the aegis of a single imperial office. Since only the



administrations that were part of the *Verein* had agreed to coordinate their timetables by 1872, larger-scale international conferences were organised.

Cologne, 1872. Birth of the European Timetable Conference

At Prussia's invitation, representatives of the Austrian, Belgian and Swiss networks and of the network operated by the French *Compagnie de chemins de fer de l'Est* met in Cologne on 12 February 1872. They agreed to set schedules for international passenger trains as of the following summer's timetable[1]. The Dutch, Polish, Hungarian, Rumanian, Spanish and Portuguese networks soon joined the conference, which became known as the International Timetable Conference, the organisation and routine of which quickly became firmly established[2].
There were two conferences each year. The first took place in January or February to set the summer timetable, the second in June or July to prepare the winter timetable. Members took it in turns to shoulder the onerous duty of organising and preparing for the conference, booking hotels, assigning the working sessions to suitable rooms within a vast building, preparing the seating plans for the formal dinners, drawing up a programme of visits to entertain "conference members' womenfolk", etc. The plenary session was generally opened by the transport minister of the host country, who would welcome his counterparts and wish all the political and economic interest groups in attendance a productive conference.
The general issues addressed involved internal rules, timetable displays, train descriptions, etc. The agenda listed the proposed services, the creation or modification of which was then discussed in group sessions, while the administration that submitted a particular proposal had to mention all the other participating administrations. These were the means by which each conference discussed and set between 100 and 300 services. The decisions taken and the key points from conference sessions were published in minutes written in German. However, these did not include actual details of discussions. At the end of the assembly, one administration would nominate itself to host the next Conference, a proposal that was always warmly welcomed, never debated and was, in fact, already agreed.
The use of Roman numerals to display the hours from 00:00 to 12:00 was adopted at the Cologne Conference, the suffixes am or pm (ante or poste meridiem), m(atin; morning) or s(oir; evening) serving to distinguish the two parts of the 24-hour day. One major step forward at the Vienna Conference in December 1896 was the adoption by a large majority of administrations of the 24-hour system (00:00 to 23:00), as proposed by SNCB.
The final pre-war conference, held in Bern on 10 and 11 June 1914, was attended by 153 delegates representing private companies, state administrations and government departments. Alongside the 52 delegates from Germany, 24 from Austria and 13 from Hungary – illustrative of the geographical fragmentation of those countries' networks and the decentralised nature of their management structures – the Swiss (12), Italian (11), Russian and Swedish (9), British (6), French, Danish and Dutch (4) representations carried little weight. There is no doubt that the rail standards culture that the VDEV had developed and disseminated at an early stage had given Germany an uncontested lead in the coordinated organisation of international services and timetables.
During the Great War, the 98 delegations present at the *Mitteleuropäische Fahrplankonferenz* (central European timetable conference) held in Vienna on 9 and 10 February 1916 are evidence of this leadership. The delegations came from Germany's military allies (46 delegations), Austria (21), Hungary (8), Sweden (3), Bosnia-Herzegovina (2), Bulgaria, Denmark, Norway and Turkey (1), or from the neutral neighbouring countries of Switzerland (8) and Luxembourg (1).

Trieste, 1904. Birth of the European Through Carriage Conference

Reaching agreement on international timetables also means deciding on train composition, since direct services between two major stations may consist of a complete train, a set of through coaches or even individual coaches which together form a multiple-section train.
This was the role of the European Agreement on Through Coaches *(Vereinbarungen der Europäischen Wagenbeistellungskonferenzen, VEWK)*, held at Trieste on 9 and 10 March 1904 and attended by 64 delegates (31 from Germany and 18 from Austria-Hungary, three Italian, three Dutch, two French, two Swiss, one Rumanian, one Russian, one CIWL, one Belgian, one Südbahn). The Union's statutes included a principle already adopted in the majority of individual agreements – that of compensation for the mileage travelled by coaches and wagons employed on international direct services by means of a settlement unit, in this case the axle-kilometre, for which cash settlement was to remain the exception.
Inter-administration coach exchanges presented more difficulties than wagon exchanges because of the variety of passenger facilities and safety installations – compartment lighting and heating, toilets, alarm systems etc. This extract from the Trieste agreement reflects this complexity: *"Coaches must be in perfect condition and fulfil all the conditions to which their operation on foreign lines is subject. The cost of supplying oil, gas or electrical power will be charged to the company that owns the coach, except in cases where electrical current is generated by a combination of the coach's own movement and a dynamo. Fees for cleaning coaches or greasing their axle boxes are not included."* Adopted for domestic service or prescribed by state authorities, the proliferation of different arrangements between administrations only exacerbated the difficulty of organising international direct services.
This prompted FS to propose adopting rules specifying standard equipment for coaches and wagons employed on international direct services at the Through Carriage Conference that was held in Stockholm in June 1911 at the same time as the European Timetable Conference in order to address these growing difficulties. These rules would have precedence over all other valid regulations and agreements, so a commission was set up to determine the technical details of the rules. At its meeting in Milan in January 1912, the commission came up with a project that was discussed at a conference in Rome in May 1914. Combined with a project covering financial and administrative matters, which FS also prepared, this gave birth to an agreement on the exchange of coaches, wagons and mail vehicles. Unfortunately, this important step forward was halted by the outbreak of the First World War a few months later. ■

© FTE Archive

The use of Roman numerals to display the hours from 00:00 to 12:00 was adopted at the Cologne Conference, the suffixes am or pm (ante or poste meridiem), m(atin; morning) or s(oir; evening) serving to distinguish the two parts of the 24-hour day.

1. *Despite extensive research, it has not been possible to locate the archives of this conference. This publication may help locate them.*
2. *The FTE archives include minutes of the following conferences: Geneva, 10-11 June 1896, winter service 1896-97; Vienna, 9-10 December 1896, summer service 1897; Christiania (Oslo), 15-16 June 1897, winter service 1897-98; Frankfurt, 8-9 December 1897, summer service 1898; Cologne, 6-7 December 1899, summer service 1900; Brussels, 10-11 December 1902, summer service 1903; Zurich, 10-11 June 1903, winter service 1903-1904.*

The European Passenger Train Timetable Conference in the inter-war years

1922 Administrations from 27 states attend a conference held in Lucerne at the initiative of SBB. This conference adopts statutes. Already in charge of the RIC Union, SBB assumes responsibility for managing the European Timetable Conference (CEH/EFK).

1924 CEH/EFK and UIC agree to keep each other informed of their work.

1927 SBB's management of CEH/EFK is extended for five years.

1929 A standardised code of symbols is adopted for timetables.

Bern, December 1920

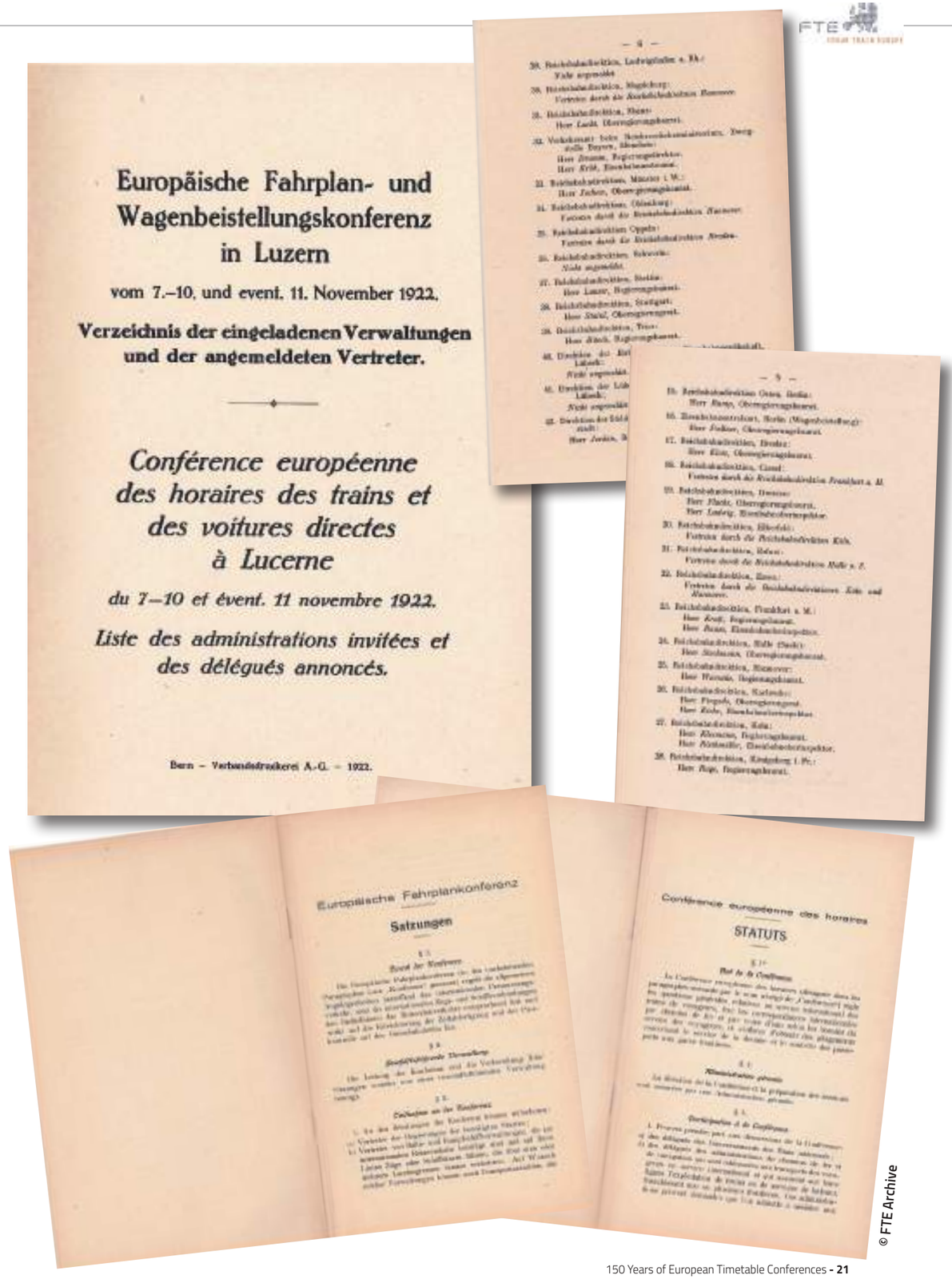
The first post-war conference was held at SBB's initiative. It took place in Bern from 1 to 3 December 1920. It was decided that the Conference should adopt statutes. One year later, and again in Bern, it was agreed that conferences should be held annually, with member networks taking turns to host the event.

Lucerne, November 1922. Statutes adopted

Still hosted by Switzerland, this time in Lucerne from 7 to 11 November 1922, the Conference invited a total of 146 delegations from Germany (38, including Mitropa, Mitteleuropaïsche Schlafwagen- und Speisewagen Aktiengesellschaft), Austria (11), Poland (10), Czechoslovakia (10), Great Britain (9), France (8), Belgium (6 including CIWL), Hungary (6), Spain (5), Sweden (5), Switzerland (5), Italy (4), Denmark (3), Finland (3), Netherlands (3), Portugal (3), Greece (2), Lithuania (2), Norway (2), Turkey (2), Yugoslavia (2), Bulgaria (1), Estonia (1), Latvia (1), Luxembourg (1), Romania (1) and Saarland (1). It commenced with an address by Mr Schrafl, president of the European Timetable Conference and General Manager of SBB: *"We Swiss are always happy when our country's neutrality, born of our ethnographic situation and consecrated by history, affords us the privilege of contributing to projects that further peace. We regard such activity as one of our country's most important international duties. (...) Today, gentlemen, each country's railways must contend with major difficulties. While force of circumstance has obliged them to remain stationary and often even retrogress, time has continued to march on. Therefore, all the efforts of every man in our profession must be directed towards overcoming the current crisis as quickly as possible and towards achieving fresh improvements and progress in all areas of our railways."*

The statutes were adopted without discussion and came into force on 1 January 1923. They included the sentence: *"The European Timetable Conference shall deal with general questions relating to international passenger train services, define international rail and waterway connections according to passengers' service needs and endeavour to secure simplified procedures for customs and passport controls at stations at international borders."* Preparations for the annual assembly, which was always held in the first fortnight in November, were the responsibility of SBB as the managing administration. The conference was open to railway and shipping companies whose services crossed terrestrial or maritime borders, sleeping car and dining car companies contracted to these operators and government representatives.

At the first conference, the majority of networks opposed the reintroduction of daylight-saving time. At the suggestion of Mr Margot, General Manager of PLM, and to great acclaim, SBB was entrusted with the management of CEH/EFK for five years, the network having already been put in charge of the International Carriage and Luggage-van Union (RIC Union).



© FTE Archive

Nice, November 1923

Member countries had already determined their daylight-saving periods for 1924. The conference asked the responsible authorities to hold discussions in an attempt to harmonise the start date. There was unanimous support for the request expressed in October by the International Union of Railways (UIC), which had been established a year earlier, for the *"earliest possible reintroduction of the major pre-war international services"*.

Naples, November 1924

In response to the UIC's desire for cooperation with the other international organisations, it was agreed to exchange agendas and general work activities of interest to both organisations. The International Air Traffic Association (IATA), which was founded at The Hague in 1919, became a member. As a result, CEH/EFK's statutes had to be corrected to include airlines *"whose conveyances provide a connection with trains operating across one or more borders."*

The Hague, October 1925

This was the first conference to be attended by delegates from the Spanish, Portuguese and Soviet railways as well as by two German companies, Junkers Luftverkehr AG (Dassau) and Deutscher Aero Lloyd AG (Berlin). The Bavarian section of DRG proposed identifying luxury trains by the letter **L** and international direct trains by the letter **D** and assigning them the same number for their entire journey. A commission was set up to examine the issue.

Baden-Baden, October 1926

In his welcome address, Mr Dorpmüller, General Manager of DRG, reminded attendees of the railways' mission to serve peace: *"For the first time in 16 years, you have come to Germany to resume your former task of building an extensive communications network that extends throughout Europe and even into Asia. This is because the territory you serve is not one isolated country – it comprises entire continents. Your exalted mission is to reduce the geographical distances that separate nations, and by doing so to bring nations together. You are enabling them to acquaint themselves with each other, and by doing so are planting the seeds of future friendship."*

The commission set up to explore special identifiers for luxury and international direct trains rejected the idea, citing the considerable difficulties associated with assigning unique numbers to international trains and the fact that the letter L could have different meanings depending on the country, while the letter D was not particularly informative. Deutsche Luft Hansa petitioned for improvements to connections between air and rail services to provide a continuation of its Berlin–Zurich service to Rome, its services from Germany and Scandinavia that terminated at Amsterdam to Brussels and its Malmö services to Stockholm.

Prague, October 1927

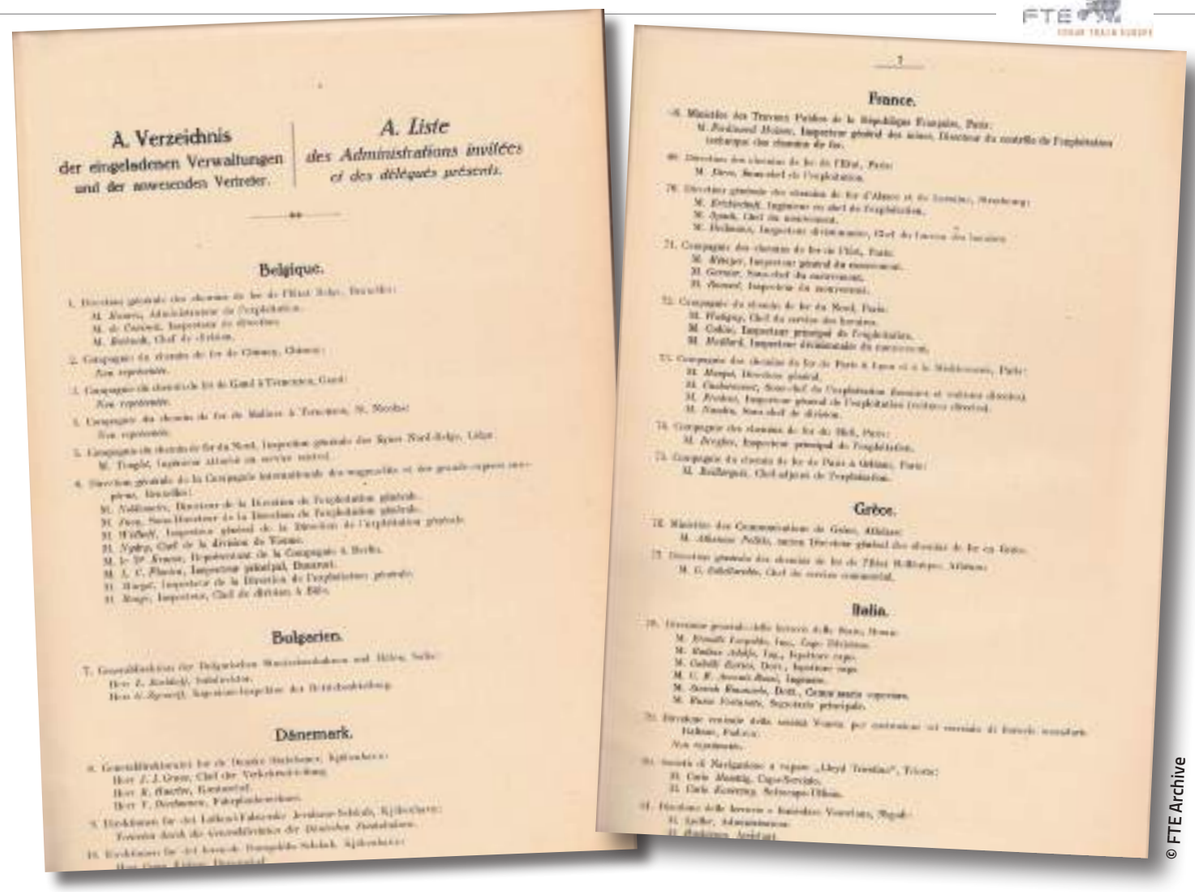
Delegates from the Geneva offices of the League of Nations became conference members. One representative from the League's Commission on Communications and Transit made an impassioned plea for improvements in train services to Geneva: *"Since I appreciate the impossibility of redrawing the train timetable graph system from one day to the next (…), I will restrict myself to asking you to consider all possible improvements, starting with services between Geneva and the major capitals, which leave much to be desired. I have already received assurances that London–Paris–Geneva services, which are currently poor, will be improved to accommodate current necessities. Another pressing issue is the organisation of direct sleeping car services between Berlin and Geneva (…). I was surprised to learn that technical and other reasons have made it virtually impossible to provide such a service."*

SBB's management of CEH/EFK was extended for five years.

Vienna, October 1928

The USSR's Commissar for Communications, a Conference member and the administrator responsible for traffic travelling from Europe to Asia via Siberia, requested that eastern Chinese railways that were already connected to Soviet railways be admitted to the conference. It was agreed to admit such non-European companies, but limit them to a single vote at Conferences.

Speaking on behalf of the growing number of tourists who were visiting Europe by rail, ÖBB proposed that the explanatory symbols used in the timetables displayed at stations and in timetable books be standardised, since the distinct lack of standardisation made it hard for


A. Verzeichnis
der eingeladenen Verwaltungen
und der anwesenden Vertreter.

A. Liste
des Administrations invitées
et des délégués présents.

Belgique.

Bulgarien.

Dänemark.

France.

Grèce.

Italia.

travellers to organise their journeys. The commission set up to examine this proposal met at Vevey from 5 to 7 June 1929. See p. 25 for information on the Vevey commission's work and discussions.

Warsaw, October 1929

The Conference heard the Vevey commission's proposals on standardisation. Citing the fact that "virtually all its stations have buffets", DRG asked to be exempted from having to include the relevant symbols "Since we would have to repeat these symbols very frequently, it would be very difficult to insert them all." The Conference conceded; symbols would be inserted "when a need to do so is felt." The commission's other proposals were adopted.

As a side-line to its primary role, CEH/EFK was therefore the originator of an international "code" of symbols that progressively spread from one administration to another. Once established, this "code" was augmented by symbols for new services, while redundant symbols were removed.

Copenhagen, October 1930

220 delegates attended CEH/EFK – a record figure that was testimony to the Conference's usefulness. 199 representatives of 131 rail administrations, shipping companies and airlines from 28 European countries took part alongside 18 ministerial delegates. At an international congress in Madrid, tourist organisations had asked CEH/EFK to create a "pan-European indicator", the brainchild of Polish ministerial advisor Mr Grabianski. A commission was set up to examine the request.

London, October 1931

With the effects of the global economic depression making themselves felt, proposals to create new services or

improve existing ones were deferred. To make up for the decline in first-class travellers, prestige services included second- and third-class coaches for the first time. The *Nord-Express,* which connected Britain and France with Berlin, Warsaw and Riga, started to include second-class sleeping cars on 1 December 1931. Meanwhile, sleeper services between Amsterdam and Basel continued to offer all three classes. The journey time between Berlin and Rome was also shortened by seven hours.

Brussels, October 1932

SBB's management of CEH/EFK was extended for five years. To ensure they could be posted at other administrations' stations, international train timetable posters were limited to a maximum height of one metre. At the UIC's request, a new standard symbol – a horizontal black diamond – that was already being used by French administrations and Compagnie des chemins de fer Prince-Henri in Luxembourg was adopted to identify trains that passengers could only board subject to certain conditions.

Bucharest, October 1933

With the crisis intensifying from one Conference to the next, attendances dwindled. The 1933 Conference was attended by 180 delegates from 26 European countries. Having become increasingly concise, the agenda for the plenary session was limited to setting a date and venue for the next conference. The opening of the Bologna–Florence *Direttissima* line, scheduled for spring 1934, was expected to improve a large number of services. For example, the journey from Rome to Berlin via the Brenner Pass and Munich now took 24 rather than 29 hours. Trains left Berlin at 09:56 and arrived in Rome at 10:45. The return working departed Rome at 19:15 and arrived in Berlin at 20:33. The Orient Express gained one hour between Paris and Bucharest, and the *Arlberg Express* 35 minutes between Paris and Vienna.

Dubrovnik, October 1934

179 delegates attended the Conference, including representatives of CIWL (Belgium), Mitropa, 16 shipping companies (13 maritime and three inland waterways) and two airlines, Lufthansa and Air France.

With Lufthansa having launched Berlin–Copenhagen–Oslo and Berlin–Barcelona services, NSB and RENFE supplied express train connections such as the Madrid–Barcelona service.

A large number of services were withdrawn owing to insufficient passenger numbers, including a Berlin–Munich–Rome–Naples sleeper service and the summertime Pullman service between Milan, Ventimiglia and Cannes. Trains serving winter sports resorts fared better, however. Services between Berlin and the Scandinavian countries improved with the opening of the bridge between Jutland and the island of Funen in summer 1935 and the completion of the Rügen causeway in spring 1936.

Helsinki, October 1935

166 delegates were in attendance. Electrification of the Florence–Rome line shaved an hour and 28 minutes off the journey time from Berlin to Rome. Timetables for the major international expresses were discussed in satellite meetings under the leadership of a managing administration: PLM for the Simplon-Orient Express and Taurus Express, which benefited from the electrification of Italian railways; Compagnie de l'Est for the Orient Express (revenue from which fell 53% between 1930 and 1934); SNCB for the *Ostend-Vienna-Orient Express* and *Nord Express;* SBB for the *Arlberg-Orient Express;* ÖBB for the *Vienna-San-Remo-Cannes Express;* and Karlsruhe regional headquarters[1] for the Riviera Express. The Paris–Antwerp *Oiseau bleu Pullman* was extended to Amsterdam, but the Milan–Cannes service was discontinued.

Montreux-Territet, October 1936

Speaking on behalf of Mr Pilet, the CEH/EFK president, Mr Etter from SBB headquarters opened the plenary session by reminding attendees of the context: "*Our railways have been particularly hard hit by the fall in international passenger and goods movements resulting from the trend towards self-sufficiency that is now emerging everywhere in the form of goods import and export quotas and monetary problems (…). This has been exacerbated by the downturn in domestic traffic and strong competition from road vehicles*". The only item discussed in the plenary session was the date of the next conference.

1. German railways were represented at conferences both by central headquarters and their numerous regional branches.

European Passenger Timetable Conference CEH/EFK, October 1936 in Montreux-Territet (Switzerland). © SBB Historic

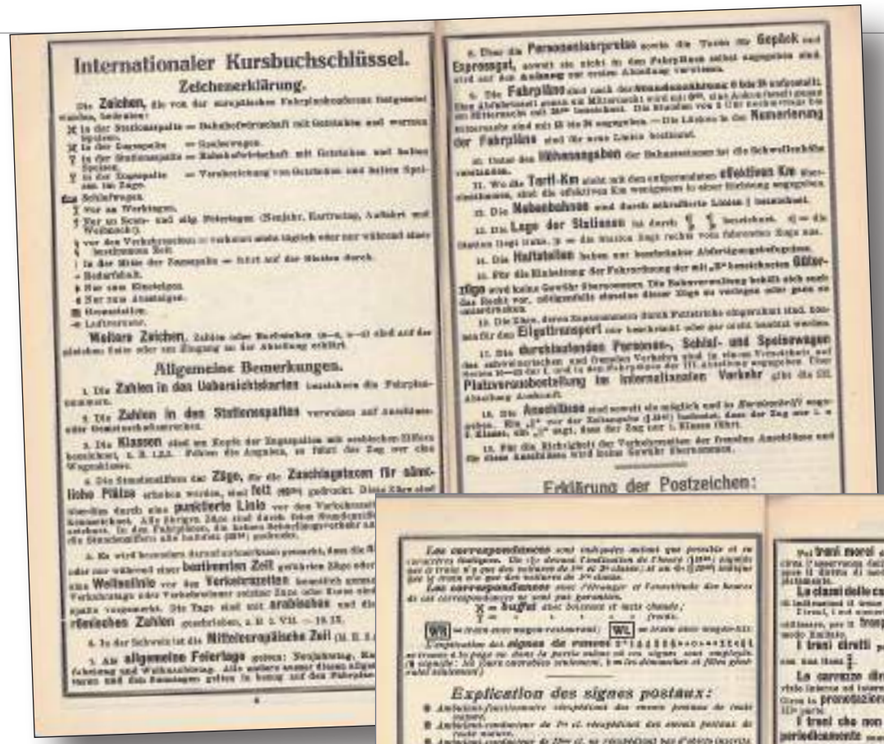
Stockholm, October 1937

Mr Granholm, General Manager of SJ, recalled Sweden hosting the conference in 1891 and 1911 and struck an optimistic note: "*The progress that has been made between 1911 and 1937 has been considerable. The constant rise in operating standards for the benefit of the public is natural. It reflects the efforts of skilled and attentive specialists and is by no means the enforced result of competition between rail and road, despite such competition having intensified this past decade. In the future, as in the past, we will continue to devote our energies to raising the standard of the economic asset we call the railways because only they have the capability to satisfy the requirements of mass transport.*" The plenary session once again extended SBB's management of CEH/EFK for five years.

Budapest, 10 to 15 October 1938

The conference was heavily overshadowed by the political backdrop. The Munich Agreement, intended "to avert war", was signed by Chamberlain, Daladier, Mussolini and Hitler during the night of 29–30 September. The Czech government capitulated to Berlin on 30 September, and on 1 October the Third Reich annexed the Sudetenland area of Czechoslovakia.

Scheduled for 3–8 October, the Conference was delayed by several days. The laconic explanation given for the delay at the Conference opening was: "By virtue of circumstances beyond its control, and at the request of the head office of Hungarian State Railways, the managing administration was obliged at the last minute to postpone this ordinary assembly by a week."



Swiss Timetable 1931.
Key to the symbols
© SBB Historic

Swiss Timetable 1927.
Key to the symbols
© SBB Historic

CEH/EFK president Mr Paschoud was hardly more explicit in his address: "*Recent weeks' events have prevented us from meeting on the date that was mutually agreed last year. Fortunately, the alarming situation facing us proved to be short lived. If nothing else, it will have enabled us to better appreciate the privilege we enjoy today of being able to pursue our work in the tranquillity and peace that it demands.*"

TCDD proposed Istanbul as the venue for the next conference on 2 to 7 October 1939: "*It goes without saying that we make no claim to be able to match the opulent comfort and unrivalled receptions that we enjoy in the major capitals of Europe (…). However, we will endeavour to do our best to ensure that our colleagues and the ladies who honour us by accompanying them when they come to Turkey have a pleasant stay in Istanbul.*"

The Istanbul conference never took place. On 1 September 1939, Germany invaded Poland. On 3 September, Great Britain and France declared war on Germany.

Just two mini conferences – in 1940 and 1945 – took place between 1938 and 1946. ■

Vevey, June 1929
Birth of an international code of symbols for timetables

Vienna, October 1928. ÖBB shared with the Conference the severe criticism of passengers visiting Europe by rail. Although European networks had agreed to adopt an extensive range of shared technical and administrative regulations, timetable posters at stations[1] and timetable publications were anything but standardised. The growth in the number of tourists, especially from America, since the end of the war made standardisation not only desirable, but beneficial to administrations and timetable publishers[2]. Given the huge variety in the symbols used by different countries, immediate and full standardisation was essential.

It was also suggested that each country should adopt bilingual timetables, the second language being determined by the nationality of the foreigners who visited it. SBB's trilingual – German, French and Italian – timetable and the Serbian, French, English and German timetable used in the Kingdom of Serbs, Croats and Slovenes (Yugoslavia from 1929) were cited as examples.

Simply using symbols that would indicate the same thing in any timetable represented a major step forward, although this was not the case at the time. For example, a crossed knife and fork meant a station with a buffet in Swiss and Austrian timetables, as well as in the timetables of countries that had formerly been part of Austria, but a dining car in the German *Reichskursbuch*. In the Austrian and Danish timetables, among others, a particular symbol represented an optional stop, but in the timetable of the Kingdom of SCS it represented a junction. The wavy line that frequently indicated a train that did not run every day was used by the Baltic railways to represent a train that might depart 20 minutes early.

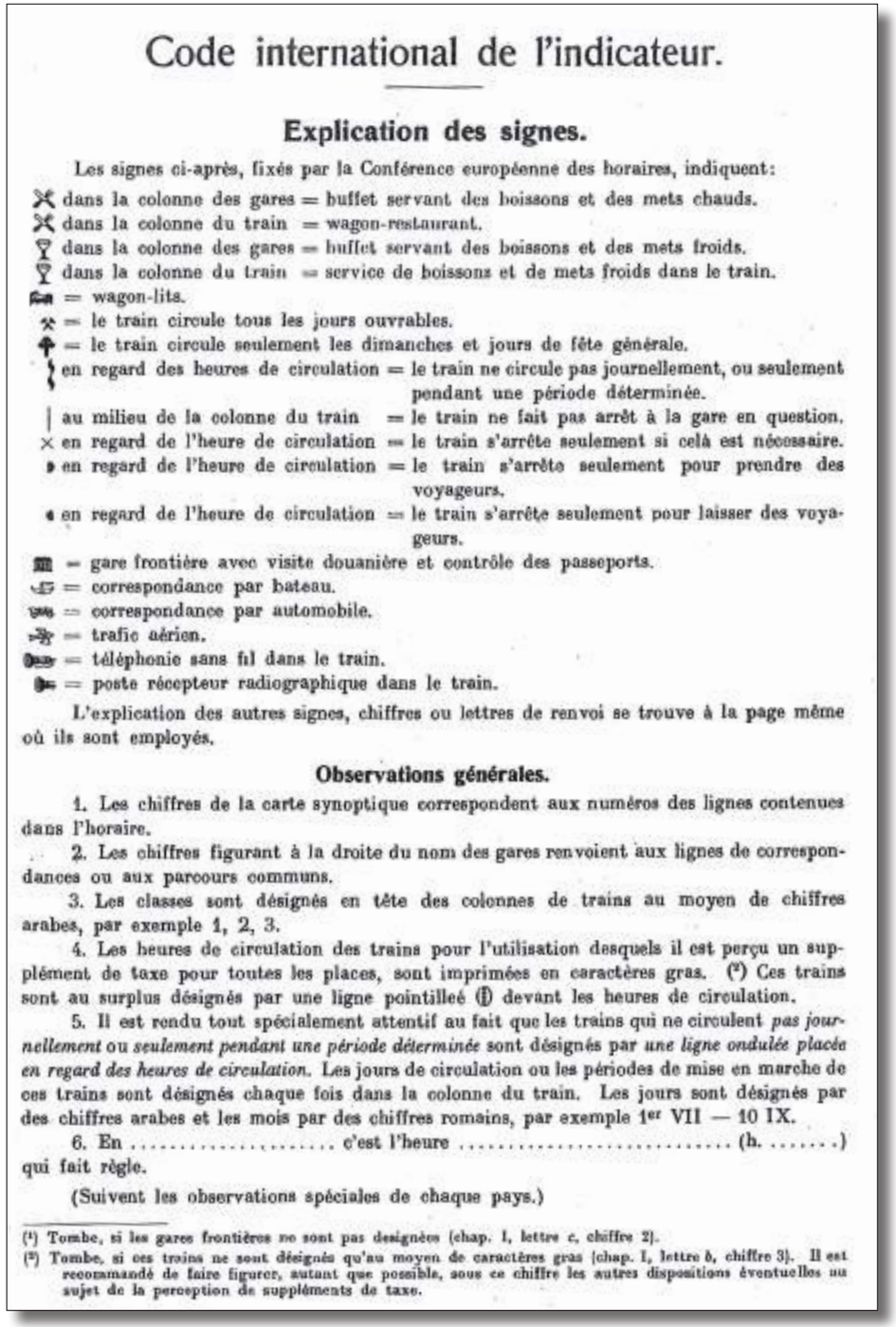
And so the debate began. SBB proposed separate discussions for timetable posters and official timetable books. The issue originated with the Central European Economic Congress in Vienna in June 1927, which had put forward the idea of symbols for train categories, buffets and refreshment rooms (that served or did not serve hot meals respectively), border crossing points, sleeping and dining cars, station stops and connections. The Conference was particularly interested to note that timetables did not have standard symbols for the routes taken by through carriages. This made it easy to imagine the difficulties faced by passengers using different national timetables to organise their journey. A set of symbols and explanations, the blueprint for an International Timetable Code was put forward to the Conference. A commission was set up to develop proposals.

International symbols code project

The 29 delegates[3], operating managers, inspectors and divisional heads who made up the commission met in Vevey from 5 to 7 June 1929 under the chairmanship of Mr Mutter, SBB's head of operations.

Since timetable posters often comprised several sheets, it was felt that having a summary table adjacent to

1. *Display was mandatory under Article 22 of the Bern International Convention.*
2. Chaix *timetable in France*; Bradshaw *in Great Britain*; Guide des Grands Express de la CIWL.
3. *CEH/EFK. Conference minutes of the Commission appointed to study the harmonisation of timetables and use of standardised explanatory symbols in timetable posters, held at Vevey, 5 to 7 June 1929.*



Code international de l'indicateur.

Explication des signes.

Les signes ci-après, fixés par la Conférence européenne des horaires, indiquent:

dans la colonne des gares = buffet servant des boissons et des mets chauds.
dans la colonne du train = wagon-restaurant.
dans la colonne des gares = buffet servant des boissons et des mets froids.
dans la colonne du train = service de boissons et de mets froids dans le train.
= wagon-lits.
= le train circule tous les jours ouvrables.
= le train circule seulement les dimanches et jours de fête générale.
en regard des heures de circulation = le train ne circule pas journellement, ou seulement pendant une période déterminée.
au milieu de la colonne du train = le train ne fait pas arrêt à la gare en question.
en regard de l'heure de circulation = le train s'arrête seulement si celà est nécessaire.
en regard de l'heure de circulation = le train s'arrête seulement pour prendre des voyageurs.
en regard de l'heure de circulation = le train s'arrête seulement pour laisser des voyageurs.
= gare frontière avec visite douanière et contrôle des passeports.
= correspondance par bateau.
= correspondance par automobile.
= trafic aérien.
= téléphonie sans fil dans le train.
= poste récepteur radiographique dans le train.

L'explication des autres signes, chiffres ou lettres de renvoi se trouve à la page même où ils sont employés.

Observations générales.

1. Les chiffres de la carte synoptique correspondent aux numéros des lignes contenues dans l'horaire.

2. Les chiffres figurant à la droite du nom des gares renvoient aux lignes de correspondances ou aux parcours communs.

3. Les classes sont désignés en tête des colonnes de trains au moyen de chiffres arabes, par exemple 1, 2, 3.

4. Les heures de circulation des trains pour l'utilisation desquels il est perçu un supplément de taxe pour toutes les places, sont imprimées en caractères gras. (2) Ces trains sont au surplus désignés par une ligne pointilleé (i) devant les heures de circulation.

5. Il est rendu tout spécialement attentif au fait que les trains qui ne circulent *pas journellement* ou *seulement pendant une période déterminée* sont désignés par *une ligne ondulée placée en regard des heures de circulation*. Les jours de circulation ou les périodes de mise en marche de ces trains sont désignés chaque fois dans la colonne du train. Les jours sont désignés par des chiffres arabes et les mois par des chiffres romains, par exemple 1er VII — 10 IX.

6. En ..... c'est l'heure ..... (h. .....) qui fait règle.

(Suivent les observations spéciales de chaque pays.)

(1) Tombe, si les gares frontières ne sont pas designées (chap. I, lettre c, chiffre 2).
(2) Tombe, si ces trains ne sont désignés qu'au moyen de caractères gras (chap. I, lettre b, chiffre 3). Il est recommandé de faire figurer, autant que possible, sous ce chiffre les autres dispositions éventuelles au sujet de la perception de suppléments de taxe.

Draft international code submitted to the Vienna (Austria) Conference in 1928, then discussed in Vevey (Switzerland) in 1929. © SBB Historic

the network map would make them easier to read. Two proposals by NS were adopted: firstly, the routes followed by "fast-running trains" (as freely defined by each network) would be printed **in bold;** secondly, to help travellers work out connections, timetables would show departure times from major interchange stations rather than arrival times.

There was considerable discussion of how to identify trains that did not run daily or which only ran during specific periods. DRG's representative said that they were identified in Germany by bold borders around the train's column on posters and by a wavy line in front of the running times in timetable books. Austria, Hungary and Czechoslovakia – but not Poland, which cited technical reasons – declared their support for the wavy line. PLM's delegate wanted to identify trains that only ran on Sundays and public holidays or which only ran on working days by special symbols that would "take up less space". Despite this, the wavy line was adopted. Poland wanted to have six categories of train that did not run every day. These were Sundays and public holidays, the day before public holidays, the day after public holidays, workdays, school days and market days. However, the idea was met with several objections, most notably that public holidays varied from country to country and sometimes from region to region within a particular country. Furthermore, travellers tended to be unaware of the operating dates of school or market day trains. As a result, too many passengers would be obliged to find out what these dates were. It was unanimously agreed that only trains that ran on Sundays and public holidays or on workdays would be assigned special symbols. The commission adopted two symbols: a cross (†) for trains that ran on Sundays and two crossed hammers for trains that ran on workdays (⚒).

Operating dates and periods – "this day of this month" – would be indicated using a combination of Arabic and Roman numerals, where 10 XI would indicate 10 November, although Hungary was given permission to use a reverse arrangement for linguistic reasons. Trains where a supplement was payable to obtain access to all seats or berths were to be shown in bold.

The classes available in each train were thus numbered "1, 2, 3" rather than "1 – 3". The *Reichskursbuch* refused to accept this on space grounds, furthermore stating that three-class trains were clearly identified. Poland complained that SBB's timetable book was cluttered with post office-related symbols: the commission's Swiss chairman retorted that the timetable, a joint publication by two administrations, was cheaper than two separate timetables! It was approved by the ČSD and MÁV delegates.

PKP's suggestion that trains with reservable seats should be identified was rejected on the grounds that it would be too complicated to implement.

Other signs were easily agreed: buffets serving drinks and hot or cold meals; stations at which customs checks took place; sleeping and dining cars; trains with seat-service drinks and cold meals ("glass" symbol) to satisfy DRG; telephone or radio available on the train; optional stops, restricted stops where passengers could only board or alight and connections with sea, road or air services. However, PKP's suggestion that trains with reservable seats should be identified was rejected on the grounds that it would be too complicated to implement.

Administrations obviously had to adopt all these international symbols themselves and then ask private timetable publishers to do the same.

Standardising information on through coach routes, which appeared in timetable books in various ways, proved complex. SNCB, NS and RENFE did not indicate through coaches on their timetable posters, while FS, CFL and MÁV identified them all. The French administrations only identified some of them, while DRG, ÖBB, PKP, Saarland, SBB and ČSD produced a separate table for them. Adoption of this table was proposed by nine delegates, but rejected by seven others. *"In view of this, the commission has decided to leave administrations entirely free to adopt the approach they deem most appropriate."*

Thus the commission completed its work, cautiously concluding that *"it is advisable to await the outcome of real-life application of these innovations before exploring the possibility of adding others."* ■

The European Freight Train Timetable Conference in the inter-war years

1921 Seven administrations adopt the Agreement governing the exchange and use of wagons between Railway Undertakings (RIV).

1924 First freight train timetable conference is held in Czechoslovakia. It is attended by five administrations. ČSD is given a five-year management mandate.

1928 The first "LIM" international freight-train timetable is published.

1929 The Conference adopts its first set of statutes. ČSD's management mandate is renewed for five years.

1930 LIM is overhauled. It is reduced in volume and synoptic maps provide more route combinations.

1934 ČSD's management mandate is renewed for five years.

1938 ČSD cedes management to Deutsche Reichsbahn.

Portorose, October-November 1921.

Transport in central Europe was extremely disorganised. To restore order, the Council of the League of Nations set up an Interchange Traffic Committee in Central Europe (ITC) in Vienna in January 1920, Austria, Hungary, Czechoslovakia, the Kingdom of Slovenes, Croats and Serbs (later to be known as Yugoslavia) having already set up a Central Transport Office in Vienna for the same purpose. The Committee delegated the task of planning freight trains, routes and wagon provision to the Office so it could ensure supplies of provisions and coal to the countries in question.

An international conference was held in the eastern Adriatic resort of Portorose from 15 October to 25 November 1921 to decide what would happen in the countries formed by the breaking up of the Austro-Hungarian Empire, Hungary, Yugoslavia, Czechoslovakia, the Kingdom of Serbs, Croats and Slovenes and Romania, as well as to divide up the important, privately owned Südbahn network, which had been founded in 1858 under the leadership of the Rothschild family. The new countries agreed to share and use a joint wagon fleet by adopting the Agreement governing the exchange and use of wagons between Railway Undertakings (RIV) which had been negotiated in Stresa and took effect on 1 January 1922. The Office in Vienna was then closed down.

České Budějovice (Czechoslovakia), January 1924. First conference on freight train timetables

In 1920, at the same time as, and independently of the events described above, ČSD, ÖBB, FS and JŽ held conferences in Budějovice, Vienna and Bled to organise the routing of vital reprovisioning trains from the port of Trieste. Meeting in Bologna in 1923, they recognised the futility of trying to do so, given the trains' dependence on decisions taken by the European Timetable Conference. It was felt necessary to establish a similar permanent organisation for freight trains.

Tasked with organising the 1924–1925 service, the first freight train timetable conference was therefore held in the Czechoslovakian town of České Budějovice in January 1924. ČSD, ÖBB, FS and JŽ were joined by MÁV. Connections between long-distance trains that often carried perishable goods, meat, fruit and vegetables were planned. ČSD was appointed managing administration for five years.

Munich, November 1929. The Conference gets statutes

Given the obvious advantages, other administrations soon joined the Conference: PKP and CFR in 1925; DRG[1], BDZ and CH and GySEV/ROeEE in 1927; and SNCB, DSB, NS, SBB, BLS and SJ in 1928. The Conference thus found itself in need of fixed rule, and so, when meeting in Vienna in autumn 1928, it decided to draft statutes. These were drafted by four administrations, DRB, ÖBB, FS and ČSD, approved at the conference held in Munich in November 1929 and entered into force on 1 January 1930. Unsurprisingly, they drew largely on CEH/EFK's statutes.

The aim of the European Freight Trains Timetable Conference was to organise international connections for freight traffic in accordance with the needs of the countries represented by member administrations and to speed up wagon routing, particularly at borders. The Conference took place twice a year and was an essential addition to CEH/EFK's statutes. A preparatory meeting was held in autumn to deal with general questions and was followed by a second meeting in spring, which formulated the details of the timetables and drafted the documents which would be used to compile the annual international freight train timetable.

Following CEH/EFK's example, conferences were divided into plenary sessions and group sessions, with plenary sessions addressing the same general issues (changes or additions to the statutes, date and venue for the next meeting and the nature of information diagrams to be integrated into the international timetable). Proposals intended for discussion at the plenary sessions had to be submitted in writing at least six weeks before the Conference start date and could be written in the language of the submitting country or in French or German. If proposals were written in the language of the country submitting them, French and German translations also had to be provided.

Management of the conference, which involved preparatory work for its meetings, was handled by a managing administration that was elected for a five-year term. The mandate held by ČSD since 1924 was renewed. To fulfil its primary task, CEM/EGK was dependent on the outcome of CEH/EFK's work. In addition to defining international services involving complete trains or wagon sets, the conference oversaw application of RIV: wagon compositions, prescribing loading methods, appropriate marking, braking capacities, etc.

15 May 1928. Publication of the first trilingual "LIM" timetable

The trilingual, Internationales Güter-Kursbuch (IGK), Indicateur pour le service de marchandises par wagons complets, Indicatore ferroviario degli itinerari internazionali per il servizio merci


Internationales Güter-Kursbuch
(IGK)
Indicateur pour le service international de marchandises par wagons complets
Indicatore ferroviario degli itinerari internazionali per il servizio merci a carri completi
Ausgabe vom 15. Mai 1928 — Edition du 15 mai 1928 — Edizione 15 maggio 1928

© SBB Historic

1. *DRG, Deutsche Reichsbahngesellschaft, was the new German railway organisation imposed on the Weimar Republic in 1924 by the Dawes Plan. It was to be used for payment of war reparations. The company board comprised representatives of the German government and creditors.*

a carri completi was to be more simply called LIM, international freight timetable.

From the 1930s onwards, conferences began to feel the effects of the global economic crisis. The intense competition between rail and road pushed administrations into fitting wagons used on international routes with continuous braking. The RIV Union approved several types that had been trialled under UIC auspices. While it was important to constantly improve the speed of trains loaded with fish, fruit and vegetables, guaranteeing on-schedule arrival was also an important criterion when industrial chains ran on lean production principles. The following pages set out examples of the discussions and decisions made at the Conferences.


Internationales Güterkursbuch
(IGK)
Zusammenstellung ausgewählter günstiger Güterzugverbindungen für die Beförderung von Wagenladungen auf den für den Ausfuhr-, Einfuhr- und Durchfuhrverkehr wichtigsten Eisenbahnlinien Europas
Indicateur pour le service international de marchandises par wagons complets
Recueil des relations les plus favorables pour le transport de marchandises par charges complètes sur les lignes des chemins de fer d'Europe les plus importantes pour le trafic d'exportation, d'importation et de transit
Indicatore ferroviario degli itinerari internazionali per il servizio merci a carro completo
Elenchi degli itinerari più importanti per il trasporto di merci a carro completo sulle linee ferroviarie dell'Europa adatti per l'esportazione, l'importazione e per il transito
Ausgabe vom 15. Mai 1931 — Edition du 15 mai 1931 — Edizione 15 maggio 1931
Verkaufspreis 3 RM — Prix de vente 3,60 frcs suisses — Prezzo corrente 13 Lire
© SBB Historic

Amsterdam, November 1930.
Improving LIM presentation

Rules were devised for the annual process of preparing LIM: Compiling the best routes for transporting complete wagon loads of freight on Europe's major railway lines for export, import and transit traffic. Station names had to be given in the language of the country in which they were situated. Only scheduled trains, extras that ran for a predefined period or operated under minimum tonnage conditions could be included. Synoptic maps provided a way of increasing traffic journey combinations. To make LIM easier to read, timetable diagrams designed for the longest possible routes could be divided, ideally at border stations. There was no advertising in LIM. DRG was put in charge of drafting the publication, and finally tribute was paid to the man who first advocated the idea of LIM, DRG chairman Max Leibbrand.

The Conference was committed to simplifying pan-European food product movements. From north to south, this meant carrying fish from the Scandinavian fishing ports to western Spain and Portugal via Hamburg, Aachen, Belgium and Hendaye, or to eastern Spain (Valencia) via Sassnitz, Berlin, Frankfurt and Cerbère. Trains also operated from Sweden to Rome via Trelleborg, Sassnitz, Munich and the Brenner Pass. For example, a train departing Malmö at 19:00 on day A would arrive in Rome at 16:00 on day D.

In the reverse direction, oranges from Spain, fruit and vegetables from the South of France (Roussillon and Provence) and citrus fruit from Italy were carried to Belgium, Holland, Germany, central Europe, Sweden and Norway. Going south-east to west, trains carried Greek grapes and plums from Bulgaria and Yugoslavia. They departed Athens at 07:00 on day A to arrive in Berlin at 02:00 on day F, in Paris at 07:00 on day F and in Amsterdam at 04:00 on day G. In addition, eggs and butter were sent from Poland to Genoa, and cattle was transported from Hungary and Yugoslavia to Italy or central Europe. Imported oil and petrol were carried from the ports of Trieste and Fiume to Czechoslovakia.

Zurich, November 1931

The SBB delegate gave a reminder of the benefits afforded by the Conference, "the youngest of the international railway unions". With between 60,000 and 80,000 foreign wagons travelling through Switzerland each month, the average time spent by those wagons had fallen from four days before the war to 2.4 days in 1931 – which translated into savings of one million gold francs in compensation.

SNCB asked the other administrations to only send it wagons fitted with continuous braking or through brake pipes. This was to avoid shunting unfitted wagons to the back of trains, something that caused major delays. "After extensive discussion, it was decided to abide by recommendations" on this point. PLM succeeded in having Marseille added to the table of stations in LIM, "since there is a lot of transit traffic".

Paris, November 1932.
The railways' "storm" not their "twilight"

Conference president Hula, a former Czech minister, struck an upbeat note: *"Many describe the current period as the railways' twilight. This is a viewpoint I do not share. I believe that this plight had to happen so that the railways could finally realise that their transport monopoly has disappeared without a hope of return, and that they have to adopt the perspective of a commercial enterprise founded by a suitable organisation and bolstered by competition. This is why I would not want to describe the current period as the railways' twilight, but rather as a serious storm that is sitting right over the railways and causing them serious harm. But this storm will pass and give way to peaceful, calming sunshine."*

According to paragraph 10 of the Introductory observations to LIM, *"when consignments are routed along lines belonging to administrations that employ compressed-air brakes on freight trains, it is recommended to only use, to the extent that this is possible, vehicles equipped with this type of brake or with an air brake pipe."* LIM listed the administrations that used compressed air brakes. These were: DRG, SNCB, the French administrations, FS, NS, SBB and BLS, SJ and MÁV. ČSD announced that they would be adopting air brakes from 15 May 1933.

A large number of trains carrying food products were improved, including trains from Spain and Italy destined for northern Europe and Great Britain by Zeebrugge–Harwich ferry, as well as fruit from the Balkans headed for western and northern Europe or eggs and cattle being carried from Poland to Italy.

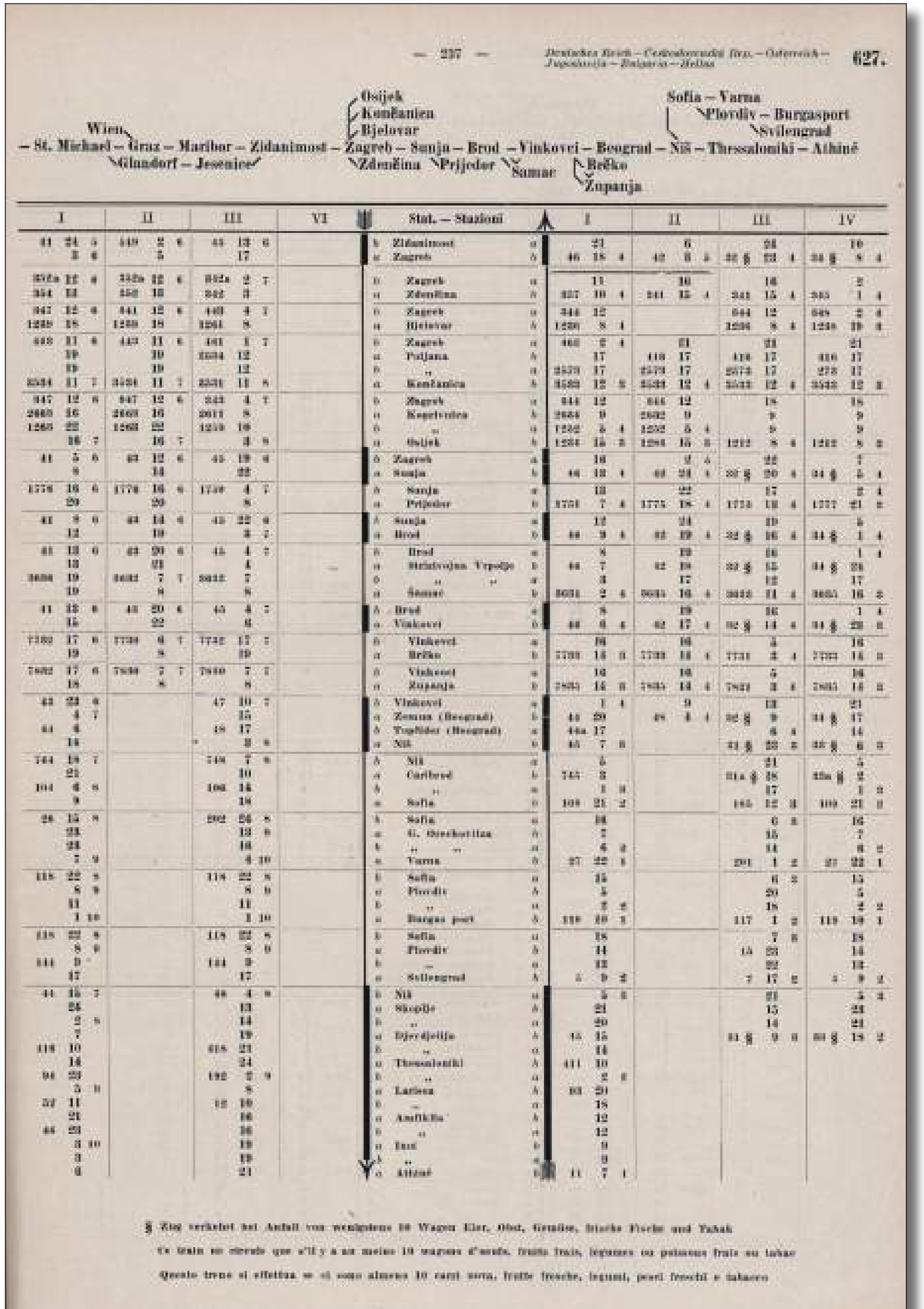
As of the previous summer, Hungarian fruit – melons and grapes in particular – had been a big hit at markets in Paris, London and Munich. However, *"various obstacles (economic crisis, currency exchange problems, loading gauge problems, shortage of refrigerated and ferry wagons, high rates and extremely long journey times) have impeded greater traffic growth."* Looking ahead, the range of produce carried was likely to grow and could start in spring with lettuce and various types of cherry. A major effort was therefore required to eliminate these obstacles. The Vacuum Oil Company in Kolín (Czechoslovakia) received regular supplies of crude oil from Ploești, Romania, returning the empty tank wagons in trains of thirty. The Conference created a five-day journey route to improve services.

Copenhagen, November 1933.
Too many broken eggs…

LIM's sale price (3 Reichsmark, 3.60 Swiss francs or 13 lira) would be removed from its cover so it could be sold to the public at a much lower price and to enable administrations to give free copies to potential customers.

SBB wanted to make wagons carrying eggs easier to identify by attaching a 20x20 cm label to them bearing the words **Eier – Œufs – Uova** in bold black print. Each year, large sums had to be paid out in compensation for eggs broken during shunting and these breakages could be avoided if staff were made aware of wagons' content. There was unanimous agreement that while this solution may not have been accepted at conference "after extensive discussion", it was recommended that "from today and with immediate effect", all administrations "attach to the two side walls of any wagon carrying eggs a model IV label (a red glass on a white background with a red border) from the "Uniform regulations for the international carriage of goods by railways (French acronym: PIM)". As the managing administration of the International Rail Transport Committee in charge of CIM, SBB would submit a proposal to make such marking compulsory.

FS was gratified by the importance by the scale of the consignments of fruit and vegetables dispatched by the administration to arrive in Europe's major cities in the early morning. Up to 40 wagons a day were being sent to Berlin. There were further improvements to services carrying oranges from Spain to Belgium and Holland and fruit or tobacco from Bulgaria and Yugoslavia to Poland and Czechoslovakia.


— 237 — Deutsches Reich – Československá Rep. – Österreich – Jugoslavija – Bulgaria – Hellas 627.

Wien – St. Michael – Graz – Maribor – Zidanimost – Zagreb – Sunja – Brod – Vinkovci – Beograd – Niš – Thessaloniki – Athinê
Glandorf – Jesenice
Osijek, Koněanica, Bjelovar, Zděnčina, Prijedor, Šamac, Brčko, Županja
Sofia – Varna, Plovdiv – Burgasport, Svilengrad

§ Zug verkehrt bei Anfall von wenigstens 10 Wagen Eier, Obst, Gemüse, frische Fische und Tabak
Ce train ne circule que s'il y a au moins 10 wagons d'œufs, fruits frais, légumes ou poissons frais ou tabac
Questo treno si effettua se vi sono almeno 10 carri uova, frutta fresche, legumi, pesci freschi e tabacco

LIM Timetable 1931.
© SBB Historic

Brussels, November 1934. "Reliable, on-time services" above all else

In his opening speech, SNCB general manager Mr Rulot underscored how much his administration had benefited from CEM/EGK since 1929. The average amount of time spent abroad by Belgian wagons had fallen from three days and five hours to two days and five hours in 1933, a development that was not entirely attributable to reduce congestion on the rails. Conference president R. Erben, the Czech rail minister, replied by highlighting the growing importance of guaranteeing delivery schedules: *"It is all the more necessary to keep refining international freight train services now that trade and industry no longer maintain large stocks of products. With affordable loans unavailable and prices constantly fluctuating, they have to work with substantially reduced stocks, relying instead on goods being delivered on schedule, quickly and dependably. Our duty is thus to ensure that our trains fulfil the second and no less important characteristic requirement of our age, namely reliable, on-time services."*

SBB raised the issue of egg consignments once more, requesting that all wagons used to carry them be equipped with a hand brake. *"Although wagons containing eggs are specially marked so that staff can identify them, damage frequently occurs during shunting owing to the use of a relatively large number of unbraked wagons. Push-off or gravity shunting (during marshalling) exposes the contents of these wagons to damage caused not only by the abrupt impact with other wagons, but even by the wagons' brake shoes since severe braking often causes load-shifting."*

DSB's representative objected on the grounds that having to used hand brake-fitted wagons would mean losing the Danish market. If "for rate-related reasons, customers ask for high-capacity wagons," then unfortunately "not all these wagons have hand brakes."

FS's representative observed that on his network, wagons containing eggs carried the prescribed labels (CIM, Annex I, model 249), which provided warnings in Italian, French and German of the need for careful shunting. "Insisting on hand brake-fitted wagons would cause difficulties." DRG's representatives shared the result of experiments conducted to establish why consignments of eggs got damaged: "They prove that brake shoe action does not damage eggs in wagons during marshalling." Dr Leibbrandt had published a pamphlet on the subject, explaining that allowing wagons to coast into other stationary vehicles or buffers – even at low speed – caused significantly more breakages than splitting up wagons during marshalling, even at quite high speeds. The outcomes of the tests that were still in progress would be communicated at a forthcoming conference. Following this contribution, "the SBB representative provisionally withdrew his proposal."

FS's representative observed that on his network, wagons containing eggs carried the prescribed labels (CIM, Annex I, model 249), which provided warnings in Italian, French and German of the need for careful shunting.

More significant progress had been made in carrying eggs from Bulgaria to Germany, Switzerland and France, and oranges from Italy to Sweden via Basel and Sassnitz, where journey times had been shortened by 24 hours. With the Southern Railway and London & North Eastern Railway joining the Conference in 1935, faster services between Great Britain and continental Europe were added to LIM from 15 May 1936.

Oslo and Bergen, October 1935

There was a change of president. Mr Erben, ministerial advisor and former Conference president, had sent his successor a letter, which the latter read out: *"As a result of a reorganisation in the operations section of the Czech railway ministry, timetable matters have been handed over to my fellow ministerial advisor Mr Machon."*

Nice, November 1936. Advertising in LIM?

PLM challenged the decision taken in 1930 to prohibit advertising in LIM. *"Experience has shown that the document does not sell well enough and is not distributed as widely as it should be. By permitting advertising in LIM, we would create a new reason to distribute it. Taking this step could primarily be of interest to transit, commission or groupage freight companies, who would then have another reason to give it to their customers. On the back of this advertising, the timetable would probably find its way into*

organisations that were unaware of it. It would then help make users aware of the efforts administrations have been making in a bid to provide fast timetables for slow freight services. Finally, the earnings from advertising would reduce the cost of publishing LIM and possibly also enable us to reduce its sales price. If this proposal is accepted, the cover could also be redesigned to make it more appealing."

A compromise was reached with DRG, LIM's publisher, under which loose-leaf advertising could be inserted in LIM as of May 1937. Administrations could send their advertising to DRG, which would then charge them insertion and labour costs. The discussion on modifying LIM's cover was postponed until the April 1937 conference.

PLM also proposed creating a label for attachment to all wagons operating international services. This label would list the stages in the wagon's route and would be affixed by the station of origin for the entire journey or changed at each border station. An analysis of wagons that had arrived late at their destination found that they had not been routed according to the timetables and journey routes provided in LIM, the executing agents having been unable to obtain sufficient information on this point from the documentation or labels. *"That is why we are proposing that wagons used for international services carry a special label showing the numbers of the trains to be used from stop to stop and the operating dates of those trains."* This solution had already been adopted in France for wagons for which routing was particularly recommended and was proving highly satisfactory. Participants acknowledged the need to ensure compliance with LIM conditions. Although it did not fall within the conference's purview, the issue would be discussed in greater depth at the next autumn session.

Athens, November 1937. LIM gets a new cover

Ways of improving LIM were discussed. At SNCB's suggestion, French and Italian titles would be added to the existing German title. The new red cover would therefore read:

Internationales Güterkursbuch
Indicateur international marchandises
Indicatore internazionale merci

The idea of having a special label to identify international wagons was rejected on the grounds that implementation would entail "major difficulties", besides which "all administrations had taken measures to ensure prompt routing of international traffic."

Sofia, October 1938. ČSD transfers management to Deutsche Reichsbahn

The Czech capitulation following the signing of the Munich Agreement on 30 September 1938 has already been mentioned. Before the session was opened, Dr Muller, a senior manager at DRB (Deutsche Reichsbahn having succeeded DRG in 1937), made the following declaration:

"*Gentlemen,*

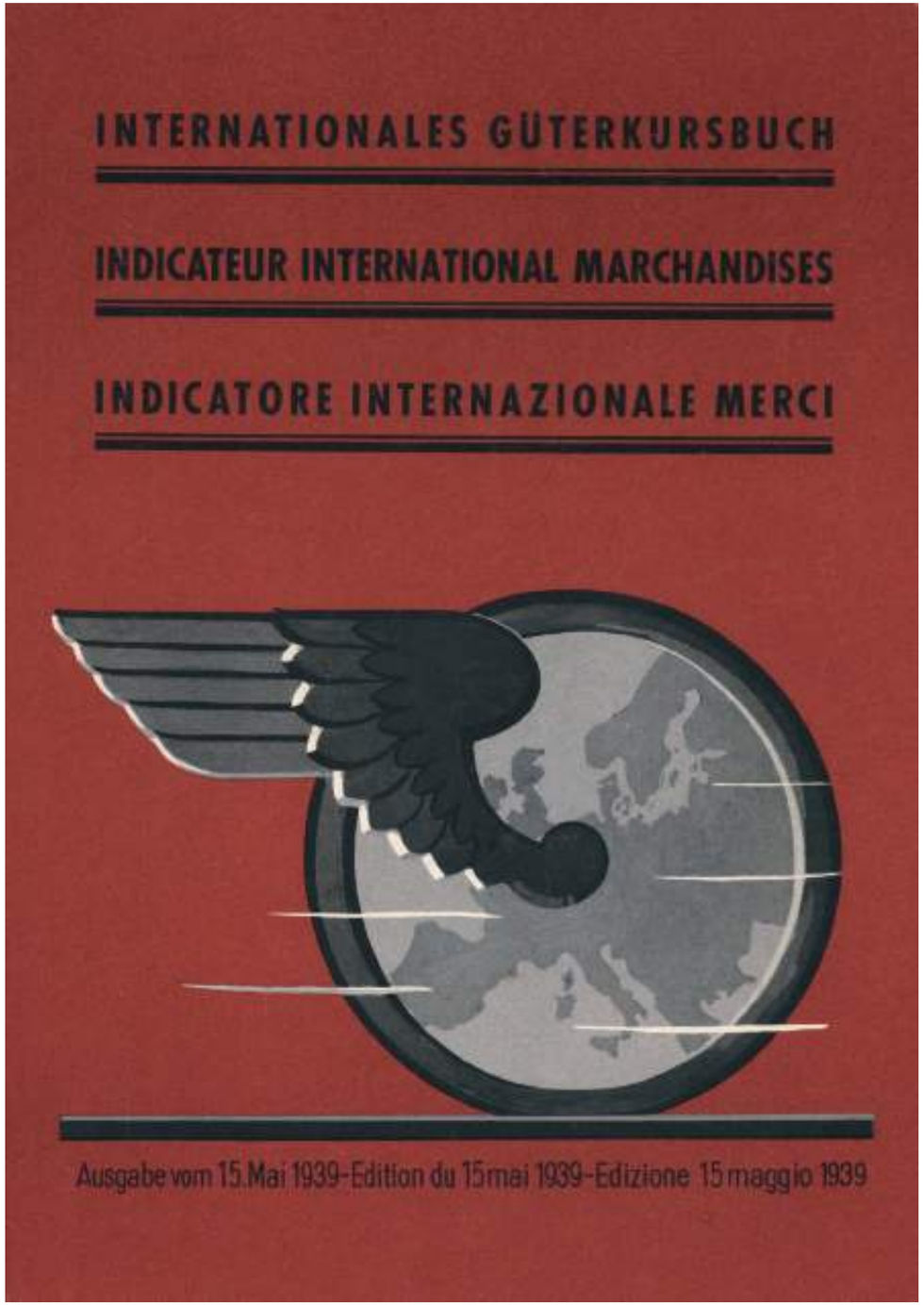
In its letter of 1 October 1938, the administration that had been managing this Conference until now, Czechoslovakian State Railways, relinquished its management responsibilities. The letter in question reads as follows:

"Having been overwhelmed by extraordinary tasks, we find it necessary to inform you that as of today's date, we will be renouncing management of the Conference. The agenda for the autumn session due to take place on 24 October in Sofia will shortly be circulated to all member administrations. To ensure the Conference continues without interruption, we propose that until decided otherwise, management be assumed by Deutsche Reichsbahn, the administration responsible for producing the international freight timetable."

I am therefore asking your consent to Czechoslovakian Railways' proposal that Deutsche Reichsbahn assume the task of management until such time as a final decision is made on the matter."

Ten administrations had adopted continuous compressed air braking for their freight trains. These were: DRB, SNCB, SNCF, PKP, SBB and BLS, SJ, ČSD, MÁV (for its fruit trains) and FS (for food product and cattle trains). SNCB proposed "immediately recommending the most extensive use possible of vehicles fitted with air brakes, or at the very least an air brake pipe, for international services traversing these countries". A vertical spiral line would be used in LIM to identify trains that did not take wagons fitted only with a brake pipe or took only a very limited number of such wagons. However, trains using the Arlberg, Tauern, Gotthard and Semmering lines or the lines from Ogulin to Sušak-Fiume and Split could still accept hand-braked wagons. The assembly proposed communicating its desire for harmonised rules to SBB as the managing administration of RIV.

At SJ's invitation, the next session would start on 23 October 1939 in Stockholm. ■



CEH/EFK's three fellow wayfarers:
- RIC
- RIV
- UIC

European Direct Services Conference (RIC Union)

The European Through Carriage Conference, which was supposed to culminate in the conclusion of an agreement on coach exchanges, petered out with the outbreak of the First World War. Post-war conferences resumed at FS's suggestion, the first being held in Stresa in April 1921. In November, "technical regulations governing the exchange of coaches and wagons" were formulated in Bern and these took effect on 1 January 1922. In 1924, an Agreement governing the exchange and use of coaches in international traffic was signed. This was known as RIC, short for Regolamento Internazionale Carrozze in tribute to its promoters. At first it adopted the statutes of the International Union for International Coach and Wagon services, which took effect on 1 January 1923. Its mission was to "govern the reciprocal use of coaches and wagons in international services and to draw up the European through-coach working plan (*Europaïscher Wagenbeistellungsplan* or EWP)" at annual conferences that would be organised along similar lines to pre-war events.

Convened by SBB as its managing administration, the European Through Coach Conference was held at the same time as CEH/EFK and was organised in similar fashion. Plenary sessions discussed the admission of new members and modifications to RIC provisions, while group sessions provided a forum for administrations to define scheduled service rolling stock diagrams, in other words predetermined vehicle routes for a defined period and covering coaches, sleeping cars, restaurant cars, lounge cars and wagons. The work was shared between geographic groups that reflected the major passenger flows, which they divided up among themselves. Delegates from affected networks fixed through-coach services under the direction of a managing administration, which was also tasked with linking up the various groups' diagrams. These were then incorporated into the European through-coach working plan, which was subsequently submitted to the plenary session for approval. Decisions were made by a majority of votes cast, with the number of votes assigned to each network dependent on the number of direct services to which it contributed and the number of axles it committed to such services. The minutes of plenary sessions were always produced in French and German; those of group meetings in French, German and Italian.

The RIC Rules were supplemented by technical regulations governing the exchange of coaches and wagons and how they were to be operated, built and maintained. Its annex set out the rules issued by the Technical Unit (produced in 1913), which vehicles had to satisfy before entering international service, as well as compensation and billing rules for coaches that were exchanged, this being done on the basis of the axle-kilometres covered. A twin-bogie coach was thus deemed to have four axles. Unlike wagons, which, by virtue of their ease of use and commonplace nature, could be exchanged and operated across borders without being bound by journey routes, coaches and luggage vans had to follow predefined outward and return routes. One fundamental principle of RIC was that any administration that had used a foreign administration's coaches in its trains for a particular length of time, should endeavour to operate those coaches on its lines in the interests of agreeing compensation for the journey routes in question. The amounts owed to and by each administration, expressed in axle-kilometres, were settled at intervals. Any network that did not return coaches within the timeframe stipulated by the joint diagrams was obliged to pay compensation in gold francs, the amount being calculated by vehicle type.

Stresa by the Lake Maggiore where the 1921 Assembly was held. © LVDR / Photorail

Exchanging wagons: RIV Union

In April 1921, delegates from administrations in 15 countries (Germany, Austria, Belgium, France, Hungary, Italy, Luxembourg, Netherlands, Poland, Romania, the Kingdom of Serbs, Croats and Slovenes, Sweden, Switzerland, the Czechoslovakian Republic and Turkey) met in Stresa to unanimously adopt the Agreementgoverning the exchange and use of wagons between Railway Undertakings. This agreement was to be known by its Italian name *(Regolamento Internazionale Veicoli)*, abbreviated to RIV.

It entered into force on 1 January 1922, could be revised every three years and broke down into several parts: rules governing the use of wagons outside the owner administration's network, calculation and billing of rental fees for loaded wagons, empty running charges, wagon conditioning and handling. Like the RIC Rules, it adopted the rules issued by the Technical Unit in 1913, which governed in particular the way that wagons were to be loaded and secured.

The task of regulating the exchange and use of wagons was assigned to the International Wagon Union, the provisional statutes for which were adopted at the general assembly held at Perugia from 13 to 18 June 1924, with these statutes entering into force on 1 January 1925. All European standard-gauge administrations joined the Union, with administrations from Greece, Latvia, Lithuania, Norway and Turkey augmenting those who attended the Stresa assembly.

It is worth noting that member administrations of the Verein adopted a revised version of VWÜ, which was more closely aligned with RIV, on 1 January 1924.

Union Internationale des Chemins de fer (UIC, International Union of Railways)

"To unify railways' operating conditions for the purpose of promoting international traffic within Europe."

Post-war international conferences were held at Barcelona (10 March to 20 April 1921), Portorose

UIC's first headquaters, on rue Bizet in Paris.
© LVDR / Photorail

(15 October to 25 November) and Genoa (10 April to 19 May 1922) to encourage the resumption of trade and transport between European countries. At the suggestion of the French administrations, a meeting to set up a new "standing conference to unify and improve railways' establishment and operating conditions for the purpose of promoting international traffic" took place in Paris on 17 October 1922. 81 delegates from 27 countries and 46 administrations attended and the draft statutes of the International Union of Railways were adopted, taking effect on 1 December. The Union's aim was to "unify and improve railways' establishment and operating conditions for the purpose of promoting international traffic within Europe." Decisions made by the general assembly were mandatory – provided they complied with laws and treaties – if they attracted at least 4/5 of the votes allocated to each administration.

Votes were allocated to administrations on the basis of the total length of their operating lines using a sliding scale. Thus, the German railways had 13 votes for 52,378 km; the French administrations 12 votes for 41,146 km; the British networks 11 votes for 31,838 km; FS

The Union's aim was to "unify and improve railways' establishment and operating conditions for the purpose of promoting international traffic within Europe."

and PKP 8 votes for 16,645 and 16,636 km respectively.

UIC was managed by three bodies. In addition to the general assembly, there was a permanent management committee and general secretariat run by executives seconded from Compagnie du chemin de fer de Paris à Orléans. Studies were assigned to five standing commissions: Passenger Traffic, Freight Traffic, Billing and Currency Exchange, Rolling Stock Exchange and Technical Issues. In October 1923 "to avoid work duplication and contradictory decisions", the management committee suggested to the other international organisations that they could exchange their agendas and minutes for the results of committee work that might be of interest. The other organisations were also encouraged to approach UIC with any question of shared interest. The Rolling Stock Exchange and Passenger Traffic commissions (which advocated standardised daylight saving time) had very similar objectives to CEH/EFK and the RIV and RIC Unions, and so agreements between these organisations were signed. Thus, the RIC Union decided to respond positively to UIC at the Through Carriage Conference held in Naples in November 1924, subsequently reinstating the agreement in 1951. After these latter agreements had been signed, relations between UIC and CEH/EFK converged to the point of becoming second nature.

UIC's aim was to supersede the Verein within Europe or at least to reduce its influence. The Verein's statutory assembly, held in Cologne in September 1932, modified the organisation's statutes, transforming it into the Union of Central European Railway Administrations or *Verein Mitteleuropaïscher Eisenbahnverwaltungen* (VMEV). The Union "weighed in" at 93,876 km and included Deutsche Luft Hansa AG and its administrations implemented the two sets of exchange regulations, RIV and VWÜ. ■

Préfecture de Police

3e DIVISION

2e BUREAU

Prévoyance Sociale

N° 162113

(Ce numéro devra être rappelé dans toutes les communications adressées à la Préfecture de Police.)

RÉPUBLIQUE FRANÇAISE

LIBERTÉ - ÉGALITÉ - FRATERNITÉ

(Mod. 215-4.)

Récépissé de Déclaration d'Association

(Loi du 1er Juillet 1901. — Art. 5)

A la date du 7 Juillet 1923

Mr Mary Président

demeurant à Paris

rue de Londres N° 8

a effectué la déclaration d'une association portant la dénomination de : Union Internationale des Chemins de Fer

et dont le siège social est fixé à Paris

rue Georges Bizet, N° 24

a déposé à l'appui de cette déclaration :

1° Deux exemplaires des statuts de l'association ;

2° La liste des personnes chargées de l'administration ou de la direction de l'association ;

3° Mg registre

Le présent récépissé a pour unique objet de constater le dépôt de la déclaration et des pièces annexées, sans préjuger en quoi que ce soit la légalité de l'association.

Pour le Préfet de Police :

Le Secrétaire Général délégué,

La déclaration doit être faite dans le délai d'un mois, être rendue publique par les soins de l'association, au moyen de l'insertion au *Journal officiel* d'un extrait contenant la date de la déclaration, le titre et l'objet de l'association, ainsi que l'indication du siège social. (Décret du 16 août 1901, art. 1er.)

Les associations sont tenues de faire connaître dans les trois mois tous les changements survenus dans leur administration ou leur direction ainsi que toutes les modifications apportées à leurs statuts. (Loi du 1er juillet 1901, art. 5.)

Les modifications apportées aux statuts et les changements survenus dans l'administration ou la direction de l'association, sont transcrits sur un registre tenu au siège de toute association déclarée ; les dates des récépissés relatifs aux modifications et changements sont mentionnées au registre.

Ce registre doit être coté par première et par dernière page et paraphé sur chaque feuille par le Préfet de Police ou son délégué. (Décret du 16 août 1901, art. 6 et 31.)

The act of validation of UIC's existence as an associaition, delivered by the Parisian police headquarters.
© LVDR / Photorail

London, Paris, Istanbul and beyond From the Simplon-Orient Express to the Taurus Express:

How CEH/EFK promoted a transcontinental service

Responding to a suggestion by the prestigious Compagnie du chemin de fer de Paris à Lyon et à la Méditerranée (PLM), representatives of the Allies meeting in Paris agreed to launch a luxury passenger train service on 15 April 1919. This train, to be called the Simplon-Orient Express (SOE), would run twice a week from London and Paris to Vienna, Budapest, and Bucharest. Although the train bypassed Germany, its competitiveness had been assured by the opening of the Mont d'Or Tunnel between Frasne and Vallorbe in 1915.

From 1 July 1920, the SOE originated at London Victoria, from where it travelled on the tracks of the South Eastern and Chatham Railway, later to become part of the Southern Railway after grouping in 1923, to the newly constructed Dover Marine Station. Having crossed the Channel, passengers travelled onwards to Paris-Nord from Calais-Maritime. The train then crossed the French capital to Paris-Lyon on the "Petite Ceinture" loop line. Its trans-continental journey then continued to Vallorbe, Lausanne, Milan, Venice, Trieste, Ljubljana, Zagreb, and Vinkovci, where it split, with one part continuing to Bucharest, Constanța, and Odessa, and the second part heading to Belgrade, Sofia, Athens, and Istanbul, which it reached after a journey time of 96 hours 30 minutes. The Paris-Istanbul service ran daily from 1 June 1921.

CEH/EFK assemblies entrusted commercial operations to CIWL, which employed a fleet of first-class coaches, and responsibility for technical operations and SOE management to PLM, as permitted under article 3 of CEH/EFK's statutes. However, the poor condition of the permanent way and rolling stock used for the express did not make this an easy task. In 1922, CIWL provided new, 53-tonne S-type "blue wagon-lits" stock, which improved comfort standards for SOE passengers.

In February 1928, several middle eastern railway companies had set up a passenger service connecting the station of Haydarpaşa (on the opposite side of the Bosporus to Istanbul) to Cairo via Aleppo, Beirut, and Haifa. Gaps in the rail network, part of which was narrow gauge, were filled by road services linking the Lebanese cities of Riyaq and Tripoli to Haifa.

It therefore seemed logical to include the subject of coordinating SOE with this new service on the agenda of the Vienna Conference in October 1928. PLM had already discussed the idea of extending SOE to Nusaybin, Mosul, and Baghdad with Chemins de fer de Bozanti-Alep-Nissibine et Prolongements (BANP) and Iraq Railways, the extension being dependent on the Turkish government giving permission to run passenger coaches on the Derbesiye–Nusaybin section. The Conference unanimously recognised the benefit of extending SOE in this way and authorised PLM to sign the necessary agreement with the two administrations in question as soon as possible. Subject to the organisation of a road service from Nusaybin to the Iraqi city of Kirkuk via Mosul, passengers would be able to board a train in Kirkuk to take them to Baghdad and from there to the port of Basra on the Persian Gulf.

In April 1929, PLM organised a key meeting in Haydarpaşa with its partners CIWL, BANP and the Turkish and Iraqi state railways. This meeting succeeded in removing the final obstacles and it was hoped that services would commence with the next winter timetable.

The schedule for the new service was finalised at the Warsaw conference in 1929. PLM would speed up SOE so that passengers arriving at Istanbul Sirkeci, the city's European station, could then cross the Bosporus to Haydarpaşa station and join Turkish Railways' new fast train the same day. This train, the Taurus Express, would leave Haydarpaşa at 16:00.

Taurus Express in Mosul, 22 August 1939
© Ulrich Fuhrmeister / Collection Freunde der Eisenbahnen e.v., Hamburg

This arrangement suited everyone. SOE would still depart London at 11:00 – for which the British were very grateful – but would depart Paris earlier and cross Yugoslavia faster. In the opposite direction, passengers setting off from Cairo or Baghdad would have a direct connection to SOE at Niš, which fulfilled the German, Czechoslovakian, and Hungarian administrations' desire to connect their capital cities to Istanbul and Athens.

The associated arrangements proved to be one of the most important international agreements in CEH/EFK history.

From 15 February 1930, the Taurus Express extended SOE towards Asia, serving Cairo three times a week and Baghdad twice a week, while from 15 May the next year this already extensive service offering was further augmented by the option of onward journeys by bus.

The consequences of the decisions taken in Warsaw were far-reaching since they had created a 7,000-kilometre transcontinental trunk service between London and Basra. Eleven different European administrations were involved in running SOE, and a further five in operating its onward extensions to Cairo and Baghdad.

At the same time, between 1920 and 1930, SOE's journey time from Paris to Istanbul was reduced by a third from 96.5 hours to 65.25 hours. The fact that it was possible to make the entire journey in second-class accommodation helped boost passenger numbers. Success seemed assured despite the inhibiting effect of the global economic downturn in the 1930s.

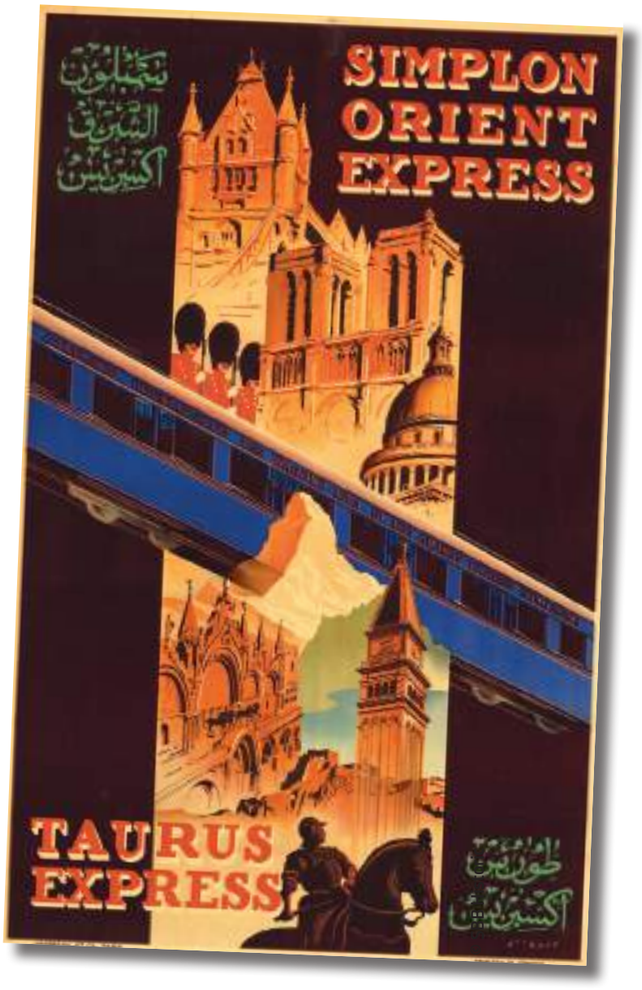
On 15 February 1930, the Taurus Express launched a twice-weekly service to Nissibine, a weekly service to Mardin and a thrice-weekly service to Riyaq (Lebanon), Beirut and Damascus.

CIWL successfully negotiated a road link from Tehran to the Taurus Express at Khaniqin (Iraq). By combining road and rail transport in this way, CIWL was able to link Egypt to the European network and simplify access first to Syria and Palestine, then to Iraq and Persia. From Basra, passengers had the option of continuing to Bombay by ship. The journey from London to Cairo took seven days. CIWL endeavoured to promote tourism in the Middle East and Egypt by introducing a timely and substantial 25 to 30% reduction in fares.

Further progress was reported at each conference

Copenhagen, October 1930: Turn-around times at Belgrade were reduced and the interval between arriving at Istanbul Sirkeci and departing Haydarpaşa was slightly extended. The journey from Berlin to Istanbul

Station Haydarpaşa in Istanbul 1958. © National Railway Museum, York



that had taken 64 hours 22 minutes in 1928 took 52 hours by May 1931.

London, October 1931: Running times and connections with central Europe were improved. Journey times from Paris to Istanbul and Paris to Bucharest were shortened by three and eight hours respectively.

Bucharest, October 1933: The time at which the two parts of the train separated at Belgrade was brought forward ten minutes, resulting in the two sections reaching Istanbul and Athens ten minutes earlier. New locomotives would be provided on the Turkish network, while an overnight train would be introduced between Aleppo and Tripoli, and more powerful buses would operate the road route between Telzivan and Kirkuk (Iraq).

Dubrovnik, October 1934: A Paris-Est–Belgrade through coach from the Orient Express was added to SOE, making a total of four rather than three. As a result of this extra coach, Bulgarian Railways had to increase the eastbound journey time over their network. However, this was offset by a faster journey time between Milan and Venice, which meant that departure times from Paris-PLM and arrival times in Istanbul could be retained.

Helsinki, October 1935: Electrification of the Italian network and the introduction of more powerful locomotives in Yugoslavia brought about a further reduction in journey time. Now running three times a week, the Taurus Express was routed through Ankara with no increase in either fares or journey time. The line to Mosul was extended by 75 km and three hours were shaved off journey time, which meant that SOE now departed London at 14:00 rather than 11:00, but still arrived in Belgrade at the same time.

By 1938, SOE was running daily, linking Paris with Istanbul in 57 hours 10 minutes.

On 3 September 1939, services were suspended. **On 15 July 1940,** however, the last 384-km stretch of the Baghdad line between Telkoçek and Samarra (south of Mosul) was completed, and passengers on the Taurus Express could finally enjoy a transfer-free journey to Baghdad.

Post-war resumption

Europe emerged from the Second World War divided into two political blocks separated by the Iron Curtain. The Arlberg Express, Orient Express and Simplon-

© SBB Historic

journey times on existing routes, restoring the Central European branches, extending trains to their terminus in Istanbul, Bucharest and Athens, intermediate stops at the en-route capitals of Vienna, Budapest, Belgrade and Sofia and connections with the Taurus Express. As of the May 1947 timetable, the train that left Paris-Gare de Lyon at 21:40 on day A and arrived at Belgrade at 20:30 on day C could be extended to Istanbul subject to the agreement of Bulgarian Railways. It would then depart Belgrade at 23:00 on day C and arrive in Istanbul at 12:25 on day E. Under this scenario, the timetable of the twice-weekly Taurus Express would have to be modified.

The European Timetable Conference was held in the Şale Kiosk at Yıldız Sarayı (palace of the stars) in Istanbul from 9 to 18 October 1947. However, the invitation issued by Turkish Railways (TCDD) was not entirely selfless. The 140 delegates would be aware of the urgency of coordinating the timings of trans-European trains with the 1948/49 timetable, and SOE and TE would be at the top of the list. With this in mind, TCDD invited Beirut-based "Chemins de fer de Damas-Hama et Prolongements", Aleppo-headquartered Southern Turkish Railways, Iraq State Railways (Baghdad) and Palestinian (Haifa) and Egyptian (Cairo) Railways.

Delegates representing some thirty administrations as well as the forces of occupation in Germany attended the group meeting held to discuss the two trains. With the gradual reopening of the railways, it became possible to set a timetable for SOE. SOE's timetable for winter 1948/49 was also set – as was the timetable for the Milan–Rome and Niš–Thessaloniki branch services – and coordinated with the Taurus Express at Istanbul, with SOE arriving at Istanbul Sirkeci at 06:40 and TE departing Haydarpaşa at 08:50. Passengers thus had two hours to change stations and continents on the ferry that crossed the Bosporus Strait from Europe to Asia. Given the poor condition of the track, however, the journey took nearly 100 hours – more than it had in 1919. However, this was gradually reduced to 76 hours in 1949 and 72 in 1952.

Orient Express would all meet different fates, declining until they were withdrawn and only re-emerging as less exclusive, but still high-quality trains. Returning to the conferences, however:

Brussels, October 1945: The idea of resuming SOE was accepted in principle. A month later, SBB, SNCB, NS, CFL, Southern Railway, FS, and SNCF (which had succeeded PLM in 1938) met in Lugano to plan for a resumption of services on 7 January 1946. However, Allied Forces Headquarters, attending the conference to represent the armed forces, reminded attendees that military trains still had priority. A dedicated SOE conference was held in Paris from 18 to 22 June 1946.

Montreux, October 1946: SNCF's general manager set out the numerous problems to be resolved: improving

Taurus Express in Mosul, 22 August 1939.
© Ulrich Fuhrmeister / Collection Freunde der Eisenbahnen e.v., Hamburg

On 27 May 1962, the Simplon-Orient Express destination boards were withdrawn in London, Paris, Venice, Belgrade, Sofia, Athens, and Istanbul. Thus, the last survivor of the prestige trains of yesteryear was downgraded to the humbler Simplon Express.

This change meant that the train had in effect come full circle. Mr Noblemaire, PLM's general manager had suggested creating a Simplon-Orient Express at the international timetable conference held in Bremen in June 1906, but the idea was rejected by Germany, Austria, and Hungary as detrimental to the Orient Express, which had crossed their territories since 1883. Thus, for the 1906 winter timetable, PLM contented itself with operating a Simplon Express connecting London with Milan via Lausanne and which was extended to Venice in 1908. However, the outcome of the First World War reversed the situation completely in 1919.

The days of regular long-distance prestige trains are well and truly past. Only a few "interrailers" – people who have bought a standard-price first or second class pass for the whole of Europe under the Interrail scheme launched in 1972 – now venture as far as Athens or Istanbul by train, and even then, they have to negotiate countless changes and the occasional bus section in Serbia.

To conclude this history, the case of SOE highlights the work of the railway people who attended European timetable conferences. Under sometimes extremely difficult circumstances, such as those during the inter-war years and the period following the Second World War, they put in place services that linked Europe to the Middle East by crossing states with railway networks in very different stages of development. Their aim was to operate trains across international boundaries, regardless of whether the countries in question were victors or vanquished and irrespective of how fundamentally different their political systems might be. The profoundly international culture of the railways was instrumental in overcoming the difficulties, while the timetablers' skill optimised and reduced journey times in a continuous cycle of perpetual motion. ■

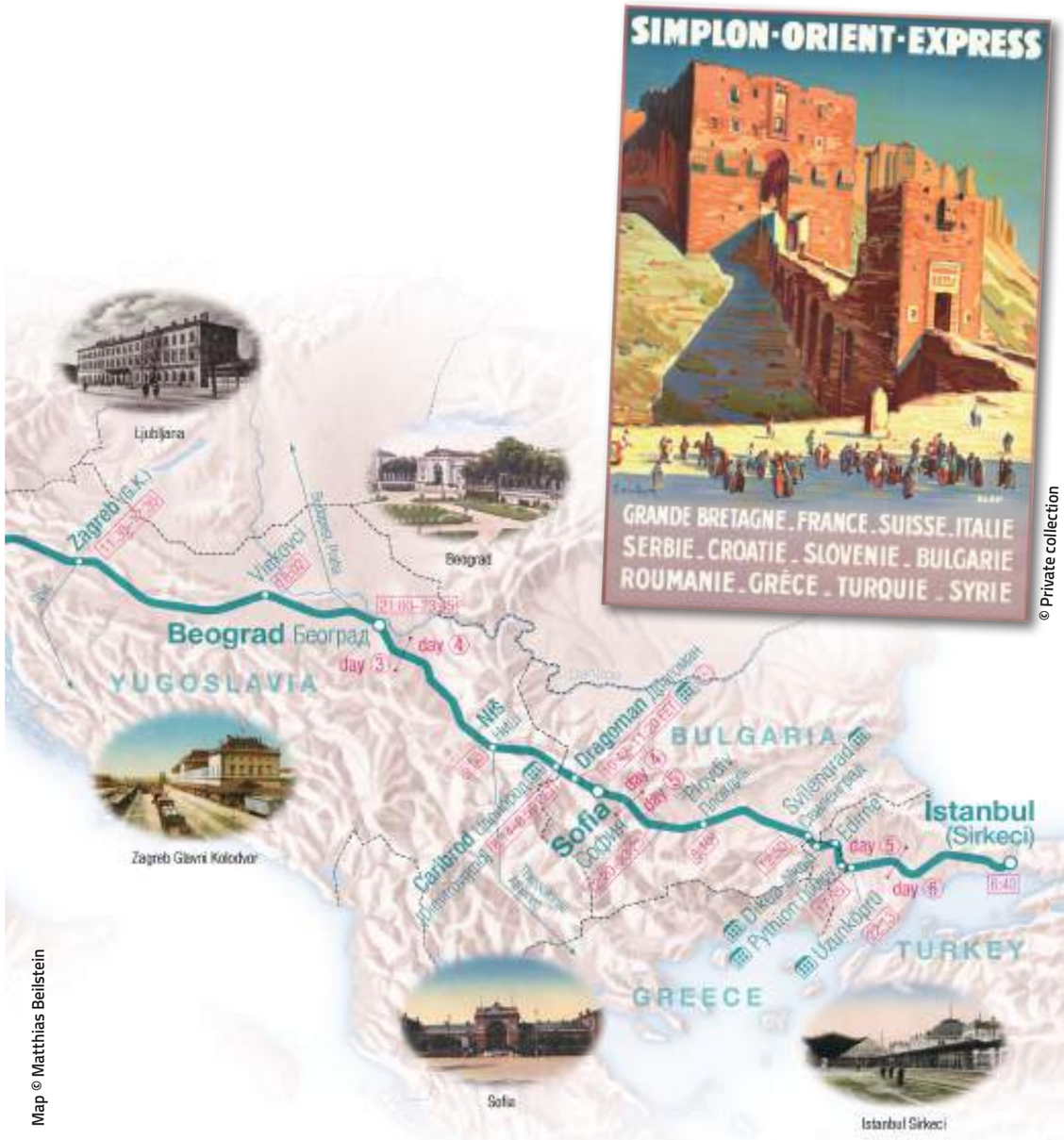
A timetabling tour de force

by Ignaz Civelli

On their journeys from Paris to Baghdad, the Simplon-Orient Express (SOE) and Taurus Express (TE) passed through four time zones, crossed 13 national borders and traversed several boundaries between political systems. Together, the routes of the two expresses, running from Calais to Baghdad, totalled more than 6,000 km (slightly less than 1/7 of the globe's circumference) and crossed two continents, Europe and Asia. The railway companies and customs authorities of all ten countries through which the trains passed – eleven when through coaches ran to Lebanon – had successfully managed to agree on an economically viable route with intelligently chosen halts en-route, reliable connections and relatively short border stops. Given the adverse circumstances they were facing shortly after the end of the Second World War and with the Cold War just starting, organising and running both trains was a tour de force of vision, logistics and planning by the participating railway companies, and particularly their timetablers.

In 1948, it took SOE around 110 hours to reach Istanbul, the "City of a Thousand Lights" – the longest journey time since its inception in 1920 and around 36 hours longer than the quickest journey times during the inter-war years. The effects of the Second World War, such as track that had been only superficially maintained or repaired, single-line sections with waits for trains coming in the other direction, stricter border checks and a half-day hold-up in Sofia for operating reasons, slowed the journey significantly. After crossing the Bosporus by ferry and travelling for a further 73 hours, passengers arrived in Baghdad, the city of the Arabian Nights.

Over the course of the two trains' long journeys, through coaches were detached or added on around



Map © Matthias Beilstein

© Private collection

17 occasions, meaning that the expresses' length was constantly changing. For example, while SOE had nine coaches when it left Paris (in addition to the mandatory luggage vans), it only had two on a different section of its journey, whilst in south-eastern Europe and Turkey, freight wagons were also attached to the expresses.

There were also around 20 locomotive changes along the route. Steam locomotives were the primary motive power for SOE, although the train was hauled by electric traction on some sections in western Europe. The TE was entirely steam-hauled. There was also a full crew change at each border, while local suppliers replenished the CIWL restaurant cars' stocks of fresh food at predefined stops.

The trains' character changed after the Second World War. By 1948 the erstwhile luxury trains had been transformed into "people's expresses". Although well-heeled travellers and diplomats could still enjoy the luxury of CIWL sleeping and restaurant cars, the trains now also included second and, on certain sections, third-class coaches, which were popular with locals – travelling salesmen, families and the rural population. ■

Map © Matthias Beilstein

Taurus Express train to Baghdad, 1969.
All rights reserved

Simplon-Orient Express from Calais / Paris to Istanbul

1948 / 1949 Train Composition Simplon-Orient Express
Departure Paris Gare de Lyon

Order	Wagon type	Company	Origin	Destination
	Locomotive 241 A	SNCF	Paris	Dijon / Dôle
1	Baggage Wagon	SNCF (ex CIWL)	Calais	Milano
2	WLAB	CIWL	Paris	Milano
3	AB	SNCF	Paris	Milano
4	WLAB	CIWL	Calais	Roma
5	WLAB	CIWL	Paris	Roma
6	WLAB	CIWL	Paris	Roma
7	AB	FS	Calais	Roma
8	AB	FS	Paris	Roma
9	WLAB	CIWL	Paris	Istanbul
10	AB	SNCF	Paris	Istanbul
11	Baggage Wagon	SNCF (ex CIWL)	Paris	Belgrad

Taurus Express from Istanbul to Baghdad

1948 / 1949 Train Composition Taurus Express
Departure Istanbul Haydarpaşa

Order	Wagon type	Company	Origin	Destination
	Locomotive BR 46	TCDD	Istanbul	Baghdad
1	Baggage Wagon	TCDD	Istanbul	Baghdad
2	C	TCDD	Istanbul	Baghdad
3	AB	TCDD	Istanbul	Baghdad
4	AB	TCDD	Istanbul	Iskenderun
5	WR	CIWL	Istanbul	Baghdad
6	WL (typ SG)	CIWL	Istanbul	Baghdad
7	WL (typ SG)	CIWL	Istanbul	Alepo
8	Baggage Wagon	CIWL	Istanbul	Baghdad

02

1945 - 1993
Modern times

A DB class VT08 diesel multiple unit at Emmerich station. These trains operated Frankfurt-Amsterdam TEE Rhein Main services until the introduction of VT11 trainsets in December 1957.
© Dubruille / LVDR/ Photorail

1945 to 1993
CEH/EFK faces competition

1950	Cooperation agreement with UIC.
1952	Revised statutes effective from 1 January 1952.
3 June 1956	European railways streamline to two classes.
May - June 1957	Start of TEE and car-sleeper trains.
1961	Agreement on two-year timetable.
1963	Streamlined modus operandi.
May 1965	Two-year timetable launched.
1966	Adoption of provisional statutes.
1967	First technical meeting at UIC.
1968	Definitive statutes.
1972	Celebration of 100 years of European timetable conferences.
1978	SBB mandate is renewed for 1979 – 1984.
1980	CEH/EFK becomes responsible for producing the European through-coach working plan (EWP).
1982	Greater collaboration between European timetable conference and UIC.
1992	Introduction of route management plans (ROME) to the group sessions. New statutes.

Lugano, November 1945

At the request of ECITO (European Central Inland Transport Organisation), which was created in London in September 1945 to address military and civilian transport needs in newly liberated Europe, SBB organised a conference to reintroduce the Simplon-Orient Express as a matter of priority. Given the difficulties of running trains and priorities in the military zones of occupation, preparation of international timetables was postponed by a year. It was decided that the 1946/1947 timetable would be effective from 6 May 1946.

Montreux, October 1946

In his welcome speech, CEH/EFK president Mr Paschoud expressed his pleasure that the conference had been able to reconvene: *"The 1946 conference bears a striking resemblance to pre-war conferences, both in its organisation and agenda. As you will be aware, this resemblance is intentional. There can be no doubt that much has changed in eight years. Some of the administrations that attended in 1938 are not represented today. There are also many new faces among you. New organisations, spawned by the war, are pursuing similar goals to ours and we may have to adapt to the change in circumstances. However, the European Timetable Conference has more than twenty years' experience and has achieved important and beneficial results. No new organisation will be able to progress without drawing on its example."* The first group meeting was devoted to the Simplon-Orient Express.

RAe TEE II on the northern approaches to the Gotthard at Wassen in January 1968. © SBB Historic

During a discussion of border formalities, which were still far too ponderous, the fact that customs checks on services between Switzerland and France or Italy were carried out at just one station near the border was singled out as exemplary. It was felt that this procedure should be universally adopted.

Istanbul, October 1947

Istanbul had previously offered to host the 1939 conference at the 1938 conference in Budapest. The Turkish communications minister was pleased that contact had been re-established between administrations which *"separated by the hostilities, asked nothing more than to get along together. The conference has resumed its position as a major railway coordination event; no less than 140 delegates from 42 different administrations and representing 23 countries are in attendance. There are definitely grounds for optimism."*

Krakow, October 1948

The Polish communications minister recalled that Warsaw had hosted the 1929 Conference. *"What events have occurred since then! The most terrible of wars has put the entire world to the torch and sword (...). What men are not here whose assiduous work made them valuable and intelligent contributors to the Conference."* His proposal to codify timetable time zones was adopted: Central European Time: CET; Western European Time: WET; Eastern European Time: EET; Moscow Time: MSK throughout the

Legendary French actress Micheline Dax poses on the buffer of an RGP-TEE multiple unit for a promotional photo in 1957. © Iskander / LVDR / Photorail

these efforts would not be sufficient to "prevent competition from private cars, buses and aircraft." The British delegate's offer to host the next conference in Brighton, "the Queen of British seaside resorts", was greeted with warm applause.

Amsterdam, October 1950. Cooperation with UIC

The chairman of NS, Mr den Hollander, picked up the subject of competition again during the opening meeting: *"As creators of good international train links, timetables are crucially important in the railways' relentless struggle against aeroplanes and buses, the new forms of transport with which they are competing for international traffic. Without good links, the battle is lost before it has even been fought. But your work is also extremely important in the broader setting. European federation[1], essential for our continent's future, will require fast, efficient transport, as much for commercial purposes as for – and most especially – tourism."*

The agenda included UIC's proposed cooperation agreement with other international non-governmental rail organisations, the aim of which was to improve resource allocation and avoid duplication. A simple draft protocol covering government representatives was signed with CEH/EFK, agreements having been concluded with five other organisations[2]. From 1 January 1951, each organisation would be represented in an advisory capacity in the others' governing bodies. Administrative offices would be in constant contact, exchanging assembly agendas and minutes. The UIC Bulletin would contain summaries of their activities. A commission was therefore set up to revise CEH/EFK's statutes.

UIC wanted CEH/EFK's support in promoting special international tourist trains, known as "cruise trains", and so a commission chaired by SBB was set up. The joint Through Carriage Conference undertook to improve some ten major services: Simplon-Orient Express, Orient Express, Arlberg Express, Nord Express, Baltic Orient-Express, Tauern Express, Rheingold Express, Paris–Brussels–Amsterdam, Amsterdam–Brussels–Basel, France–Germany, and Paris–Rome via Modane.

Several years later, Franciscus Quirien den Hollander, a keen supporter of the European project, would create the Trans-Europ-Express.

International Rail Transport Committee, CIT; CEM; RIC; RIV; URF, Union of European Railway-owned Road Services, set up in 1950 to manage the scheduled international services operated by Europabus.

Relations between France and Belgium. © Raymond Floquet/ LVDR / Photorail

Oslo, September 1951. Revised statutes effective from 1 January 1952

The agenda included CEH/EFK's revised statutes. The Romanian delegate's suggestion of an article-by-article discussion was rejected. It was agreed that UIC and the United Nations should attend conferences in an advisory capacity. While the statutes would be available in German, English, Italian, French, and Russian, only the latter two would remain the permitted languages for minutes. Unanimous decisions by group meetings would be binding. Mini conferences could be held to expand on or modify group decisions, it being the responsibility of the administration organising the conferences to produce minutes. The revised statutes were approved by a majority, "but with no expression of acquiescence on the part of the Soviet, Romanian, Polish, Czechoslovakian or Deutsche Reichsbahn [East German] delegates", as the minutes noted.

SNCF offered to host the next conference in either Nice or Paris. Nice was duly chosen as the preferred venue.

Nice, October 1952. UIC engagement benefits CEH/EFK

UIC Leaflet 210, valid from 1 January 1954, introduced a requirement to display a destination board at both ends of coaches. In addition to the obligatory information, boards could also show the name of luxury trains and onwards destinations. UIC announced that it had commissioned a group consisting of representatives of SNCF, CIWL, DB and SBB to conduct a study of the "future prospects for passenger traffic", the results of which would progressively shape the direction followed by CEH/EFK. This procedure was acknowledged as consistent with the intentions of the 1951 CEH/EFK/UIC memorandum.

Athens, October 1953. Revising services: new ways forward suggested

CEH/EFK took note of the proposals put forward by the UIC group, which had been expanded to include FS and NS. New strategies for combating road and air competition were suggested, including reducing the number of classes in coaches; the development by CEH/EFK of new fast services reflective of current needs, particularly half-day services; electrifying lines or introducing diesel traction; the development of sleeping accommodation in night trains by providing appropriate coaches. DB and SNCF were at loggerheads over the design of such coaches. DB was in favour of 26-metre coaches with six-seat 3rd-class compartments that could be transformed into couchettes. Given the rapid evolution of customer expectations, its chairman, Edmund Frohne, also advocated short coach

Promotional photo showing passengers boarding a CST. © Coll. G. Ribeill

service lives. On the other hand Louis Armand, SNCF's general manager, preferred eight-seat compartments that could be transformed into six couchettes.

Other medium-term options were also put forward, such as identifying the routes that were best suited to passenger needs, focusing efforts to maximise speed and comfort on them and using cross-border routes to link major European cities between 300 and 500 km apart. This suggestion was inspired by the solution successfully adopted by NS and SBB for domestic services – "a system of frequent services operated by railcars and light rail units." This second option was dependent on simplified customs formalities, a subject that the Conference regularly discussed, but which ultimately remained a government matter. Since the Conference did not have the authority to take decisions in response to the group's proposals, the suitable response to its request would be to make "no observations or suggestions" .

Budapest, October 1954

The 1955/56 timetable period was defined as 22 May 1955 to 2 June 1956, with the new two-class system scheduled for introduction on 3 June. The studies undertaken for the Europexpress programme were mentioned, and Deutsche Schlaf-und Speisewagen Gesellschaft (DSG) was admitted as a new associate member.

Wiesbaden, October 1955

SNCF announced that roll-out of the first multiple units intended to operate high-speed services between major European cities under the Trans Europ Express (TEE) banner had been postponed since only the French units would be delivered in 1956. These would be put into service immediately on delivery, but would not carry TEE branding.

Lisbon, October 1956. CST, TEE and night trains: first steps towards service revamp

While efforts were still ongoing to improve long-distance services such as the Simplon-Orient Express, Orient Express, *Nord Express* and *Paris-Scandinavie Express*, work commenced on rejuvenating international train services. It was not long before seasonal car-sleeper trains (CSTs), comprising sleeping and couchette cars coupled to double-deck car carriers, were in operation. The first, a thrice-weekly service between Boulogne-Maritime and Lyon-Brotteaux, ran on 31 May 1957. The first class-only, high-speed luxury services operated by the Trans-Europ-Express group, overseen by NS in partnership with SNCB, SNCF, DB, SBB and FS, commenced on 2 June, the timetable having been previously set at a conference. Services between Brussels, Dunkirk, Basel, Paris and Frankfurt were improved by the electrification of the

3 June 1956: European railways streamline to two classes

UIC had previously investigated the issue in 1952. The declining market share of first class and the operating cost savings that could be achieved by providing just two classes were arguments that European administrations could not resist. The decision was made at a UIC assembly in Naples in May 1953. As of the 1956 summer service, there would only be two classes: first, with six seats per compartment, and second with eight, while each administration was to modify its own fleet. From 3 June 1956, on all networks, any passenger who was used to travelling second class could find themselves sitting in either a standard second-class compartment or a refitted first- or third-class compartment. The only administration not to make the change was RENFE, which had a significant and stable volume of first-class traffic.

Brussels–Luxembourg and Valenciennes–Thionville–Luxembourg lines.

The Plenary Assembly discussed the development of morning, evening and night sleeper services; analysing international traffic flows using a method developed by UIC; the steps to be taken to deal with trains running late; efforts to come up with a standard seat numbering and marking system; and harmonising the operating periods of seasonal trains. A working group made up of representatives of DB, SNCB, SNCF and ÖBB was tasked with investigating a range of night services on routes of between 800 and 1,000 km.

Naples, October 1957. Simplify and reduce

Mr Wichser, Conference president and head of SBB, suggested simplifying conferences and increasing the period covered by international timetables to two years. The four-month summer timetable period adopted at Lisbon was also discussed. Although some administrations felt this was too long, it was what tourism professionals had been requesting. The slimmed-down border-crossing arrangements obtained for TEEs gave rise to hopes that governments might simplify and standardise procedures across the board by permitting passport and customs formalities while trains were in motion, allowing attendants to collect couchette passengers' passports and giving passengers the option of remaining in restaurant cars for border crossings.

Leipzig, October 1958. Cooperation with business departments? The annual timetable in jeopardy, criticism of through coaches

Conference president Mr Wichser suggested dealing with agenda items more quickly than in the past. The opening meeting would still discuss the validity period of the international timetable, but the conference would end with a single Plenary Assembly. Working groups would only discuss the major international trains; other trains would be either dealt with before the assembly or harmonised at the venue immediately after it had ended. This distinction was also to be observed in the minutes.

New ideas for cooperation were discussed. For several years, SNCF had been chairing conferences of administrations' business departments, these conferences taking place at the same time as CEH/EFK. It was suggested that a joint preparatory conference between CEH/EFK and UIC should be held. The idea of holding this conference a few weeks before the main event was supported by 166 votes from 10 administrations, while that of holding the two conferences simultaneously received 123 votes from seven administrations.

The preparatory conference would discuss general and high-level issues raised by UIC or by the Operations department of a particular administration. Since none of the delegates responded when invited to comment on the principles already agreed with Mr Tuja the Secretary General of UIC, Mr Wichser concluded: "*The silence from the floor leads me to assume that you agree to the principles I have just set out and that we will be able to proceed on that basis.*"

The issue of timetable periods that had been raised at Naples was rediscussed, with Mr Wichser being in favour of extending them. "*The timetable is undoubtedly our production schedule. By changing it each year, we are letting slip through our fingers numerous benefits that only become tangible once it is well run in. No company subject to state economic planning would do such a thing unless compelled. Our customers – the people who use the railways in other words – would doubtless also welcome timetables that change less frequently because it would make it easier*

Summer service, 2 June 1957: Start of TEE services			
Train units	**Name**	**Route**	**Distance**
DB	Paris-Ruhr	Paris–Liège–Cologne–Dortmund	607 km
DB	Saphir	Ostend–Brussels–Cologne–Dortmund	458 km
DB	Rhine-Main	Amsterdam–Cologne–Frankfurt	484 km
DB	Helvetia	Hamburg–Frankfurt–Basel–Zurich	963 km
FS	Ligure	Marseille–Genoa–Milan	556 km
FS	Mediolanum	Milan–Munich	595 km
NS-SBB	Etoile du Nord	Amsterdam–Brussels–Paris	312 km
NS-SBB	Oiseau bleu	Brussels–Paris	312 km
NS-SBB	Edelweiss	Amsterdam–Brussels–Luxembourg–Strasbourg–Basel–Zurich	902 km
SNCF	Ile-de-France	Paris–Brussels–Amsterdam	541 km
SNCF	Arbalète	Paris–Mulhouse–Basel–Zurich	614 km
SNCF	Mont-Cenis	Lyon–Turin–Milan	464 km
SNCF	Parsifal	Paris–Liège–Cologne–Dortmund	607 km

for them to organise their journeys." Since all attendees accepted this argument, SBB proposed an immediate vote on the principle of a two-year timetable for 1960–1962, but encountered opposition from the Czech transport minister. The issue therefore remained unresolved.

Mr Wichser reminded delegates that the general manager of FS, Mr Rissoné, had raised an important question with UIC: "Very few through coaches are used by significant numbers of passengers, and when the coaches arrive at their destination, they are often filthy from their long journey. Using individual coaches for direct services is cumbersome and makes train formation harder." He suggested replacing "the small-unit system of individual coaches by a system based on compact coach sets or even entire trains running unchanged from one end of their journey to another, depending on major traffic flows."

Although the issue was the responsibility of the existing 'Through Carriage Conference', a working group was set up comprising representatives of SBB (chair), DB, DR, SNCF, ÖBB, SJ and ČSD. DB and SNCF also sent representatives of their Operations and Commercial departments.

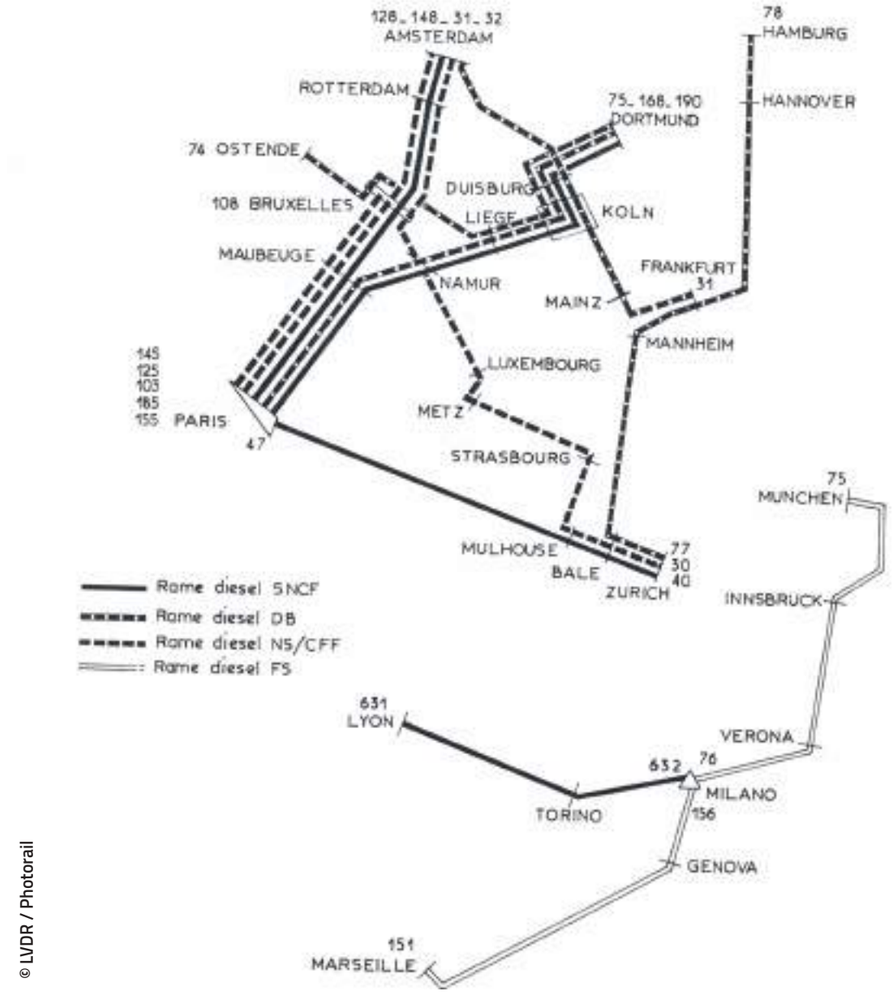
The public relations arm of UIC, the Information Centre of the European Railways, shared a request from American travel agencies concerning the possibility of having summer timetables by the preceding autumn. Should the annual assembly of the CEH/EFK be brought forward? No. The annual assembly had originally been scheduled to take place in November, was brought forward to the end of October in 1925 and then to the beginning of that month in 1931. October was therefore the ideal month for it.

Drawing on the example of the TEEs, DB suggested using letters to identify the various international trains by their attributes: **D** would be used to denote direct trains *(direct, diretto)*, **DD** express trains *(D-Zug, Express, Direttissimo, Expresso)* and **Ex.** long-distance fast trains *(Rapide, rapido, Expresszug).*

Vienna, October 1959. Discussing the two-year timetable. Very long-distance night trains?

The subject of two-year timetable periods was discussed again: 17 administrations were in favour of immediate

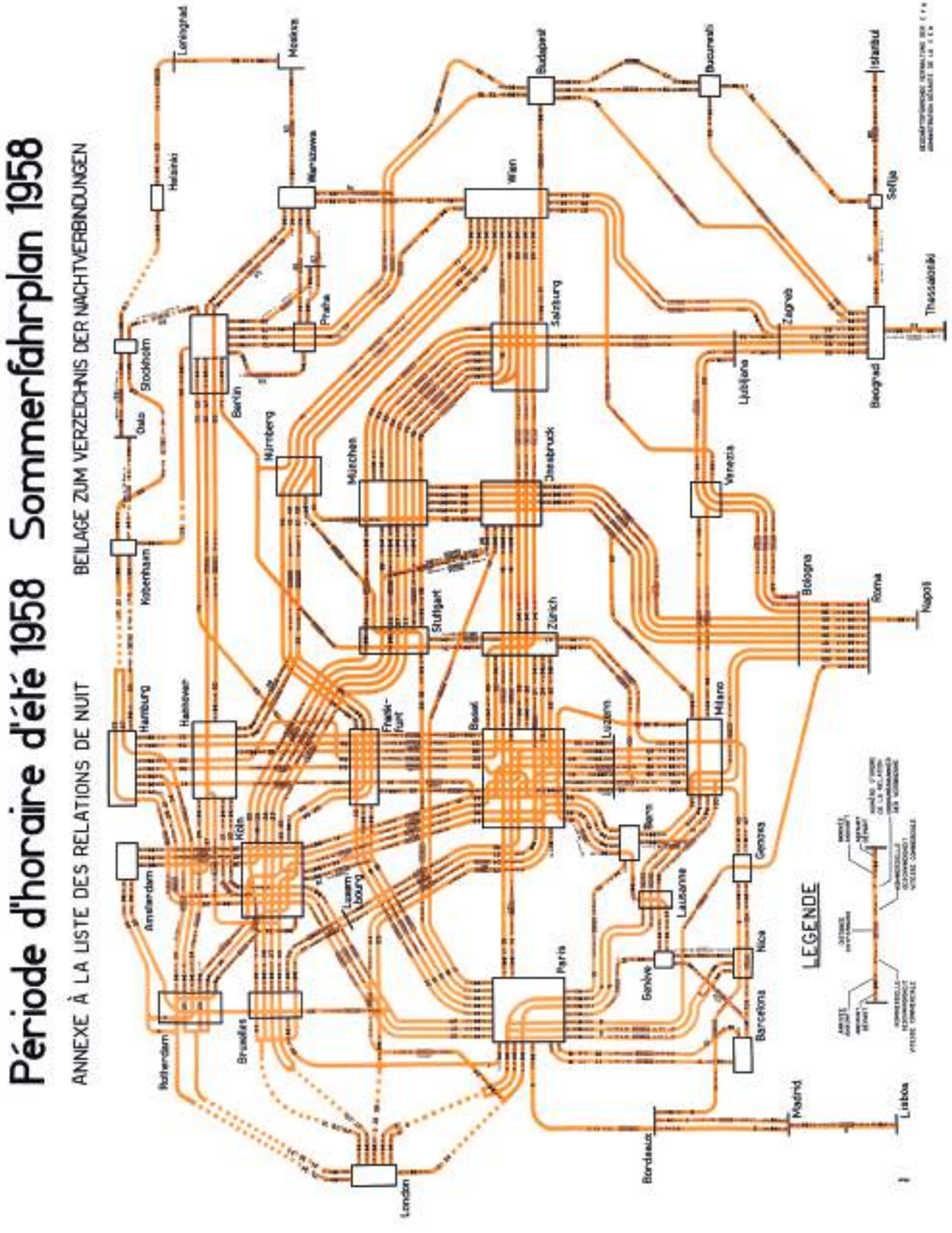
The 13 TEE connections in 1957



introduction, while the 12 who held the majority of votes wanted to delay for a while, and only three administrations opposed the suggestion. The issue would therefore have to be resolved at the next meeting. The German suggestion of differentiating fast trains was dropped as incompatible with the wide range of fare supplements charged by administrations, who were fiercely protective of their freedom to set fares.

Priority was to be given to improving routes on which the railways were in a good position to fend off competition from air travel. Primarily, these were routes in the order of 800 km (up to a maximum of 1,100 km) that could be covered in a single night by fast trains offering sleeping berths in all classes. Secondarily, they were routes that could be completed in one night and half a day – in other words services between cities 1,400 to 1,500 km apart.

SBB prepared a catalogue of 106 services from the 1958 summer timetable for CEH/EFK and suggested improvements to each for the 1959/60 timetable. The services in question were operated by night trains on



© SBB Historic

A DB train set next to a Pacific Chapelon 231 E at Gare du Nord in Paris. June 1957.
© Dubruille / Photorail / LVDR

routes of between 800 and 1,500 km "Night-time rail services have now reached a level which, in the most important regions at the very least, ought to permit the railways to maintain their position in the face of air and road competition. However, this programme is not an end in itself. While it is unlikely to include new services, which would ensure adequate profitability, it will nevertheless undergo improvement over the coming years, at any event in terms of several timetables and some train compositions. By fulfilling its general mandate in timetabling matters, CEH/EFK will continue to devote the greatest attention to the issue of night services."

Leningrad, September-October 1960. CSTs a success

Couchette trains travelling between 800 and 1,100 km in a night, such as the Paris–Venice service (1,189 km) had been introduced. The car-sleeper trains trialled in the summer had also been a complete success. The CST operating between Belgium and Avignon required a relief service and would continue to Amsterdam and Düsseldorf once a week. Another CST was to be introduced between Paris and Milan. This period marked the start of rapid growth of this type of train.

Brussels, September-October 1961. Agreement on the two-year timetable. Farewell to long-distance through coaches

The final debate was held on the adoption of a two-year timetable. There were 147 votes in favour of introduction from 1963, 163 votes for a later date. The proposal put forward by a working group attracted a consensus: the two-year timetable would be introduced for the 1965-1967 period. SBB expressed its regret that passport and customs formalities on moving trains and the collection of night train passengers' passports by an attendant were not universal and that continuous service in restaurant cars was still very limited. Each administration was invited to submit a status report for inclusion in a general report to be submitted to the relevant authorities.
Standardising coach sets, or at least through coach sets, and eliminating very long-distance coaches whose occupancy changed completely during their journey were to remain a major preoccupation. In particular, it was difficult to ensure the cleanliness of couchette and sleeping cars that were in service for 24 or 48 hours and sometimes longer. The situation was such that it had been necessary to cancel both the through coaches in the *Arlberg-Orient Express* that continued beyond Vienna to Hungary and Romania and the Paris–Oslo through sleeping cars in the *Nord Express*.

© SBB Historic

The European Passenger Fares Conference (CEV)

The Business Conference on Passengers (with SNCF as lead administration) took place at the same time as CEH/EFK. This conference had several specialist groups: Standard International Passenger and Baggage Tariff (TCV) (chair: France); CIWL traffic trends (CIWL); international traffic analysis (SBB); Trans-Europ-Express (DB); accompanied cars (DB); Eurailpass (SNCF); couchettes (DB); Eurailgroup (SBB); traffic to and from USSR (DR). The emergence of new marketing departments within administrations reflected the increasing incursion of "Business" into "Timetables'" territory and the role of various bodies within CEH/EFK.

Copenhagen, October 1962

The traffic study group set up in 1954 with simplified procedures examined 48 major international express trains, ranging from the Orient Express (with SNCF as lead) to the *Danubius Express* between Moscow, Sofia and Varna (with SŽD as lead). Proposals were to be submitted to the 1963 CEH/EFK.

Sofia, September 1963. New and simplified *modus operandi*

The first two-year timetable was set to take effect in May 1965, with annual national timetables continuing to provide information on domestic services. A new modus operandi was unanimously adopted with the aim of limiting the amount of time delegates were obliged to be present. Opening on the Wednesday closest to 15 September, conferences would then last for eight working days, closing on the Friday morning of the following week. To even out the conference's structure, the plenary session would be held on the Tuesday, separately from the closing session, and preceded towards the end of the first week by the delegation heads' session. Visits and social activities would take place at the end of the week, while the official dinner would be held on the Monday. As in the past, preparatory conferences would be convened prior to the Main Conference.

Although TEE and CST services were booming, traditional major services were being increasingly cut back, with some sections being cancelled, routes shortened and operating days reduced.

Stockholm, September 1964. Modifying CEH/EFK's statutes

With the launch of the two-year timetable impending, CEH/EFK's statutes had to be modified. A preparatory project was presented. The general meeting and technical meeting, both of which were scheduled for September, would alternate. For the purpose of group meetings within the general meeting, "timetables that are not the subject of proposed changes will be retained unchanged for the subsequent period." After 12 months of stable operation, they could only be changed with the agreement of the affected administrations. The same principle was applied to the technical meetings as well. Before and after these meetings, trains could undergo minor modifications at preliminary or mini conferences at the suggestion of a particular administration, which would then be responsible for organisation. CEH/EFK now had 43 actual members holding 344 votes. These were allocated to members based on one vote per thousand kilometres. The most important were: SŽD (55 votes), SNCF (38), DB (31), BR (25), PKP (24), FS (17), DR (16), ČSD and RENFE (14), SJ (13), CFR and JŽ (12). It is also worth noting that the cost of managing CEH and running its meetings was divided between administrations using the same ratios. Document printing costs were charged pro rata, depending on the number of copies ordered by each network. At the request of the International Federation of Travel Agencies (IFTAA), a joint CEH/EFK and UIC working group was set up to investigate the publication of a specific timetable poster.

Madrid, September 1966. Provisional statutes adopted

The amended statutes were approved. However, they would remain provisional and open to improvement until their entry into force on 1 January 1967. The idea of compiling an international timetable poster for passenger trains was abandoned on the grounds of expense and the difficulties associated with producing it.

Paris, 27 September to 6 October 1967. First technical meeting at UIC

The first intermediary technical meeting, attended by a limited number of delegates, took place at UIC's offices, which proved to be an ideal venue for group conferences.

Basel, September 1968. Definitive statutes

Having been due to take place in Prague, the assembly had to be hastily relocated to Basel "owing to the turn of current events". The provisional statutes approved in 1967 became definitive without further amendment. Conference president Mr Wellinger compared the 8 to 12% increase in international rail passenger traffic with the stagnation – or in some cases fall – in rail traffic that had been seen since 1964. Given the necessity for "full cooperation at European level", he decried the fact that countries were adopting short term interests on an "everyone for themselves" basis. "It is up to us to demonstrate that we will not succumb to this temptation."

Prague, September 1970. Summer period defined

In his welcome address, Mr Kotora, the general manager of Czechoslovakia's state railways, reminded delegates that when the Conference had met in Prague in 1927, "the president had compared setting the timetable to Sisyphus' boulder" in his opening speech. However, Mr Kotora felt that "this image of Sisyphean labour as a symbol for futile endeavours" was inappropriate given that the irreversible progress made by the railways since 1927 was assuredly the result of CEH/EFK's work. The Conference agreed to alternate CEH/EFK meetings, but there were still differences on the definition of the summer period. It was agreed that it should commence on the Sunday closest to 31 May, this date being brought forward a week if it coincided with Whitsun, and end on the last Saturday in September.

The Conference on Special Trains for Travel Agencies (CITA/IRSK)

At Vienna, on 15 November 1963, the International Conference on Special Trains for Travel Agencies adopted basic rules that entered into force on 1 January 1964. The Conference consisted of 24 travel agencies from Britain (11), Belgium (3), the Netherlands (3), Germany (3), France (1), Austria (1) and Switzerland (1). It provided a forum for member administrations of CEH /EFK to discuss with the travel agencies' delegates issues that could affect traffic, movement and commercial issues and the non-regular special trains promoted by the agencies or administrations. SBB was the lead administration.
The Conference had been set up in the post-war period.
As with the European Passenger Fares Conference (CEV), more needs to be found out about these conferences. The reconstructed calendar indicates they took place after CEH/EFK.

St. Gallen, September 1972. CEH/EFK celebrates its centenary. Closer links between CEH/EFK and business-side conferences?

The official ceremony held to mark several anniversaries – CEH/EFK's centenary, RIC Union's half-centenary and SBB's fiftieth year of CEH/EFK management – took place at St. Gallen theatre on Wednesday 20 September. An attractive, illustrated commemorative brochure was produced in French and German.

In his opening speech, SBB chairman Mr Otto Wichser, a former CEH/EFK president of 12 years' standing, compared international trains to "earthworms". *"As always, we have to strive to respond to heterogeneous demand by providing differentiated services. The TEEs and travel agents' specials that form part of this process of diversification have recently been joined by Intercity trains. However, little has been done to improve the appeal of traditional international trains, which still resemble an earthworm that is constantly having parts cut off, then reassembled in a different order to suit its routing. This results not only in significant wastage of time and energy, but in constraints that very often compromise timetable enforcement. We have yet to fully make the transition from thinking of direct services in terms of single coaches to regarding them in terms of full or part trains made up of uniform rolling stock capable of dealing with extremely high traffic flows. There is still much to do. Nevertheless, I was pleased to note that a large part of the Conference agenda is devoted to this issue. I hope that discussion of it proves highly fruitful."*

CEH/EFK Plenary Assembly,
September 1972, in St. Gallen .
© SBB Historic

CEH/EFK,
Opening Conference
September 1972, in St. Gallen .
© SBB Historic

Conference president Karl Wellinger continued: *"The foreseeable needs of the international transport market and joint railway operations call for new solutions. The agenda is intended to address this issue. (...) UIC statistics indicate that passenger traffic as a whole is progressing positively if sluggishly, but that the railways' share of overall traffic is continuing to fall."* Given that *"the railways have to step up their efforts to improve speed, comfort and punctuality"*, the president was keen to emphasise that "punctuality must have priority over speed" as a competitive factor and guarantor of safe operation. CEH/EFK would assume "direct responsibility" for rising to this challenge.

Ways of improving collaboration between CEH/EFK and Business Conferences on Passengers (CCV; SNCF as lead administration) and between operations and business managers were proposed. Each administration was to conduct a market survey prior to each assembly; there was to be continual contact between the CEH/EFK and CCV administrative offices; and there was to be cross-participation in each other's conference. This proposal was approved with the observation that holding the two conferences in the same building or in buildings only a short distance from each other would simplify discussions.

DB proposed rotating the technical meeting between countries, since strictly speaking there was no "host administration" at UIC in Paris. A vote was taken. Although there were 130 votes in favour of rotation, the proposal was rejected by 159 votes and 39 abstentions.

SBB's management mandate was renewed for the five years from 1973 to 1978.

Helsinki, September 1974.
Lack of unity on standard time

Since autumn 1973, countries had taken a variety of measures to mitigate the risk of energy shortages following the first global oil crisis. These included the introduction of a new standard time – which was decided unilaterally. CEH/EFK suggested that administrations lobby their respective ministries of transport to have their government align their time change with the summer timetable already agreed by the Conference, which was scheduled to commence on Sunday 1 June 1975. With OSJD joining in an advisory capacity, a new version of the statutes would take effect on 1 January 1975.

Budva, September 1976.
Save costs at all costs!

Despite the economic recession, rail traffic held up during 1975. The decision taken in Helsinki on the changeover to summertime had produced few results. Eight countries had already defined four separate daylight-saving periods. The zones, listed from earliest to latest start date, were the United Kingdom, France, Belgium, Luxembourg, the Netherlands, Poland, Greece and finally Italy, the only country compatible with the decision made in Prague in 1970. Each administration would have to approach its national government.

Efforts to save costs were making themselves felt. A large working group was set up to upgrade the role of preliminary conferences as a way of reducing the length of the main assembly. Similarly, ways of reducing CEH/EFK's document printing costs would be examined.

SNCF suggested following the example of the airlines, which used universal time (UT) in their timetables. WET would thus become UT, CET would become UT + 1, etc. However, only 99 out of 305 votes were in favour of this suggestion.

Edinburgh, September 1978.
The daylight-saving discussion continues.
Improving high-quality trains

In July 1977, PKP had surveyed administrations on the daylight-saving time issue. The low response rate (only nine replies were received) indicated that "a large majority is against bringing forward the summer timetable start date." Administrations were again invited to lobby their governments. CEV wanted to issue a special timetable entitled Europe's best rail services. A working group was set up to investigate the issue and report back in 1979/80. In connection with efforts to promote a "coherent and appealing high-quality service offering", surveys of operations departments had shown that the trains in question did not always meet the quality standards expected by customers – some coaches had no air conditioning, schedule speeds varied depending on direction, there were too many stops and backup coach sets were used too frequently on certain routes. *"These technical-side inconsistencies make it difficult to develop a business policy that is acceptable to customers and commercially satisfactory to administrations."* CEV reminded delegates of the importance of partnership between business and operations departments in delivering high-quality services.

SBB's management mandate was renewed for the five years from 1979 to 1984.

1 January 1980.
CEH/EFK becomes responsible for producing the European through-coach working plan (EWP)

The group meetings were tasked not only with setting international train timetables, but also with defining train composition – i.e. the number and type of vehicles – in the European through-coach working plan (EWP), which until then had been the responsibility of the direct service conferences governed by the RIC Union and its regulations. The task of publishing EWP in French, German and Italian and harmonising it with RIC regulations was entrusted to SBB as CEH/EFK's managing administration.

The Hague, September 1980

In his welcome address, Mr Ploeger, general manager of NS, struck a pessimistic note. *"In 1950 around 2.5 million people travelled on international trains departing from or bound for the Netherlands. Now, 30 years later, this number has increased to 5 million – twice as many as thirty years ago. Set against the thirty-fold increase in air traffic, however, this growth seems insignificant. Road traffic has also increased dramatically. This means that rail's market share, which was certainly more than 50% in 1950, has declined. I also think the majority of other European countries have experienced the same trend."*

CEV was working on a project to launch Eurail timetable 1981, a pocket-size city-to-city timetable providing information on some 1,600 domestic and international services connecting 85 cities in 19 countries. To ensure it would be available in January, administrations were asked to provide the necessary timetable information by 10 December. CEH/EFK would then provide notification depending on deadline compliance.

Given the "modest results" achieved by the Intercity trains marketed under the IC brand, CEV president Mr Ravel[3], appealed for greater collaboration: *"Seamless cooperation between business and technical departments is essential for further development both as regards commercial and technical definition and implementation and sales. By constantly improving their understanding of the market, business departments must provide a marketing definition of the products to be offered, which the technical units must then deliver by endeavouring to satisfy the needs thus expressed. This collaboration must be further strengthened."*

Lillehammer, September 1982.
CEH/EFK and UIC: closer collaboration rather than amalgamation

"As part of a study of ways to condense and revitalise its working groups", UIC's management committee investigated the option of incorporating CEH/EFK into UIC. On 20 January 1982, following a meeting between CEH/EFK president Mr Wellinger, UIC secretary general Mr de Fontgalland, CEV president Mr Ravel (SNCF), operations commission president Mr Scotland (DB), and sales commission president Mr Wansink (NS), the issue of "potentially modifying the structure of CEH/EFK and UIC" was deferred in favour of greater collaboration between the two organisations.

Florence, September 1988.
Launch of the EuroCity brand

The EuroCity group set up by UIC's passengers commission was tasked with promoting a new high-quality international train service with a demanding requirements specification. To join the group, administrations had to accept the EuroCity regulations. Inversely, since EuroCity would be represented at CEH/EFK by its member administrations, there would be no need to amend CEH/EFK's statutes.

Balatonfüred (Hungary), September 1990.
Improve links between the two halves of a reunited Europe?

The Conference was dominated by the fall of the Berlin Wall. Mr Sipos, deputy general manager of MÁV, underscored the importance – now greater than ever – that the transport ministry attached to MÁV, "the pivot that connects eastern and western, northern and southern networks", within a reunited Europe. CEH/EFK president Mr Weibel echoed these sentiments: *"It is pleasing that our fresh focus on new traffic flows should have become a key preoccupation in so short a time, not just for MÁV, but for all European administrations and CEH/EFK. The demands facing you are high. Your task has not been made easier – in fact it has become the opposite. In addition to efforts to establish a single European market, of which you will all be aware, and the associated liberalisation of economic and transport structures, we have suddenly been confronted – to our great joy, moreover – with the political and economic opening-up of eastern Europe. It is perhaps appropriate that just as eastern Europe is embarking on a process of political and economic turnaround, we are meeting in the Hungarian town of Balatonfüred to prepare a network of timetables that will simultaneously take account of the potential market that has opened up in the east and the challenge presented by the European Community's single market."*

Closing the Conference, Mr Weibel highlighted recent achievements, including the success of the EuroCity brand, which had grown from 15 to 92 services, the significant reduction in journey times on various networks, and finally the creation of a considerable number of new services throughout Europe, such as links between Paris and Lisbon, Salzburg and Rome, and Malmö and Berlin.

The trains discussed in group meetings were therefore divided into five groups: ordinary trains run by one of the 24 managing administrations (from CP to SŽD), EuroCity trains from Alpe-Adria to Wörthersee, IC trains from Breisgau to Schauinsland and named trains from *Adria Express* to *Zurich-Beograd Express*.

Liege, September 1992.
Making way for route management groups

In the early 1990s, two major events impacted the way CEH/EFK worked. Firstly, the process of liberalising rail traffic in Europe began with the introduction of

3. *Jean Ravel, SNCF's Sales head, introduced the concept of marketing and passenger surveys as a way of responding to demand. He seems to have played a similar leadership role in UIC and CEV.*

Eurocity 85 Munich-Bologna Centrale crossing at Domegliara-Sant'Ambrogio pulled by ÖBB 1216.011 August 2013. © Moliva

EU Directive 91/440 (the initial steps having been taken during the CEH/EFK and CEM/EGK Plenary Assemblies in 1994). Secondly, the new concept of route management (ROME), which was intended to improve understanding of the market needs associated with international passenger trains, was rolled out by Leaflet C6 under the driving force of UIC's passengers commission. In principle, Route Management met at least once a year, usually before the so called "preliminary conferences" which took place between April and June (13 to 11 months before the start of the new timetable period). The primary purpose of the meetings was to define:

- the service offering that would be made available to customers in the international traffic segment (frequency, preferred times, composition, rolling stock provision)
- the business conditions associated with service roll-out (products, prices, services, distribution, communication, train cleaning, etc.)

These meetings took place upstream of the process defined by CEH/EFK and were not its responsibility.

CEH/EFK's new statutes, which entered into force on 1 January 1993, took account of this European-level development. The conference's primary goal was still to define international rail and water passenger services at technical level by transposing the service offerings mutually agreed between marketing and operations departments within Route Management. Article 4.2 referred to the concepts set out in UIC Leaflet C6 Route Management. "For the purpose of making preparations for the general meeting or technical meeting, networks may hold preliminary conferences to flesh out concepts prepared during ROME for the group meetings". Group meeting decisions required unanimity among the administrations directly affected, while those taken by ROME could no longer be modified (Art. 5.1). At preliminary conferences, proposals intended to modify timetable structure had to be unanimously approved in advance by the ROME group in question (Art. 7.1.2). Delegates from the TEN (Trans Euro Night) pool route management project group (ROME) attended CEH/EFK meetings in an advisory capacity. ■

CEM/EGK from 1946 to 1993: the search for consolidated traffic and guaranteed times

1946 Management of CEM/EGK reverts to ČSD. This will be renewed until FTE is set up.

1951 Cooperation and information-sharing agreement with UIC.
The CEM/EGK name is introduced in November 1951 (The International Freight Trains Timetable Conference becomes the European Freight Trains Timetable Conference).

1953 The revised statutes come into force.

1960 In view of the success of the TEEs, the idea of launching a similar product for freight – TEEMs – is proposed in 1960.

1961 The TEEM product is launched.

1964 LIM becomes a biennial publication.

1968 A new modus operandi based on annual alternations is launched. General meetings at the invitation of an administration and technical meetings at UIC, supplemented each year in April by timetabling meetings.
The CEM and EGK abbreviations are officially adopted in November 1968.

1969 The new statutes come into force.
A working group prepares for the issue of a dedicated timetable – TEC – for intermodal rail/road and rail/sea services.

1972 In search of new criteria: "Guarantee times rather than promise untenable speeds..."

1973 A Standing Group made up of a small number of administration representatives is set up to ensure more effective preparations for plenary meetings and the subjects to be discussed.

1979 The amended statutes come into force.

1984 A coordinated network of chain transport trains and marshalling yards is set up to create a new offering branded ICM (Intercity-Marchandises).

1986 ICM becomes TEF (Trans-Euro-Freight).

1987 Research for a new international train offering – EurailCargo.

Prague, December 1946

Having been ousted in Sofia in 1938, ČSD was elected to manage the Conference for five years. It remained in this role until CEM/EGK and CEH/EFK merged to become FTE.

Rome, November 1948. Contributing to Europe's economic revival

The "delicate task" of producing the first post-war edition of LIM provoked debate. With a minimum print run of 2,000, it would be sold to private customers at the relatively high price of five Swiss francs, as opposed to the four Reichsmark charged in the pre-war period. Establishing new fast routes and improving those that already existed would contribute to the economic revival of a Europe whose railways had yet to be completely rebuilt. At the suggestion of the British and American occupying forces in Germany, routes that were still unusable owing to war damage would be identified in LIM using the words "Services interrupted for technical reasons":

Verkehr aus technischen Gründen unterbrochen
Le trafic est interrompu pour des raisons techniques
Il trafffco è interrotto per motivi technici.

Amsterdam, November 1949

Under pressure from the Geneva-based United Nations Economic Commission for Europe (UNECE), which was responsible for re-establishing trade and free movement of freight within Europe, railway companies were required to ask their governments to simplify customs procedures. Doing this previously had produced satisfactory outcomes for trains operating between the Nordic countries and France, from Padborg and Flensburg to Paris-La Chapelle via Jeumont.

Brissago / Locarno, November 1950. Agreement with UIC

In 1950, UIC proposed making an agreement with the other non-governmental rail organisations. Without infringing the autonomy and effectiveness of the existing organisations, the aim was: "a) to avoid the duplication of work which the modus operandi of these organisations can cause, b) to ensure the necessary coordination between and unity of action by these organisations, c) to ensure joint and collective representation vis-à-vis various international organisations, particularly the United Nations Organization and subsidiary organisations." CEM/EGK signed the agreement, which took effect in 1951. UIC would attend CEM/EGK in an advisory capacity, while CEM/EGK would attend UIC and have voting rights. The UIC Bulletin would provide all organisations with updates on each others' activities.

Vienna, November 1951. Change of name

The "International Freight Trains Timetable Conference" became the "European Freight Trains Timetable Conference" (Conférence Européenne des horaires de trains Marchandises or Europaïsche Güterzugfahrplankonferenz, abbreviated to CEM or EGK). Since its timetable continued to use the LIM abbreviation, however, the term "LIM Conference" continued to be used until 1969. The Conference recommended the creation of combined border stations, where two countries customs' authorities would operate side-by-side in just one of those countries. Another proposal was to have specialist customs bureaus further inside the country. The projected major international passenger and freight links compiled at Geneva at UIC's initiative had been accepted by the experts delegated by the military occupation zones in Germany. UIC suggested preparing a compilation of recommended routes, and a working group (ČSD, SNCF, SBB, FS, SNCB, ÖBB, MÁV, NS and DB) took up the task, which would be repeatedly discussed at length at subsequent conferences.

London, November 1952. "170 routes linking 22 countries"

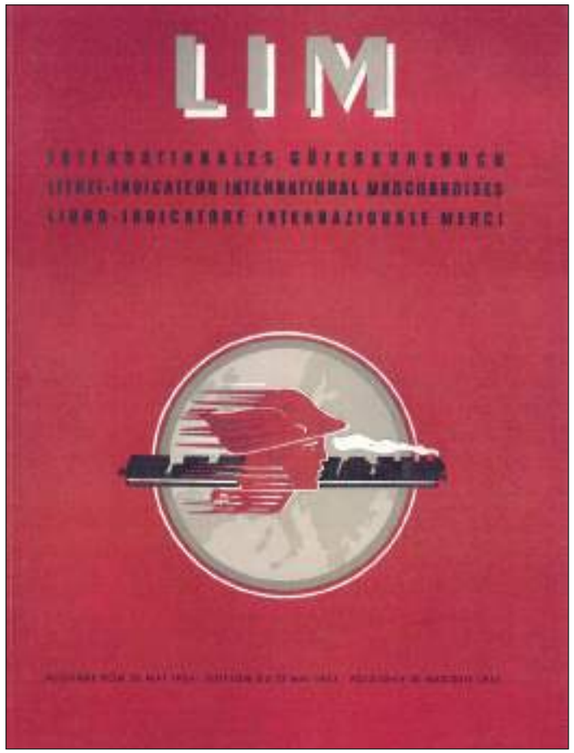
The new statutes, which had been amended primarily to take account of the agreement with UIC, came into force on 1 January 1953 following official approval. A commission met frequently in Spiez, canton of Bern, to draw up a "list of trunk routes". This took the form of 170 routes linking 22 countries, but did not include routes between adjacent countries. SNCF and SBB felt there were too many and therefore suggested a selection based on a comparison of cost prices. However, the objection was raised that it was not within CEM/EGK's competence to calculate these prices. Instead, business departments had to be allowed full freedom to add or remove routes.

Warsaw, October 1953. Making LIM easier to work with

According to NS, freight distributors were finding it hard to work out from LIM how long their consignments would be travelling and when they would arrive at their destination; what LIM regarded as "perishable goods", since definitions varied from one administration to another; what products could be transported in French "fast goods services", what the term "fast wagons" used by DSB meant, and more.
Discussion of the list of "trunk routes" drawn up at Spiez rumbled on. UIC wanted to emphasise in LIM "the end-to-end timetables applicable on inter-country routes and routes on which specific rate terms could be granted." A sub-commission chaired by SBB and meeting in Spiez would revise the timetable diagrams in LIM. DB wanted LIM to include not only international trains composed of full wagonloads, but also part-load freight services. The proposal was not accepted.

Berlin, November 1954. Clearer, slimmed-down LIM?

In response to regular criticism that the timetables in LIM were difficult to read, two lists of stations were added: feeding and watering stations for livestock and re-icing stations for refrigerated consignments. The "trunk routes" discussion continued. Mr Roche, the SBB delegate who chaired the Spiez commission, which comprised ČSD, DB, FS, JDZ, MÁV, NS, ÖBB, SNCB, SNCF and SBB, defended the status quo as preferable to large-scale slimming down: "The timetables that have been developed over the years take account of experience, operational requirements and customer wishes; focusing traffic on a certain number of trunk routes is a long-term undertaking." LIM should not be reduced to some "170 trunk routes": "*The current timetable is the result of 25 years' experience and takes account of customer interests.*" It was agreed that the sub-commission, with DR and DSB as new members, should continue its efforts to simplify LIM. SNCF suggested making it easier to identify the timetables for major traffic routes by asking administrations to completely overhaul their own timetables within LIM, *"an example of what could be done to make LIM clearer. (...) If all members were to modify the timetables that affect them using the same guiding principles, we would have a timetable that is both easier to read and less bulky."* This was regarded as an "interesting suggestion" and earned SNCF the Conference's gratitude for the difficult work it had done. However, the task of examining such a far-reaching proposal was felt to be "impossible in the plenary session" and was therefore delegated to the Spiez commission.



© SBB Historic

Paris, November 1955. Explanations added to LIM

Vague or confusing points in LIM were resolved. An explanation of the "fish" symbol used by SNCF to designate "perishable goods" transported by "'fast goods' service" was provided. This denoted a "special-purpose train for live animals and perishable goods, particularly live shrubs, fresh flowers, live plants, butter, mushrooms, delicatessen, fresh shellfish, fresh cream, crustaceans, fresh or frozen fruits with the exception of cider or perry fruit, slaughtered game, ice, oysters, milk, dead rabbits, fresh or frozen vegetables, yeast, grape must, pastries, fresh or frozen fish, fresh or frozen meat and dead poultry." SNCF would stop using a letter **S** to identify its "'fast goods' services", since RIV regulations had earmarked the letter for "wagons suitable for fast running." It would use a dashed box instead, this being

the symbol used by other administrations to identify trains operating under the high-speed provisions defined by the CIM convention. DSB would in turn discontinue any mention of their "fast wagons".

Prague, November 1956. For or against a compilation of trunk routes?

Noting the work done by the commission set up to investigate the option of concentrating traffic on "trunk routes" chaired by Mr Favre, director general of SBB, the Conference was of the opinion that *"preparing a compilation of trunk routes by the joint efforts of business and operations departments does not seem likely to result in actual concentration of freight traffic."* To slim down the 170 trunk routes identified in 1952, it would be better to address the question solely from an operational perspective, giving priority to two criteria: the actual carriage time and the consistency of the traffic in question. Business departments could then use the resulting compilation of rational routes as guidance for concentrating traffic on these routes.

Split, November 1957. A slimmed-down, unchangeable route compilation and should one of the two annual meetings be discontinued?

Applying the two criteria above had reduced the number of routes in the compilation from 2,900 in 1952 to around 1,100 – a decrease of 62%. The new compilation was ready for 1 January 1958 and was not to be modified before 1 June 1959. However, new routes could be added if journey time did not exceed that of the fastest route by more than 25% and there was minimum annual traffic of 100 wagons. According to ÖBB, now traffic had stabilised across Europe, it would be possible to discontinue the spring assembly. The Conference discussed this idea at length. There was majority support for discontinuing one of the two meetings, but "given that the process of setting the goods timetable is subject to a wide variety of constraints compared to its passenger counterpart", it was felt preferable to discontinue the October assembly.

Brussels, November 1958

CEM/EGK president Mr Hoska's retirement was marked by a tribute from his successor, Mr Matula, director of the Czechoslovakian Ministry of Transport. Border formalities were discussed again. While trucks were only stopped for a short period, trains could be held up for up to 10 hours. Sometimes trains of perishable goods were processed at a rate of 30 wagons in two hours, less time than it took to deal with an equivalent convoy of trucks. It was important that trains were still accepted and dispatched on Sundays and public holidays.

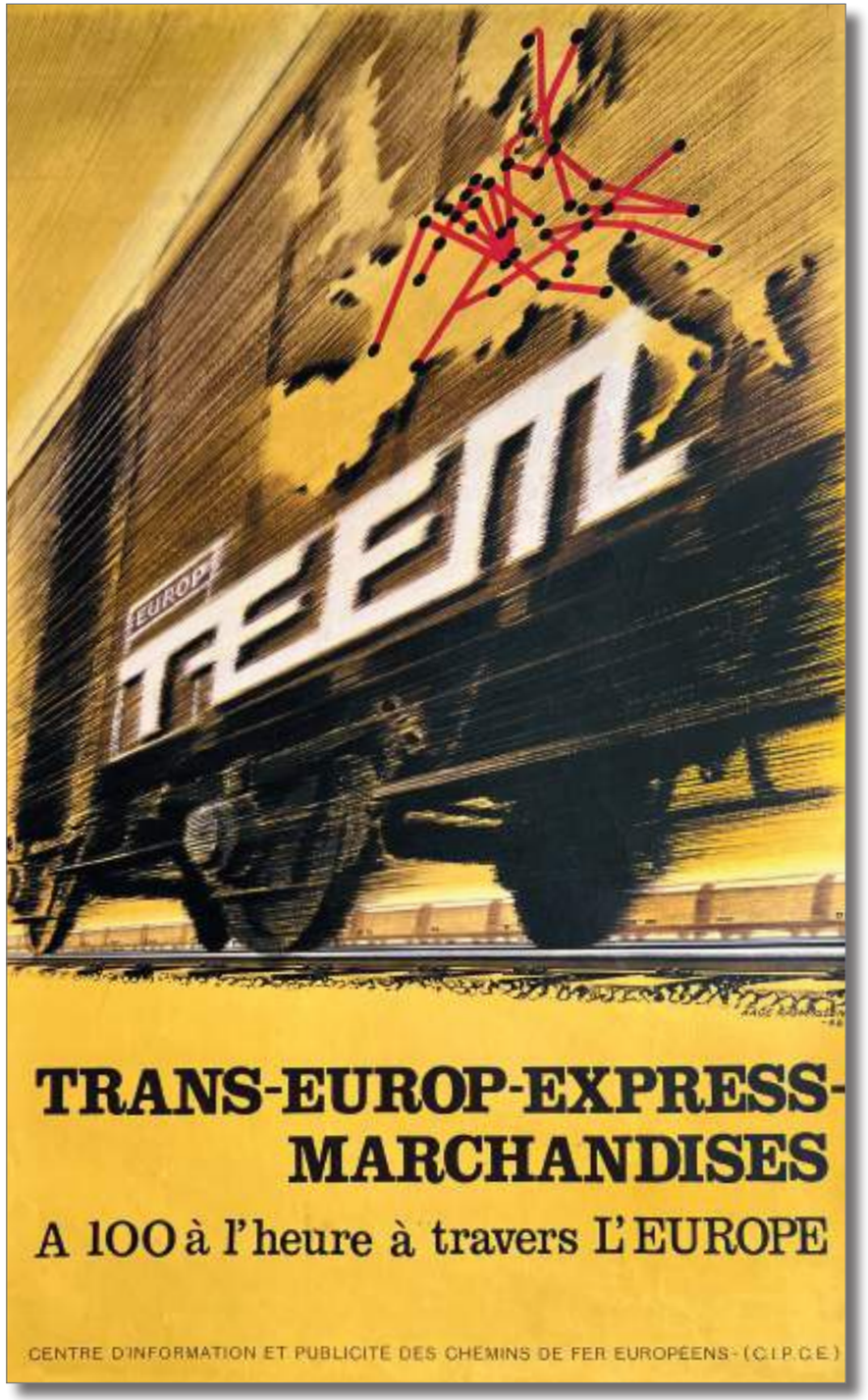
Sofia, November 1959

DB's proposal to only use wagons carrying the S or SS symbol on international services, except in the case of heavy goods, was commended to all member administrations. It was decided to end the investigation of the routes problem and give preference instead to focusing on upstream international European traffic and channelling that traffic into "rational routes".

Locarno, August 1960. The TEEM group is created

Independently of CEM/EGK, operational heads decided to create a TEEM group chaired by SBB. TEEM was supported by UIC and had been inspired by the Trans-Europ-Express services launched in 1957 and the factors contributing to their success. The criteria to be fulfilled were decided in the Austrian town of Feldkirch between 8 and 10 September 1960. The first was "to outperform or at the very least equal trucks on schedule speed". This meant a minimum schedule speed of 45 km/h, except on routes involving ferries, gradients and sharp bends. These trains would be limited to 1,000 tonnes and 100 axles and would be made up entirely of S or SS wagons loaded to maximum authorised capacity so that they could operate at up to 100km/h. TEEM trains, of which there would be a constant number, would operate over the longest possible distances with a reduced number of technical stops. Their progress would be tracked and advance notification would be given to ensure no time was wasted in dealing with possible technical or commercial constraints. Agreements would be necessary to limit layovers at border crossings to two hours. TEEMs would carry "goods requiring rapid transport, goods that road-based competitors are keen to take from the railways and perishable items" and there would be no minimum tonnage.

Finally, CEM/EGK member administrations would undertake to promote TEEMs. A special, highly visible label would be attached to wagons and a "TEEM" stamp on waybills would attract the attention of agents along their routes. The design of an A5-format pamphlet on the TEEM



© Col. G. Ribeill

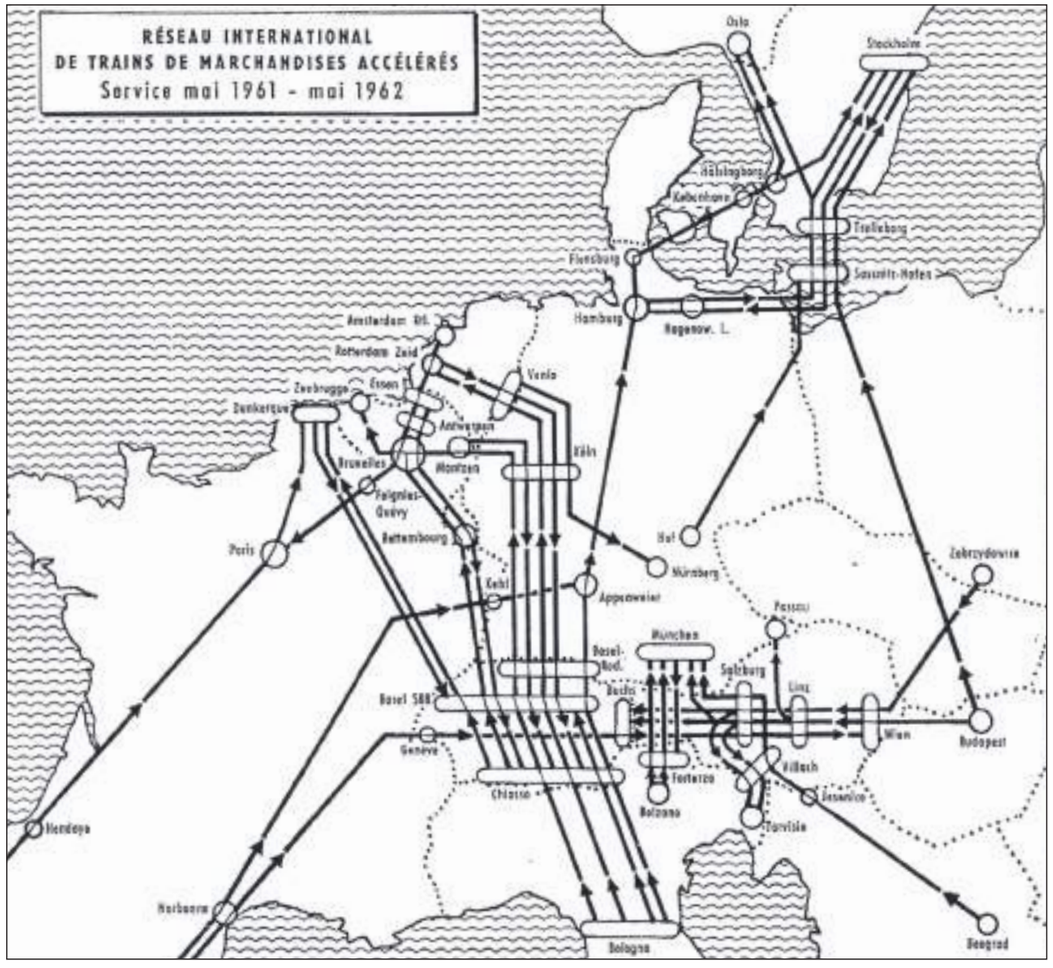
offering was discussed. The cover would show a goods train with the TEEM logo as its locomotive positioned vertically and standing out from a map of Europe. In the end, this design was used for the poster announcing the launch of TEEM, and the first pamphlet had to make do with a completely red cover. A working group would suggest a network of 31 TEEM-branded trains covering some twenty routes for the 1961/1962 timetable period.

Budapest, November 1960

TEEM was beginning to gain momentum. CFR apologised for being unable to operate a TEEM during the 1961-62 timetable period, but was admitted to the group. However, BR, which was unable to guarantee the required speeds for technical reasons, and the Györ–Sopron–Ebenfurth railway remained outside the TEEM network. The bulk transport of fruit, early vegetables and citrus fruit, for which TEEM was ideal, explains the large number of south-north routes that were investigated.

Prague, January 1961

The following names and trademarks were adopted for TEEM: *Trans-Europ-Express-Marchandises / Trans-Europ-Express-Güterzüge / Treni-Espressi-Europei per Merci;* TEEM-



© Doc SNCF / Col. GR

The first TEEM trains

Operator	No.	TEEM route	Distance
SNCF	TEEM 1	Hendaye - Dunkirk	1163 km
	TEEM 5	Chiasso – Basel – Dunkirk	1051 km
	TEEM 6	Dunkirk – Strasbourg-Ville – Basel	738 km
	TEEM 10	Amsterdam – Essen – Antwerp – Schaerbeek – Feignies – Paris-la Chapelle	567 km
	TEEM 13	Narbonne – Dijon-Perrigny – Kehl - Appenweier	987 km
	TEEM 19	Narbonne – Geneva – Buchs SG – Innsbruck – Salzburg – Linz – Vienna Hütteldorf-Hacking	731 km
SNCB	TEEM 21	Chiasso – Basel – Thionville – Bettembourg – Stockem – Schaerbeek - Bruges - Zeebrugge	1036 km
	TEEM 22	Antwerp – Stockem – Bettembourg – Thionville – Basel - Chiasso	959 km
DB	TEEM 32	Venlo - Cologne-Gereon – Cologne-Eifeltor – Frankfurt (M) - Nuremberg	571 km
	TEEM 33	Bologna – Chiasso – Basel Bad. – Flensburg – Helsingör – Helsingborg - Stockholm	2659 km
	TEEM 37	Bologna – Chiasso – Basel Bad. - Appenweier – Hamburg-Han - Hamburg-Eifd – Flensburg- Weiche – Padborg – Nyborg - Korser – Copenhagen – Helsingör – Helsingborg – Gothenburg – Kornsjö - Oslo	2666 km
	TEEM 44	Montzen – Aachen – Basel Bad. - Chiasso	943 km
	TEEM 45	Bologna – Chiasso – Basel Bad. – Cologne-Eifeltor – Aachen-Süd – Montzen – Schaerbeek – Bruges - Zeebrugge	1506 km
	TEEM 48	Rotterdam Zuid G – Venlo – Basel Bad. - Chiasso	1111 km
	TEEM 49	Bologna – Chiasso – Basel Bad. – Cologne-Eifeltor – Cologne Geroon – Venlo – Eindhoven – Rotterdam-Zuid	1356 km
MÁV	TEEM 51	Budapest Fer. – Szob – Sturovo – Bad Schandau – Seddin – Sassnitz Hafen – Trelleborg - Stockholm	2094 km
FS	TEEM 61	Bologna – Chiasso – Basel Bad.	607 km
ÖBB	TEEM 70	Munich Ost – Kufstein – Brennero - Fortezza	244 km
	TEEM 71	Bolzano – Fortezza – Brennero – Innsbruck - Kufstein – Munich Süd	293 km
	TEEM 73	Bolzano – Fortezza - Brennero – Innsbruck - Kufstein – Munich Süd	293 km
	TEEM 74	Zebrzydowice – Petrovice – Breslav – Hohenau – Vienna Hütteldorf – Salzburg Gnigl – Buchs SG	1049 km
	TEEM 75	Beograd – Jesenice – Rosenbach – Villach – Salzburg Hbf – Munich Süd	991 km
	TEEM 76	Zebrzydowice – Petrovice – Breslav – Hohenau – Vienna Hütteldorf – Arnoldstein - Tarvisio	834 km
	TEEM 80	Budapest Fer. – Hegyeshalom – Vienna Hütteldorf - Passau	559 km
	TEEM 82	Budapest Fer. – Hegyeshalom – Vienna Hütteldorf – Salzburg Hbf – Munich Süd	729 km
	TEEM 86	Budapest Fer. – Hegyeshalom – Vienna Hütteldorf – Salzburg Gnigl – Arnoldstein - Tarvisio	786 km
	TEEM 88	Budapest Fer. - Hegyeshalem – Vienna Hütteldorf – Salzburg – Innsbruck – Buchs SG	1001 km
DR	TEEM 91	Hof – Gutenfürst – Seddin – Sassnitz Hafen	731 km
	TEEM 93	Hagenow Land – Sassnitz Hafen - Trelleborg – Malmö - Stockholm	981 km
	TEEM 94	Stockholm – Malmö – Trelleborg – Sassnitz Hafen – Hagenow Land	981 km
	TEEM 95	Hagenow Land – Sassnitz Hafen - Trelleborg – Malmö – Kornsjö - Oslo	1052 km

Kursbuch, Indicateur TEEM, Orario TEEM; wagon labelling; the use of a TEEM stamp rather than a sticker on waybills.
The numbers assigned to TEEM trains were determined by their geographical bearings. Starting from the west, odd numbers were given to west-east and south-north services. Management of the first 31 TEEMs published in the May 1961 timetable was split as follows between seven administrations, which were allocated reserved numbers: ten TEEMs to ÖBB (nos 70 to 89); seven to DB (nos 30 to 49); six to SNCF (nos 1 to 19); four to DR (nos 90 to 99); two to SNCB (nos 20 to 29); one to MÁV (nos 50 to 59); and one to FS (nos 60 to 69).

London, April 1961

The time-consuming discussions on the other routes and trains resumed. ÖBB was asked to conduct periodic surveys to measure the volume of the various wagon traffic flows with the aim of incorporating them into LIM using quantitative criteria. Border stations were to be underlined in LIM and TEEMs were to be identified by a bold dashed box.

© SBB Historic

28 May 1961: TEEM services commence

TEEM network established in 1961. TEEM services proved to be so successful that the number of trains would be more than doubled in May 1962 from 31 to 66.

Warsaw, November 1962

The traffic flow analysis for the first half of 1961 produced a disconcerting finding: customers chose routes on the basis of commercial considerations, not on the basis of the criteria adopted at LIM conferences. 34% of the "trunk or ordinary routes" in the 1960 edition of LIM did not carry a single wagon. 25% transported eleven wagons at most and 13% saw not more than 50 wagons. In short, "72% of these routes are of minimal importance."

Luxembourg, November 1963

A decision was taken to completely redesign LIM to make it easier to read.

Vienna, November 1964. LIM becomes a biennial publication

International freight trains were categorised using a standard system that would be adopted when UIC Leaflet 421 was revised. Information on refrigerated wagon traffic would be regularly shared on an ongoing basis. LIM would only appear every two years (May 1965, May 1967, etc.) and the presentation of its timetables would be simplified.
While a certain number of TEEMs were withdrawn at each conference, a larger number of new ones was created. At Vienna, for example, three trains were withdrawn with effect from the end of May 1965: 411 Ruse–Budapest; 631 Belgrade–Munich and 804 Mezilesi–Hohenau. However, five new ones were created: 117 Saint-Pol-de-Léon–Rotterdam, 338 Oslo–Salzburg, 406 Stockholm–Budapest, 415 Curtici–Bad Schandau 690 Curtici–Munich. 125 Narbonne–Appenweier would be extended to Stockholm and 314 Skagen–Hamburg would start from Oslo, while 403 Belgrade–Stockholm would be restricted to operating between Budapest and Stockholm.

Bucharest, November 1966. TEEM criteria are revised

A uniform system for communicating wagon routes was developed in partnership with UIC. LIM would only cover primary and secondary routes carrying at least 400 or 200 wagons respectively each year. Not only would this new format reduce costs, it would encourage greater traffic concentration, which would in turn improve profitability.
A working group had investigated TEEM trains' failure to observe quality criteria. 84 routes from the 1965/67 timetable had been analysed to single-minute accuracy. Speed on 14 of these was less than 35 km/h. It was also less than 40 km/h on 36 and less than 45 km/h on 60. In other words, 71% of routes were affected. While 47% of border stops did not exceed two hours, 24% exceeded three. There was recognition that "the schedule speed of 45 km/h cannot be achieved on a large number of TEEM routes", a finding that was felt to justify exceptions and a revision of the contractual criteria. Since TEEMs had originally been diagrammed at schedule speeds of 45 km/h, mathematical formulas could be applied to calculate the additional time required for ferry boarding, changes of track gauge, steep gradients, etc. The result of these calculations was that TEEMs had to maintain a schedule speed in the region of 55 km/h between borders. If this was not possible, transit time would be rounded upwards. Conversely, any TEEM made up entirely of SS wagons could operate at 120 km/h on certain specific routes.

Stockholm, November 1968. New statutes for a new modus operandi

The plenary session approved the new statutes that

Left: Interfrigo wagon, unloading of fruit, January 1972 in Zurich (Switzerland).
© SBB Historic

Right: Interfrigo wagon running in a train, August 1961.
© SBB Historic

Two railway cooperatives

Interfrigo, International Railway-owned Refrigerated Transport Company, was a cooperative under Belgian law founded in 1949 at SNCF's suggestion. The five original member administrations – SBB, FS, NS, BR and SNCB – were subsequently joined by DB, with CFL, CEH, RENFE and TCCH joining in 1952, and DSB in 1960. Administrations were often represented by subsidiaries, such as STEF, Transthermos, Réfribel, Frigo-Suisse, Despred, Masped, Romtrans, Cechofracht and Jugosped. Using a traditional fleet of mechanically refrigerated, refrigerated and insulated wagons, Interfrigo operated international temperature-controlled transcontainer services. Its headquarters were in Basel.
Intercontainer, International Company for the Transport of Containers, was a second cooperative under Belgian law founded in December 1967 by Interfrigo and 11 administrations (BR, CFF/SBB, CFL, CIR, DB, DR, DSB, FS, JZ, MÁV, NS, NSB, ÖBB, RENFE, SJ, SNCB, SNCF). Its aim was to coordinate and develop international transcontainer transport and to organise and provide ancillary services associated with such traffic. Its Basel headquarters worked with the railway companies or their subsidiaries (Transfracht, CEMAT, CNC, Interferry) to deliver a high-performance network of trains and specialised routes. By 1978, ten years after it was founded, Intercontainer had 23 members.
The two organisations later amalgamated in 1993 to form Intercontainer-Interfrigo (ICF).

entered into provisional force with effect from 1 June 1969. The Conference adopted its new abbreviated title of CEM in French or EGK in German. The transition to the biennial LIM meant a new modus operandi. As regards the objectives, dates and venues for meetings, a general meeting hosted by an administration would be held in the November of even years, while a technical meeting would be held at UIC in the November of odd years. Moreover, timetabling meetings would be held annually in April at UIC headquarters or the headquarters of the managing administration.

Basel-based rail cooperatives Intercontainer and Interfrigo joined CEM/EGK in an advisory capacity. Seafreight transcontainer services operated by BR between Harwich and Rotterdam, Zeebrugge and Dunkirk were added to the TEEM timetable in 1969.

Paris, November 1969. Launching intermodal rail/road and rail/sea services

Progressing economic globalisation increased the significance of international maritime trade. The growing amount of traffic carried by seafreight transcontainers and other bulk containers prompted the formation of a TEC working group chaired by SBB with the participation of Intercontainer. From spring 1970, the services provided by administrations – or their specialist subsidiaries in some cases – would be published in a new TEC timetable.

Belgrade, November 1972. Agreement with the International Union of Railways: guarantee times rather than promise untenable speeds...

A working group investigated the possibility of closer alignment with UIC and its business commission, both having recognised that the quality of international freight services required improvement. This improvement would be driven by the new approach of providing regular, reliable services rather than pointlessly adding new services and promising untenable service speeds. So it came about that in 1972, a guaranteed delivery time transport system was trialled. This service was subject to detailed operating conditions and a new rates system known as TIG (International tariff for low-speed wagonload goods carriage with guaranteed delivery times). Cooperation with UIC meant both adapting CEM/EGK and closer collaboration between member administrations' business and operations departments. The "Regular conveyance of international goods" working group received instructions with comments to this effect from its chairman, Mr Rietmann (SBB):

"International organisations can only operate if two conditions are fulfilled: they must have a highly experienced administrative team (...) and they must be led by a chairman who is empowered to impose his will within the organisation and is capable of representing it with authority to the outside world. These two conditions will become more important in the future. We believe these conditions have been met. We are all aware of the current administrative office, in which we all have full confidence. In Mr Kotora, we have a president who we know will energetically address any new tasks placed on CEM/EGK.

We are aware that this conclusion places a major burden on your shoulders. Firstly, it will be your task to harmonise CEM/EGK's work with that of UIC as it undergoes full reorganisation. Secondly, you will have to strengthen the position of both CEM/EGK and rail goods transport in general in the face of ever-intensifying competition. These two tasks are almost too much for one person, and so I would like to assure you, on behalf of all our colleagues, that they will always be available to offer you their railwaymen's experience and their advice."

To simplify planning, an analytical numbering system for international trains was developed in 1972. This led to the publication on 3 June 1973 of UIC Leaflet 419-2 (Analytical numbering of international freight trains), compliance with which was mandatory.

Paris, November 1973. A standing group is created

The working group proposed setting up a standing group with the following tasks: "helping the managing administration deal with important issues, preparing items for submission to the plenary meeting, defining new tasks and proposing ways of investigating them, formulating suggestions for submission to other organisations, particularly UIC, and representing CEM/EGK at UIC commission meetings", all items always being resolved in plenary meetings. This standing group comprised members appointed for six years and representing eight administrations. These were DB, DR, FS, MÁV, ÖBB, SBB and SNCF, with ČSD still presiding over CEM/EGK. The modified statutes would enter into force on 1 January 1974. TIG, which had been renewed until November 1973, would be extended to new routes on an experimental basis from 1 March 1974.

© SBB Historic

Florence, November 1974

To mark CEM/EGK's half centenary, its president, Frantisek Kotora, presented plaques of honour to the five founder administrations and certificates of merit to all current members in a ceremony attended by UIC president Mr Bordoni and UIC secretary general Mr de Fontgalland. He cited with satisfaction the 6,000 important services covering 22 countries detailed in LIM's 835 pages, the 129 TEEM services created since 1961 and the 550 services provided by TEC since 1969.

Rotterdam, November 1978

Increasingly aggressive competition from road transport prompted the Conference to limit TEEM services to routes with good, reliable performance. It was therefore necessary to re-examine the TEEM criteria.

Paris, November 1979

A new version of the statutes was published in 1979. An investigation of 135 TEEM services in the 1978/1979

© FTE Archive

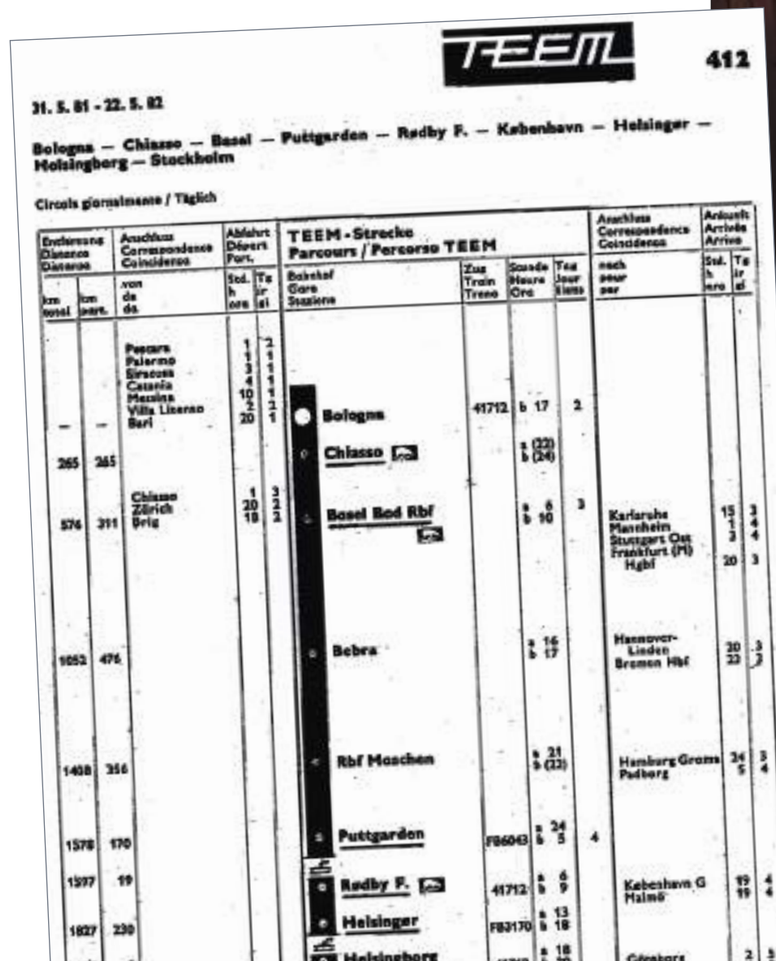
timetable showed that 34 (25%) of them were not running to schedule owing to operating issues, which menat that TEEM's contractual schedule speed had to be reformulated. The schedules had to be adapted to technical operating conditions while taking account of binding schedules, comparable to those by which road hauliers were bound. A case-by-case approach was needed rather than a general abstract rule.

Paris, November 1981

The criteria that would be used to draw up the "list of high-capacity border crossings and transit routes" and "list of high-capacity train routes" were defined.

Paris, November 1983

At UIC's initiative, a scoresheet of CEM/EGK's relations with UIC's business and operations commissions was drawn up. Work was driven by specific, complementary, "fundamentally different" objectives: "development of general measures for the former, defining implementing measures for the latter." This indicated that it was not the time to integrate CEM/EGK into UIC and that efforts should focus on finding a more effective way of reconciling the two bodies' work and sharing their findings.


TEEM 412

31. 5. 81 - 22. 5. 82

Bologna — Chiasso — Basel — Puttgarden — Rødby F. — København — Helsingør — Helsingborg — Stockholm

Circuls giornalieri / Täglich

Entfernung Distance Distanza km total	km part.	Anschluss Correspondence Coincidenza von de da	Abfahrt Départ Part. Std. h ore	Tg jr gi	TEEM-Strecke Parcours / Percorso TEEM Bahnhof Gare Stazione	Zug Train Treno	Stunde Heure Ore	Tag Jour Giorno	Anschluss Correspondence Coincidenza nach pour per	Ankunft Arrivée Arrivo Std. h ore	Tg jr gi
		Palermo	1	2							
		Siracusa	1	1							
		Catania	3	1							
		Messina	4	1							
		Villa Literno	10	1							
—	—	Bari	20	1	Bologna	41712	b 17	2			
265	265				Chiasso		a (22) b (24)				
576	311	Chiasso Zürich Brig	1 20 18	2 2 2	Basel Bad Rbf		a 6 b 10	3	Karlsruhe Mannheim Stuttgart Ost Frankfurt (M) Hgbf	15 1 3 20	3 4 4 3
1052	476				Bebra		a 16 b 17		Hannover-Linden Bremen Hbf	20 22	3 3
1408	356				Rbf Maschen		a 21 b (23)		Hamburg Grams Padborg	34 5	3 4
1578	170				Puttgarden	F86043	a 24 b 5	4			
1597	19				Rødby F.	41712	a 6 b 9		København G Malmö	19 19	4 4
1827	230				Helsingør	F83170	a 13 b 18				
					Helsingborg		a 18			2	5

Left: TEEM 1981/1982
Bologna - Stockholm Timetable. © SBB Historic

Above: Re-icing at Chiasso while the train is stationary. The polar bear on the TEEM timetable shows stations with re-icing facilities. © SBB Historic

Budapest, November 1984

The "Improving international traffic" working group set up in 1980 for the purpose of quantifying wagon flows and defining high-performance routes presented its results. Excluding TEEM, the 1982/83 timetable listed 282 international train formations, divided up as follows: five operating between four countries, 33 between three countries and 244 between two countries, of which 19 ran between adjacent border stations. The group suggested a new, high-performance system based on the organisation developed by DB to improve the speed and reliability of trains on domestic services, which used transport chains made up of regular, single-batch, non-stop trains. It proposed the creation of a top-of-the-range offering of international trains which, when undergoing priority shunting in "international marshalling yards", would be matched to such ICM or Intercity-Marchandises trains. A managing body for ICM trains, steered by DB, DR and NS, was tasked with locating high-efficiency border points and drawing up the list of "international marshalling yards" suggested by the administrations. At LIM 1986/1987, ICM trains were added to the goods train numbering system: 40000 = TEEM; 41000 = fast trains; 42000 = fast intermodal trains and 43000 = ICM.

Paris, November 1985. In search of a new top-of-the-range offering

13 administrations expressed interest by reporting their international marshalling yards and the trains linking them. Nine administrations were offering around 90 ICM trains. However, these involved the participation of six other administrations. The 1986 CEM/EGK meeting would suggest dividing management of ICM trains between the administrations managing TEEM trains, since UIC's involvement in the implementation of the ICM networks was not felt to be essential. Conversely, the "Improving international traffic" working group attended to the task of developing a requirements specification for the EuroCargo top of the range offering.

Brighton, November 1986. LIM and TEEM timetables get a new look

Work commenced on redesigning the LIM and TEEM timetable books. The DB and FS advertising units were involved in the design of the new TEEM timetable book. Using an A4 format, and with graphics on a coloured background, the front page would include a reproduction of the simplified network and the word TEEM-2000 followed by the full CEM/EGK name in three languages. The way TEEM services were presented was revamped to improve their visual appeal.
In 1986, ICM became TEF (Trans-Euro-Freight), with trains in the 43000 number series.

Paris, November 1987

The "Improving international traffic" working group suggested a new range of high-quality trains with the assistance of UIC. The EuroCargo brand, now named EurailCargo, required compliance with various conditions. Apart from sufficient traffic volumes, trains normally had to be single-batch and operate on fixed days, thus guaranteeing delivery times. Collection would take place on day A with delivery to the recipient on day C at the latest, but on day B wherever possible.

Dresden, November 1988. New TEEM criteria. Amended statutes

The "TEEM criteria" working group redefined the TEEM directive with the aim of "taking greater account of customer needs. (…) Schedule speeds are no longer a key factor." The new criteria were based on tiers of distance, under which a wagon dispatched on day A had to be delivered to its recipient no later than day B, C, D or E, depending on its tier. The minutes-based calculation that had been used until then was redundant, since the tiers brought greater flexibility to the offering.
The statutes were amended again in 1988.

1993 CEM/EGK presidency transferred from ČSD to ČD

Following the opening of the Iron Curtain in 1990, Czechoslovakia became the Czech and Slovak Federal Republic. Identity disputes resulted in its collapse on 31 December 1992 and the birth of separate Czech and Slovak Republics. ČSD also split into two administrations ČD and ZSR. Management of CEM/EGK passed to ČD. ■

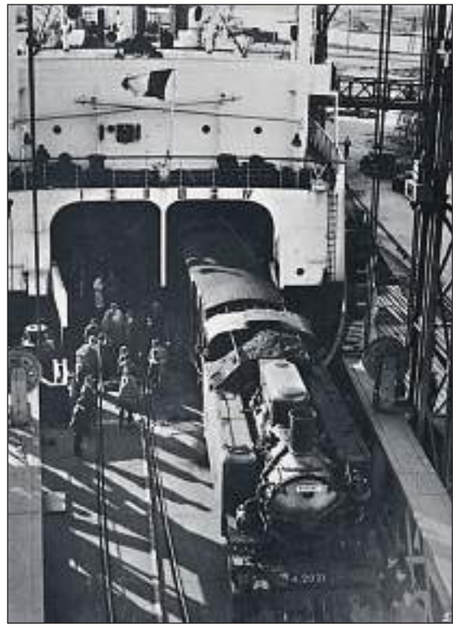
Shipping and ferry companies at railway timetabling conferences

Right from the outset, CEH/EFK's statutes permitted shipping companies operating services that connected with international trains and crossed at least one national border to join the Conference. Transhipment and unloading were reduced when it became possible to shunt coaches and wagons onto train ferries. By 1970, a large number of shipping companies were members of CEH/EFK. However, they would become fewer in subsequent years.
Here are some of the maritime links that were incorporated into international rail passenger services. The list includes services where passengers had to change from train to ship as well as services where rolling stock was loaded onto the ferries:

- Warnemünde (Germany)–Gedser (Denmark) (the oldest German ferry route between Germany and Scandinavia, launched in 1903)
- Grossenbrode (Germany)–Gedser (Denmark)
- Puttgarden (Germany)–Rødby (Denmark) (nicknamed the "bird flight" line since migrating birds followed the same route)
- Sassnitz (Germany)–Trelleborg (Sweden) (nicknamed the "royal line")
- Gothenburg (Sweden)–Frederikshavn (Denmark)
- Calais or Boulogne (France)–Dover or Folkestone (GB)
- Newhaven (GB)–Dieppe (France)
- Dover (GB)–Ostend (Belgium)
- Dover (GB)–Dunkirk (France)
- Harwich (GB)–Hook of Holland (Netherlands)
- Stockholm (Sweden)–Turku or Helsinki (Finland)

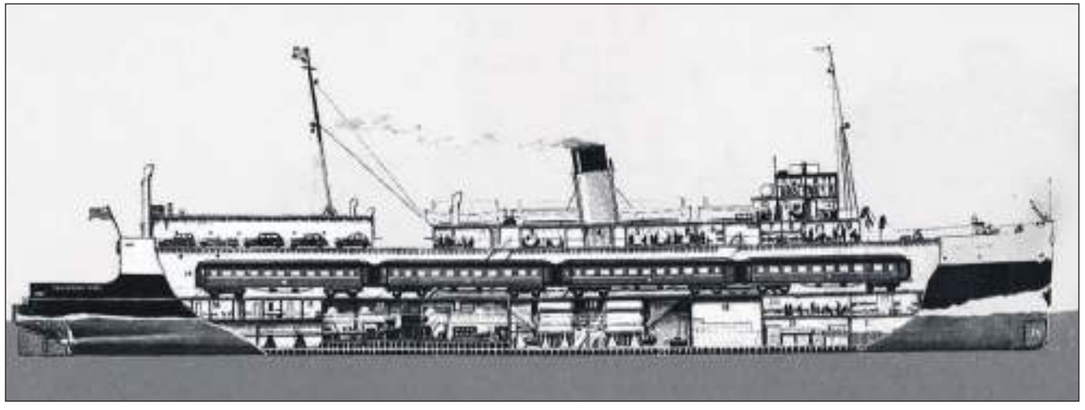
This chapter will now examine services between London, Paris and Brussels. On 12 October 1936, CIWL, in partnership with Compagnie du Nord and the Southern Railway, launched the Night Ferry – a direct London–Paris boat-train service, the Channel crossing for which took place aboard specially constructed train ferries. CIWL ordered twelve dedicated F (for ferry) coaches, which would satisfy Britain's singular standards, particularly its narrow loading gauge, as well as the standards introduced in continental Europe by the Railway Technical Unity's 1913 regulation. Thus vacuum braking and high platforms were the norm on one side of the Channel, while compressed air braking and low platforms prevailed on the other. On the French side, CIWL operated a restaurant car for breakfast service between Dunkirk and Paris, while dining facilities on the London–Dover leg were provided by the Pullman Car Company until 1962, then afterwards by a British Railways dining car.
Until 1951, the crossing was operated by three ferries – Twickenham Ferry, Hampton Ferry and Shepperton Ferry – each equipped with four sets of tracks for railway rolling stock. These were ordered by the Southern Railway and operated by Société anonyme de navigation Angleterre-Lorraine-Alsace (ALA). The two central tracks could accommodate eight coaches, the two outside tracks were reserved for freight stock. In July 1951, SNCF introduced Saint-Germain to the route, and it was joined in 1975 by ALA's Saint-Eloi. Together, they superseded the three ex-Southern Railway ferries.
Cross-section of Twickenham Ferry. This ship was ordered by the Southern Railway in 1933 to operate the Dover–Dunkirk crossing and went into service in 1936. It could accommodate 500 passengers, 12 coaches and two luggage vans (or 40 four-wheel trucks). It made its last crossing on 5 May 1974.

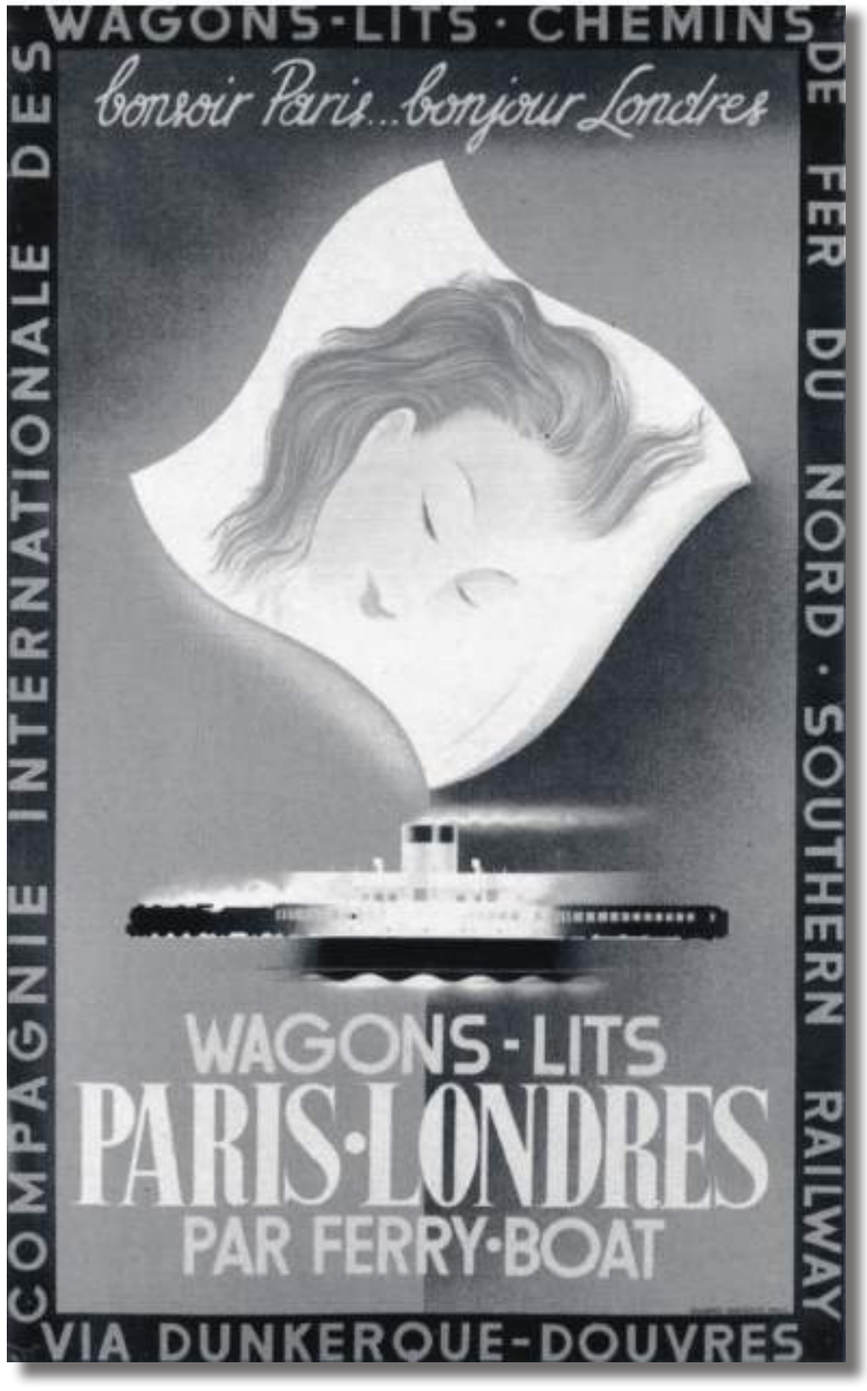
Having been interrupted by the War, the Night Ferry resumed on 7 December 1947, following the rebuilding of the Dover and Dunkirk port facilities, both of which had been seriously damaged by enemy bombing campaigns.
From 2 June 1957, one or two London-Brussels through coaches were added to the train.
The group meetings at the Madrid CEH/EFK assembly in September 1966 discussed four cross-channel routes for the 1967–1969 timetable period which are illustrative of a more extensive service offering. SNCF, BR, SNCB, CIWL and ALA coordinated both the timetable and composition of the Night Ferry train operating the Paris-Nord / Brussels-Midi–Lille–Dunkirk–Dover–London Victoria and return route.
A London–Basel sleeping car was added for the 1967/68 and 1968/69 winter services for passengers travelling to Swiss ski resorts.
A unique feature of the Night Ferry was the use of a specially installed lock system by which the train embarked and disembarked the ship. Special enclosed docks with sea locks were built at Dover and Dunkirk so that the train ferry could be kept at a constant level relative to the railway tracks on land. At high tide, the ship could steam directly in or out of the dock, but at low tide the water had to be let out first before departure, similar to a canal lock, and on arrival water had to be pumped in to bring the ship up to track level.
In July 1976, the opening of a new harbour station in Dunkirk reduced the crossing time from 3 hours 30 minutes to 2 hours 20 minutes. Arrival in London was brought forward to 07:45.
From 1 January 1977, the London–Brussels and London–Paris services were operated by British Rail. However, airline competition and the convenience of car-carrying couchette trains quickly enticed business travellers and British tourists away from the Night Ferry, and it ran for the last time on 31 October 1980. ■



Above: Boarding a train on the Twickenham Ferry in 1936. All rights reserved

Below: Longitudinal section of Twickenham Ferry
© Collection: Phil Dambly / PFT (Magazine En Lignes)





Garett, "Bonsoir Paris, Bonjour Londres. Wagons-Lits Paris-Londres par ferry-boats" poster for Compagnie du Nord / Southern Railways, printed by Alliance Graphique, 1936. All rights reserved

The development of CEH/EFK, CEM/EGK and FTE from 1994 to 2022

1994	Managing Railways SBB (CEH/EFK) and ČD (CEM/EGK) are tasked with presenting a merger project.
1995	Merger of CEH/EFK and CEM/EGK is approved.
1996	FTE statutes are approved. Forum Train Europe FTE is founded on 1 January 1997.
1998	FTE development strategy: separation of RU and IM functions within the organisation.
1999	A new FTE C conference for IMs is launched to harmonise the paths of international trains.
2002	First ever mid-December timetable change.
2003	Pathfinder goes live. International timetable coordination enters a new era.
2004	FTE A for passenger traffic in January 2004: Pathfinder is used for the first time to coordinate international train timetables for the 2005 annual timetable. RailNetEurope (RNE) is set up as the association of rail infrastructure managers.
2006	FTE becomes the association of Railway Undertakings and companies that provide important services for passengers (sleeping-car and rail catering companies) and freight.
2007	Harmonised deadlines for train path requests applied for the first time at European level for the 2008 timetable year.
2009	LIM is published for the last time for the 2010 annual timetable.
2013	First FTE C passenger traffic coordination conference for railway undertakings (incorporating the EWP conference) .
2014	FTE launches a project to overhaul the timetabling process.
2015	FTE strategy for 2016-2020 approved .
2017	English becomes the sole official language of Forum Train Europe. Launch of Timetable Review (TTR) pilots.
2019	Working Group FTE IT established.
2020	IT Cooperation Agreement FTE-RNE and IT FTE Strategy approved.
2021	Major RU key requirements related to Capacity Management and RU ambassadors concept approved.
2022	150th anniversary of timetabling conference in Passenger Traffic and 25th birthday of FTE.

Warsaw, September 1994, CEH/EFK and Luxembourg, November 1994, CEM/EGK The process of reforming European railways commences

With Directive 91/440/EEC ("Development of the Community's railways") in force and Directive 95/19/EC ("Allocation of railway infrastructure capacity and the charging of infrastructure fees") on the horizon, SBB and ČD were asked to draft a joint proposal covering statutes and suitable procedures for each organisation and to present this proposal in 1995. The first Directive introduced the principle of free, non-discriminatory access to infrastructure capacity for any train operator that applied to use it. Furthermore, it separated infrastructure management from production management for charging and/or organisational purposes by introducing the new concept of infrastructure managers (IMs) and railway undertakings (RUs). This new distinction cast doubt on the suitability of the two conferences' organisational structure and working methods going forward.

The second Directive would require any railway undertaking to submit train path requests to the infrastructure manager of the network from which the service would depart, with IMs having to ensure European-level capacity coordination between all CEH/EFK and CEM/EGK member administrations, regardless of whether these were members of CER. The option of merging would be revisited periodically.

December 1994 to August 1995: Investigating CEH/EFK and CEM/EGK reform

A CEH/EFK, CEM/EGK and CER working group co-chaired by SBB and ČD was given two tasks: to establish a new capacity coordination process that complied with the directives and to create with effect from 1 January 1997 a new organisation from the merger of CEH/EFK and CEM/EGK. This organisation would be named FORUM RAIL EUROPE (FRE) and would incorporate all members from within and outside the EU. This neutral platform would be responsible for coordinating train production and infrastructure capacity internationally. After a year of transition in 1996, the new structure would be in place from the beginning of 1997 in compliance with EU Directive 91/440.

Paris, September 1995: extraordinary Plenary Assembly of CEH/EFK

The working group's proposals for a new international coordination process and the establishment of FORUM RAIL EUROPE (FRE) were approved. SBB and ČD were to submit the statutes they had drafted to a joint Plenary Assembly of CEH/EFK and CEM/EGK in September 1996 so that the new organisation could commence operations in 1997.

La Rochelle, 20 September 1996. Joint assembly of CEH/EFK and CEM/EGK. Birth of FTE

The presidents of CEH/EFK and CEM/EGK, Mr Hans-Peter Fagagnini (SBB) and Mr Jaroslav Kocourek (ČD), emphasised the historic significance of this first joint meeting of the two organisations. The creation of a new organisation FORUM TRAIN EUROPE FTE) on 1 January 1997 was approved. Its statutes replaced those of CEH/EFK (1993) and CEM/EGK (1988) with the exception of two suspended articles (9.5 "Voting and decisions" and 17 "Distribution of costs"). All members of CEH/EFK and CEM/EGK subsequently became members of FTE.

In summer 1996, SNCF had opposed the Forum Rail Europe name that the organisation was originally to adopt on the grounds that it could be confused with the Rail Europe brand that its subsidiary SNCF Grandes Lignes International SA had registered in France and other countries.

A new, split coordination process was introduced. This involved technical planning of international passenger and freight trains on behalf of railway undertakings and coordinating capacity management on behalf of infrastructure managers.

An FTE Standing Group chaired by SBB with ČD as co-chair, and made up of representatives from DB AG, FS, MÁV, NS, ÖBB, PKP, RZD and SNCF, was mandated to deal with general issues and questions relating to train planning and pathing.

FTE management was split. SBB was designated "Managing Railway A" for 1997 to 2002 and responsible for general administration of the organisation and passenger traffic, with ČD as "Managing Railway B", co-chair and responsible for freight traffic.

The timetable coordination process followed four stages:

- FTE 1: FTE organised separate global conferences for passenger and freight traffic. These were held in June.
- FTE 2: Administrations organised bilateral and/

or multilateral conferences held between July and September.

- FTE 3: FTE organised separate global conferences for passenger and freight traffic. These were held in October
- FTE 4: Administrations organised bilateral and/or multilateral conferences held between December and February.

FTE 1 conferences were preceded by route management (ROME) meetings for international passenger traffic and "offer union" meetings for international freight traffic. These meetings took place outside the FTE process, and the FTE technical platform transformed their results into tangible form, with routes, operating periods, train composition, etc. being defined by RUs' production planning experts.

The dates of the first global conferences of the FTE era were:

- FTE 1 passengers traffic from 9 to 13 June 1997, in Lucerne (Switzerland);
- FTE 1 freight traffic from 23 to 27 June 1997, in Lucerne (Switzerland);
- FTE 3 passengers traffic from 29 September to 3 October 1997, in Bern (Switzerland);
- FTE 3 freight traffic from 27 to 31 October 1997 in Bern (Switzerland).

As a result, the general and technical conferences of CEH/EFK in September and CEM/EGK in November, the three preliminary conferences – east–west in May, east in April/May and west in June – and the CEH/EFK mini conferences ceased to exist.

Paris, 23 April 1997. FTE Plenary Assembly. FTE statutes completed

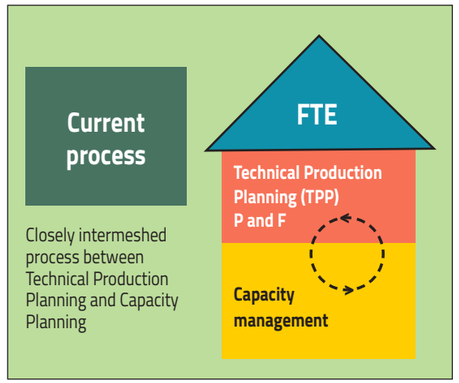
The new articles – 9.5, Voting and decisions and 17 Distribution of costs – were approved. A small working group was set up to prepare a questionnaire to gauge opinion on moving the annual timetable changeover from May/June to December/January. This group comprised SNCF and DB AG, the two administrations that had proposed the questionnaire, ÖBB, ČD and SBB.

Paris, 22 April 1998. FTE Plenary Assembly. FTE's transformation continues

From 1 January 1997, FTE had two purposes: to coordinate technical production (TP) by the RUs and to oversee international capacity management coordination (ICMC) by the IMs. The interdependence of the RUs and IMs explains their joint participation at FTE 1 and FTE 3 conferences, which dealt separately with passengers and freight traffic. Furthermore, "train path management" was only partially separated from "production planning" as an activity at the global FTE 1 and FTE 3 conferences. No working meeting involved IMs by themselves.

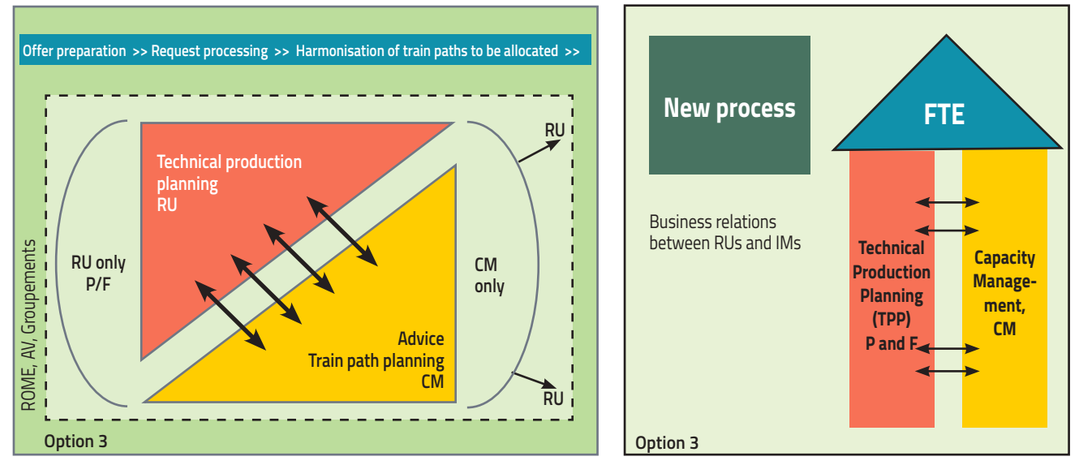
The EU wanted to promote competition by simplifying equal access to existing networks for the new railway undertakings. FTE's organisational structure having been criticised for the lack of independence between RUs and IMs in train path allocation, SBB and ČD suggested modifying this structure by tasking a working group to be chaired by SBB with submitting proposals to an extraordinary assembly to be held in Paris on 7 October. The working group's mission was to ensure that all railway undertakings respected the principle of non-discriminatory network access and to guarantee a reliable international coordination process.

21 August 1998. A historic report



The report produced by the working group, "Development of Forum Train Europe FTE, Initial strategy", acknowledged that Forum Train Europe was not organised in a way that met Brussels' requirements.

The two planning processes had to be separated and defined more clearly. For technical production planning, this meant finalising service concepts among the railway undertakings; harmonising requested timetables for international trains among the railway undertakings (train path requests); and determining the composition of international trains. For capacity planning, this meant satisfying the train path requests submitted by railway undertakings and/or authorised candidates; coordinating train paths at the border between capacity managers;



and planning diversionary train paths necessitated by track maintenance and construction works.

With regard to organisational structure, the working group presented four possible options:

- **Option "o":** Maintain the status quo.
- **Option 1:** Set up a new Forum Rail Path Europe (RPE) for IMs while retaining FTE for RUs. Cooperation between FTE and RPE.
- **Option 2:** Retain FTE as an organisation shared by RUs and IMs, but move train path allocation outside FTE.
- **Option 3:** Retain FTE as an organisation shared by RUs and IMs, but clearly separate responsibilities and ensure no RU participation in train path allocation

Within the working group, the majority of support was for option 3.

Paris, 7 October 1998. Extraordinary FTE Plenary Assembly

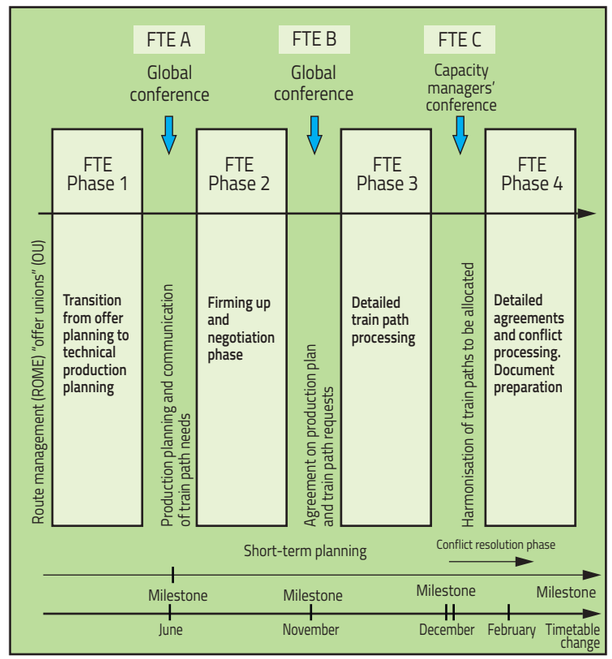
The working group was asked to prepare for implementation of option 3 by the April 1999 assembly.

11 February 1999. New report on the implementation of option 3

The report put forward a new modus operandi based on a summer (May/June) timetable change. Planning would take place in four phases, graded from outline to detailed, with three milestones (FTE A, B and C). These were aligned with the main annual timetable change.

The three conferences each contributed to the overall process. The purpose of FTE A, held in June, was to plan production and communicate train path needs.

In November, FTE B would draw up an agreement on the production plan and train path requests. Finally, the "Capacity managers' conference" (ICMC) or FTE C, the major innovation introduced by option 3, met in December to coordinate and harmonise the national-level passenger and freight train paths prepared by the



IMs and specified the exact times at which trains would pass border stations. RUs did not attend this conference.

Paris, 21 April 1999. FTE Plenary Assembly. The new process is tested in a pilot phase. It is decided to move the timetable change to mid-December from 2002

The new process would be trialled in a pilot phase running from April 1999 to April 2000 and the milestone for this would be the new FTE C "Capacity Managers' Conference" in December. A report on the pilot phase would be presented at the plenary assembly in April 2000.

Moving the timetable change date from May/June to around the new year (December/January)

The process that culminated in railway companies moving the timetable changeover from May/June to mid-December with effect from 2002 was a long one. The final decision taken at the FTE Plenary Assembly on 21 April 1999 was preceded by three surveys of CEH/EFK, CEM/EGK and FTE members between 1995 and 1998. Given that the opinions expressed during the last survey in September 1998 did not produce any clear response, the extraordinary FTE Plenary Assembly held in October 1998 asked SNCF, DB and FS to prepare a joint proposal for submission to the FTE Plenary Assembly scheduled for April 1999. The three companies all agreed in principle to moving the timetable change to around the new year, but disagreed on the exact date, SNCF preferring mid-December, DB mid-January and FS late January.

Looking ahead to the final decision that was expected to be taken at the FTE Plenary Assembly in April 1999, DB suggested the following compromise:

- The timetable would change in the second week of December for a trial period of two years.
- The experience gained during this trial period would indicate if the changeover date would remain in December or be pushed back to January.

The option of reverting to a date at the end of May/early June at the end of the trial period was ruled out, the decision to move the timetable change to around the new year being one of principle and thus irreversible.

The FTE members who attended the Plenary Assembly on 21 April 1999 approved DB's proposal and thus agreed to moving the main timetable change from May/June to mid-December. It was a historic result, with 248 votes in favour of moving the timetable change and 144 opposed.

Thus, from 15 December 2002, the timetable changed in mid-December across the whole of Europe. The timetable periods during the transition were:

- 2001/2002 : 10 June 2001 to 14 December 2002 (18-month transition period)
- 2003: 15 December 2002 to 13 December 2003

After this historical decision FTE submitted an amendment application to the EU Commission in Brussels for the date to be enshrined in EU Directive 2001/14/EC, and Appendix 3 was successfully amended. On 23 October 2002, on the basis of the application by the FTE, the EU Commission decided to amend EU Directive 2001/14/EC with regard to the date for changing the network timetable for rail transport, with effect from the timetable for 2003 (from 15.12.2002).

Paris, 1 to 3 December 1999. First FTE C "Capacity managers' conference"

This historic conference was attended by nearly all European CMs (EU, non-EU and Eastern European broad-gauge networks). First the CMs harmonised international passenger and freight train paths at border crossings. Then, in response to the train path requests communicated by RUs at FTE B and/or outside the FTE process, each CM assigned train paths according to the principles and priority rules set by their home country and in a transparent and non-discriminatory manner.

Paris, 19 April 2000. FTE Plenary Assembly. New timetable planning process adopted

From 2002, the global conferences took place as follows:

- End of January/early February: FTE A for passenger and freight traffic under RU chairmanship. Primary task: RUs to harmonise timetable offer concepts at international level.
- Mid-May: FTE B for passenger and freight traffic under RU chairmanship. Primary task: RUs to harmonise timetables for trains' entire journey routes, connections and train compositions.
- End of June: FTE C under CM chairmanship (not attended by RUs).
  Primary task: CMs to harmonise international train paths at national borders

It is important to note that the timing of all global FTE A, B and C conferences was geared to the annual timetable change that took place on the second Saturday in December as of 2002, as decided by the FTE Plenary Assembly on 21 April 1999.

Members felt that FTE B could not be considered an international train path requests conference until such time as the deadlines for submitting requests had been harmonised at European level. Furthermore, it would be important to align the deadlines for national and international planning processes on the basis that train path requests and path allocation would be completed eight and six months before the timetable change.

Paris, 13 June 2001. Extraordinary FTE Plenary Assembly. Pathfinder project launched

The revolutionary Pathfinder project, an initiative launched by Managing Railway SBB, was presented. It was suggested that advancing Internet technology could be harnessed to develop a communication system that incorporated the iterative process of harmonisation into international timetable planning by railway undertakings and capacity managers.

Thus timetable planning embraced the digital age.

Members greeted the project, approving the launch of phase II, and a central development group was set up under the leadership of SBB as Managing Railway and comprising Banestyrelsen, Railned, DB Netz AG, DB Reise und Touristik AG, DB Cargo AG, SBB Infrastruktur, SBB Personenverkehr, SBB Cargo, ÖBB Netz, ÖBB RailCargo, ÖBB Personenverkehr, Réseau Ferré de France (RFF), SNCF Grandes Lignes, SNCF Fret, SNCF Infrastructure, RFI, Trenitalia Divisione Cargo and Trenitalia Divisione Passeggeri.

This new, multilateral communication platform would simplify and speed up RU-RU, RU-IM and IM-IM data exchange in the international timetable coordination process. Since Pathfinder would be multilingual, language barriers between international train planners would be eliminated and access to reliable, regularly updated information would become a reality.

This European-scale IT project was FTE's contribution to the implementation of the European Union's desire to create a single, integrated space where trains could run between countries without any technical impediments.

Paris, 16 November 2001. FTE Plenary Assembly. Pathfinder development kicks off

Members agreed to the final development of Pathfinder and approved the 3,500,000 Euro investment loan for phase III of realisation. Under the financing model adopted to cover the development costs, 15% of the total sum would be split between all FTE members and 85% would be shared between the main partners (BS, DB Cargo, DB Reise und Touristik, DB Netz, ÖBB, Railned, RFI, Trenitalia, RFF, SBB, RFF and SNCF).

With financing in place, development could now begin, and FTE was now on the path towards a digital future. The initiative was a pioneering step in Europe; soon the paper proposals written out by planners during FTE coordination conferences would be no more than relics of a bygone age.

Paris, 3 July 2002. Extraordinary FTE Plenary Assembly. Pathfinder presentation

The next steps in Pathfinder's development were presented to FTE members:

- Prototype ready ..... September 2002
- 1st version (pilot) ..... March 2003
- Pilot operation ..... March – April 2003
- Final version (version 1.0) ..... September 2003
- Pathfinder live ..... From December 2003

Looking ahead to the FTE B1 (now FTE A) coordination conference for passenger traffic, due to take place in Ljubljana from 19 to 23 January 2004, railway undertakings prepared their first dossiers for the 2005 timetable from December 2003 onwards.

At this historic conference, RUs and IMs used the Pathfinder system to coordinate the timetables of international trains on twelve different European routes and the timetables of numerous special services.

Paris, 6 November 2002. FTE Plenary Assembly. FTE is realigned and a new timetabling process

The first railway package published in March 2001 (EU Directives 2001/12-14) included the extension of access rights to the national part of the trans-European freight network and clarified certain functions, such the issuing of licences to railways undertakings and train path distribution by capacity managers. FTE's Managing Railways also proposed that working procedures be re-examined.

The tasks assigned to the "FTE realignment" working group involved objectives such as consolidating FTE's position as a platform for cooperation between CMs and RUs and specifying the forms that cooperation with other European organisations, particularly RailNetEurope (RNE), should take. SBB and ČD were joined by the following members: DB Cargo,

DB Netz, DB Reise und Touristik, NS Reizigers, PKP, RailCargoAustria, Railned, RFF, RFI, SNCB Cargo, SNCF Grandes Lignes, SNCF Infrastructure, Trenitalia Divisione Cargo and Trenitalia Divisione Passeggeri.
SBB and ČD were to suggest a legal status for FTE at the November 2003 assembly, which would then take effect on 1 January 2004.
The Plenary Assembly FTE approved the new process relating to the 2005 timetable, which would start on 12 December 2004 and was scheduled as follows:

- FTE A for passenger traffic in January: RUs to harmonise offer concepts at international level.
- FTE B for passenger traffic in March: RUs to request train paths
- FTE A for freight traffic in March: RUs to request train paths
- FTE B for freight traffic in June: Resolution of any conflicts resulting from the national train path planning phase and modification requests submitted by RUs.
- FTE C in June: CMs to harmonise international train paths at national borders.

The "FTE realignment" working group was to submit a new process manual at the November 2003 assembly.
SBB and ČD were re-appointed Managing railways for the 2003–2005 period.

2003 – an eventful summer as Brussels takes a close interest in FTE's activities

On 15 July 2003, FTE attended a hearing in Brussels at the European Commission's Directorate-General for Energy and Transport (DG TREN, subsequently DG MOVE) and Directorate-General for Competition Policy (DG COMP) to explain its mission and activities and Pathfinder.
The aim of the hearing was to explore two important questions: firstly what influence RUs had on train path allocation and secondly, in the case of integrated railways, how autonomous CMs were of these RUs within FTE.
On 5 August, a letter from DG TREN reminded FTE's management that the first railway package, and Directive 2001/14 in particular, required infrastructure managers to allocate capacity on an equitable, non-discriminatory basis and in accordance with Community law. Moreover, these IMs had to be independent of RUs legally, organisationally and in terms of decision-making.
DG TREN and DG COMP advocated RailNetEurope's involvement in the train path allocation process and rejected FTE's current model of a joint international umbrella organisation for IMs and RUs, feeling it could instead become the platform for RUs operating international trains. They also felt that Pathfinder should be the property of the capacity allocation bodies.
On 24 September, faced with the reservations expressed by the European Commission, the Directors General on UIC's Executive Board declared their opposition to any detrimental decision, such as changing FTE's legal status by transforming it into an association, until the Executive Board had held its next meeting on 19 November. FTE and RNE were asked to prepare a joint position paper on the structures, tasks division and responsibilities of FTE and RNE going forward, including a plan for migration between the two organisations.
On 24 October, FTE and RNE submitted their "Position paper on the future development of FTE and RNE" for discussion by RNE's Steering Committee on 3 and 4 November and by the FTE Plenary Assembly on 5 November. The paper started by summarising the current situation:

- FTE was founded on 1 January 1997 and had around 80 members from 35 countries. These members comprised railway undertakings and infrastructure managers. On 6 November 2002, the FTE Plenary Assembly had decided to examine FTE's organisational structure and give it legal status with effect from 1 January 2004. In April 2003, the "FTE reorientation" project's steering committee had chosen "association under Swiss law" as its preferred legal status.
- In the framework agreement signed off in Berlin in September 2002 proposing the creation of "RailNetEurope (RNE)", 17 IMs had undertaken to cooperate on marketing, distribution and, in particular, the introduction of One-Stop-Shops (OSS). On 1 January 2004, RailNetEurope (RNE) would be transformed into a Vienna-based association.

Then, three proposals were put forward:

- **Option A: Retain IM tasks within FTE and RNE**

FTE would remain the umbrella organisation for RUs and IMs and would retain its role as the European train path workshop. Pathfinder would be entrusted to FTE.

- **Option B: Migrate FTE into RNE**

FTE's infrastructure-related tasks, such as harmonising the national train paths of international trains, would be transferred to RNE, which would assume responsibility for the timetable planning process. FTE and RNE would have to resolve the issue of how coordination platforms (global IM and RU conferences) were to be organised during the migration phase. Pathfinder would be transferred to RNE. FTE would assume RU tasks.

- **Option C: Migrate RNE into FTE**

RNE's infrastructure-related tasks would be transferred to FTE, which would remain the umbrella organisation for RUs and IMs. Pathfinder would be transferred to the new FTE association.
Option B was adopted, as fleshed out in a sub-option B3:

- IM tasks would be progressively migrated from FTE to RNE in the period up to 2005;
- RNE would become an association in 2004;
- FTE would become an RUs-only association from 1 January 2005;
- The IMs would leave FTE on 31 December 2004;
- Responsibility for the international timetable coordination process for all traffic types would pass to RNE on 1 January 2005;
- The RU process would remain the responsibility of FTE and the RUs;
- Pathfinder would be transferred to RNE on 1 June 2004. FTE and RNE would conclude a cooperation agreement to safeguard future developments.

RailNetEurope (RNE) was set up in 2004 as the association of Infrastructure managers. Currently, RNE has 38 Full Members and 11 Associate Members.
RNE facilitates the operational international business of its members. RNE's role is also to provide support regarding compliance with the European legal framework. This entails developing harmonised international business processes, templates, handbooks, and guidelines. All in all, RNE's mission is to help its members meet the challenges of the rapidly changing railway sector in Europe and to promote international rail traffic. For that purpose, RNE delivers solutions and provides tools for international infrastructure management.

Consequently, the core business of RNE is to provide support to European Rail Infrastructure Managers with the planning, selling and managing of international train paths.
In addition, RNE acts as a coordination platform for the development of common procedures and IT tools across the Rail Freight Corridors (RFCs).
As an umbrella organisation, most of RNE's work takes place through standing Working Groups and Project Teams, which are divided into the following business areas:

- Capacity Management (encompassing Timetabling and Management of Temporary Capacity Restrictions)
- Traffic & Train Performance Management
- Rail Freight Corridors
- Network Statement & Corridor Information Documents
- Legal Matters

RNE has adopted the typical structure of an international organisation. At least twice a year, the RNE General Assembly makes decisions. These are prepared by the Managing Board which meets about five times a year and supervises the work of all RNE groups. The day-to-day work of these groups is coordinated and managed at the RNE Joint Office in Vienna, which is also in charge of the administration, finances and communication of the Association.
RNE cooperates closely with Forum Train Europe FTE, which represents a large part of the market, and liaises with other European/international bodies – such as the CER, CIT, EIM, ERFA, IRG-Rail as well as UIC and UIRR – to build consensus on issues of common interest. Furthermore, RNE collaborates with the European Railway Agency (ERA) in the field of TAF and TAP TSIs.

Bad Homburg (Germany), 3 and 4 November 2003

The RNE Steering Committee approved migration option B3.

Bern, 5 November 2003, FTE Plenary Assembly

Migration option B3 as described in the position paper was approved with the addition of the following conditions (and thus known as option B3 plus):

- Binding regulations would be introduced between FTE and RNE governing future responsibility for different timetabling sub-processes;
- The timetabling process for 2004/2005 had to be safeguarded during the migration phase;
- The FTE and RNE associations would be set up at the same time;
- RNE would define the conditions under which railways that had yet to separate certain essential IM and RU functions could still join.

This represented the organisational separation of tasks and processes linked to service offer and production planning – which would remain the responsibility of FTE and the RUs – from tasks and processes linked with train path planning, which was transferred to RNE and the IMs, with effect from 1 January 2005.

As part of the process of separating essential RU and IM tasks, FTE members asked for guarantees that the iterations of offer, rolling stock and infrastructure would be upheld. There would have to be effective coordination at international level and between all players of the final product delivered to customers by RUs and IMs – trains (offer) and train paths (capacity).

FTE and RNE both recommended that UIC's Executive Board approve implementation of migration option B3 plus at its meeting of 19 November 2003. Migration would then result in the creation of an RNE association in 2004 and an FTE association in 2005.

The assembly also unanimously approved the timetabling process manual (version of 20 October 2003), which was based on European Directive 2001/14 and comprised five phases (A to E).

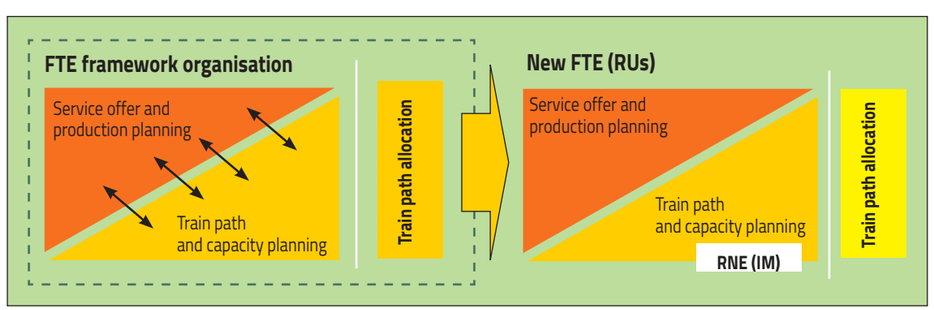
- Phase A: Offer concept checking by RUs.
- Phase B: Train path request preparation by RUs.
- Phase C: Train path elaboration by IMs.
- Phase D: Train path offer checking by RUs.
- Phase E: Timetable finalisation at border stations by IMs.

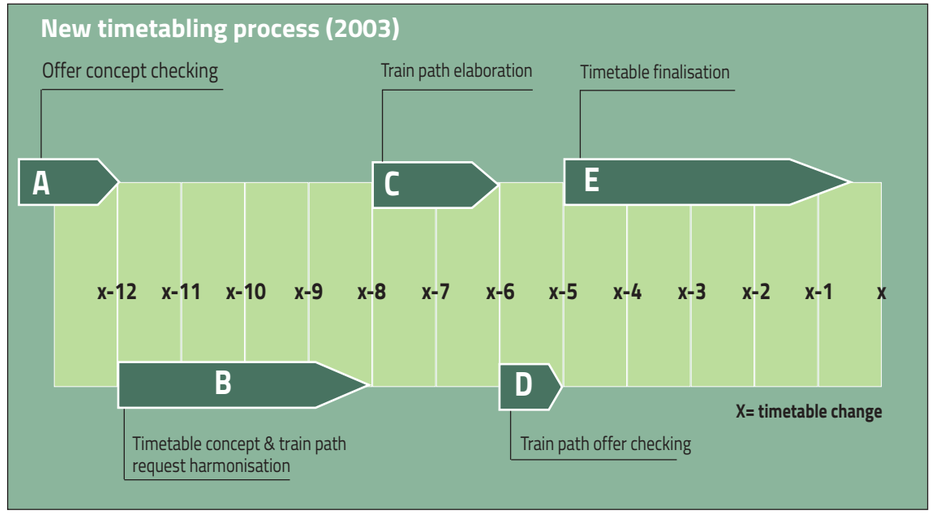
From 2004, FTE coordination conferences for the 2005 timetable period were organised as follows, in accordance with the process approved by the FTE Plenary Assembly in November 2002:

- FTE B1 for passenger traffic in January: RUs to harmonise offer concepts at international level.
- FTE B2 for passenger traffic in March: RUs to request train paths
- FTE B for freight traffic in March: RUs to request train paths
- FTE D for freight traffic in June: Resolution of any conflicts resulting from the national train path planning phase and modification requests submitted by RUs
- FTE D1 (formerly FTE C in June): CMs to harmonise international train paths at national borders.

Paris, 19 November 2003. Line clear for FTE and RNE

UIC's Executive Board approved option B3 plus, with RNE as the organisation for IMs and FTE as the organisation for RUs. RNE would be able to attain association status in December 2003 in order to guarantee its operational launch on 1 January 2004. The solution involved transferring FTE's IM functions to RNE as of 1 January 2005. RNE would become an association on 1 January 2004, while FTE would become the organisation of RUs.





One of the first specific measures relating to the transfer of functions from FTE to RNE was confirmed by the FTE-RNE working group on "Migrating IM activities from FTE to RNE" in April 2004. As of 2005, the FTE D1 conference (the conference formerly known as FTE C) for IMs would be organised by RNE.

Bern, 27 May 2004, FTE Plenary Assembly. Migration forges ahead

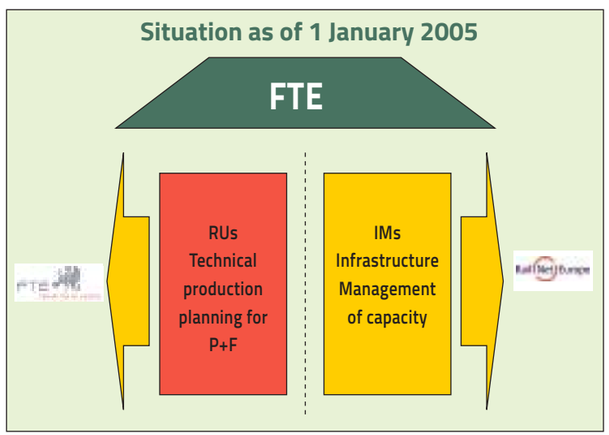
UIC's decision of 4 May 2004 confirming Bern-based FTE's pivotal role as an international train production planning platform open to all RUs, was approved and the managing networks were tasked with overhauling FTE's statutes. The new statutes and new vote-allocation and cost-sharing key would be submitted to the assembly on 25 May 2005 with an eye to them taking effect on 1 January 2006.

The assembly was briefed on the progress of the FTE/RNE migration process, under which FTE would focus entirely on RU activities by becoming an organisation entirely for RUs with effect from 1 January 2005. Infrastructure managers would leave FTE on 31 December 2004.

2005 was regarded as a transition year leading to the full operation of Pathfinder. The timetabling process was now carried out in conformity with the FTE process manual of December 2003. FTE organised and financed four coordination conferences – FTE B1 and B2 for passenger traffic, B and D for freight traffic, while RNE organised and financed the 2005 FTE D1 (formerly FTE C) conference. In addition, RNE organised and financed the first strategic planning meeting (major modifications) scheduled in the calendar for x-24/x-12 at the end of 2004/start of 2005.

Bern, 4 November 2004. FTE Plenary Assembly. FTE's new strategy is approved

The assembly approved the five strategic focal areas to be pursued from 1 January 2005: coordinating timetable and production planning processes between RUs; organising FTE coordination conferences; providing support for processes and products (Pathfinder, EWP and LIM);



building a network/opinion leader for RUs in planning process definition; and finally representing RUs' interests vis-à-vis other organisations.

Bern, 25 May 2005, FTE Plenary Assembly. FTE becomes an association under Swiss law

The new FTE statutes, its status as an association under Swiss law and the new cost-sharing and vote-allocation key valid from 1 January 2006 were approved.
"Forum Train Europe FTE is a European organisation of Railway Undertakings and service providers headquartered in Bern, Switzerland" (Art. 1.1); "FTE promotes transparent and independent cooperation among its members, enabling them to plan their international transport production" (Art. 2.1); "Membership of FTE shall be open to Railway Undertakings and other applicants for the allocation of railway infrastructure capacity in cross-border rail traffic, as well as national rail traffic undertakings and international rail traffic service providers who adjust their services to the international timetables" (Art. 4.1).
A new organisational structure was created:

Bern, 18 May 2006, FTE Plenary Assembly

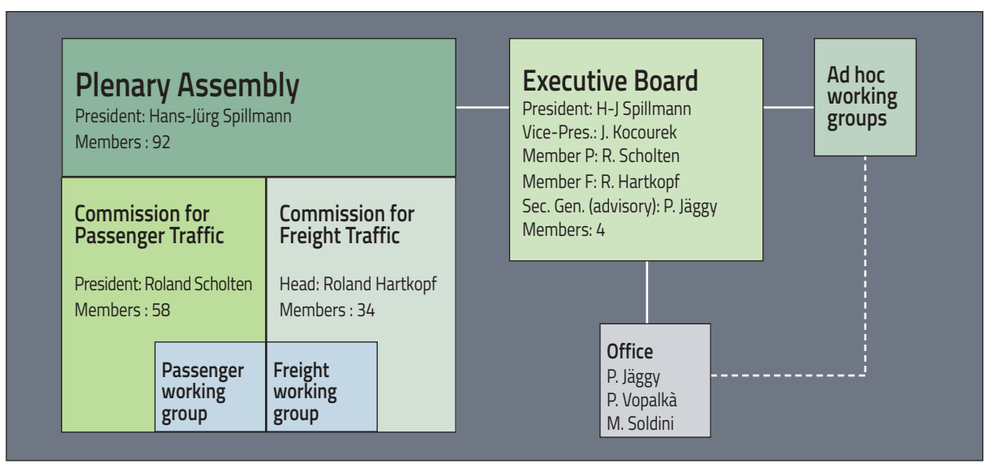
The annexes to the FTE statutes, which would take effect immediately, were approved.
In 2006, the efforts made to harmonise deadlines throughout Europe started to bear fruit.
Starting in 2007, and looking ahead to the 2008 timetable, deadlines for path requests (based on the decision of the RUs and IMs at that time in the framework of the FTE) and the draft timetable were harmonised internationally by IMs within RNE. However, there was still no single date for final offers in August.
The first "historic" harmonised dates in the planning process would apply annually following the same schedule:

- 14 January 2007: RUs submit feasibility study request;
- 9 April 2007: RUs submit path request;
- 2 July 2007: IMs submit draft timetable;
- 2 July to 5 August 2007: RUs submit observations on the draft timetable;
- 6 to 19 August 2007: IMs present final offer.

RNE informed FTE that their technical meeting of capacity managers, which coordinated train paths at border crossings and prepared the draft timetables for submission to railway undertakings in early July 2007, would take place between 18 and 21 June 2007. In light of this development, the timing of the FTE D freight traffic conference, which was originally scheduled to take place on the same dates, had to be reviewed. Henceforth, it would take place at the beginning of July, after the IMs had submitted the draft timetable to the RUs.

Bern, 24 May 2007, FTE Plenary Assembly

FTE members were told of the UIC Executive Board's decision of 7 December 2006, which approved FTE's status as an association under Swiss law and the creation of a joint network that was open to all RUs. FTE's headquarters would remain in Switzerland.



Bern 27 May 2009, Commission for Freight Traffic. LIM withdrawn after 80 years

When LIM was computerised in 1993, it marked a major step forward. Given IT equipment's short life cycles, however, the MS DOS-based system had reached its limits by 2009, and further development was not economically viable. During this time, UIC and several RUs developed X-Rail, which, with integrated timetable information in its basic version, looked capable of replacing the outdated and work-intensive LIM. In May 2009, the Commission for Freight Traffic decided to withdraw LIM and embark on negotiations with X-Rail project management. Unfortunately, these negotiations proved fruitless since members were not willing to split the costs demanded by X-Rail, while many RUs were unwilling to continue to commit to full-load traffic and several major RUs were already involved in X-Rail.
The last LIM editorial conference – for the 2010 timetable period – took place in Podébrady (Czech Republic) from 17 to 19 November 2009.

Bern, 30 May 2012, FTE Commission for Passenger Traffic. New FTE process approved

The FTE Commission for Passenger Traffic approved the introduction of the new timetabling process from November 2012 for the 2014 timetable period. This meant: The FTE B1 and FTE B2 coordination conferences were renamed FTE A and FTE B; the new FTE C coordination conference was scheduled for July and would encompass the EWP (European through-coach working plan) conference, which would be held in June until 2012, firstly to harmonise and fix the data published in EWP for international train compositions, and secondly to coordinate RUs' responses to the timetable drafts submitted by IMs in early July.
This new conference would first be held in Ljubljana from 9 to 11 July 2013.

Bern, 4 June 2013, FTE Plenary Assembly. We speak English

English would become FTE's language from January 2015. There would be a second language for a two-year transitional period (2015–2016). German would be retained as the second language until 31 December 2016. English would become the sole language of FTE from 1 January 2017.

Bern 3 June 2014, Commission for Freight Traffic. Work starts on overhauling the timetabling process

The FTE working group reported four findings from its analysis of the timetabling process. The timetabling process was essentially geared to passenger traffic and did not meet freight traffic's needs. The first date for requesting paths (X-8) was too early since RUs had yet to sign contracts by then. The dates set by IMs for requesting path updates during the year and offering train paths in the annual timetables had also not been fully harmonised. Finally, there was a need for better coordination and communication of engineering work by infrastructure managers.
An FTE and RNE joint project involving RUs and IMs from autumn 2014 was to define a new global timetabling process for passengers and freight traffic.

Berne, 4 June 2015, FTE Plenary Assembly. New FTE Strategy 2016-2020 is approved

The FTE Executive Board presented three strategy options for the 2016-2020 period.

- **Option 1:** Service reduction (cost minimization) - Focus on organising the FTE coordination conferences for freight and passenger traffic
- **Option 2:** Optimise of the *status quo,* with maintaining and strengthening core FTE activities, but reducing some current tasks
- **Option 3**: Future concept for strategic development – expand services to increase FTE impact and covering a broad spectrum of tasks.

The FTE Plenary Assembly voted in favour of option 2 for building on the status quo with strengthened core FTE activities and optimising certain areas.

FTE would perform the following tasks:

- Services identical to *status quo*

- Additional activities:
  - Strengthening FTE participation in TTR project
  - Representing members of general issues
  - Developing the relationship with RNE at Management Board level
  - Improving internal and external communication

- Reduction of activities:
  - Participating to a limited extend in the PCS groups
  - Ceasing organisation and participation in the WMGS, WMPS and Balkan conferences.

Bern, 9 June 2016, FTE Plenary Assembly. Revision of international timetabling process

The revision of the international timetabling process, TTR, was presented, replacing the "outdated existing process (…) in order to comply with market requirements". Launched at the request of FTE members, it was transformed into a task shared with the association of the infrastructure managers, RNE.

Bern, 1 June 2017, FTE Plenary Assembly. Launch of TTR pilots

The FTE Plenary Assembly debated the established TTR programme and gives the go-ahead to pilots aimed at validating the expected business improvements. The pilots that were implemented subsequently highlighted a lack of harmonisation between IMs.

Bern, 7 June 2018. Idea of Railway Planning System is rejected

The FTE Plenary Assembly was dominated by a major debate about the structure, tasks and responsibilities of the organisation. Considered one of the most controversial assemblies in FTEs history, it debated the idea of a "Railway Planning System" (RPS), a Europe-wide IT planning system for RUs potentially costing millions of euros. The idea was rejected.

To improve TCR planning and adopt the notorious Annex VII of Directive 2012/34/EU, the FTE Plenary Assembly endorsed the "TCR Guidelines" created with RailNetEurope (RNE). TCRs would remain the thorniest issue for members until the present day.

Bern, 5 June 2019, FTE Plenary Assembly. An FTE IT working group is established

TTR pilots were discussed; those that had been implemented were not considered sufficient for demonstrating benefits or shortcomings of the TTR process.

After the RPS experience of 2018, the FTE Plenary Assembly decided against forming an IT Change Control Board together with RNE and voted for a dedicated IT working group. The group would be charged with creating an FTE IT strategy. The IT working group would report to the Freight and Passenger working groups and would not have its own budget.

Online, 10 June and 25 November 2020, FTE Plenary Assemblies IT Cooperation Agreement FTE-RNE (June) and IT-Strategy (November) approved

The outbreak of the pandemic resulted in an overhaul of the FTE Plenary Assembly: it was held online for the first time in its history, allowing participants to stay safe at home while still debating and deciding the future.

With "RPS dreams" having come down to earth in 2018, the FTE Plenary Assembly approved the newly created FTE IT strategy in November, creating a framework for IT work in the next five years. Overall, it made it clear that FTE was first and foremost a business organisation. Making FTE a potential IT operator was viewed critically by many. Instead, the aim was to exert influence on capacity-related business requirements and IT standards.

In June, a cooperation with RNE on the joint development of the Path Coordination System (PCS) was approved, allowing FTE to order and pay for change requests to the benefit of Railway Undertakings. This 2020 cooperation agreement has resulted in constructive and fruitful cooperation between RUs, FTE and RNE.

Defining object models for data exchange, the "Train Object Modelling (TOM)" project outlined its potential dimension with several communication layers; this resulted in the FTE Plenary Assembly first limiting the scope (June 2020) and, later, transferring the project to the more suitable TAF/TAP TSI organisations (November 2020) in accordance with the new FTE strategy.

TTR was due to move into the "migration phase", though implementation timelines were still largely vague.

Online, 9 June and 23 November 2021, FTE Plenary Assemblies Major RU key requirements related to capacity management (June) and RU ambassadors concept approved (November)

The FTE Plenary Assembly in June endorsed the RU statement on capacity management improvements, asking IMs to "adapt the timetable procedures to market needs" with a "fast, market oriented, and harmonised (…) capacity management".

In the field of TCR planning, RUs declared the need to have the TCR and its affected trains (principle of "work and run") planned properly by IMs and in collaboration with RUs.

In November, the FTE Plenary Assembly created the "RU ambassadors" to support the change in capacity management within RUs and provide a structure to strengthen the voices of RUs at the national and international level. To prepare RUs and support the TTR implementation, several RU pilots were approved for 2022. A number of FTE rail freight members organise a RailFreightForward Group (RFF) to push forward freight improvements. This group promotes Digital Capacity Management (DCM). FTE established the link between the DCM goals of RFF and the ongoing work in TTR IT, resulting in a common sector statement with RFF, FTE, RNE and other stakeholders.

It is no coincidence that the 150th anniversary of the timetabling conferences, the centenary of SBB as the host organisation and the 25th birthday of FTE as an association are celebrated in Olten: it is the railway hub of Switzerland – the confluence point north-south and east-west traffic.

The FTE Passenger and Freight Commissions started investigating the future setting of FTE conferences, taking developments in markets, IT and future TTR processes into account.

Olten, 9 June 2022, FTE Plenary Assembly. 150th Anniversary of the timetabling conferences in Passenger Traffic

It was no coincidence that the 150th anniversary of the timetabling conferences, the centenary of SBB as the host organisation and the 25th birthday of FTE as an association are celebrated in Olten: it is THE railway hub of Switzerland – the confluence point of north-south and east-west traffic. And it is a town rich in railway heritage. There are strong parallels with FTE, which celebrates its anniversary with the first "live" FTE Plenary Assembly since the pandemic disrupted international rail traffic. After 100 years of being organised by Swiss railway experts, the team has been transformed into a European group of enthusiasts living and working in Switzerland, the Netherlands, the Czech Republic and Germany. And remains committed to serving the whole continent. ■

The longstanding partnership between OSJD and CEM/EGK/FTE – and between East and West

by Peter Jäggy, FTE Secretary General 1997–2017

OSJD is an international organisation that promotes cooperation between railways in eastern Europe and the Far East. It is headquartered in Warsaw and was founded in 1956. Its members are transport ministries, railway undertakings, companies with observer status and affiliated companies from 29 countries. The primary purpose of this organisation is to develop and improve international rail traffic between Europe and Asia.

For many years, CEM/EGK – and then, latterly, FTE – helped organise the WMGS freight traffic coordination conferences on international freight timetables in eastern and south-east Europe under the chairmanship of OSJD's Committee III.

Held in early February until 2016, then in May from 2017, the annual conference agrees modifications to the current freight timetable and prepares train path requests for the next timetable period.

In addition, until 2016, FTE was an observer at the WMPS passenger traffic conferences organised and run by OSJD's Committee IV for passenger traffic. At both events, FTE took the opportunity to update the representatives of the eastern European railways on its own current issues and projects and to develop its partnership with OSJD.

Under the new FTE strategy for 2016–2020, the 2015 FTE Plenary Assembly decided that the FTE office would cease to be a co-organiser of the WMGS conferences as of 2017. The last WMGS conference to be co-managed by FTE took place in the Romanian town of Sinaia from 1 to 4 February 2016.

03

1994 - 2022
Contemporary times

Renfe Mercancias class 333.3
diesel locomotive. ©Renfe Mercancias / Patier

Forum Train Europe – An important period for FTE's future

Pierre-Alain Urech. FTE President, 1998–2003, Vice-Chairman of the Board of Directors of SBB AG

Pierre-Alain Urech

I had the pleasure of being FTE President during a period that was crucial for the organisation's future. At the time, railways were undergoing a process of far-reaching reform that was the result of the efforts to breathe fresh life into European rail freight traffic that the European Commission had begun in the early 1990s. Although all EU Member States had formally implemented Directive 91/440/EEC, and many states had put in place the additional liberalisation measures set out in the associated national directives, there had been virtually no significant change in Europe's rail markets. One of the key goals of EU transport policy was to increase the competitiveness and market share of the overall rail system by implementing effective intermodal competition, European rail companies having previously been very largely protected from market forces. The aim was to open up the self-contained state monopolies that made up traditional national rail markets to new entrants by imposing non-discriminatory market access policies. The first attempts at liberalisation were the Trans European rail freight freeways – roughly equivalent to today's rail freight corridors (RFCs) – which were introduced on certain routes.

These European and national-level activities, the evolving operational environment and political pressure were the key factors that prompted me, in my capacity as FTE President, to implement fresh reforms within Forum Train Europe (FTE) following its emergence from CEH/CEM on 1 January 1997. In short, we needed to set a path for FTE going forward.

The EU Commission was paying close attention to FTE, suspecting that because it had historically evolved as an organisation for the "old" state railway monopolies, it would be a barrier to competition within Europe, which was obviously not true.

After various meetings with the EU Commission in Brussels, I realised that FTE's structure was a major problem since, at the time, any infrastructure manager that was part of the same organisation as a railway undertaking could also be a member of FTE.

As a result, both FTE's organisation and its approach to timetabling had to be adapted to existing EU Directives and the new rail packages that the European Community was already in the process of drafting by more clearly separating the roles and responsibilities of RUs and IMs.

The FTE Plenary Assembly therefore decided to introduce FTE C, a new coordination conference specifically for IMs, whose purpose was to harmonise passenger and freight train paths at national borders from December 1999. RailNetEurope (RNE) continues to organise and run this conference as the "RNE Technical Meeting".

A further important milestone during my presidency was the decision in 1999 to shift the timetable changeover from May/June to December with effect from 2002. Following a four-year lead period, during which European railway companies were asked to complete several questionnaires and countless discussions were held with FTE members, a compromise was finally agreed and agreement was reached on the introduction of the new timetable changeover date. Thorough preparation and planning ensured that this Europe-wide milestone transition passed off without a hitch.

Furthermore, FTE embraced digitalisation long before it became a popular concept. Back in 2001, I commissioned an investigation of ways to simplify and speed up coordination processes connected with the harmonisation of international timetabling, train path planning and operations planning. Thus, work on the creation of Pathfinder, FTE's pan-European web-based communication system for international timetable coordination, was launched. This proved to be the first historic step in the digitalisation of timetabling in Europe, with FTE bearing the full costs of development itself and without any financial support from the EU. This system went into service following an iterative development phase between the RUs and IMs that lasted approximately two years and was ultimately transferred to RNE in June 2004 as part of the FTE/RNE migration process. Following various refinements and upgrades by RNE over the years, the tool is still in use as the Path Coordination System (PCS). However, the basic principles are still the same.

I left Swiss Federal Railways (SBB) at the end of 2003 to become CEO of a listed Swiss energy corporation. Nearly 20 years have passed since then, and today, as Vice-Chairman of SBB's Board of Directors, I am pleased to see that FTE is still working very effectively, thanks partly to the decisions that were taken back then.

I would like to thank everyone who has helped achieve this impressive outcome, particularly my former Secretary General Peter Jäggy and his estimable colleague and passenger traffic secretary, Matteo Soldini. Both have made crucial and hugely significant contributions to FTE.

Finally, I wish FTE and its new management team continued success. ■

Pathfinder - a new era of digitalisation in European timetable coordination

Uwe Kolk, former head of the project "Pathfinder"

Uwe Kolk

Swiss IT Award for Pathfinder. © FTE Archive

The year 2000 opened the twenty-first century and marked the beginning of a whole new era. Whereas humanity had previously lived in an analogue world, trading in haptic goods and clearly defined services, the millennium catapulted the world into a digital and exceedingly virtual future.

In the 130th year of its existence, the venerable "Forum Train Europe" was still at the cutting edge and decided to transfer the well-rehearsed international timetable coordination into the new millennium with a visionary European project. The FTE management developed a first draft within the framework of an e-business strategy, which was handed over to the author as project leader in January 2001 for fine-tuning and implementation. The "Pathfinder" project and with it a new era was born.

The FTE General Assembly of 13 June 2001 was to be used to present the ambitious project to the European railway undertakings and the infrastructure managers and to approve the necessary budget.

From the beginning of the project, political obstacles and difficulties were identified as the biggest challenge. Europe-wide projects had a reputation of producing modest results with very large resource requirements. To mitigate these risks, even the first rough concept was to be developed and communicated internationally. The early involvement of the EU railway and competition authorities was also a relevant success factor. Thus, with cheerful courage and focused presentation, the author trekked via Lucerne, Brussels, Frankfurt, Paris, Utrecht, Vienna, Copenhagen, Basel and finally back to Paris, where the development of the Pathfinder fine concept was commissioned.

Objectives and system philosophy were named concretely:

Objective

Development of a "multilateral" and multilingual communication tool that supports the entire timetabling process in passenger and freight traffic and distributes the work results to the railway undertakings and infrastructure managers in a timely manner. With this, FTE wanted to achieve the first step towards the digitalisation of the core business of the railways in Europe. The international timetable would now be coordinated via a modern tool and no longer with paper and pencil!

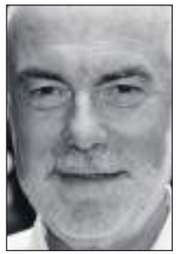
Methodology

Decentralised intelligence, process-supporting tool that integrates the Internet philosophy into the system by means of the community idea.

For implementation, a consortium, a so-called community, was founded to bring Pathfinder to life using modern, iterative methods. The Pathfinder core group included the following companies: Banestyrelsen, Railned, DB Netz AG, DB Reise und Touristik AG, DB Cargo AG, SBB Infrastruktur, SBB Personenverkehr, SBB Cargo, ÖBB Netz, ÖBB RailCargo, ÖBB Personenverkehr, Réseau Ferré de France (RFF), SNCF Grandes Lignes, SNCF Fret, SNCF Infrastructure, RFI, Trenitalia Divisione Cargo, Trenitalia Divisione Passeggeri.

The agile tools and methods widely used today were hardly known in 2001. But it was precisely this new approach that was the key recipe for success for the European project. The Pathfinder Community met every month in a member's home country. At each meeting, the concrete software, which was made easily available as a web application, was used to discuss, and decide on the next development steps. In close cooperation between railway undertakings and infrastructure managers, the

Pathfinder idea became the coordinating system for cross-border European rail traffic.
The budget of 3.5 million euros was financed 85% by the eight main partners. The remaining 15% was borne by all FTE members based on the FTE cost distribution key.
From 2004, Pathfinder became established in all European countries. It replaced the paper minutes of the FTE A, B and C Coordination conferences. After more than 100 years of successful work, the FTE had arrived in the world of digitalisation.
Pathfinder fitted perfectly into the international route coordination process. All participating companies supplied the current data statuses, mostly via interfaces. This transparency avoided misunderstandings and duplication of work. The hitherto time-consuming communication made way for content-related, strategic coordination.
Different write and reading rights in the individual process phases ensure the division of tasks between railway undertakings and infrastructure managers. The system is available in all major languages and thus enables secure communication without language barriers.
At the suggestion of the EU Commission, Pathfinder was handed over to RailNetEurope in summer 2004 as the Path Coordination System (PCS). This handover and the winning of the Swiss IT Award in the category "Projects" marked the end of the author's commitment as project leader.
Joint implementation and ease of use have, in retrospect, been the success factors of Pathfinder for almost twenty years. ■


Hans-Jürg Spillmann

Separation of infrastructure and traffic and the creation FTE and RNE as associations

Hans-Jürg Spillmann, President FTE 2004-2012

It is by no means self-evident that in 2022 Forum Train Europe (FTE) will be able to look back on 150 years of history as a coordinator of cross-border rail traffic in Europe. After more than 100 years of successful operation of the European Timetable Conference, CEH/EFK for passenger traffic and the European Timetable Conference CEM/EGK for freight traffic, these two platforms were merged in 1997 to form Forum Train Europe (FTE). However, the last decade of the 20th century was marked by the European Union's (EU) desire to redefine the regulatory framework for international rail transport.
Based on the desire for rapid economic integration of the newly admitted member states, the EU intended to increasingly promote access to central European markets through efficient, environmentally friendly rail traffic. To this end, the EU wanted to strengthen the railways in competition with other modes of transport.
Although this diagnosis was welcome, many railway professionals did not like the medicine prescribed by the EU. The EU attributed the cause of the low, even dwindling market share of the railways in cross-border traffic to the fact that the railways - in contrast to road and air transport modes – did not face any competition between the providers of the transport service. Competition among the railways therefore had to be created as a matter of urgency. As a prerequisite for this, the railway companies, which were mainly organised on a national basis, should be separated as far as possible into infrastructure managers (IMs) and railway undertakings (RUs). The RUs, for their part, would have to compete for customers' orders based on a harmonised Europe-wide rail infrastructure.
The model that the EU followed to make rail traffic more efficient and competitive was very similar to the successful model of liberalisation in the telecommunications sector.
The EU vigorously implemented the transformation of the regulatory framework for the railways in several "railway packages". In the eyes of the competition authorities, FTE came under suspicion of being an organisation in which the established, state-owned railway undertakings ("incumbents") were trying to bargain away scarce cross-border train paths and thus prevent new entrants from even having a chance to enter the market.

"Timetable negociations".
© FTE Archive

At the beginning of the 21st century, the challenge for the FTE Executive Board was therefore to understand and implement the new regulatory environment. At the same time, however, it was necessary to avoid "overshooting the target" by making cross-border coordination completely impossible. The separation of FTE into one coordination platform for the infrastructure managers (IMs) and one for the railway undertakings (RUs) became unavoidable. Carefully reasoned and intensive communication on the need for cross-border coordination of the planning process to politicians became the main task of the FTE Executive Board at that time.
From 2004 onwards, the IMs coordinated their cross-border planning and scheduling within the framework of RailNetEurope (RNE). The information tool "Pathfinder" (today "Path Coordination System", PCS), which was jointly developed for cross-border path planning, was transferred from FTE to the ownership and responsibility of RNE at the end of 2004 and the IMs left FTE. The "new" FTE became the organisation of RUs and service providers. On 19 July 2007 FTE became independent as an association under Swiss law.
After some years of mutual demarcation as required by the EU, fortunately the realisation prevailed that the rail traffic product can only be successfully developed further if the IMs' plans are coordinated with those of the RUs. The solution to this was found by FTE and RNE. Ultimately, the key factor was the realisation that the "object" of the activities of the RNE and FTE is the same, because ultimately every train journey requires on the one hand a rolling stock and production concept that is coordinated across borders, and on the other hand the appropriate infrastructure facilities and train paths. FTE and RNE agreed in several stages on a coordinated annual plan with a binding process behind it.
This balancing act between system-relevant coordination processes and the demands of competition policy is no easy exercise. Since the first decade of the 21st century, the management bodies of RNE and FTE have been facing the major challenge of resolving the conflict of objectives and to find practicable solutions for the railways.
The influence of different customer expectations in passenger and freight traffic is particularly striking. While RUs in passenger traffic can plan in annual cycles, RUs in freight transport are exposed to much shorter-term customer requirements. The annual planning process of FTE and RNE must take these different requirements into account; a planning process based on the "one-size-fits-all" model is no longer sufficient.
In all these changes, FTE has proven its worth. The growing number of members and the increasing share of "new entrants" demonstrate the high benefit of this European platform for the coordination of cross-border rail traffic. With the increasing digitalisation of processes, cross-border cooperation is becoming more efficient and more transparent. FTE as a coordination platform will also remain indispensable in the context of new regulatory requirements for customer-friendly cross-border rail traffic. ■

Peter Jäggy

Jaroslav Kocourek: a big-hearted personality and a railwayman to the core

Peter Jäggy, Secretary General FTE 1997–2017

He was happiest around trains and stations. With his expertise and his tireless dedication to the railways, Jaroslav Kocourek not only left his mark on ČSD, later ČD, but also the European Freight Trains Timetable Conference (CEM/EGK), of which he was president from 1996. Furthermore, following the amalgamation of CEM/EGK and CEH/EFK, he was Vice-President of the European rail organisation Forum Train Europe from 1997 until his death in 2006. During the upheavals that followed the reorganisation process, he was instrumental in shaping FTE and his influence on the organisation was felt for many years. He was a railwayman through and through, and it is no exaggeration to say he was even a legend. In his view, not only did railway companies have to maintain good relations with each other, they also needed to work hard to forge links with public and political institutions and enhance the railways' reputation. Jaroslav was a sensitive, thoughtful man who was respected throughout Europe. He was quite simply an acknowledged, consistently engaged expert, a man of huge experience, an admired colleague and, above all, a friend. Despite his high-level involvement and status, he was not a man to seek the limelight.

People interested in railway history will also know Jaroslav from his countless outstanding photographs of life on the railways. In addition, he played an important role in helping set up the Czech Railway Museum in Lužná u Rakovníka in 1989. A memorial plaque was unveiled there on the 10th anniversary of his death at a ceremony attended by public dignitaries, members of the ČD Board of Directors, railway enthusiasts and friends.

Jaroslav felt it was always important to remain calm, think before acting, consistently consider the needs of a smoothly running railway system, focus on people, employees and customers, never forget to think about the longer term perspective, and encourage multicultural cooperation.

Sadly, he died unexpectedly on 9 July 2006, and his funeral ceremony at Prague's main hlavní nádraží station was as impressive as that of any head of state.

The number of invited guests from his home country and abroad, and, above all, the number of railway employees – shunters, train crews, drivers, former managers, cleaners and colleagues – who gathered at the station was astonishing. All wanted to pay their last respects. Not least among the mourners was Albatros, his beloved ČSD class 498.1 steam locomotive, which stood by him at the station, shedding its own tears of gratitude for his steadfast loyalty and waiting affectionately for him, ready to take him on his final train trip.

The signal turned green for departure, and the two old friends left together, Albatros sounding its own whistles of mourning as it conveyed Jaroslav into the tunnel and on to his final resting place. We are all enormously grateful to him, and his passing has left a huge hole. The railways will never forget his tireless personal commitment to them, and we will honour his memory for all time. ■

Memorial plaque for Jaroslav Kocourek. © Private collection

ČSD Albatross 498.011 departs Prague with Ex261 in November 1968. © Jaroslav Kocourek / Col. Joachim Claus

Pavel Vopalkà: the long-standing freight traffic secretary to CEM/EGK and FTE – conscientious, multicultural, unforgettable and a talented linguist

Peter Jäggy, Secretary General FTE 1997–2017

Pavel was a true railwayman who encouraged multicultural working within CEM/EGK and later in FTE. His characteristic traits were always listening to people, never acting without thinking things through and knowing exactly what was best for the railways and their future.

Pavel served CEM/EGK, and subsequently FTE, for 24 years. He planned and organised the freight traffic coordination conferences, compiled their working programmes, promoted international cooperation and was the go-to person for everything associated with freight traffic. In short, he was the expert's expert. It is also thanks to him that FTE's coordination conferences were not just forums for planning and technical coordination, but also social events where railway people could meet, socialise and build trust in each other.

He was always there when we charted the course of the railways' future development. He consistently made sure that the railway system progressed and evolved and that the people who planned its freight traffic did their work under the best possible conditions.

For many years, he also led the LIM (Livret indicateur International des Marchandises – international freight train timetable) coordination conferences and he oversaw and drove the development of this forum and its computerised information system for international wagonload transport chains.

Pavel was a highly respected freight traffic expert and an endearing human being, and none of us will ever forget his laugh. Although he is no longer with us, railway people will always keep a place for him in our hearts. We are grateful for his energetic commitment to CEM/EGK and FTE. ■

Peter Jäggy

The beginning of TTR - The over 100-year-old timetabling process has had its day in Europe

Peter Jäggy, Secretary General FTE 1997–2017

The cross-border coordination of the annual timetable is very complex, requires a lot of specialist knowledge and is carried out according to regulatory framework conditions, which are partly prescribed by EU directives and regulations, and according to an annual timetable defined by RailNetEurope (RNE).

In addition, the timetable planners follow the national priority regulations with a predefined planning hierarchy for long-distance traffic, freight transit traffic, interregional services and, additionally, the national delivery network for wagonload traffic as well as regional services such as suburban railways and local freight traffic. All that must be incorporated and integrated into the rail network and its timetable.

Various electronic planning tools such as route graphics, track occupancy plans, network graphics and national planning tools are used for this purpose. As an important European coordination tool, the IMs and RUs have at their disposal the Path Coordination System (PCS), which was initiated by FTE in 2000 as the Pathfinder system and successfully implemented throughout Europe by FTE two years later. The introduction of the coordination system between RUs and IMs marked the beginning of digitalisation in European path and production planning in Europe, which was financed by the then members, a striking milestone in the long history of FTE.

However, all these initiatives of FTE were not enough. A new market-oriented and more flexible timetabling process had to replace the outdated process.

The current capacity management process, which was created in the last century, no longer meets the needs of the railway market. It requires improvements in terms of flexibility, efficiency and effectiveness and is also not cost-optimal. Furthermore, national specificities make international harmonisation difficult and stand in the way of seamless cross-border traffic, better use of existing infrastructure and the further development of the Single European Railway Area. For this reason, Forum Train Europe and RailNetEurope joined forces in 2014 to launch an ambitious project - "Timetabling and Capacity Redesign for Smart Capacity Management", or TTR for short. Today, TTR enjoys the full attention of the European Commission, railway organisations and other railway stakeholders. Moreover, the TTR programme is seen as an important way to fulfil the transport objectives of the European Green Deal.

Thus, FTE had set up a specific working group for the further development of the planning process in freight traffic, which had started two years before the start of the TTR programme with a more detailed analysis of the current situation and its problems.

Due to the opening-up of the European rail freight market, the requirements for RUs and IMs have changed. The aim of this study was to analyse the current "freight planning process" and to identify problems and difficulties. Based on this analysis, 10 solutions and variants for the "further development of the freight planning process" were proposed. Each variant was assessed based on comprehensive analysis. Different effects on, for example passenger traffic or the legal framework conditions, were also shown for all proposals. The findings of the study were:

- Today's planning process no longer meets market needs.
- The current process is not properly implemented or adhered to by stakeholders.
- Deadlines and national regulations (Network Statement) are different and need to be harmonised internationally.
- The planning process is too time-consuming and complex.
- It does not consider or only partially considers planning during periods of engineering works.

The solution for the future planning process can only be found jointly between IMs and RUs. After the decision of the FTE Plenary Assembly in 2013, FTE used this basis to give RNE, the process leader, the stimulus to launch the current TTR programme. FTE was integrated into the overall programme management as a co-leader with active participation and responsibility. It was and is the culture of FTE to involve its members and important stakeholders in the projects from the very beginning, so that suggestions for improvement and approaches to solutions can be worked out together. The participating members are all experts in their field; they know the problems best because of their practical experiences. In addition, this approach promotes motivation in the change process and acceptance in the implementation and realisation throughout Europe. With this project approach, FTE had launched Pathfinder (now known as PCS) at that time, developed it together with RUs and IMs, implemented it successfully and on time in Europe and always with the same conviction: "The wheel belongs to the rail, the rail belongs to the wheel" which has not changed until today. ■

TTR - Elements for improvements for the sector

Sebastian Naundorf, Senior Project Manager / Deputy Managing Director FTE and Sebastian Carek Senior Project Manager FTE

Sebastian Naundorf

Sebastian Carek

With 150 years of history, it is evident: timetabling has evolved through history. And while the Jubilee is ongoing, change is still needed. The existing, decades-old timetabling process is outdated and does not serve market needs anymore. In order to make timetabling more customer oriented and efficient, the revision of the timetabling process "Timetable Redesign TTR" (today "TTR for smart capacity management") was initiated. Requested as early as 2014, the market needs these improvements now more than ever. With concepts already defined to a large extent, it is time for the implementation. The European Commission seems supportive in two ways: it is ready to adopt the necessary legislation and in addition assist with external funding – for rail, this is like winning the lottery, as the EU (and some member states) are even providing money to support the IMs in improving their own working methods. So, what is TTR about?

In a nutshell, TTR is set to change the capacity management process in order to:

- Make capacity available when the different markets need it, i.e. earlier than today for stable traffic and later than today for traffic that is requested by customers at a later stage,
- Make capacity commitments stable, i.e. ensure that Temporary Capacity Restriction (TCR) planning will be respected before capacity commitments are made,
- Make good quality capacity available no matter when the RU books it,
- Make capacity available at the click of a mouse, i.e. by providing a common, standardised IT-environment connecting IMs and RUs for all planning aspects,
- Harmonise national processes, remove national peculiarities and complete the creation of the single European rail market also in the area of capacity management.

Where do we come from?

Today, RUs can either request paths in the Annual Timetable – in which conflicts are coordinated, or in the late or ad-hoc path request phases, in which the remaining capacity is allocated (in most countries) on a first come – first served basis. This leads to the fact that for most traffic the path requests need to be placed in the Annual Timetable to obtain a timetable of adequate quality – regardless of whether the customers transport needs are known or not. Furthermore, today's process is only partly harmonised. Path offer dates differ from country to country and not all of them follow the TCR planning, making it difficult and sometimes even impossible for IMs to coordinate internationally an effective path offer of good quality. This leaves the RUs operating international traffic with the additional task of having to overcome with these differences. Last but not least, IT is organised by national IMs, each having their own application and sometimes own connection to some RUs. The current common European tool is only available for a very limited number of actions.

What are the RUs´ needs in TTR?

To overcome today's shortcomings, RUs in FTE started TTR in order to update the outdated Process to the needs 21st century, supported with the advanced IT and binding legal framework:

a) For the process, RUs need good quality at different path ordering times

Most passenger and some freight services need earlier path commitments. These shall be much earlier than today, at best more than five months before the timetable change to be competitive with air and road. This shall be served with an accelerated annual timeline allocation timeline. Most freight and some passenger services only know their customer needs at short notice when signing the transport contract, but they still require good quality paths. This is expected at timings between four months and one month before the traffic starts and shall be handled by the new concept of Rolling Planning. It is essential to safeguard capacity for these business needs since the financial incentives for cancellation/modification are not the right approach to minimise early bookings for non-contracted traffic with unknown transport details. Moreover, freight customers who start operating traffic at short notice may wish to continue running services beyond the end of the artificial timetable period. Rigid dates for timetable changes are a concept that is unknown to competitors in other modes of transport such as roads and waterways. Thus, multiannual Rolling Planning shall make it possible to book for up to 36 months ahead (for a defined path in the current year, and for "slots" in the upcoming years). Ad hoc planning for any short term or individual requests remains possible.

Moreover, RUs require that paths are stable and once commitments to customers are made, shall not (or only in exceptional cases) be changed. To reach that, early planning of TCRs becomes necessary, either individually or with good assumptions that avoid undue blockage of capacity for TCRs. Making sure that the new approach is beneficial to the market, RUs need to be involved in these early planning stages – not just informed, but in a constant common dialogue together with IMs, discussing all capacity needs.

Last but definitely not least, the process needs European implementation. RUs require the same process with the same timeline and the same mechanisms to be executed by all IMs throughout Europe. Only then then can the Single European Railway Area come into existence and provide the basis for a level playing field with other modes of transport.

b) For the IT support, RUs demand easy access to capacity

RUs customers ask for offers and want an answer immediately. Reducing the time for an offer from days or even weeks as in the case today to minutes is one of the aims of TTR IT, now referred to as Digital Capacity Management (DCM). This shall build on common standards on the basis of TAF and TAP TSI, commonly implemented and used between all partners. As such, it shall be no different for RUs whether they order national or cross-border traffic; and no matter if it is in the Annual Timetable, Rolling Planning or ad-hoc planning meaning IMs will be able to implement TAF/TAP TSI across all their interfaces.

Not only path data shall be communicated with common standards, but also TCR data – from consultation to changes in individual paths – and any pre-planning data shall be produced to the same standards. In addition to these approaches, RUs expect IMs to modernise their IT. This means that manual work in path construction should be reduced and shall be strongly supported by digitalisation, automatisation and mathematical optimisation. This would also assist IMs staff in reducing peak-workloads and in identifying traffic opportunities in densely used networks.

c) The supporting framework shall assist RUs in achieving market-oriented conditions

Having a common allocation process and IT system on paper is the basis. Getting these implemented and executed commonly is the necessary other part, with RUs needing a framework supporting and enforcing the shared implementation. Today's experience shows that a simple agreement on paper is not enough. As such, one of the major expectations is steering mechanisms for IMs, such as reciprocal commercial conditions. These shall provide financial incentives for IMs to steer for internationally aligned and early TCR planning.

IMs are organised and financed nationally, but their work is the key driver of successful international rail carriage. If they do not cooperate and align their decisions, the European market as the whole suffers. Effective mechanisms are needed to support and enforce the aligned cross-border work. This shall be done by a common legal framework and may require also a cross-border "watchdog". Thus, RUs expect a decision-making escalation mechanism that works across national borders and ensures that conflicts are not solved at the expense of the railway undertakings and their customers. Of course, RUs expect that IMs work together and work in dialogue with RUs, so that the escalation mechanism must be used only in exceptional cases. Past experience shows that it is important to have this mechanism, since very little was achieved on voluntary basis.

d) Implementation is needed now

RUs need the implementation of market-oriented capacity management today! With the initial programme starting in 2014, the time for action is now, IMs are asked to agree on implementation plans, nationally and at the European level together with RUs. These IM-plans will be guided by an ambition to assist the market – and not by the lowest common denominator. It remains a joint task for every RU in FTE to push for these improvements now and in the upcoming years and motivate IMs and other stakeholders such as the various Ministries of Transport to implement them. The European Commission announced their support for the market needs in TTR and started legal activities. This amazing support needs to be used by RUs together in FTE to provide the necessary input, shaping capacity management for the next decade. It is now up to us to shape the framework in favour of the business! ■

An RU perspective on European Digital Capacity Management

Ulla Kempf, Martin Schmidt – SBB Cargo International and active FTE member representatives

Ulla Kempf

Martin Schmidt

Let's start by looking back 15 years to see what development has been possible in recent years. At this time bigger railway companies may have had dedicated bilateral interfaces with one infrastructure provider. Smaller companies transmitted their path request by fax or, if possible, by e-mail. For international path coordination, Pathfinder was used, which was replaced some years later by PCS (Path Coordination System). At the end of the path request process all path offers were entered manually into the software systems. A data exchange between the systems was an exception and not the norm. In the meantime, integrated software systems or interfaces which connect several systems within one railway company are state of the art. Interfaces with other Railway Undertakings or Infrastructure Managers exist but still only on bilateral bases.

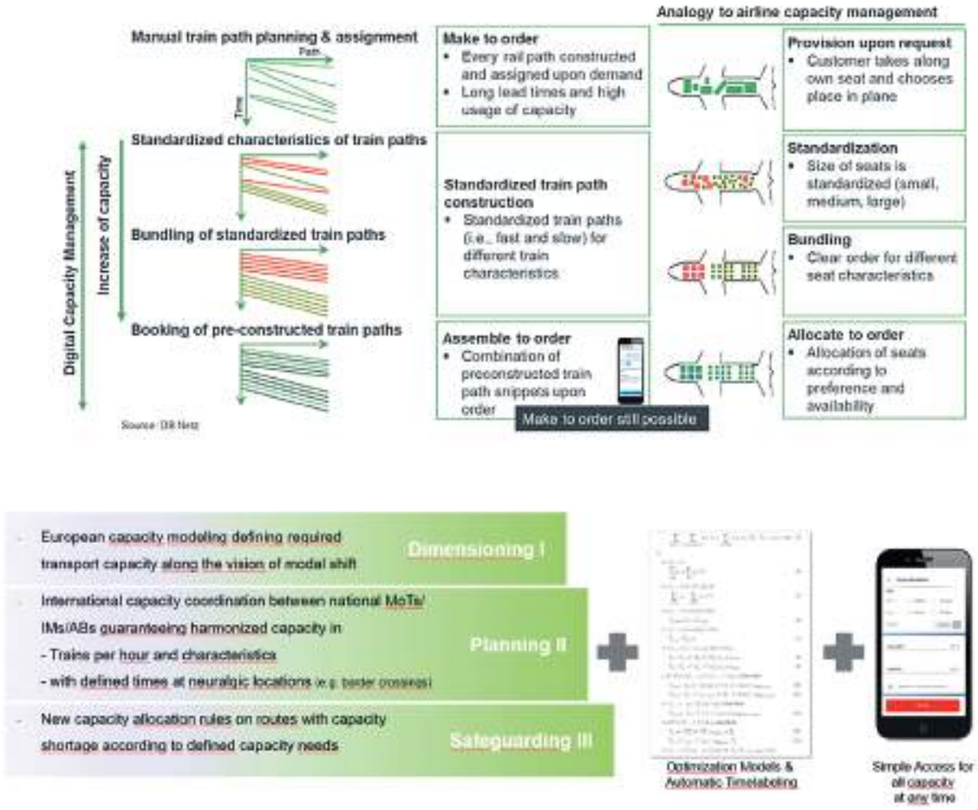
Within the next three years interfaces built upon TAF/TAP TSI regulation for path requests and path offers including new identifiers will be introduced throughout Europe.[1] It will make standardised, unified cross border data exchange within the European railway sector possible and implement the digitalisation. A speedup in communication by reducing manual work and distributing information over one channel to several partners is possible on that basis, but this rollout is only one step, and it will give the opportunity for further development, which is necessary to meet social and political expectations.

Increasing modal shift from road to rail will be one of the crucial cornerstones in transforming Europe into the first carbon-neutral continent by 2050 - the European Commission's objective in the Green Deal[2]. Achieving 30% rail modal share in freight would contribute to these targets by avoiding 25 million tons of CO_2 equivalent emissions and approximately 25 billion EUR in external costs from 2030 onwards[3].

To boost this growth, Railway Undertakings need to offer competitive services to the market, which requires making running international trains "as easy as running trucks". This includes the fast and transparent availability of data and information. It requires a change in the way we work. To enable this, valid information must be exchanged through the whole planning process by digital interfaces, including Infrastructure Managers who need to provide sufficient infrastructure capacity in quantity and quality to create space for growth.

Transparency and access to capacity, in particular infrastructure capacity, needs to be simple, digital and without time delay. In this regard, today's management

1. cf. http://taf-jsg.info/wp-content/uploads/2021/03/TAF-RU-IM-JSG_2020-report-v1.0.pdf (page 21 and following pages)
2. European Commission, "Handbook on the external costs of transport", (Version 2019 – 1.1)
3. Green Book, Rail Freight Forward Initiative



© SBB Cargo International / Forum Florence

© DB Netz

of capacity is outdated. Heterogeneous and dispersed systems[4] as well as traditional processes for capacity management in Europe are not matching up with short term and flexible market needs any more. Instead, they lead to "a" technically possible solution for "a" timetable by manually constructed "make to order" train paths, which cannot yet be optimised due to technical and time restrictions. Often these offers are therefore suboptimal (cross-border international) train paths for freight with long and non-synchronised lead times for booking.

In general, capacity is the most expensive and not infinitely extendable resource we have in the rail sector and therefore it has to be used most efficiently.

Digital Capacity Management (DCM) will address those challenges. It industrialises the process of rail path planning and assignment by standardising, automating, and optimising small capacity units. Transparency and access to capacity will become digital. Planning and dispatching systems / organisations can communicate digitally and without time delay allowing seamless offers across national and organisational boarders. Finally, yet importantly, optimisation of infrastructure capacity and asset utilisation will become possible.

Through digital representation of infrastructure, including daily engineering work, train path capacity and quality can be maximised by optimisation algorithms in the perspective of National or European networks. The use of adaptors makes it possible to keep existing legacy IT-systems for timetabling and therefore keep investment costs low[5].

The effects are promising. A DB Netz best practice example resulted in a higher supply of capacity on current infrastructure: ~ + 4% [4,6]. On average, less travel time is required: ~ - 6% due to optimised train paths saving resources on IM and RU side[4]. The replacement of slow made-to-order processes by digitalised, industrialised processes will deliver path offering times of approx. 1 hour instead of 30 working days as well as a step-change in process quality in terms of conflict elimination (e.g., infra works), speed, etc. Overall, more transparency on available capacity is possible and therefore enables the implementation of long-term as well as multi-annual timetables as required for TTR (Timetable Redesign project of Forum Train Europe and RailNetEurope). In addition, DCM provides means for more efficient investment planning of physical infrastructure investments through a comprehensive digital representation of infrastructure for SERA (Single European Railway Area). Once DCM is fully rolled out, RUs expect it to improve driver and locomotive deployment due to optimised round trips and reduced synchronisation times at borders of up to 15% and possible energy savings of up to 10% due to less consuming stops for rail freight[7].

Digital Capacity Management offers the facility for a hierarchical, international, cross-border capacity planning within Europe. To ensure seamless European rail freight flows, it is an absolute necessity that the overall process of dimensioning – planning – and safeguarding capacity will be aligned accordingly. A European capacity model defining required freight traffic capacity along the vision of modal shift is needed and must be coordinated between Member States, IMs, and Allocation Bodies to guarantee harmonised capacity[8]. Through DCM our sector will receive the means to do so and act accordingly.

To make this happen, Infrastructure Managers, Railway Undertakings and Authorities need to act now. The current structures in rail are neither incentivising investments in digital measures nor in cross-border optimisation. A possible way to overcome this predicament is by treating investment in DCM as equivalent to investment in new physical capacity and finance it by corresponding means. Elevating digital investments to level playing field with physical investments, lower investment needs and shorter lead times will incentivise governments and IMs to invest with high returns in capacity. This could serve as an unlocked opportunity to remove or at least reduce significant bottlenecks on Europe's most heavily used network sections until physical infrastructure is built. ■

4. 28+ legacy infrastructure management systems in Europe
5. Source DB Netz project NEXT /click & ride
6. 4% on 50% of the European Railway Network equivalents into approx. 16 bn EUR of physical investment saved
7. Green Book, Railfreight Forward Initiative
8. New capacity allocation rules on routes with capacity shortage according to defined capacity needs are additionally necessary to sustainably ensure the international rail freight capacity needed

Welcoming night trains back to Europe

Michael Weiss Team Coordinator Annual Timetable and Erwin Kastberger Head of Product Management Nightjet, ÖBB Personenverkehr

Michael Weiss

Erwin Kastberger

The Idea

The preliminary work for new night train routes is not a mental masterpiece at first. A middle school atlas is sufficient as a basis. This can also be your own 30-year-old atlas - neither the location and number of inhabitants of the major cities in Europe nor the railway lines between them that can be travelled by night trains have changed noticeably since then. Using a worn-out timetable from the 1990s is also very helpful here, even if it is rather confusing due to the large number of night trains running at that time. One would not even know where to start.

Therefore, together with like-minded colleagues from like-minded railway companies, one starts with the major trains of the past, which have been discontinued in the meantime, and thinks about how something like this could look in the meanwhile already advanced 21st century. Is the demand for services between two cities enough to finance the infrastructure costs, the vehicles, the management costs, and the overhead? If

© ÖBB

not, then another city needs to be connected, which raises the next question: Who can carry out a complex shunting manoeuvre where today? In the end, however, a concept emerges that appears to be economically viable and producible for marketing experts and can thus be handed over to the production planners who first throw up their hands in despair.

The implementation

The final coordination between the market and production divisions takes place within the framework of the meeting somewhat unwieldly called "platform for the handover of the product" - usually in November, i.e., x-13. So, the planners take down their hands again and thus dive deep into the world of production… Because from this point on, the lead in the planning of a train changes to the production areas and thus to the framework of Forum Train Europe (FTE) - always keeping in mind that until the concrete implementation of a new train service, it will still require an iterative cooperation of these two and many other areas.

This is particularly true for night trains because they are characterised by individual timetable planning, varied train composition with higher shunting costs compared to daytime traffic and "creative elements" that do not (or no longer) occur in clocked daytime traffic.

Firstly, there is the timetable: At the FTE A Coordination conference in January of each year, the first production and timetable concepts are agreed between the RU production divisions and infrastructure managers. While the synchronisation of long-distance services is slowly becoming the standard in daytime traffic, one could also say that night trains run to very special, tailor-made timetables. The aim is not to keep journey times as short as possible, but to ensure convenient boarding and alighting times for the customer. When departing in the evening, this can still be planned largely without conflict; the departure time should ideally be between 20.00 and 22.00 hrs. On the one hand, on the way, one tries to disturb the night's rest as little as possible by making only a few stops. On the other hand, economic factors currently lead to solutions with half trains or groups of coaches that must be shunted at midnight hours in junction stations. The search for suitable operating points and the necessary resources for this work is part of the standard process in the detailed planning of night trains.

Finally, they arrive at their destination, night trains often run during the morning rush hour for commuters and students. Bottlenecks in line and platform capacities in the conurbations require a high degree of solution competence on the part of transport and infrastructure companies. By the FTE B Coordination conference in March, the plans will be specified and finally be ready to be ordered.

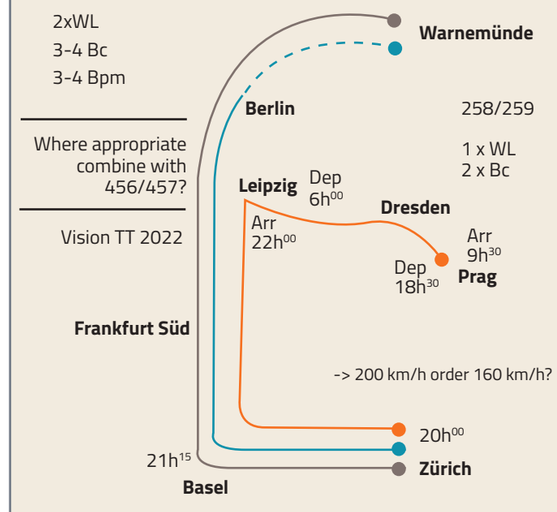
A special feature of the night trains operated by ÖBB should also be mentioned here: the so-called "Semmelhalt" (bread stop). As part of the personal service provided by the staff of our current partner Newrest, the service offered on our NightJets includes breakfast with a choice of freshly baked goods, in addition to numerous other components. Buns and rolls are delivered directly to the train en route in a suitable city between 3.00 and 5.00 a.m. as part of a scheduled stopover. Newrest then serves a small "menu" put together according to the customer's individual wishes directly in the compartment - correct planning thus ensures not only operational implementation but also guarantees this catering service is available.

Once the scheduling hurdles have been cleared, the extensive and complex production processes during the stabling period are on the agenda. Beyond the usual operations also required on other trains, such as interior cleaning, water filling and toilet disposal, night trains need significantly more care. Continually fresh bed linen, clean blankets, and catering for sleeping and couchette cars are specific requirements that are not found in daytime traffic. In view of the optimisation of the infrastructure, even at large stations, individual solutions are required here. The stationary systems for permanent energy supply that were still common a few years ago have been greatly reduced because the multiple units used in daytime traffic supply themselves with energy via the overhead line. Therefore, when planning new night train services, power connections need to be re-established in individual operating stations - or the timetable or destination station must be adjusted to prepare the set of carriages for the next journey in a customer-friendly way.

And since all these production steps are not carried out on the platform, but in suitable stabling facilities, resources are again needed for shunting the night trains.

Flip chart

Creative phase



Development of new Nightjet concept. © ÖBB

It is easy to see that all this requires a detailed plan coordinated with numerous organisational units.
Finally, the use of vehicles - train composition and routing. As already mentioned, relation-related coach groups are often used - the standard here is the combination of sleeper coach - couchette coach - seating coach, to be able to offer customers as wide a choice as possible, from the de-luxe compartment to the economy rail ticket with seat. Historically, the most diverse types of carriages are used here; ÖBB alone currently has no less than 5 different couchette series - all in comparatively small numbers. This makes it difficult to organise the routing and, above all, the maintenance. However, the near future will bring a decisive step for passengers, ÖBB and its partners - new NightJet trains are already in production, and individual prototypes are already on test runs. Scheduled use is planned for 2023 on trains between Italy and Austria.
A NightJet from Venezia SL via Salzburg to Stuttgart could then look like this (working status FTE A 2022):
Conventional wagon groups from Budapest, Rijeka and Zagreb will run together with the new NightJet from Venezia - the next few weeks will show if and how we succeed. ■


Gabriel Seguette


Richard Herrmann

Forum Train Europe FTE today from the member's point of view

Gabriel Seguette, SNCF Voyageurs and Leader of the FTE Working group for Passenger traffic and Richard Herrmann, DB Cargo Germany and Leader of the FTE Working group for Freight traffic

Celebrating the 150th anniversary of the European Train Timetable Conferences makes an easy start to name the benefits of being part of FTE: this activity is permanently essential to operate international rail services for passenger and freight traffic. From 1872 up to 2022, conference organisation as well as meeting content has obviously changed drastically. Still, we pursue the same goal as the long list of our forebears: providing quality international rail services to the European public and making border-crossings as smooth as possible. Today, FTE arranges five coordination conferences a year – FTE A, B and C (for passenger traffic) and FTE B and FTE D (for freight traffic) – to coordinate the timetables and the deployment of rolling stock. This is the first dimension of FTE: ensuring this long-lasting and crucial task of facilitating daily international business of railway undertakings.
This first task is essential to operating international rail traffic. FTE brings together all involved parties in Europe, resulting in close and fruitful cooperation between infrastructure managers and railway undertakings. Together, we ensure the first step for smooth and optimal concertation regarding cross-border traffic: harmonised and quality planning for passenger and freight services.
This is, however, not the only value of FTE. FTE bears a second dimension: providing member companies a platform to share, define and solve any problems faced by railway undertakings in the field of capacity management. The role of the permanent and temporary working groups is to find and promote common positions. FTE provides a forum for comparing the situation among countries and offers ways to challenge Infrastructure Managers to come up with capacity of better quality and more stable path commitments and to ensure the necessary path harmonisation at the borders between different IM's. The subjects are diverse, ranging from path allocation to TCR (temporary capacity restrictions) processes.
FTE holds consequently a third dimension: looking ahead to the future interests of railway undertakings in the field of capacity management. The association therefore manages to push for better market-oriented rules towards business and institutional stakeholders. FTE has managed to develop close ties with other sectoral institutions involved in the making of future capacity allocation rules in Vienna, Brussels, Paris and beyond. Such a role is currently being deepened: it is of primary importance for railway undertakings to operate in a more market-oriented capacity allocation framework. The market needs major achievements soon, sooner than the next jubilee celebration!
Finally, there is a fourth dimension for FTE which is derived from the three previous features: FTE is a vibrant community gathering people from the FTE office and from all member railway undertakings and applicants.
All these formal and informal discussions, exchanges and activities also make our common good for the benefits of all FTE members.
Being part of FTE goes much beyond the European Train Timetable Conference: it has turned into a commonplace of railway undertakings for all capacity topics to improve the situation of the sector.
We are delighted to be part of such a family! ■


Edgar Schenk

Forum Train Europe FTE today from the point of view of the FTE Management

Edgar Schenk, Managing Director FTE (since 2019)

Introduction / Step in the wrong direction

For some time now, FTE has been much more than an organiser of conferences. For example, FTE reached the first step in digitalising the international timetabling process with the development of the "Pathfinder" tool. In today's "PCS", which is based at the partner association RailNetEurope (RNE), FTE defines the user requirements of the Railway Undertakings. With the project management in the IT project Train Object Modelling (TOM), which aimed to develop a standard communication between the heterogenous European systems, FTE brought another complex topic to FTE's portfolio. TTR (Timetable Redesign) was also initiated by FTE members, which aims at a more market-oriented and harmonised capacity allocation throughout Europe.
With this mix of topics, it has been unclear in recent years what FTE stands for. Should the focus be on the development of IT or on the further development of business topics? It was clear that with the limited resources of the members and the FTE Office, both could not be done effectively and efficiently.
In 2018, planning for a major IT project, the "Rail Planning System", was initiated. After members expressed serious reservations regarding costs and benefits, this project was abandoned and an attempt was made with a new IT strategy to become a partner in the IT developments at RNE. This plan was also met with scepticism from the members. The rejection of this thrust by the Plenary Assembly in June 2019 ushered in a new direction. In future, the FTE Office should better involve the members and represent their requirements from a business perspective.

Development of a new strategy

With this, the decision was made to focus on business issues and on the requirements management of a future IT rather than to IT developments. It was the right decision. There is no voice of the Railway Undertakings (RUs) in Europe in the area of capacity management and timetabling other than FTE, and this voice had to become stronger.
In autumn 2019, the Executive Board launched a strategy process to clarify what the association should stand for in the future and on which topics the focus should be placed. The members were involved in the process. Intermediate steps were discussed in the Freight and Passenger Traffic Working groups, and results were approved in the Commissions.

The resulting mission statement sums up the roles of the association:

- We are the think tank in the field of capacity management and timetable planning by promoting exchange among the middle managers and professionals of our members.
- We promote Europe-wide standardisation of processes and tools and help to increase the competitiveness of rail in intermodal comparison by supporting RUs in the relevant working groups and projects and doing a targeted stakeholder management.
- We provide and develop the platforms for RUs to coordinate European train services. Our core business encompasses the design, harmonisation and agreement of cross-border timetables and train compositions.

- We promote the voice of RUs towards other European organisations involved in capacity management by aligning RU opinions and bringing consolidated positions into projects and to key stakeholders.

The vision is intended to represent the self-image of the association: **FTE is the European Platform for Railway Undertakings for Capacity Management and Timetabling.**

This orientation should bring stability and clarity back into the association. The timetable is the basis of the railway product. In view of the socially and politically demanded "Green Deal", cross-border passenger and freight transport must become simpler and faster. In order to improve planning throughout Europe, common processes, principles, and tools are needed. Forum Train Europe plays an important role here by working on issues in this area together with the technical experts of the railways, planning and promoting implementation. One thing is clear: the market pressure on the sector is huge and improvements need to be made in a timely manner. In a process with the members, the relevance and the impact of the topics were elicited and derived from this, on which the focus should be placed in the future. These are topics which, from the RUs' point of view, need to be improved quickly:

Topic	Goals
Temporary Capacity Restrictions (TCRs)	Better coordinated planning of capacity restrictions at engineering sites across Europe and in line with the RUs' market needs. FTE is currently campaigning for a participatory process of the RUs.
Capacity allocation	Influence future allocation rules (AR) in Europe from a market point of view. FTE aims to align the position of its members towards AR, define no-goes and have a common position towards Infrastructure Managers (IMs) in the negotiations.
Commercial conditions and other incentives for better capacity utilisation	Define a RU view on commercial conditions and negotiate these into an overall Commercial Conditions concept respective lobby for RU interests in this field. In a later step, further fields of possible incentives for better capacity utilisation will be explored.
Improvement of the timetable planning processes	The current annual timetable process as well as the future rolling planning and ad hoc processes have to be improved. FTE organises structured feedback towards other stakeholders, identifying areas of concern. Supporting the improvements, KPIs are developed to identify areas of concern.
Register capacity forecasts / capacity requirements	RUs are to be enabled to make capacity forecasts in order to influence future capacity models and make them as practical as possible. In doing so, processes and requirements for tools are to be designed.
FTE Conferences	In addition to planning and running the conferences as they are today, the conferences will be geared towards future market requirements, technical possibilities and the new process.
Further development of PCS	Elicitation of market requirements of the applicants for the further development of the PCS tool.
IT in the framework of TTR and TAF/TAP-TSI	Define requirements and facilitate exchange at business level on Digital Capacity Management (DCM), TAF/TAP TSI and IM-plans on IT-issues.
TTR Management	Representation in the official programme structure of TTR aims to bring RU positions into conceptual work and the legislative process. IMs and RNEs should be pushed for a market-friendly implementation of the new processes and tools.

Working methods

FTE develops common positions on the above-mentioned topics together with experts from the members. The development takes place in topic-specific working groups and the working groups for freight and passenger traffic. Decisions are taken in the Plenary Assembly or the Commissions for Freight and Passenger traffic. The positions developed in this way are introduced at various levels. The FTE Office and the members' representatives bring the positions into higher-level bodies and projects at European and national level. In order to represent common positions, FTE works together with other associations. Since the capacity management processes are developed jointly with the infrastructures, FTE primarily contributes the view of the customers and the market to the partner association RNE, in which the infrastructure managers are united. Also important for FTE are the RU associations ERFA (European Rail Freight Association) and Allrail (Alliance of Passenger Rail new entrants), with which it seeks to join forces for technical lobbying. FTE also contributes expertise and positions via various working groups of CER (the voice of European railways) and UIC (International Union of Railways). The cooperation with the CIT (international rail transport committee) on legal issues is highly appreciated.

Current and future challenges

With the methodology of an Impact Assessment the European Commission (EC) started the process of the revision of Regulation (EU) 913/2010 and Directive 2012/34/EU this year. The EC states that one of the main drivers of today's "insufficient competitiveness of rail transport (...)" and "limited growth potential of rail services (...)" is "ineffective management of capacity on the existing network (...)"[1]. The aim of the revision is to support the EU's ambitious policies in the fields of transport, climate change, energy and the environment. For FTE it is an opportunity to bring in aligned RU positions. Thus, the communication of common positions by means of position papers is becoming increasingly important.

With the ambassador concept approved at the end of 2021, the FTE members can better assert the needs of the market nationally and internationally. However, it is also important that the companies - infrastructure managers and railway undertakings - realise that a change is necessary so that the current unsatisfactory situation in many areas of capacity management can be improved quickly. This is where FTE comes in with the ambassador concept, to which a large number of the members have committed themselves. Finally, it is clear to the members that everything which is done in FTE is about improving the framework conditions for the sector. This is what FTE committees; the FTE Office and the members are working for.

The author identifies immediate needs for action in particular:

- Greater inclusion of countries in Central and Eastern Europe: so far, TTR in particular has been seen as a rather "western" project. However, the problems of the RUs are the same all over Europe, in part they are even more accentuated in the countries of Central and Eastern Europe, especially with regard to the planning of the TCRs.
- Working methodology: today's working methodology with numerous working groups often pushes the staff and the experts of the member railways to their limits. New approaches are needed.
- Resource allocation in the member railways: often all the "FTE topics" are assigned to a single person. This is where the concept of ambassadors comes in, with which the specific technical experts of the companies work on the corresponding topics.

FTE considers the digitalisation in the field of capacity management as essential. FTE supports the work for the digital capacity management (DCM) from a business point of view and has a clear opinion on a future IT-landscape: **a)** One access in a common ecosystem, which is the same for all transports. **b)** The whole capacity cycle is played on the same tool or interface (one click) and response times are fast. **c)** There is an ongoing optimisation to maximise the use of the available capacity (learning system). This means also: for RUs it doesn't play a role if there is a central capacity broker or not. The point is that the improvements are needed fast.

The work on market-driven and internationally harmonised capacity management will keep the sector busy for a long time to come. For the future, the monitoring of a customer-oriented implementation will be particularly important for the association. Forum Train Europe is the reliable network of RUs to achieve the goals. ■

1. All quotes are from the EC's Call for Evidence, 7.3.22.

Michail Stahlhut

150 years of intelligent planning and requirements for the future

Michail Stahlhut, CEO HUPAC

I was delighted! An email came asking if I would be willing to write an article celebrating 150 years of timetable conferences. At first, I thought that timetable planning is boring but then concluded that the railways have had good ideas ever since its existence but struggled with the limited capacity of the infrastructure! That's the main reason it needs planning and coordination: there is a limit at some point.

But let's take a look back together: 150 years is a time that we humans can only understand through books. Two world wars are one thing, and I am writing these lines under the impression of a renewed threat from Russia's invasion of a free Ukraine. But what interesting, things have happened alongside all this terrible adversity? What has brought humankind forward? Humans have achieved great things together, usually in powerful groups, in 150 years:

- 1876 Otto engine by Nikolaus August Otto
- 1876 Telephone by Graham Bell
- 1889 Introduction of the German pension system
- 1895 X-rays Wilhem Conrad Röntgen
- 1898 Diesel engine by Rudolf Diesel
- 1911 Discovery of radioactivity by Marie Curie
- 1919 Women's suffrage in Germany
- 1928 Pencillin by Alexander Fleming

These are just a few pioneering innovations; the list can go on. The railway has accompanied these, whether from a long distance or by transporting steel to produce cars: basically, the railway has always been there. In the process, Europe has grown ever closer together over the last 150 years, not only through infrastructure, but also through its sensible, resource-saving planning. This can be easily deduced from a picture with lines of equal distance times. In the 1950s, people in Copenhagen were still "worlds" away from people in Munich. This has changed step by step.

Time distance lines using the example of Switzerland between 1950 and 2000 -> Switzerland is getting smaller... Technical development has changed the relationship between time and distance. This is certainly less due to planning than to technology on the infrastructure. Nevertheless, the distance - whether with new high-speed technology or with an interoperable border-crossing multi-system locomotive - is the same, but the time between these economic centres has been shortened. At first glance, this is a trivial insight in times of high-speed internet and high-speed trains. But with a historical lens, this is an exciting achievement of the last decades.

Very topically, the demand for environmentally friendly transport has now grown. Increasing containerisation is a tailwind for an international revival of the railway system. Both factors have led the sector into a new renaissance.

The use of transport routes has become more international. It follows the logic of connecting living and economic areas. It is exciting that in Europe these living and economic spaces are very much to be found along the London - Rome axis. Development takes place along transport routes that can be traced back to the Roman era and can be explained by topographical logics in Europe. And around this line of development, other new transport axes have developed towards the east, the south-east and the south-west. This is where the rapid overcoming of time and space, the proximity of the railways to mass goods, the Green Deal in Europe now come together to form a holistic new supply picture of people and industry in Europe. This results in the necessity to optimally manage the existing, but also limited railway infrastructure.

The management of these infrastructures - be it road, rail, or airspace - is always based on capacity. With a road/rail ratio in Europe of 10:1, rail needs to be managed particularly and accurately. Planning connections on a limited infrastructure is key. In certain time situations, planning is a fundamental prerequisite for the utilisation of a scarce resource. And if freight and passenger traffic also use the same network, the question of the importance of the traffic user also resonates in every decision on a journey. Or there is a quick discussion about prioritising one user or the other. In addition, the traffic situation professional is occupied with questions such as: what speed, what tonnage, what acceleration of the train will make the traffic situation usable. These are only a few influencing factors that then transform European infrastructure planning into sensible use.

It must lead every planner to the brink of despair when they realise that a well-run high-speed train makes capacity for 3-4 other goods trains in one section impossible. Transport systems with a large difference in speed simply do not fit on the same limited infrastructure at the same time. But the planner is just as happy that his high-speed train is now possible from Frankfurt to Milan, etc. However, the fact that in today's times this planning is still done from state to state, that the management of the network has practically remained at the level of the nation states of the early 20th century, is a traditional view of railway infrastructures in a networked and permeable world. Yesterday, as today, planning was done with time path diagrams. In the Netherlands, the network designer plans a national passenger network, and so do his colleagues in Germany, Switzerland, and Italy. The international coordination is still done in dark meeting rooms in Ljubljana. It almost seems as if poker players meet in a remote place in Europe to play the all-important last poker game for the best timetable planning. I am sure that human interaction must and will continue to exist. Human interaction can never be replaced by a machine alone. And yet the digital world and the use of "block-free" infrastructure use through ETCS will change railway planning. A national demand for "clickable" train paths via app is as absurd as waiting for the last 10% capacity utilisation of a new integrated software that frees us from all worries. I hope that planning will become much more international, faster, and finally revolutionised in the direction of a European construction kit. Timetable planning conferences should then serve to create even better international permeability.

One could think that basically it is not the constancy of railway planning that is exciting, but the tenacity and persistence in the demand for change in planning as such. This results from the limited resource of infrastructure. Building new lines would be much easier, BUT: in times of individual regional "Gärtle" thinking, the continuous changing and bargaining and optimising is certainly the much harder task. The urgent renewal of aging technology and of points, bridges and signal boxes that have reached the wear limit is increasingly flowing into the daily routine and thus into every planning. Building to secure the existing stock, dealing with daily disruptions, both are unfortunately also part of line management and thus just as much part of its planning as finding new or alternative routes or even running positions. Therefore, the management of the existing infrastructure is only seemingly an easy game. Our ambition to double the modal split on this infrastructure can certainly not be achieved with on-board resources and a good poker game in Ljubljana. It takes a lot more than that.

I am fascinated by all of us involved in the railway system, how we have changed the supply world in 150 years and visibly for me in the last 25 years, and how we all keep trying to find solutions. WELL DONE!

The way to get everything 100% right is an aspiration of the railway sector that stems from its sense of safety. And that is also immanently important in a technical environment. BUT: in an environment where punctuality is no longer associated with the appendix "like the railway", the best planning is a waste of time if we do not learn from the daily influences destroying quality and thus capacity and derive new planning. This is a pity and above all frustrating for all people involved in the process. We need to renew ourselves and combine the power of this renewal with acceleration not of trains but of planning systems.

I am happy about 150 years of intelligent planning and the exchange about it in conferences. Path planning must lead to the best management of European networks and deliver more capacity than yesterday. I would like to see planning that fundamentally adapts to reality and enabling European industries and living spaces to grow together serves the realisation that the railway system is the sensible, necessary aid for an energetically optimised and land-conserving interconnection of the continent derives from the need for international thinking recognises the limitation of the infrastructure factor forces a systemic thinking in several transport modes, thus finding an answer to the question: What brings more benefit to the railway higher speed or more capacity?

The use of modern technology to optimise national and international driving situations, including European ones, disruptive effects from construction and disruptions, is finally and quickly made possible. and finally, above all improved and intelligent use of humans. It needs the will of all to change! Then, after the next 150 years, we will be able to say: 300 years of timetable planning have brought Europe together and inseparably connected it. ■

Harald Hotz

Paul Mazataud

FTE and RNE – A very special relationship

Harald Hotz, former RNE President (2013 - 2021) and Paul Mazataud, RNE President (since 2021)

Looking back over the last 20 years, the beginning of the new millennium certainly marked a new era in the railway sector. For many decades, Infrastructure Managers (IMs) and Railway Undertakings (RUs) had been working together under the umbrella of FTE. With the arrival of EU Directive 2001/14 the basis for this cooperation changed. The Directive obliged Infrastructure Managers (IMs) to offer not only national but also international products, and so the separation of Infrastructure Managers and Railways Undertakings (RUs) was put in motion.

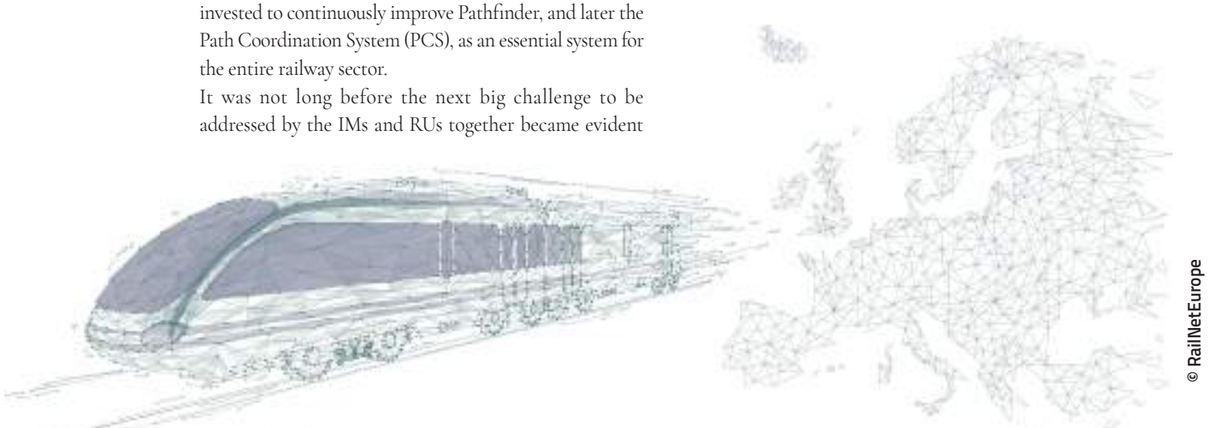
Harald Hotz, then chairman of the Capacity Managers group, one of the pillars of FTE, clearly remembers that time as one of many discussions and uncertainties. Many assemblies were spent debating the implications and possible consequences of the anticipated change. One of the main fears was that following the separation of IMs and RUs into different umbrella organisations, cooperation would suffer, and the railway sector would break apart.

After some years of negotiation, RailNetEurope (RNE) emerged as the new association for European Infrastructure Managers. The next phase was one of consolidation and the IMs were focused on maintaining a close relationship with their main customers, the RUs. After the Pathfinder tool was transferred to RNE, the RUs continued to be deeply involved with new developments via various committees and bodies, ensuring that Pathfinder remained effectively a co-owned tool, in which the RUs' needs and requirements were reflected and met. Substantial efforts and funds were invested to continuously improve Pathfinder, and later the Path Coordination System (PCS), as an essential system for the entire railway sector.

It was not long before the next big challenge to be addressed by the IMs and RUs together became evident – the revision of the European timetabling process. The existing one was outdated, inefficient and not adapted to the market's needs and led to unnecessary delays caused by poorly coordinated construction works and timetable clashes. When both the RNE General Assembly and the FTE Plenary Assembly agreed on a revised process in 2017, it was a huge success and marked the launch of the Timetable Redesign (TTR) Programme, which is still ongoing today and is expected to bring immense benefits to the entire sector in terms of optimised capacity, more stability, reliability and flexibility of timetables, reduced costs, and ultimately increased competitiveness with other modes of transport and a significantly increased market share.

FTE and RNE have been jointly and tirelessly working on this task, driving the necessary innovations and processes, and managing to place the project on the map of European developments to guarantee the attention and funding needed for the programme to succeed.

FTE and RNE have been through various ups and downs together, building a solid relationship in the process, and have now arrived at a position of mutual trust and fruitful cooperation. This strong relationship is an excellent basis from which to address the many challenges still ahead, the most immediate one being the implementation of TTR. RNE looks forward to continuing to have FTE as a valuable sparring partner in the TTR for Smart Capacity Management Programme, and beyond, for many years to come. ■



© RailNetEurope

Timetabling / Capacity Management of the future

Sebastian Naundorf, Senior Project Manager / Deputy Managing Director FTE and Sebastian Carek Senior Project Manager FTE

Sebastian Naundorf

Sebastian Carek

1) Market view

We were given a unique chance to outline the likely development of capacity management in Europe in the medium and long-term. Nonetheless, to foresee or foretell the future more than a few years ahead (of any industry, not only railways) is not an easy task. Who knows how even the current revision of the TEN-T and RFC EU regulations would shake up the sector and change how we allocate and manage railway capacity? In this article, we are going to share our outlook on what the future may hold. We based it on the trends and patterns we observe and hear from FTE members and other stakeholders. However, it does not mean that this prophecy is going to be fulfilled, nor that such a scenario would be preferred by us.

Europeanisation of capacity management

The four EU railway packages pave the way for the creation of the single European railway area (SERA) from the technical point of view and also set new standards for the liberalisation of the market. Nevertheless, when it comes to the capacity management area, the road to SERA remains very long. In the last two decades, Infrastructure managers (IMs) failed for both objective and subjective reasons to harmonise their capacity management processes. Most of the IMs limit their view only to their own network, and the consequences of misalignment harm both market segments, passenger traffic and the logistic sector. This negative experience will lead to a stricter European legal framework, which should align the national processes and reduce the number of different national practices. The IMs will lose flexibility in the definition of the processes, which would be the cost for not being able to do so voluntarily.

A similar "Europeanisation" step can be expected at institutional level as well. The European Railway Agency took the role of the authority in the technical and safety aspects, while the search for an International Leading Entity for capacity management is still at the preliminary discussions phase. The new entity will have to take care not only of traffic management but also become the final arbiter with decision-making power in the capacity planning/allocation. The railway business suffers greatly from wasted capacity resulting from contradictory national decisions, as best illustrated in the planning of temporary capacity restrictions (TCRs). Hundreds of use cases can be documented when one IM executes a TCR on a particular line, while the second IM starts the next TCR just after the first IM finished its work. In the end, trains are not able to run normally for a much longer period compared to the situation if the TCRs were to synchronised.

Another story concerns the situations where IMs plan TCRs simultaneously on lines which are re-routing alternatives to each other. The result is that there is either no rail transport at all (causing a shift to road transport, for freight sometimes forever) or the transport times and costs increase dramatically. The regulatory bodies are also powerless because they are not authorised to issue decisions taking into consideration aspects from anywhere other than the country of their jurisdiction. The future International Leading Entity should address this issue, stop the capacity wastage and push for a European network approach instead of the national one.

TTR implementation - no end in sight

The TTR programme was supposed to provide a solution to several capacity management issues and unify the fragmented markets. The TTR implementation should have been fast, synchronised and without national interpretations and the creation of new national particularities. The programme started in 2014, and the implementation target was set for the 2025 annual timetable. which was clearly considered by the market as being late. The reality of 2022 is disappointing from the RU perspective, the market benefits for the next years are very limited, the implementation will take much longer and seems it will lead to a new set of national barriers. There is also a high probability that the final TTR will deviate from the joint RU-IM agreements and thus from the market needs. Most likely, if there is no intervention by the legislative and political bodies, the fragmented implementation might go even beyond 2030. Furthermore, the extended hybrid implementation period will almost certainly go hand in hand with chaos, when trains will run on their journey over TTR-lines, semi-TTR lines and non-TTR lines. Therefore, we predict that the upcoming decade

© SBB AG

would be very challenging for rail employees and consume a lot of effort. RUs are here between the devil and the deep blue sea, since keeping the status quo is not a sustainable alternative either.

Freight outlook

The liberalisation of the freight market dropped the markup almost to zero, and there is limited potential to decrease the cost internally on the RU side. The attempts to make rail freight competitive will now focus on the IMs' capacity management, infrastructure development and digitalisation since in these fields there is urgent need for improvement. Despite the outstanding number of public proclamations, the "trains without windows and votes" have not yet reached the top of the list of priorities. Realistically, we predict that the "30 by 2030" goal will not be reached in the ultimate number of European countries and the rail freight market share will, in the positive scenario, only stagnate. We argue that the light at the end of the tunnel is likely to appear in the 2030s and 2040s, thanks to the investments into new infrastructure for high-speed passenger operation. If this is accompanied by full TTR implementation and capacity improvements in bottlenecks the needs of freight traffic will be satisfied by the freed-up and better managed capacity on conventional lines. We also expect that the integration of terminals and service facilities into the overall capacity management process will be one of the key discussion topics in the coming years.

Changes in freight market segments

The structure of the market segments will reach a new equilibrium. The majority of trains running today are already driven by demand, and the capacity management process will have to reflect that. There is a need for high-quality capacity to be available at shorter notice with multi-annual validity, and more traffic will be ordered via Rolling Planning and/or ad hoc.

In the end, the freight traffic playing a major role in annual timetables will be the single wagonload. The decline in this segment will most likely stop in the next years since European countries are considering or already introducing subsidies. It is worth mentioning that wagonload traffic is currently only operated by the domestic incumbent RUs. The public support for wagonloads is naturally going to be non-discriminatory and might also attract other RUs to enter the market. Nevertheless, that would increase challenges in the capacity allocation conflicts in yards, and the sector will have to devise a new and transparent process. Intermodal transport has a bright future as well, this often supply-driven segment would either take part in allocation in the annual timetable, or maybe be attracted by the intended multi-annual aspect of Rolling Planning.

Moreover, it has to be noted that the infrastructure in Eastern Europe does not have sufficient capacity to accommodate the trains, to say nothing of their standard operating speed on some main lines. A significant upgrade of infrastructure will follow, thus increasing the number of TCRs in Eastern Europe. It would be very important to learn properly how to coordinate TCRs with a view to maximising traffic flows. A prerequisite is the adoption of a multi-annual funding scheme for IMs; without it, the freight RUs will suffer even more than today.

Passenger outlook

Passenger rail transport has a very bright future in the upcoming decades. New rolling stock is being ordered almost daily, and new connections are introduced every year, including the return of night trains. Recovery from the Covid pandemic is certain to take time, the number of daily-commuter trips might not return to the pre-pandemic figures, but overall, the passenger-km will continue to grow in the next years.

New infrastructure is going to be built across Europe, and older lines will be upgraded, thus increasing the overall capacity. From the cross-border perspective, Europe will still have many border regions, where the international lines are used by disconnected regular national trains from both sides. This is neither optimal for capacity nor contributes to the of international services The European countries will gradually connect these services to form seamless connections, thus improving commuting and tourism. For RUs and IMs, this will mean a higher need for coordination and harmonisation of cross-border timetables and TCRs.

Passenger traffic is currently stable enough to be planned in the yearly timetable periods. Nevertheless, in the long-term, the level of digitalisation and success of short-term freight capacity products are also likely to be adopted by the passenger sector. The passenger RUs will also demand a shift from static annual planning to the dynamic world of Rolling Planning.

Passenger open-access future

The liberalisation of passenger rail transport brought about the creation of open-access RUs which have proved to have many advantages and innovative elements but has also brought challenges: How to optimally combine these with the publicly subsidised traffic? How to solve higher capacity demand for peak hours at major stations? How to optimally use capacity when competing operators use rolling stock with different parameters for timetabling? How to tackle the increasing spread time at hubs? These are only a few of the many important and unresolved questions.

The capacity is scarce and it would not be cost-optimal to construct additional tracks if the needs can be served by better optimisation. Such a step would inevitably mean new boundaries limiting the freedom of open-access operation but naturally not restricting the competition itself. We predict this development from recent British and Spanish reforms, both of which might show a future path for Europe. A short summary now follows.

The British model assumes that passenger traffic and capacity planning will be in the hands of a state-owned IM, which would set tariffs, construct optimal timetables, and probably buy optimal rolling stock for each section of its infrastructure. This should be accompanied by a tendering process for the entity in charge of maintenance (dominated not by RUs, but train manufacturers) and tendering of the operation itself to RUs.

The second potential scenario is the recent Spanish experiment on high-speed lines. In order to avoid congestions in stations, the IM constructed paths and optimally distributed them over the whole day. The paths were afterwards bound to packages of different sizes and tendered as Framework Agreements to RUs. As a result, competition in the market remained between several RUs. The IM took a more active role in timetabling, but the RUs are still in charge of marketing, ticketing and they own their rolling stock as well. We have to add that they also bear the bulk of commercial risk, since they commit themselves to ordering capacity for multiple years irrespective of changes in passenger demand.

Both directions show that the level of freedom for RUs is reduced compared to the very free models (e.g. Sweden, the Czech Republic, Germany) and more aspects are taken back by non-market-actors like the IMs or public authorities. When comparing the two models, some representatives of the RU community would rather believe that the Spanish model prevails. This is due to the fact that the British one gradually separates all historical RU businesses (ticketing, timetabling, production), and transforms RUs only to "management agencies", which have minimal space for their own innovations and future development. In conclusion, one has to add that even with the scenarios described above, the current open access arrangements might remain for specific segments, such as night trains and / or seasonal trains to mountain/sea resorts.

Summary

The mid-term and long-term outlook for railways in the areas of capacity planning and management differs considerably, the road to the single European railway area remains long, and in the upcoming decade, the sector will face significant difficulties and changes. Firstly, the Europeanisation of capacity management will continue since the national level was not able to cope sufficiently with the issues. Secondly, TTR will not be smoothly implemented, and the problematic hybrid situation will last for several years. The challenges will

also be unevenly spread, with freight RUs bearing the majority of the burden. The change process may well be completed in the 2030s and 2040s, and together with new infrastructure development, we are looking forward to a bright future for rail. The sector will also have to find a way forward in several capacity management issues, such as: How to achieve stable TCR planning? How to continue open-access passenger operation when the capacity is scarce? How to integrate terminals, yards and service facilities into the overall process? The FTE platform must be there for its members to assist them in discussing, elaborating and promoting the right market-orientated solutions.

2) Technology view

The way timetables are created has evolved a lot over time and changes were dependent on available technology and on society as a whole. Whereas the creation of printed paper timetables imposed a great deal of stability, communication via IT in planning and customer information provided room for more frequent changes. Similarly, when railways were created as private or state-owned enterprises, the operations and infrastructure were integrated. Interaction with others was still needed when leaving own network but not within their own network. That differs today with the separation of IMs and RUs. Fundamental changes like these are difficult to foresee however taking the current overall structure for granted there may be room for some hypotheses about timetabling of the future:

Hypothesis 1: The importance of long-term planning will be reduced

Currently, there is a trend to earlier planning, aiming at more time to solve conflicts and optimise capacity use. Using the Dutch, French or Swiss models of preplanning or the future TTR process, early timetabling takes place years before the actual train runs. At the same time, we see that market needs may change day by day, showing the need for more flexible short-term planning Whereas this was already visible before the pandemic, it is even more evident now. This not only means the stand-still and constant re-planning of passenger services due to lockdowns and border closures. It also means the (hopefully) post-pandemic developments of less commuter traffic and more leisure traffic in passenger business – resulting already in reconsidering TCRs from weekends to weekdays to minimise impact (as currently discussed in the UK). Changes that were previously expected to take decades have now occurred within a matter of months. Despite the current trend of (pre-)planning earlier, we may see a need to actually (re-)plan the timetable at short notices. Early pre-planning may continue to serve as a good orientation for infrastructure adaptations but will not be able to serve the market needs. With road, waterways and (to a certain extent) air being very flexible to cover short term needs, rails processes and technology will need to adapt as well. The ability to organise a new timetable may be needed anytime, and no longer bound to any "timetable years".

Hypothesis 2: Rail operations and planning will converge

Within rail operations there is a long-term trend: control systems try to go from "showing actual conflicts" via "detecting potential future conflicts" to "proposing solutions for future conflicts". Eventually, rail operations systems may even be able to handle most conflicts automatically. How is this done? To a certain extent these systems do the job of what is today usually another department: they calculate a timetable!

Of course, here it is not a timetable with path offers and allocation, but a calculation of train times taking into account infrastructure and train characteristics, detecting conflicts, and optimising the slots – very similar to constructing timetables. If these systems try to create a plan "for the next hours", their algorithms may pave a way forward for the automated construction and optimisation of the service plans for the next day too – and then the next few weeks and months. Naturally, constructing a timetable that appears stable over several weeks may be a different issue from doing it for one day, but the basics are set – and with IT-calculation times able to provide a one-day-timetable in seconds, it should technically not be a hurdle to calculate optimal timetables for longer periods within minutes.

The classical timetabling comes from the other side: starting from planning a yearly timetable, some annual sub-timetables adjusted for different travel levels (winter/summer destinations) is gradually making place for 365-day calculations – including every different TCR step and holiday needs for freight and passenger traffic.

Taking these developments into account it is questionable why the rail industry should possess and pay for different systems, algorithms and experts dealing with ultimately the same topic: the calculation of the optimal use of capacity.

Hypothesis 3: Optimisation and digitalisation may lead to flexibility in the target functions

Optimisation is a nice buzzword. It says everything and nothing. When you optimise a timetable, do you put in as many trains in as possible? Or do you distribute traffic in a way that different needs can be accommodated? Or do you calculate times for robustness, allowing for recovery from delays?

From the traffic management we already know that optimisation may differ depending on the situation. Control centres may aim at keeping as many trains on time as possible in peak hours. When reaching off-peak, it may be more important to maintain connections. And in case of major disruption, the optimal situation may mean "let's keep as many trains running as possible".

When it turns to timetabling, digitalisation will allow the creation of timetables within very short time frames. This not only allows quick adaptations – but also different views of the same timetable. Calculating for robustness can be compared with calculations for maximum traffic, different scenarios may also be calculated and compared. And in case of changed priorities also these may be applied quickly. Thus, timetabling must not remain static, with the same old target only changed once in a generation. It can evolve gradually, more often and provide forecasts of different scenarios before applying these to a real-life setting.

This would also help to overcome harsh allocation rules that provide one winner and one loser – as is the case in most countries today. Creating and comparing scenarios quickly would help in finding solutions for more winners.

Hypothesis 4: The RU will be more important in timetabling than the IM

Currently there seems to be a move towards more responsibility of IMs in capacity management. IMs being a supplier to RUs, it seems strange that the supplier has so much impact on the RUs product. With different RUs on the same infrastructure, it is sometimes assumed that only the IM can create a holistic view and optimise for all stakeholders. But does this accommodate the market needs?

RUs know their customers' needs and can also evaluate the flexibility of the customer in case the original request is not feasible. Thus, negotiations between RUs about scarce capacity are closer to market needs – and may result in a better timetable than if another actor does it, further away from customers. This of course requires transparency in a way to deal with capacity (available capacity, conflicts) while at the same time keeping business secrets safeguarded.

The IM would still play an important role, for example as requester of capacity, since reserved capacity to perform maintenance and allow for TCRs is needed. Being a capacity consumer like the others the IM would join in creating a market-oriented timetable.

Even though this seems to be far in the future we see parts of this already happening. In some countries, all RUs can plan within the IMs system. In others, RUs sit together to handle capacity shortage in TCRs.

Mature markets show that RUs understand their competition towards the customer, but not on the common production facility – which is the rail infrastructure. Thus, RUs elaborate the best market-oriented use of scarce capacity together, while being able to compete amongst the best service for the customer.

Hypothesis 5: Timetabling will follow the business needs

Timetable periods have existed for ages and made sense when customers and companies could not easily exchange information. They were not a cause of disadvantage when markets were slow and traffic also changed slowly. In today's world those reasons are gone; information exchange happens in real-time, and markets change quickly. But still railways adhere to static timetable periods! The need to print out something in a paper form cannot be the excuse. Seeing the number of footnotes in the last remaining printed timetables or the traffic details in electronic systems makes it clear: neither freight nor passenger trains run according to timetable periods. Still, we try to create an annual plan, but which never materialises as such!

So, will it remain worth the effort to create something that only serves as a basis for changes later on. With specific traffic needs having different time horizons, we may assume that a future timetabling process would be rolling – not like Rolling Planning (which is still bound to the annual timetable framework) but done virtually any time in the near future.

Looking to market requirements, those passenger RUs that sell advance tickets wish to be able to open their trains to sell five to twelve months ahead of the day of travel. Once a ticket is sold, the passenger wants to be sure about their booked connection so even changes of a few minutes may be critical. High density urban transport may not be that critical to the nearest minute – if there is a connection every 15 minutes, passengers may not care too much (or

even notice). This becomes more critical when extending outwards into the countryside. Some freight services are ordered months ahead, some just days before, and the freight customers may want commitments for a single day or several years. Slight changes of a few minutes may not be relevant for the freight customer and depending on the production constraints of the RU may or may not be relevant for the RU. Nevertheless, transport times and the linked costs matter, so the flexibility is still limited.
Taking these market requirements into account, the future timetable would build up gradually and no longer be completed by a specific deadline:
Some trains may be planned (and paths allocated) whenever the need occurs, days, weeks or months ahead. Depending on the flexibility (which may be incentivised with different access charges), these may be shifted later to optimise for transport needs occurring at short notice
The allocation does not end on day X of the timetable change, but when the customer wants it and financial conditions may be in place to reduce unnecessary blocking of capacity. Nevertheless, the experience will repeatedly prove that it is essential to also introduce other conditions to avoid situations where all available capacity has been consumed by early bookers. This can be flexible safeguarding of demonstrated "short-term" capacity needs – it may not matter if the "good quality freight path" is available 5 min earlier or later, as long as it remains available.
It may sound complicated to us today, but with modern IT and transparency on the capacity needs at any time it should not be light years away to plan the timetable as and when the customers need it.

Hypothesis 6: National isolation will turn into European integration

Is European integration a political issue? It may be, but for railways it is a real business issue: cross-border rail lags far behind competing modes, which is not only due to national capacity management, but at least partly due to it.
Processes and technology were created in national settings and breaking up state-owned companies meant that everyone was busy developing new relationships between RU/IM – on their own "old" territory. Solutions were sought to handle this at a national level, which accounted for the vast majority of traffic. Adding to that was the creation of national regulations, resulting in national rules when creating timetables and attributing paths.
For international traffic, that meant going from a two-party-discussion (agree the timetable with the neighbour) to a four-party-discussion. That may sound like a real party, but you don't want to make a mess when creating timetables. This further changed when RUs started to go cross-border on their own, but IMs naturally didn't.
With unbundling, cross-border cooperation, competition and open access, a multitude of settings may exist on one single border-crossing. Handling this with individual national technology remains the norm in 2022 but clearly is not future-proof. With RUs pushing for more standardisation it can be assumed that at least the RU/IM interfaces will become more and more standardised – even if this seems rather slow judging by the experience of TAF/TAP TSI. However, the momentum is there, and it is supported by EU politics. Once this is established it will pave the way to link with further actors (terminals, stations…) and eventually create a standard, integrated environment for capacity management. This in turn may support standardised IT systems – as at least from the interfaces and data standards, no difference should exist from country to country. It remains to be seen if this results in "a system used everywhere" or some competition amongst system providers to gain as large share of the timetablers (and other capacity managers) market as possible.

Summary

The way timetables are created has changed and will continue to. There will always be a need for pre-planning, but the future focus will be on modelling infrastructure needs for investments. Creating paths and solving detailed conflicts (between paths or between traffic and TCRs) however may no longer be a pre-planning goal and may shift to more frequent short-term planning, no longer bound to artificial deadlines. The IT support may be more standardised and provide a dedicated European market in which not every RU or IM has to create its own system. We may even see more weight in the RUs to create the timetables amongst themselves, with the IM involved for requesting capacity for TCRs only…
TTR as we know it (or rather expect it) would be a necessary bridge-technology until more state-of-the-art approaches make short term planning more feasible and internationally connectable. Whether this is going to happen in the next 25, 100 or 150 years of FTE remains to be seen though… ■

The future of Forum Train Europe: Market needs and Green Deal orientation

Stephan Pfuhl, President FTE (since 2012)

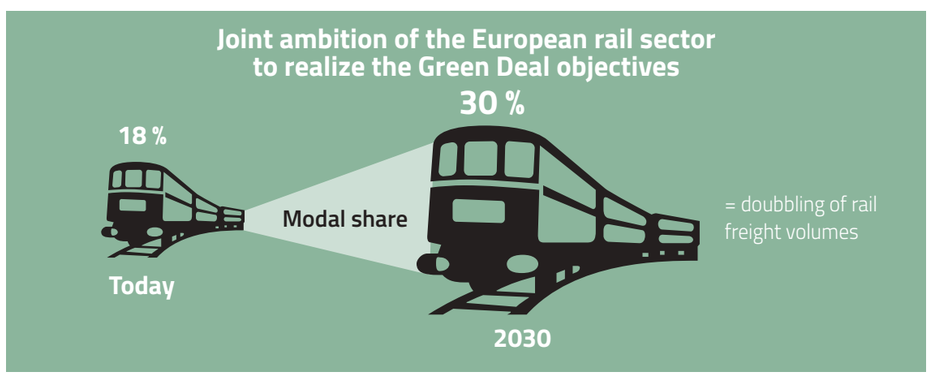

Stephan Pfuhl

150 years - what an impressive history as an organisation! The previous articles underline the important contribution that FTE has made to the development of international rail transport for passenger and freight traffic. Within this time-period of 150 years the industry has experienced many changes and challenges up to now:

- The liberalisation of the railway sector all over Europe
- Greater competition between transport modes (cars, trucks, airlines)
- New customer demands and market needs (flexibility, prices, timetables, services)
- Higher market orientation and new railway companies entering the market
- Strong growth and expansion of international transport (freight and passenger)
- Vast investments in Europe-wide railway networks
- Covid crisis and war in Ukraine

The list of changes and challenges could be even longer but what is there to show for 150 years of these changes and challenges, and especially for the future of FTE?
The essential and major achievement is that the railway sector has played and continues to play an important role in our daily transportation needs – yesterday, today and also in the future. The sector has so often tested and reacted to new regulations, new market needs and new competition that it cannot only look back on a long, successful history but also look forward to a prospering future. With the continuous growth of demand for international transport, FTE will remain an important organisation and be open to connect and coordinate all relevant railway players in the market where capacity management is concerned.
Coming from the historic need for personal interaction and coordination between railway companies and forming the basis for the planning conferences over decades, FTE remains an important platform. However, the need for higher flexibility in the face of changing customer and market needs must be acknowledged and fulfilled. The aim is to make the modal shift a reality: running a train must become as easy as running a truck, car, or a bus. The tools to accomplish a more efficient and faster way to coordinate the need of railway undertakings with market-oriented train paths will be in the focus of tomorrow's changes.
This already reflects the needs for even better coordination between infrastructure managers and railway undertakings. In recent years there has already been a shift in the scope of FTE. The organisation now no longer concentrates on timetable conferences alone as the core business of the railway undertakings shifts more and more to a broader approach: a professional capacity management. Today's costly infrastructure must be better used, more capacity supply is therefore needed within the existing infrastructure.
Not surprisingly, a better alignment with infrastructure managers is an important future success factor. FTE therefore maintains close dialogue with RailNetEurope, the association of the major infrastructure managers. Only if the existing rail networks will be used more efficiently and well-coordinated will the railway sector remain competitive. Capacity management therefore becomes more and more important: the coordination of used and unused train paths, a higher flexibility to match market needs, especially for freight customers, the cross-country advanced planning and alignment of works are success factors for the future of rail.
Even though FTE will remain a strong facilitator of timetabling in the future in order to meet the demand for international train paths and facilitate cross-border traffic, digitalisation will progress over time, making the timetable planning and coordination process more efficient. The Covid period has already proven that timetable conferences can be held virtually and the future tools of capacity management will even support this process further. But the need for coordination and personal interaction between the specialists at the different railway undertakings will remain important given the ongoing complexity of train planning especially as international traffic grows.
The goal of the European Union to achieve 30% market share in freight traffic by 2030 is ambitious, challenging but energising.
Coming from an 18% market share as of today there remains a lot of progress and improvements to be made.

FTE will and must play its role in achieving this goal and had already started the dialogue with RailNetEurope in 2014.
This was the hour of birth of "TTR" – the timetable redesign of the future, which was driven by the market needs of the railway undertakings and a strong ambition to improve today's existing processes.
FTE brings together the issues that railway undertakings have been dealing with for years. The timetable process has to be adapted to the market needs of different customers, whether they are in the business of carrying passenger or freight. The associated "TTR" programme is currently in the implementation phase but the road to full implementation is rocky and full of hurdles and will take longer than expected. Nevertheless, the customer needs of the railway undertakings must remain the focal point. Supporting the implementation and making it market-oriented will therefore be one of the central tasks of FTE in the immediate future. Because one thing is clear: access to capacity for the railway undertakings must be more efficient, faster, more digital, more reliable, more European and better aligned to the market needs in order to achieve the ambitious goals and thus strengthening the railway sector. With combined efforts on a European level, FTE will play an important role in supporting the joint ambition of a modal share increase.The importance of market needs is crystal clear, but another factor cannot be further neglected in the future: sustainability. The "Green Deal" of the European Union underlines the ambitious goal to become climate neutral by 2050.
The railway sector remains indisputably one of the most sustainable means of transport. Given the "Green Deal" this shows the importance and responsibility of the railway sector. It is also in the responsibility of FTE to facilitate the way forward by improving the processes of cross-border transportation and aligning the railway undertaking market needs. Only then when market conditions are met, and processes harmonised will the railway sector prosper in the future as it has done successfully in the past and thus thrive whilst achieving sustainability.
There are many challenges remaining and high expectations of many different stakeholders to be fulfilled, but I am optimistic that FTE will continue to play an important part in fulfilling railway undertakings' market needs in the future and use its network with all stakeholders to support the competitiveness of the railway sector. Thus, FTE will continue to change and develop. With its background as an organisation that once focussed on timetabling, planning and conferences, FTE is increasingly moving towards becoming a strategic platform for railway undertakings.
I am honoured and grateful to be part of FTE and I would like to thank all members, important stakeholders (amongst others, political and regulatory bodies, other associations), the past presidents and management board members as well as the staff of FTE for their commitment, support and engagement in helping FTE to achieve an impressive 150-year jubilee.
The future of rail lies in our hands – FTE will work hard for it, giving all its knowledge, energy, and compassion for a prosperous future, and in the hope of celebrating more historical achievements in the 150 years' time. ■



Acknowledgements

The process of writing and producing this book has provided an opportunity to meet and interact with a large number of people. The long list of acknowledgements is indicative of the highly participative nature of this publication.

Special thanks go first of all to all members of FTE and the FTE Executive Board for giving the go-ahead to a publication to mark the historic 150th anniversary of the first European Passenger Trains Timetable Conference.

I would also like to offer my sincere gratitude to historian Georges Ribeill, who responded to short timelines by throwing himself heart and soul into the uncharted history of little known international organisations, and to Vincent Lalu, CEO of la Vie du Rail and his deputy Frédéric Demarquette, whose team resources (Robin Loison Head of production and Jade Cédile graphics) and acknowledged expertise in railway publishing have made a substantial contribution to this book.

The following helped track down information, documents, photos, etc.:
Everyone at SBB Historic in Windisch (Switzerland), and particularly Martin Cordes, Jin Chei, Andrea Kuratli, Pascal Pfister and Marc Ribeli, for their unfailingly warm welcome and willingness to make themselves available.
Alexandra Lefèbvre, head of the UIC Documentation Centre (Paris)
The SNCF historical archive centre (Le Mans)
Gabriele Romani of Fondazione FS (Rome)
Doctor Susanne Kill of Deutsche Bahn's Corporate History/Historic Collection unit (Berlin)
Alfred Klein-Wisenberg of ÖBB Archive (Vienna)
Philipp Koiser of RailNetEurope (Vienna)
Peter Jäggy, former Secretary General of FTE (Bern)
Maria Valdes Menendez of Renfe Mercancias (Madrid)
Balázs Molnár of MÁV-Start (Budapest)
Gabriel Seguette of SNCF Voyageurs (Paris)
Karl-Heinz Bogner former representative of ÖBB Personenverkehr at FTE (Austria)
Robin Garn, editor of *EisenbahnKlassik* (*ClassicRailway*) magazine (Germany)
Jean-Luc Vanderhaegen of *En Lignes* magazine (Belgium)

The following prepared the maps and the train composition diagrams for the Simplon-Orient Express and Taurus Express:
Ignaz Civelli, historian (Switzerland)
Matthias Beilstein, cartographer (Switzerland)
Marylin Remond and Sylvain Lucas, designers (France)
The staff at TCDD, Nazmiye Kılıçaslan and
Ergün Görgün (Ankara)

The English version of the historical section was translated by:
John Purnell and John Gleaves (BMP Translations, Basel)

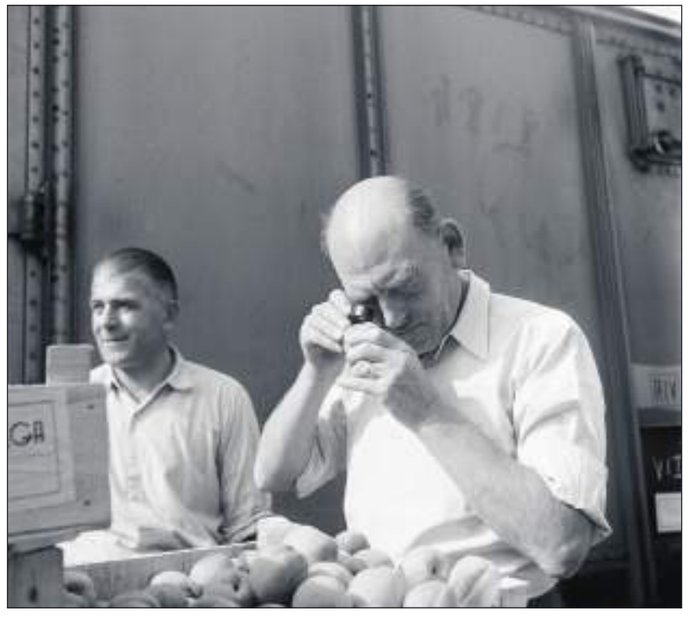
The historical chapters were proofread by:
Sandrine Baumgartner (Newrest)
Roland Hartkopf (former head of the Commission for Freight Traffic FTE)
Patrick Lefèvre (former representative of SNCF Fret)
Fabrice Peigné (SNCF Voyageurs/Lyria)
Jean Quaeyhaegens (Infrabel)
Reimer Wolff (former representative of DB Netz at FTE)

The following checked the English translations of all texts in record time:
Julian Holmes (Eurostar)
Robert Longstaff (DB Cargo)

Finally I would like to thank my colleagues in the FTE office – Marisa Emery, Edgar Schenk, Sebastian Naundorf, Sebastian Carek and Peter Bouman – for their support. And special thanks go to Fabian Hunkeler for his assistance with the iconography research.

Matteo Soldini
April 2022

All published annexes can
be consulted and downloaded through this site
https://www.forumtraineurope.eu/services/downloads
or QR code.



Top left: night atmosphere of the marshalling yard in Chiasso, March 1967. © SBB Historic

Bottom from left to right : Comfort coach to Vienna. First class coach with minibar. Restaurant car in international train. © MÁV-Start.

Top: Inspection of fish from Italy in Chiasso, June 1946. © SBB Historic

Above: Inspection of fruits from Italy in Chiasso, September 1950. © SBB Historic

Top: Nightjet © ÖBB / Harald Eisenberger

Above: DB Cargo train in the snow © DB Cargo Germany

Right: Green Cargo train between Forsmo and Selsjön, Sweden © David Gubler

Places of the Coordination conferences of Forum Train Europe FTE for Passenger and Freight Traffic 1997-2022

Year	Month / Location
2022	FTE A Passenger Traffic – January, on-line FTE B Passenger Traffic – March, on-line FTE B Freight Traffic – March, on-line FTE D Freight Traffic – July, Ljubljana FTE C Passenger Traffic – July, Ljubljana
2021	FTE A Passenger Traffic – January, on-line FTE B Passenger Traffic – March, on-line FTE B Freight Traffic – March, on-line FTE D Freight Traffic – July, on-line FTE C Passenger Traffic – on-line
2020	FTE A Passenger Traffic – January, Ljubljana FTE B Passenger Traffic – March, on-line FTE B Freight Traffic – March, on-line FTE D Freight Traffic – July, on-line FTE C Passenger Traffic – July, Ljubljana/on-line
2014-2019	FTE A Passenger Traffic – January, Ljubljana FTE B Freight Traffic – March, Ljubljana FTE B Passenger Traffic – March, Ljubljana FTE D Freight Traffic – July, Ljubljana FTE C Passenger Traffic – July, Ljubljana
2013	FTE A Passenger Traffic – January, St. Petersburg FTE B Freight Traffic – March, Ljubljana FTE B Passenger Traffic – March, St. Petersburg FTE D Freight Traffic – July, Ljubljana FTE C Passenger Traffic – July, Ljubljana **(First time)** From 2013 EWP tasks integrated into new FTE C Coordination conference in Passenger Traffic
2012	FTE B 1 Passenger Traffic – January, Ljubljana FTE B Freight Traffic – March, Ljubljana FTE B 2 Passenger Traffic – March, Ljubljana EWP Conference – June, Ostrava **(The last one)** FTE D Freight Traffic – July, Ljubljana
2011	FTE B 1 Passenger Traffic – January, Ljubljana FTE B Freight Traffic – March, Ljubljana FTE B 2 Passenger Traffic – March, Ljubljana EWP Conference – June, Liege FTE D Freight Traffic – July, Ljubljana
2010	FTE B 1 Passenger Traffic – January, Sarajevo FTE B Freight Traffic – March, Sarajevo FTE B 2 Passenger Traffic – March, Sarajevo EWP Conference – June, Vannes FTE D Freight Traffic – July, Sarajevo
2009	FTE B 1 Passenger Traffic – January, Ljubljana FTE B Freight Traffic – March, Ljubljana FTE B 2 Passenger Traffic – March/April, Ljubljana EWP Conference – June, Treviso FTE D Freight Traffic – July, Ljubljana LIM Conference – November, Podébrady
2008	FTE B 1 Passenger Traffic – January, Ljubljana FTE B 2 Passenger Traffic – March, Pontresina FTE B Freight Traffic – April, Pontresina EWP Conference – June, Starý Smokovec FTE D Freight Traffic – July, Pontresina LIM Conference – November, Podébrady
2007	FTE B 1 Passenger Traffic – January, Ljubljana FTE B Freight Traffic – March, Ljubljana FTE B 2 Passenger Traffic – March, Ljubljana FTE D Freight Traffic – June, Ljubljana EWP Conference – June, Opatija LIM Conference – November, Podébrady
2006	FTE B 1 Passenger Traffic – January, Ljubljana FTE B Freight Traffic – March, Ljubljana FTE B 2 Passenger Traffic – April, Ljubljana FTE D Freight Traffic – June, Ljubljana EWP Conference – June, Ustroń LIM Conference – November, Podébrady
2005	FTE B 1 Passenger Traffic – January, Ljubljana FTE B Freight Traffic – March, Ljubljana FTE B 2 Passenger Traffic – April, Ljubljana FTE D Freight Traffic – June, Ljubljana EWP Conference – June, Zell am See LIM Conference – November, Podébrady **Important remark:** From 2005 RNE organizes the FTE D1 Conference of Capacity Managers (previous FTE C) in June, afterwards recalled RNE Technical Meeting
2004	FTE A Passenger Traffic – January, Ljubljana FTE A Freight Traffic – March, Ljubljana FTE B Passenger Traffic – March/April, Ljubljana FTE B Freight Traffic – June, Ljubljana FTE D1 Conference of Capacity Managers – June/July, Bled EWP Conference – June, Clervaux LIM Conference – November, Podébrady
2003	FTE A Passenger Traffic – January, Florence FTE A Freight Traffic – January, Florence FTE B Passenger Traffic – May, Chianciano Terme FTE B Freight Traffic – May, Chianciano Terme FTE C Conference of Capacity Managers – June, Gotha EWP Conference – June, Sárospatak LIM Conference – November, Podébrady
2002	FTE A Passenger Traffic – January, Florence FTE A Freight Traffic – January, Florence FTE B Passenger Traffic – May, Florence FTE B Freight Traffic – May, Florence FTE C Conference of Capacity Managers – June, Paris EWP Conference – June, Laško LIM Conference – November, Podébrady
2001	Special Conference Freight – September, Paris Special Conference Passenger – November, Paris EWP Conference – January, Wien **Important remark** Transitional year: timetable change postponed from May/June to mid-December from 2002
2000	FTE 1 (A) Passenger Traffic – June, Bayreuth FTE 1 (A) Freight Traffic – June, Bayreuth FTE 3 (B) Passenger Traffic – November, Leipzig FTE 3 (B) Freight Traffic – November, Leipzig FTE C Conference of Capacity Managers, December, Dresden LIM Conference – May, Podébrady
1999	FTE 1 Passenger Traffic – June, Berlin FTE 1 Freight Traffic – June, Berlin FTE 3 Passenger Traffic – September, Bingen FTE 3 Freight Traffic, October, Bingen FTE C First Conference of Capacity Mangers, December, Paris LIM Conference – May, Podébrady EWP Conference – December, St. Veit an der Glan
1998	FTE 1 Passenger Traffic – June, Grindelwald FTE 1 Freight Traffic – June, Grindelwald FTE 3 Passenger Traffic – September/October, Bern FTE 3 Freight Traffic – October, Bern LIM Conference – May, Podébrady EWP Conference – December, Krems an der Donau
1997	FTE 1 Passenger Traffic – June, Lucerne FTE 1 Freight Traffic – June, Lucerne FTE 3 Passenger Traffic – September/October, Bern FTE 3 Passenger Traffic – October, Bern LIM Conference – May, Podébrady EWP Conference- December, Zell am See

Top: BLS Cargo at FTE D Freight Coordination conference.
July 2019, Ljubljana.
© FTE Archive

Above: DB F and SNCF at FTE C Passenger Coordination conference.
July 2019, Ljubljana.
© FTE Archive

Left: DB Cargo Team at FTE D Freight Coordination conference.
July 2019, Ljubljana.
© FTE Archive

Places of the European Passenger Train Timetable Conferences CEH/EFK 1872-1996

Year	Location / Month
1996	La Rochelle - September **(last CEH/EFK conference)**
	Delft - December, EWP Conference
1995	Paris (UIC) - September
	Szklarska Poręba - December, EWP Conference
1994	Warsaw - September
	Beroun - December, EWP Conference
1993	Paris (UIC) - September
	Spoleto - December, EWP Conference
1992	Liege - September
	Interlaken - December, EWP Conference
1991	Paris (UIC) - September
	Hässelby-Vällengby - December, EWP Conference
1990	Balatonfüred - September
	Berlin - December, EWP Conference
1989	Paris (UIC) - September
	Ljubljana - December, EWP Conference
1988	Florence - September
	Bruges - December, EWP Conference
1987	Paris (UIC) - September
	Strasbourg- December, EWP Conference
1986	Augsburg - September
	Bodensdorf – December, EWP Conference
1985	Paris (UIC) - September
	Munich– December, EWP Conference
1984	Paris (UIC) – September
1983	Paris (UIC) - September
1982	Lillehammer - September
1981	Paris (UIC) - September
1980	The Hague - September
1979	Paris (UIC) - September
1978	Edinburgh - September
1977	Paris (UIC) - September
1976	Budva – September/October
1975	Paris (UIC) - September
1974	Helsinki - September
1973	Paris (UIC) - September
1972	St. Gallen (100-year anniversary) - September
1971	Paris (UIC) - September
1970	Prague - September
1969	Paris (UIC) - September
1968	Basel - September
1967	Paris (UIC) - September
1966	Madrid - September
1965	No conference took place. From 1967 in the odd-numbered years, a technical meeting took place at the head-quarters of the UIC in Paris.
1964	Stockholm - September/October
1963	Sofia - September/October
1962	Copenhagen - September/October
1961	Brussels - September/October
1960	Leningrad - September/October
1959	Vienna - October
1958	Leipzig - October
1957	Naples - October
1956	Lisbon - October
1955	Wiesbaden - October
1954	Budapest - October
1953	Athens - October
1952	Nice – October
1951	Oslo – September/October
1950	Amsterdam - October
1949	Brighton - October
1948	Krakow – October
1947	Istanbul – October
1946	Montreux – October
1945	Lugano - November
1940	Gstaad – February (Partial Conference)
1938	Budapest - October
1937	Stockholm - October
1936	Montreux-Territet - October
1935	Helsinki – October
1934	Dubrovnik - October
1933	Bucharest - October
1932	Brussels - October
1931	London – October
1930	Copenhagen - October
1929	Warsaw - October
1928	Vienna – October
1927	Prague – October
1926	Baden-Baden - October
1925	The Haag - October
1924	Naples - November
1923	Nice – November
1922	Lucerne - November
1921	Bern – November
1920	Bern – December
1916	Vienna – February (Partial Conference)
	Stuttgart - July (Partial Conference)
1915	Munich - February (Partial Conference)
	Leipzig - July (Partial Conference)
1914	Bern - June
1913	Budapest - June
	Naples - November
1912	Amsterdam - June
	Hamburg - November
1911	Stockholm - June
	Trieste - November
1910	Brussels - June
	Wiesbaden - November
1909	Nice - June
	Strasbourg - December
1908	Heidelberg - June
	Strasbourg - December
1907	London - June
	Vienna - December
1906	Bremen - June
	Dresden -December
1905	Liege - June
	Florence - December
1904	Copenhagen - June
	Munich - December
1903	Zurich - June
	Stuttgart - December
1902	Innsbruck - June
	Brussels - December
1901	Budapest - June
	Berlin - December
1900	Paris – June
	Frankfurt - November
	Palermo - December
1899	St. Petersburg - June
	Cologne - December
1898	Antwerp - June
	Nice - December
1897	Christiana – June
	Frankfurt - December
1896	Geneva - June
	Vienna - December
1895	Amsterdam - June
	Dresden - December
1894	Paris - June
	Florence - December
1893	London - June
	Munich - December
1892	Budapest - June
	Brussels - December
1891	Berlin - January
	Stockholm – June
	Düsseldorf - December
1890	Rome - January
	Stuttgart - June
1889	Vienna - January
	Interlaken - June
1888	Frankfurt - January
	Baden-Baden - June
1887	Dresden - January
	Lucerne - June
1886	Hamburg - January
	Amsterdam -June
1885	Strasbourg - January
	Budapest - June
1884	Berlin - January
	Graz - June
1883	Prague - January
	Kiel – June
1882	Brussels - January
	Lindau - June
1881	Dresden - January
	Freiburg - June
1880	Brunswick - January
	Innsbruck – June/July
1879	Vienna - January
	Constance - July
1878	Leipzig - January
	Frankfurt - July
1877	Hannover - January
	Baden-Baden - July
1876	Berlin - February
	Zürich - July
1875	Trieste - February
	alzburg - July
1874	Stuttgart - February
	Hamburg - July
1873	Nuremberg - September
1872	Cologne - February

Places of the European Freight Train Timetable Conferences CEM/EGK 1924-1996

Year	Location / Month
1996	LIM Conference Podébrady
	Kongsberg - November **(last CEM/ EGK conference)**
1995	LIM Conference Paris (UIC)
	Paris (UIC) – November
1994	LIM Conference Podébrady
	Luxembourg – November
1993	LIM Conference Paris (UIC)
	Paris (UIC) - November
1992	LIM Conference Tabor
	Wroclaw - November
1991	LIM Conference Paris (UIC)
	Paris (UIC) - November
1990	LIM Conference Ústí nád Labem
	Vienna - November
1989	LIM Conference Paris (UIC)
	Paris (UIC) - November
1988	LIM Conference Rakovník
	Dresden - November
1987	LIM Conference Paris (UIC)
	Paris (UIC) - November
1986	LIM Conference Olomouc
	Brighton - November
1985	LIM Conference Paris (UIC)
	Paris (UIC) - November
1984	LIM Conference Tábor
	Budapest - November
1983	LIM Conference Paris (UIC)
	Paris (UIC) November
1982	LIM Conference Hradec Králové
	Bern - November
1981	LIM Conference Paris (UIC)
	Paris (UIC) - November
1980	LIM Conference Hradec Králové
	Sofia - November
1979	LIM Conference Paris (UIC)
	Paris (UIC) - November
1978	LIM Conference Karlovy Vary
	Rotterdam - November
1977	LIM Conference Paris (UIC)
	Paris (UIC) - November
1976	LIM Conference Bratislava
	Brussels - November
1975	LIM Conference Paris (UIC)
	Paris (UIC) - November
1974	LIM Conference Plzeň
	Florence - November
1973	LIM Conference Paris (UIC)
	Paris (UIC) - November
1972	LIM Conference Brno
	Belgrade - November
1971	LIM Conference Paris (UIC)
	Paris (UIC) – November
1970	LIM Conference Prague
	Madrid - November
1969	Copenhagen - April
	Paris (UIC) - November
1968	LIM Conference Paris (UIC)
	Stockholm - November
1967	Paris (UIC) - April
1966	Bucharest - November
1965	Stuttgart - April
1964	Athens - April
	Vienna - November
1963	Luxembourg - April
	Oslo - November
1962	Prague - April
	Warsaw - November
1961	London - April
	Leipzig - November
1960	Vevey - April
	Budapest - November
1959	Amsterdam - April
	Sofia - November
1958	Rome - April
	Brussels - November
1957	Copenhagen - April
	Split - November
1956	Stockholm - April
	Prague - October
1955	Bucharest - April
	Paris - November
	Düsseldorf - April
	Berlin - November
1953	Oslo - April
	Warsaw – October/November
1952	Budapest - March
	London - November
1951	Sofia - April
	Vienna - November
1950	Dubrovnik – March/ April
	Brissago/Locarno - November
1949	Brussels - April
	Amsterdam - November
1948	Copenhagen - April
	Rome- November
1947	Paris - March
	Stockholm - November
1946	Prague - December
1939	Lucerne – March/April
1938	Warsaw - April
	Sofia – October/November
1937	Salzburg - April
	Athens - November
1936	Stuttgart - March/April
	Nice - November
1935	Budapest - April
	Oslo and Bergen - October
1934	Florence - April
	Brussels - November
1933	Prague - April
	Copenhagen - November
1932	Vienna - April
	Paris - November
1931	Munich - April
	Zürich - November
1930	Palermo - April
	Amsterdam - November
1929	Split - April
	Munich - November
1928	Vienna - March
	Krakow – November/December
1927	Vienna - March
	Budapest - November
1926	Vienna - March
	Bucharest - November
1925	Dubrovnik - January
	Verona - December
1924	České Budějovice - January

The CEH/EFK conference in Augsburg in 1986. © Wolfgang Diekamp

FTE Members. May 2022

Country	Freight	Passenger
Austria	LTE Logistik- und Transport GmbH	Newrest Wagons-Lits Austria GmbH
	Rail Cargo Austria AG	ÖBB Personenverkehr AG
Belgium	Crossrail Benelux NV	SNCB / NMBS
	DB Cargo Belgium	Thalys International
	LINEAS NV	
Bosnia and Herzegovina	Železnice Federacije Bosne i Hercegovine	Železnice Federacije Bosne i Hercegovine
	Železnice Republike Srpske A.D. (ŽRS)	Železnice Republike Srpske A.D. (ŽRS)
Bulgaria	BDZ Cargo	BDZ EOOD
	Bulgarian Railway Company AD	
	Bulmarket Rail Cargo Ltd.	
	DB Cargo Bulgaria EOOD	
Croatia	HŽ Cargo	HŽ Putnički prijevoz d.o.o.
Czechia	ČD Cargo	České dráhy, a.s
		JLV a.s
Denmark	DB Cargo Scandinavia A/S	DSB SOV
France	DB Cargo France	LYRIA SAS
	Fret SNCF	SNCF Voyageurs
		Trenitalia France
Germany	DB Cargo Deutschland AG	DB Fernverkehr AG
	RTB CARGO GmbH	DB Regio AG
	TX Logistik AG	SNCF Voyages Deutschland GmbH
Greece	PEARL S.A.	TRAINOSE
	TRAINOSE	
Hungary	GYSEV CARGO Zrt.	MÁV-START Vasúti Személyszállító Zrt.
	Rail Cargo Hungaria Zrt.	
	Train Hungary Magánvasút Kft.	
Italy	Captrain Italia S.r.l.	Trenitalia S.p.A.
	DB Cargo Italia S.r.l.	Trenord S.r.l.
	Mercitalia Rail S.r.l.	Venice Simplon-Orient-Express Ltd

FTE Members. May 2022

Country	Freight	Passenger
Luxembourg	CFL Cargo SA	Société Nationale des Chemins de Fer Luxembourgeois
	SIBELIT	
North Macedonia	ŽRSM Transport AD	ŽRSM Transport AD
Montenegro	Montecargo	Železnički prevoz Crne Gore AD
Netherlands	DB Cargo Nederland N. V.	NS Reizigers
Poland	DB Cargo Polska S.A.	PKP Intercity S.A.
	PKP Cargo S. A.	
Romania	DB Cargo Romania SRL	CFR Călători
	SC Grup Feroviar Roman SA	
	Unicom Tranzit SA	
Serbia	EURORAIL LOGISTICS D.O.O.	Srbija Voz ad
	Srbija Kargo ad	
Slovakia	Metrans Danubia a.s.	Železničná spoločnosť Slovensko, a.s.
	Železničná spoločnosť Cargo Slovakia a.s.	
Slovenia	Slovenske železnice Tovorni promet d.o.o.	Slovenske železnice Potniški promet d. o. o.
Spain	RENFE Mercancías SA	
Sweden	Green Cargo AB	
Switzerland	BLS Cargo AG	BLS AG Personenverkehr
	DB Cargo Schweiz GmbH	SBB AG Personenverkehr
	Hupac Intermodal SA	
	SBB Cargo AG	
	SBB Cargo International AG	
Turkey	TCDD Taşımacılık A.Ş.	TCDD Taşımacılık A.Ş.
Ukraine		JSC "Ukrzaliznytsia"
United Kingdom		Eurostar International Ltd

FTE D Freight
Coordination conference.
July 2019, Ljubljana.
© FTE Archive