CER

The Voice of European Railways

Report

Brussels, 08 February 2024

CER Ticketing Roadmap – 3rd Implementation Monitoring Report Autumn 2023

Contents

1. Executive Summary

The CER Ticketing Roadmap ("Roadmap") continues to be a key vehicle for the CER railways to improve the cross-European passenger experience by 2025 and 2030, respectively. It establishes concrete actions to further improve the experience of rail passengers in the Single European Railway Area. Timely implementation of the Roadmap is a key token of the sector's commitment to the European Union's climate and growth goals.

Since the adoption of the Roadmap by the CER General Assembly in autumn 2021 concrete actions have been launched both on a common level and on an individual railway level. Solution development and implementation work, with a focus on the 2025 goals, is in full swing. To gauge implementation progress and to identify areas that need special attention, the CER passenger railways are surveyed twice a year and results are presented to the member railways' CEOs at the CER General Assembly. The report at hand presents a synthesis of the third such survey performed in November and December 2023. It summarises the state of play and highlights where efforts should to be reinforced. The survey findings and recommendations were endorsed by the CER General Assembly on 30 January 2024. As a token of transparency and commitment, it was decided to make the key elements of the underlying report available to the wider public in a concise manner.

Survey turnout has further improved versus the first two monitoring campaigns undertaken in autumn 2022 and spring 2023. Of the 29 CER member railways in question,

- 24 have participated (+3 vs the first survey)

- representing 95,8% of CER members' intra-EU passenger traffic[1] (+2.0 percentage points)

- covering rail traffic in and between 21 EU Member States with rail operations on the Continent (+2) as well as the Eurostar operations to and from London.

CER members from Finland, Ireland and FNM Group from Italy have participated for the first time, thus extending implementation monitoring coverage significantly, both in terms of geography and in terms of ridership.

Roadmap delivery is largely on track, both regarding multilateral solution development and implementation by the railways individually. Only a few changes to the railways' implementation timelines were reported. A few, overall insignificant, delays here and there were, on balance, offset by a few accelerations. This being the third such exercise, the timeline planning appears stable overall. This bodes well for meeting the 2025 milestones in general. Yet, CER members have been urged to further accelerate their individual timelines by prioritizing tasks accordingly, thus reducing a somewhat 2025-heavy character of overall implementation planning.

Responses to the third survey also show a further improved awareness and confidence level by the railways. The number of "not sure" and similarly inconclusive answers to what needs to be implemented is negligible. Moreover, a previous observation has been reconfirmed: Those railways who are actively involved in the development of common services and in the CER Ticketing Task Force are generally more advanced in their implementation work. In response to this finding, active participation in the established Roadmap related working groups and in the regular dissemination and facilitation formats has stepped up in the half a year since the previous survey.

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[1] Based on 2022 ridership figures.

The survey at hand highlights once again the dependence on third parties such as infrastructure managers and national authorities for some of the less mature Roadmap actions. The extension of booking horizons and the harmonisation of ticket conditions are particularly dependent on alignment with third parties. Some benchmark initiatives by individual RUs aimed at accelerating implementation in close collaboration with domestic stakeholders, or to take a degree of commercial risk to bring about customer improvements, have been reported. The Ticketing Task Force will further explore to what extent such lighthouse initiatives can be adopted by other RUs. CER members have been asked to address with national stakeholders the need for convergence between national legacies and the requirements of the Single European Railway Area as featured in the Roadmap.

The CER General Assembly acknowledges that 2024 needs to be *the* year of implementation work for important customer improvements to materialize in 2025, i.e. in most cases latest as from the timetable change in December 2025.

The next implementation progress monitoring survey will be carried out in spring this year. The key results will be reported accordingly once endorsed by the CER General Assembly.

2. Background and Purpose of this Report

CER Ticketing Roadmap

In September 2021 the CER General Assembly adopted the CER Ticketing Roadmap ("Roadmap"). The Roadmap encapsulates a vision of railway ticketing and distribution by 2025 and 2030, respectively, summarizing concrete actions to further improve the customer experience from planning and booking to travelling internationally by rail. The roadmap naturally respects the regulatory requirements, more importantly, in several cases it exceeds them. It is thus a key token of the sector's commitment to a truly Single European Railway Area and to meeting its own and the European Union's climate and growth goals. It is crucial that the CER community delivers on its pledges. The voluntary effort of the CER member railways has so far been received well by stakeholders. However, they expect continuous and tangible progress and customer improvements. Delivery on the roadmap is not only a pledge but also in the railways' very own interest, and crucial to help shape meaningful legislation in this area.

The Ticketing Roadmap at one glance
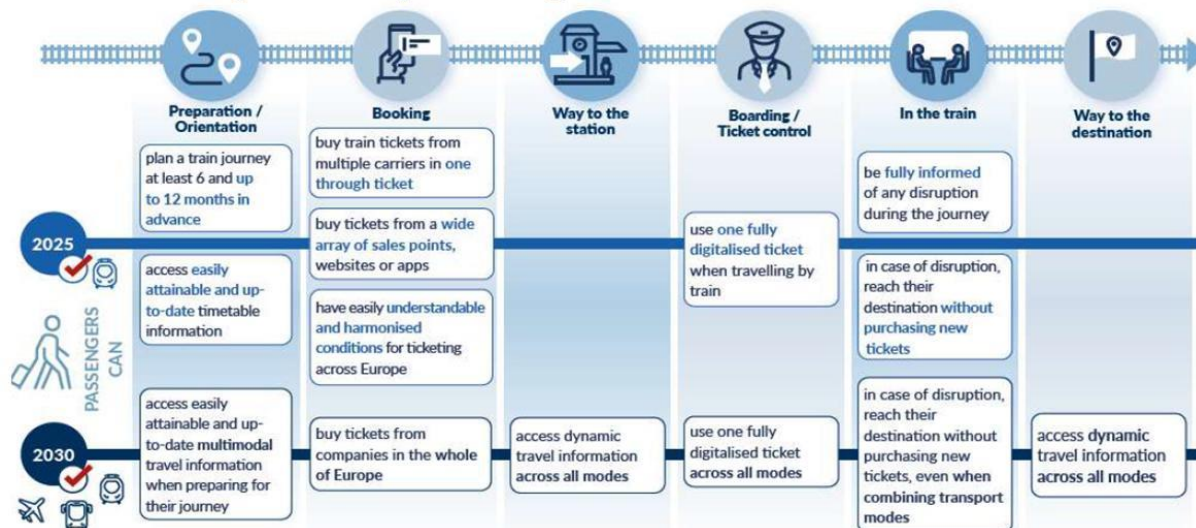
Important Roadmap milestones are to be achieved by 2025 in each of the eight core areas of action:

#	Action (Focus: implementation by 2025)
1	More up to date **timetables**
2	Being able to buy train tickets at least 6 and up to 12 months in advance (booking horizon)
3	More up to date **tariff** exchange, enabling through tickets
4	European wide **standardized API**[2] for selling train tickets
5	Increased harmonization of **ticketing conditions** (general conditions of use)
6	Full **digitalization of tickets**
7	**Real time information** during the journey
8	Better **support** during disruptions and delays

To make this a reality, the CER Ticketing Task Force[3] has published an Implementation Handbook and set up suitable governance structures for each of the core action areas of the Roadmap. No new governance structures have been established. Rather, the actions

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[2] Application Programming Interface that allows two IT programs to communicate with each other.
[3] The CER Ticketing Task Force consists of representatives from ČD, DB, MÁV-START, NS, ÖBB, PKP Intercity, Renfe, SBB, SNCF, Trenitalia, VR and ZSSK and is supported by CER, UIC and CIT. Participation is open and encouraged to all CER member railways.

draw on already established sector working bodies, notably at UIC and CIT. The Roadmap is an integral part in these sector associations' work programmes.

Implementation Monitoring

To add weight to its Roadmap commitment and to ensure timely delivery, the sector has decided to monitor and report progress continuously. For this, and to drive and steer implementation, CER has contracted a consultant. In collaboration with the Ticketing Task Force and CER members, comprehensive progress reports are presented bi-annually to the CER General Assembly. The document at hand is a synthesis of the third such report. The key findings and recommendations of that report were presented in detail to the General Assembly on 30 January 2024.

The synthesis was produced for a broader audience such as the European institutions.

3. Key Results and Recommendations

3.1. Overall Findings

The further improved survey turnout is a key finding already. Apparently, Roadmap subjects have in most cases become routine elements of the railways' internal project portfolios.

From the first two surveys and from interactions during this third campaign it is more obvious than ever that the less active a railway's involvement in the international development of the Roadmap topics the more need for clarification and support. Whereas railways that are actively involved in multilateral working bodies, and especially in the Ticketing Task Force, articulated a significantly lower need for support and guidance, or not at all.

The third survey reconfirmed that sector solutions, which need to be implemented by the RUs to become Roadmap compliant, are mostly considered mature and fit for purpose. This refers specifically to the following initiatives:

- UIC MERITS database for timetable data exchange,

- Open Sales and Distribution Model (OSDM) protocol as a technical enabler for the sale of integrated and through-tickets,

- Electronic Ticket Control Database (eTCD) of the UIC for cross-RU ticket inspection,

- CIT Agreement on Journey Continuation (AJC).

Hence, it is generally accepted that there is a suitable portfolio of solutions at an implementing RU's disposal. This also implies that the key tasks to ensure broad compliance with the Roadmap are indeed to be performed at an individual company level. Exceptions are, nonetheless, the Actions related to harmonization of ticketing conditions (Action 5), the extension of booking horizons (2) and real time information (7). Here, the Ticketing Task Force made, and supports on an ongoing basis, an extra effort by the topical multilateral working bodies, notably at the UIC.

Overall, some responses from RUs that are not engaged in relevant international sector working bodies indicate that there is still a need for additional explanation about the workings and practicalities of the solutions. Bilateral meetings with companies in question have been scheduled to straighten out such knowledge gaps.

Obstacles and issues incurred so far continue to fall largely into the following categories:

- Internal: Resource limitations, budget constraints and internal project portfolio priorities,

- Third parties: Reliance on infrastructure managers, national bodies and other stakeholders for bringing about improvements in Actions such as booking horizon and real-time information exchange,

- New way of working in an international, multi-stakeholder environment to which many internal experts and decision makers are not accustomed,

- Limited availability of proven off-the-shelf solutions for some Roadmap actions.

As these continue to be raised during survey campaigns, CEOs have been asked to ensure

▪ that Roadmap projects remain in focus internally,

▪ external stakeholder support.

To better understand the railways' implementation maturity, special attention in the third monitoring campaign was attached to reconfirming the individual companies' delivery planning. Survey responses have been summarised and Action specific timelines have been established in an aggregated way. In the following, two examples are presented in more detail. These, like the other Actions, demonstrate tangible progress versus the previous survey campaigns.

Example 1: More up to date timetables (Action 1)

Action's goal:

When passengers search for journeys, the timetable information they find is easy to reach and the data is accurate, complete and up to date, on any channel of their choosing.

The more frequently an RU's timetable data are uploaded to the UIC MERITS database for others to integrate in their sales and information channels, the more accurate and up to data these data are for customers and third parties such as distributors.

Aggregated implementation timeline:

Thirteen of the 24 respondents already report compliance with this Action's upload frequency target, i.e. they upload their timetables to the MERITS database at least twice a week. All others, with two slight latecomers, report plans to do so latest by the end of 2025.

More specifically, the survey yielded the following timeline commitments:

1 More up to date timetables

| 13 | 1 | 1 | 1 | | 6 | 2 |

Today — 06.24 — 12.24 — 06.25 — 12.25 →
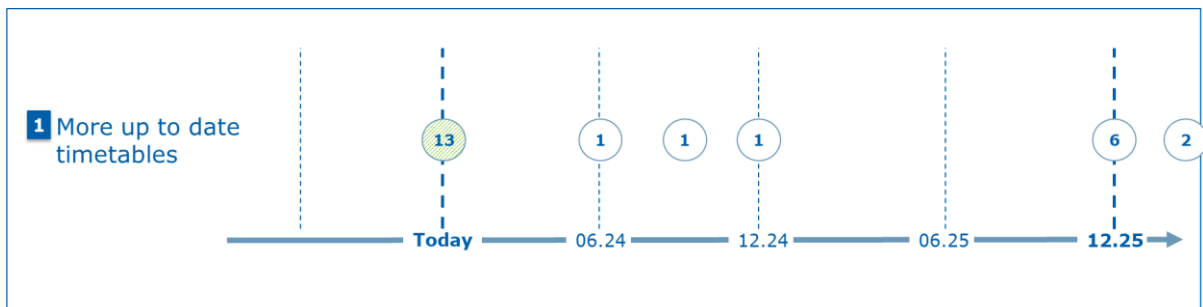
(x) Number of RUs with planned implementation by that date (x) Already compliant at time of survey (self-declared)   Source: 3rd Survey

No critical delays versus previous planning were reported. Moreover, one RU has communicated their plan to accelerate. This Action is therefore one of the most mature ones of the Roadmap. Yet, up-to-date timetable data of consistently high quality across the European network needs additional work, for instance by including replacement bus services, other domestic rail operators and public transport authorities, minimum connecting times for international journeys etc. Tackling these impediments is work in progress at the topical UIC working group in close collaboration with the member railways.

Attention also needs to be paid in some geographies to the interaction between infrastructure manager and RU when it comes to providing timetable data. Practices and responsibilities vary between member states. As a matter of principle, the Roadmap addresses the RUs' responsibilities and there is no intention to change established national practices. Nonetheless, as part of their implementation planning RUs need to factor in the

potentially lengthy alignment process with their infrastructure manager(s) and take appropriate measures to ensure the Roadmap goals are met on time and in the desired quality irrespective of the specific IM – RU interplay.

<u>Example 2: Better support during disruptions and delays (Action 8)</u>

Action's goal:

In case of a disruption or delay on a train that will hinder passengers' continuation of their journey by rail, the passengers will be notified of the situation, informed about their passenger rights and be given options on how to best continue to their destination. Upon inspection of their tickets in any subsequent trains, the disruption or delay becomes apparent to staff and their tickets remain valid.

Key element of the Roadmap at this stage is related to the handling of missed connections as laid out in the CIT Agreement concerning Journey Continuation (AJC). It should be noted, however, that Action 8 of the Roadmap comprises more than just joining the AJC, for example the digitisation of the processes. Therefore, additional questions were asked in the survey at hand to feel the railways' pulse about scenarios and concrete measures to further enhance the scope and depth of the AJC and about digitizing processes such as delay confirmations.

Key survey findings:

A substantial number of 17 survey respondents have already signed up to the AJC. All respondents are planning to ultimately join the agreement. The Agreement has been communicated widely via different tools such as a dedicated AJC homepage (https://www.cer.be/cer-eu-projects-initiatives/agreement-on-journey-continuation-ajc). More and more railway undertakings that have joined the AJC are publishing information on their websites; in the meantime, 13 RUs implemented the AJC on their company websites. There are also concrete plans to further enhance this subject. Standards on digital annotations as foreseen in eTCD[4] will be a supportive tool to digitalize the process for the AJC. Therefore, in cooperation with the UIC a task force has been set up to work on the implementation of eTCD with regards to the AJC processes. 18 out of 22 railway undertakings answered in the survey that their company is aware of eTCD and the fact that it might be used in conjunction with the AJC. Until 2025 it will be, however, key to take steps on the level of each company to use eTCD for this purpose.

More specifically, the survey yielded the following timeline commitments:

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[4] Electronic Ticket Control Database (eTCD) of the UIC for cross-RU ticket inspection.
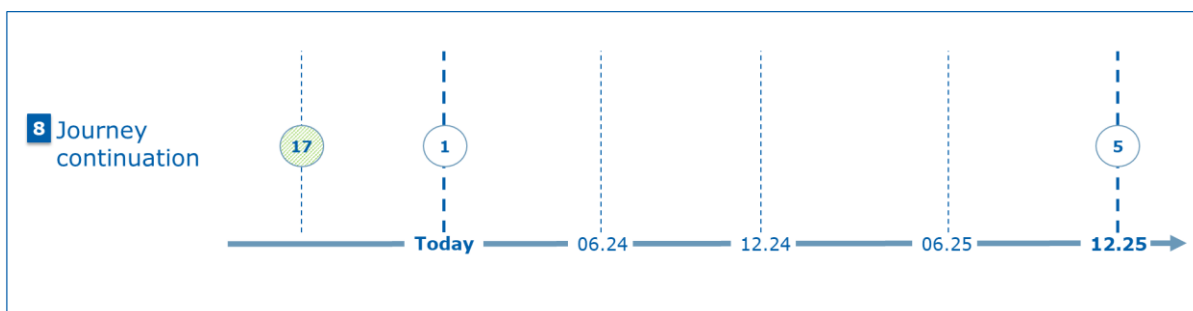
As of February 2024, 17 railway undertakings already apply the AJC:
BLS, ČD, CFL, DB, DSB, GYSEV, HŽPP, MAV-START, NS, ÖBB, PKP IC, Renfe, SBB/CFF, SJ, SNCB/NMBS, SNCF, SŽ, Trenitalia, ZSSK.

<u>Overall implementation timeline considerations and recommendations</u>

The aspired step changes entail a degree of dependency on third parties such as Infrastructure Managers and on national or European legislation. Railways and groups of, for example, "neighbouring" railways, are urged to accelerate implementation of all common services that are already available or that are sufficiently mature.

The Agreement on Journey Continuation (cf. Roadmap Action 8), the OSDM online sales interface (cf. Actions 3+4) and connecting to the UIC Electronic Ticket Control Database (cf. Action 6) are examples where additional progress could be made faster. Those RUs that have not yet launched internal projects are requested to do so as a matter of urgency. It is also recommended to follow an agile approach wherever possible. For example, increasing booking horizons in incremental steps constitutes tangible customer improvements that can typically be brought about faster than larger scale leaps. Likewise, timetable and tariff data upload frequencies to the respective UIC databases can be increased in a stepwise manner.

The railways are urged to follow such an agile philosophy of Roadmap implementation, geared towards bringing about tangible customer improvements ahead of the 2025 milestones.

3.2. Risk Assessment

CER Ticketing Task Force risk assessment of Roadmap implementation status as planned, based on the survey responses and additional insights into the maturity of sector solutions:

Action	Assessment
1. Timetables	Good progress in increasing RUs' frequency of making timetable data available. Improving data quality and consistency remains an area that needs ongoing attention.

2. Booking horizon	Relatively good number of RUs with concrete plans to increase booking horizons. Some pragmatic solutions implemented or identified, e.g. by two railways, accepting a degree of commercial risks to improve the customers' booking experience. Dependency on third parties (notably Infrastructure Managers, national bodies) to be managed. Booking horizons for domestic and cross-border services to be harmonized, where applicable.
3. Tariff exchange	Already solid use of established sector solution. Focus on incremental improvements.
4. Standardized API	Solution in place (OSDM). Various RUs have started implementation or have a concrete plan to do so in due time. Recognition of OSDM as "the" sector solution is doubtless there at CER level. It would be appropriate that OSDM as sector solution was accordingly recognised by European Commission/ ERA.
5. Harmonization of ticketing conditions	Common development of solutions to this broad-scope Action gained traction. Dependency on third parties (notably national bodies) presents a challenge; overcoming this consistently presents a major challenge. Increased alignment with national stakeholders needed.
6. Digitalization of tickets	Several RUs are already compliant or have concrete plans to become so shortly. Focus of multilateral work is on incremental improvements.
7. Real time information	Railways' pronounced commitment to develop a new open standard real-time information exchange platform that draws on an established solution used by a subset of railways.
8. Support during disruptions and delays	Agreement on Journey Continuation (AJC) applied by a further increased number of RUs, making AJC a prime example of CER member collaboration. Incremental enhancements defined and generally supported by the railways. Additional activities to better take care of international passengers in case of disruptions and delays launched.

3.3. Recommendations to CER Member Railways

RUs and groups of, for example, neighbouring RUs, are urged to accelerate implementation of all common services that are already available or that are sufficiently mature. The Agreement on Journey Continuation (cf. Roadmap Action 8), the OSDM online sales interface (cf. Actions 3+4) and connecting to the UIC Electronic Ticket Control Database (cf. Action 6) are examples where additional progress could be made. It is also recommended that implementing railways follow an agile approach wherever possible. For example, increasing booking horizons in steps constitutes tangible customer improvements that can typically be brought about faster than jumping directly from today's practices to the envisaged booking horizon. Likewise, timetable and tariff data upload frequencies to the respective UIC databases can be further increased in a stepwise manner.

It needs to be understood that 2024 is a critical year of implementation. With less than 24 months to go before the committed key milestones of the Roadmap are due, there is no time left for revisiting approaches or changing priorities.

In a nutshell, railways are advised to:

- be bold by pursuing implementation acceleration potentials,
- launch internal implementation projects as a matter of urgency, if not yet done so,
- lobby national stakeholders where third-party support and alignment is needed (especially regarding timetable stability/ booking horizons, ticket conditions, real time information exchange),
- participate in the CER Ticketing Task Force and in international working groups such as different action task forces, the overall Roadmap contact meetings or owner meetings (if not yet done so),
- consider joining and using the services of the sector-led TAP TSI Services Governance Association (TSGA),
- take upcoming implementation monitoring surveys as an opportunity to check internally that implementation activities are on track,
- provide evidence of communicable passenger improvements that CER can use to underpin progress made.

3.4. Concerted Effort

The survey respondents reiterated previous remarks about the dependencies on third parties and required stakeholder support to help facilitate Roadmap implementation and overcome barriers to implementation.

Suggestions were made specifically regarding:

a) European Commission and ERA

   o Refrain from legislative proposals that impose new or conflicting requirements that may jeopardize railways' efforts and investments already made;

b) Ensure that the ERA Technical Document B.5 and B.13 are referenced in the revised TSI for Telematic Applications Sector bodies (Action Owners, Ticketing Task Force)

- o Foster dialogue, alignment and synchronization between multilateral working bodies and RUs as well as between RUs;

- o Launch implementation meetings and workgroups per Action or specific subsets thereof;

- o Exert strong project management, leadership and visibility;

- o Remind of implementation deadlines and intermediate steps on an ongoing basis;

- o Take the diversity and specificities of CER passenger RUs, for instance of open-access international high-speed operators, into account

c) Others

- o National governments to support the Roadmap consistently and refrain from contradictory or additional legislation in that field;

- o National bodies and stakeholders to align national standards and requirements with the Roadmap; overcome the patchwork of conflicting national or even regional approaches and solutions.

Meeting the quality and timeline goals of the Roadmap will greatly benefit from a concerted effort, building on the CER members' commitment and the recommendations presented to and endorsed by their CEOs.