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Proposal for a REGULATION OF THE EUROPEAN PARLIAMENT AND THE COUNCIL

amending Regulation (EU) 2021/782 as regards the protection of passengers with single tickets

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Glossary

Term or acronym	Meaning or definition
AJC	Agreement on Journey Continuation
ERA	European Union Agency for Railways
GCC-CIV/PRR	General Conditions of Carriage for Rail Passengers
HOTNAT	Hop On the Next Available Train
MDMS	Multimodal Digital Mobility Services
PRM	Persons with disabilities and persons with reduced mobility
RPRR	Regulation (EU) 2021/782 on rail passengers' rights and obligations
RMB	Regulation on Multimodal Booking
RTR	Rail Ticketing Regulation

1. POLITICAL AND LEGAL CONTEXT

Passenger rights form the cornerstone of the EU transport and consumer policy. The EU is the only region in the world to provide passengers with comprehensive protection across all modes of transport: air, rail, bus and coach, and waterway. Since 2004, this framework has been underpinned by four core Regulations covering each mode[1], plus a fifth dedicated to passengers with reduced mobility travelling by air[2]. It continues to evolve, most recently with the relaunch, in October 2025, of the interinstitutional negotiations relating to the Commission's proposal to amend the Regulation on air passenger rights[3], along with the ongoing negotiations on the 2023 proposals on passenger rights for multimodal journeys[4] and on the enforcement of passenger rights[5].

Within this framework, the rail sector plays a central role in achieving the EU's transport, connectivity, competitiveness, and climate ambitions. In his report on the Single Market[6], Enrico Letta emphasises that the railway sector is essential to its success, serving as a backbone for EU connectivity. By linking regions and Member States, railways foster economic cohesion and contribute to the EU's climate objectives, accounting for only 0.3% of transport-related greenhouse gas emissions and offering a sustainable alternative to road and air travel.[7] However, as highlighted by Mario Draghi in his report on the Future of European Competitiveness, the Single European Railway Area remains incomplete. Twenty-five years of market opening have been undermined by fragmentation, monopolies, and technical barriers, leaving passengers with limited high-speed options, complex bookings, and weaker consumer passenger rights[8].

In 2023, rail represented 8.4% of overall land passenger transport, and it was the third most used mode after cars and air travel. From 2000 to 2023, the number of passenger-kilometres travelled by rail grew by 29.2%, reflecting a 1.1% average increase per year[9].

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[1] Regulation (EC) No 261/2004 establishing common rules on compensation and assistance to passengers in the event of denied boarding and of cancellation or long delay of flights, Regulation (EU) 2021/782 on rail passengers' rights and obligations, Regulation (EU) No 1177/2010 concerning the rights of passengers when travelling by sea and inland waterway, Regulation (EU) No 181/2011 concerning the rights of passengers in bus and coach transport, and Regulation (EC) No 1107/2006 concerning the rights of disabled persons and persons with reduced mobility when travelling by air.
[2] Regulation (EC) No 1107/2006 concerning the rights of disabled persons and persons with reduced mobility when travelling by air.
[3] COM(2013) 130 final
[4] COM(2023) 752 final
[5] COM(2023) 753 final
[6] Enrico Letta (2024), "Much More Than A Market"
[7] Ninth monitoring report on the development of the rail market under Article 15(4) of Directive 2012/34/EU of the European Parliament and of the Council, p. 2. eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52025DC0439
[8] Mario Draghi (2024), "The Future of European Competitiveness". See, in particular, the in-depth analysis of transport policies in Part B of the report.
[9] European Commission (2025), Statistical pocketbook 2025. Statistical pocketbook 2025 - Mobility and Transport - European Commission

The combined share of regional, long-distance and international rail journeys is on average 57% of all rail journeys in the EU[10].

In 2017, the European Commission proposed a revision of Regulation (EC) No 1371/2007 on rail passengers' rights and obligations[11]. This proposal led to the adoption of Regulation (EU) 2021/782 on rail passengers' rights and obligations (hereafter "Regulation (EU) 2021/782" or "RPRR"), which entered into application on 7 June 2023 and replaced and repealed Regulation (EC) No 1371/2007[12]. The RPRR applies to both international and domestic rail journeys (suburban, urban, regional and long-distance) throughout the Union provided by one or more railway undertakings licensed in accordance with Directive 2012/34/EU.[13] Key elements of the revision included real-time dynamic travel information, a common EU-wide compensation and reimbursement form[14], and stronger tools for national enforcement bodies (NEBs). It also enhanced the protection for persons with disabilities and persons with reduced mobility (PRM), required dedicated spaces for assembled bicycles on new or upgraded trains, introduced a right to self-rerouting, and obliged railway undertakings to cooperate with station managers on contingency planning. For the first time, it established, albeit limited, obligations for sole railway undertakings to offer through-tickets for their respective long-distance or regional services (with the obligation to make all reasonable efforts to offer through-tickets for other services)[15], strengthening passenger protection on connecting journeys. This revised framework reinforced the commitment to standardised and fair railway operations across Member States.

This analytical Staff Working Document (SWD) builds on and updates the analysis in the Impact Assessment accompanying the 2017 proposal to revise Regulation (EC) No 1371/2007 (hereafter the "2017 IA SWD")[16]. The 2017 IA SWD presented two policy measures as part of two broader policy scenarios: policy scenario A under which all single journeys sold in a single purchase would have to be considered a through-ticket and hence

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[10] Milieu consulting and Transport & Mobility Leuven (2026), Support study for a targeted revision of Regulation (EU) 2021/782 on rail passengers' rights and obligations.

[11] Regulation (EC) No 1371/2007 of the European Parliament and of the Council of 23 October 2007 on rail passengers' rights and obligations (OJ L 315, 3.12.2007, p. 14).

[12] Regulation (EU) 2021/782 of the European Parliament and of the Council of 29 April 2021 on rail passengers' rights and obligations (recast), (OJ L 172, 17.5.2021, p. 1)

[13] Directive 2012/34/EU of the European Parliament and of the Council of 21 November 2012 establishing a single European railway area (OJ L 343, 14.12.2012, p. 32). Railway undertakings are defined as any public or private undertaking that is licensed under the Single European Railway Area Directive, whose principle business is the provision of services for the transport of goods and/or passengers by rail, and which is required to ensure traction. This definition also covers undertakings which provide traction only.

[14] Available in all EU official languages on https://transport.ec.europa.eu/reimbursement-and-compensation-requests-form_en. See also Commission Implementing Regulation (EU) 2024/949 of 27 March 2024 establishing a common form for rail passengers' reimbursement and compensation requests for delays, missed connections and cancellations of rail services in accordance with Regulation (EU) 2021/782 of the European Parliament and of the Council, *ELI: http://data.europa.eu/eli/reg_impl/2024/949/oj* .

[15] A through-ticket provides passengers with comprehensive, unified rights across successive rail services operated by one or more railway undertakings, equivalent to a single journey. It is defined as a ticket or tickets representing a transport contract for successive railway services operated by one or more railway undertakings, as defined in Article 3(35) of Directive 2012/34/EU of the European Parliament and of the Council of 21 November 2012 establishing a single European railway area. See section 2.1.

[16] SWD(2017)318 final

come with a full set of passenger rights[17]; and policy scenario B which adds to scenario A that through-tickets would have to be offered where technically possible, while railway undertakings would not be obliged to conclude agreements between them. Under scenario B, railway undertakings and ticket vendors would also have the burden of proof towards passengers that no through-ticket was sold[18]. In its proposal, the Commission opted for policy scenario B as it was considered at the time that this would better serve passengers who ask to obtain through-tickets, while ensuring alignment with the 4th Railway Package where the Commission clarifies certain aspects related to through-tickets and their availability and declares its intention to monitor rail market developments in the Member States in this respect. The co-legislators built on this policy option during negotiations on the proposal. In particular, they specified that 'sole railway undertakings' have to offer their long-distance and regional rail passenger services as a through-ticket. The concept of a 'sole railway undertaking' does not only concern a rail operator's own services but also services of several rail operators that are entirely owned by the same entity. The co-legislators also agreed that for other services, railway undertakings have to make 'all reasonable efforts' to offer through-tickets and cooperate to that end among themselves. This analytical SWD also describes how the market and the problem of the insufficient protection under multi-operator journeys have evolved since the adoption of Regulation (EU) 2021/782. It also provides an updated assessment of the expected impacts of the intervention by means of a cost-benefit analysis.

Recognising the importance of seamless and sustainable travel, President von der Leyen stressed in the Political Guidelines 2024-2029[19] that it should be made easier for people to shift to more sustainable travel options, in particular to cross-border rail. This is key to achieving the European Union's climate objectives. In this regard, the Political Guidelines say: *'[…] Cross-border train travel is still too difficult for many citizens. People should be able to use open booking systems to purchase trans-European journeys with several providers, without losing their right to reimbursement or compensatory travel. To this end we will propose a Single Digital Booking and Ticketing Regulation, to ensure that Europeans can buy one single ticket on one single platform and get passengers' rights for their whole trip'*.

This initiative complements the initiative for a Rail Tiketing Regulation (RTR), which contains rail-specific measures enabling comprehensive comparability and availability of rail tickets, including single tickets for multi-operator journeys. It also complements the

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[17] This was outlined as follows: "*This measure would define that single journeys which are sold in a single purchase, under a single transport contract with multiple tickets have always to be considered as a 'through ticket' by railway undertakings and ticket vendors. As a result, the rights under the Regulation e.g. to assistance, reimbursement, rerouting or compensation apply to the whole journey*."

[18] Policy scenario B added the following measure to Policy scenario A: "*This measure makes it clear, as already pointed out in the Interpretative Guidelines, that the possibility to purchase through tickets has to be offered wherever this is technically possible. The measure would, however not oblige railway undertakings to conclude agreements with each other, as this would interfere in their business conduct and commercial freedom. Railway undertakings and tickets vendors would, in addition, have the burden of proof if no through-ticket was sold, i.e. that the obligations under the Regulation to e.g. assistance, reimbursement, rerouting or compensation do not apply to the whole journey but only to the different segments of the journey*".

[19] "Europe's choice, Political Guidelines for the next European Commission 2024-2029", 18 July 2024, available at https://commission.europa.eu/document/e6cd4328-673c-4e7a-8683-f63ffb2cf648_en.

initiative for a Regulation on Multimodal Booking (RMB) that contains horizontal, mode agnostic rules ensuring a level playing field between MDMS platforms[20] and transport operators[21]. Together, these initiatives aim to make rail travel more attractive, integrated, accessible, and fair, reinforcing both the EU's climate goals and the creation of a seamlessly connected and competitive European transport network.

2. INSUFFICIENT PROTECTION UNDER MULTI-OPERATOR JOURNEYS

Rail journeys within the European Union, particularly cross-border, often require passengers to combine different rail services (regional, long-distance or cross-border) from more than one railway undertaking in a single journey. However, the level of protection afforded to passengers in the event of missed connections between these rail services currently varies, even where the tickets for the journey are purchased in a single transaction on a single platform. At present, EU law grants protection in such cases only to passengers holding 'through-tickets'.

2.1. LOW AVAILABILITY OF THROUGH-TICKETS

A through-ticket is a ticket, representing one (single) transport contract, covering successive railway services operated by one or more railway undertakings for a given rail journey.[22] Such a ticket gives rise to a full set of rail passenger rights in the event of missed connections between those services, in particular the rights to reimbursement or re-routing, to assistance and to compensation[23].

Under Regulation (EU) 2021/782, the issuance of a through-ticket can be the result of one of the following cases:

1. The obligation to offer through-tickets for successive railway services from 'sole railway undertakings' under Article 12(1) of Regulation (EU) 2021/782;

2. A cooperation between railway undertakings for other services than those under point one above, to offer through-tickets for particular journeys;

3. Where a railway undertaking, on its own initiative, sells a combination of tickets for a journey involving operators that are not part of the same sole railway undertaking, and does so in a single commercial transaction.

However, the obligation to offer through-tickets is rather narrow. First, the obligation to offer through-tickets under the first case above is restricted to long-distance or regional services from a 'sole railway undertaking', i.e. a rail operator's own services or services of several rail operators that are wholly owned by the same entity. Second, the requirement for railway undertakings to cooperate among themselves to offer through-tickets for other services under the second case above is limited to 'all reasonable efforts'. Such bilateral

[20] Multimodal Digital Mobility Services (MDMS) are platforms providing traffic and travel information (e.g., schedules, tariffs and availability of services) and enabling the distribution of tickets, directly or via re-linking, for two or more transport operators, operating in one or more transport modes.
[21] EU rules on multimodal digital mobility services and single digital booking & ticketing
[22] See Article 3(9) of Regulation (EU) 2021/782, read together with Article 3(35) of Directive 2012/34/EU.
[23] Article 12(3) of Regulation (EU) 2021/782.

cooperations take place on a case-by-case basis, , as showcased below. Third, ticket combinations sold by railway undertakings under the third case above are presumed to constitute through-tickets. However, this presumption does not apply if the undertaking clearly informs the passenger, prior to purchase, that the tickets represent separate transport contracts. It should also be noted that ticket combinations offered by third-party ticket vendors *on their own initiative* in a single commercial transaction do not qualify as through-tickets under the RPRR. Nonetheless, to avoid any misunderstanding that this single booking does not offer the same level of protection as through-tickets, the third-party ticket vendor has to inform passengers clearly and prior to purchase about the fact that it does not sell a through-ticket[24].

As explained further below, and also highlighted in the Report on the implementation and results of Regulation (EU) 2021/782 on rail passengers' rights and obligations, the offer of through-tickets covering services of more than one sole railway undertaking remains limited and is not consistently available across the EU, especially for cross-border journeys.

As regards domestic rail travel, it has to be pointed out first that all incumbent railway undertakings (except in PL, see Figure 1) have Significant Market Presence (SMP) in the overall national rail transport service market, i.e. a market share above 50% in terms of passenger kilometres[25]. Consequently, in Member States with a dominant incumbent railway undertaking, a substantial share of domestic rail journeys may already be operated under through-tickets, as this protection is legally mandated (Article 12(1) RPRR) for long-distance and regional services provided by a sole undertaking.[26] However, such higher domestic availability of through-tickets is a mere consequence of the overall SMP of incumbent railway undertakings within their domestic market. Without effective rules on passenger rights protection in case of missed connections between different railway undertakings a level playing field amongst all market participants is not ensured, going against Union objectives for enhanced market opening and for interoperability under the Single European Rail Area.

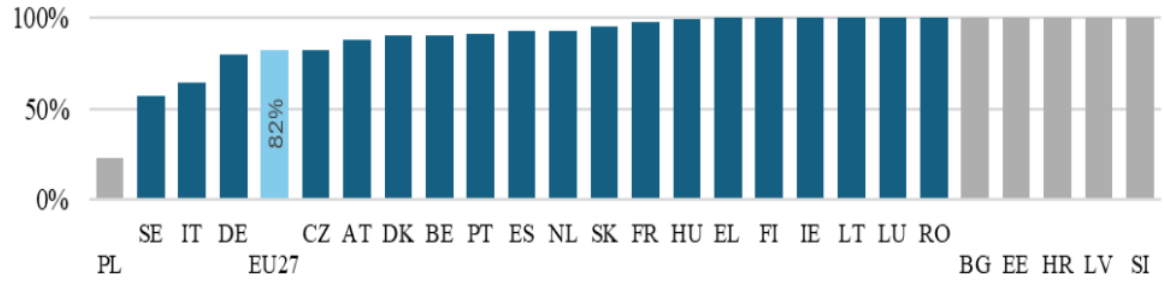
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[24] Under Art. 12(4) of Regulation (EU) 2021/782, where a ticket or tickets are purchased in a single commercial transaction and the ticket vendor or tour operator has combined the tickets on its own initiative, the ticket vendor or tour operator that sold the ticket or tickets shall be liable to reimburse the total amount paid for that transaction for the ticket or tickets and, moreover, to pay compensation equivalent to 75 % of that amount in the event that the passenger misses one or more connections. It follows from Art. 12(7) of that same Regulation that this liability shall not apply if it is mentioned on the tickets, or on another document or electronically in such a manner that allows the passenger to reproduce the information for future reference, that the tickets represent separate transport contracts, and the passenger was informed of this prior to the purchase.

[25] It needs to be noted however that market shares relating to particular type of passenger rail service (long-distance, regional, cross-border) may be different.

[26] Furthermore, in some Member States some particularities have been identified. For example, in Luxembourg, second-class rail travel on passenger services operated by the main railway undertaking is free of charge and does not require a (through-)ticket.°(26) In the Netherlands, a national check-in and check-out system is in place. Passengers' journeys start when they check in at the station of departure and end when they check out at the station of the final destination, regardless of any transfers, the type of rail services used or changes of operator. In practice, this appears to function as a through-ticketing system. See Communication - Report on the implementation and results of Regulation (EU) 2021/782 on rail passengers' rights and obligations, COM(2026) 228

Figure 1: Incumbent market share (in terms of pkm) in the passenger service market per Member State (2022)



Source: Rail market monitoring (RMMS), July 2025

Evidence suggests that domestic through-ticketing schemes covering several railway undertakings in a single Member State are available only in a limited number of Member States. In 2021, a study commissioned by the European Commission identified instances of extensive through-ticketing in some Member States and limited availability of through-ticketing in others.[27] The list below includes schemes quoted in the 2021 study, along with additional cases found through desktop research:

- In Czechia, under the *Oneticket* system, regardless of the number of operators, the entire domestic journey is considered as a single transport contract when it is done within the railway network of the country. Passenger's rights for travel disruptions apply[28].

- In Germany, railway undertakings participate in a common fare system under the *Deutschlandtarif*. Tickets issued for a journey consisting of directly adjacent rail services of undertakings participating in the *Deutschlandtarif*, including temporary passes like the monthly *Deutschlandticket*, are considered to be a through-ticket under the RPRR. The *Deutschlandtarif* mainly concerns regional and (sub)urban rail passenger services from around 50 public and private railway undertakings, and does not include long-distance services from e.g. DB Fernverkehr AG, Flixtrain or Eurostar[29].

- In Hungary, all tickets for domestic journeys are considered through-tickets, including multi-operator tickets. It has to be noted however that most domestic passenger rail services are operated by MÁV. GYSEV operates only some railway services in the North-West of the country and GYSEV is also partially Hungarian state owned like MÁV[30].

- In Poland, PKP Intercity cooperates with nine regional rail operators to offer joint tickets that integrate fares (*Wspolny Bilet - WB*). WB does not extend to journeys on

[27] Steer and KCW (2021), Long-distance cross-border passenger rail services, Final Report, Study Contract MOVE/2020/OP/0013, Annex N, p. 329.
[28] https://oneticket.cz
[29] See https://www.deutschlandtarifverbund.de/ueber-uns/ as well as parts A and C of the fare conditions (*Tarifbedingungen*; version of 14.12.2025)
[30] https://www.mavcsoport.hu/sites/default/files/upload/page/vasuti_uzletszabalyzat_25.10.01.pdf

TLK[31] or Intercity (IC) trains in sleeper or couchette cars, or to rail services operated by operators who decided not to take part in this cooperation[32]. In the event of delays or other obstacles causing missed connections, passengers can obtain a delay certificate for conditional continuation on the next available train of the participating operator, subject to seat availability, with rights to refunds or compensation for the whole integrated fare from the issuing operator[33]. The scheme does not, however, seem to cover some independent railway undertakings active on the Polish market such as RegioJet and Leo Express[34].

- In Sweden, *Resplus* offers passengers the ability to combine travel with several transport operators (train, bus, ferry, etc.) under one *Resplus* ticket, thanks to a cooperation among Sweden's public transport operators. Every train that starts or ends in Sweden is covered by Resplus. In the event of a missed connection during a Resplus journey, the *Kom-Fram-Garanti* (Arrival Guarantee) applies: the operator causing the passenger to miss his connection is liable to ensure that the passenger can continue their journey, provides alternatives for rebooking, accommodation, food and beverages, a partial or full reimbursement or a delay compensation (for combined trips with a total distance over 150 km), using the same thresholds and values as in the RPRR[35].

The low availability of through-tickets is particularly evident in the context of cross-border rail journeys. While the information on the availability of through-tickets across the Union is not readily available, Annex 1 shows a number of cross-border rail journeys in the EU for which tickets can currently be bought in a single transaction on a single platform, either directly from a railway undertaking or from a third-party ticket vendor. As illustrated in Annex 1 and based on available evidence, most cross-border rail journeys are not offered as through-tickets, leaving passengers without a clear framework to rely on if they miss a connection. This results in unequal protection for passengers purchasing a trans-European rail journey creating a strong disincentive for them to opt for rail for their cross-border travel. Moreover, in the call for evidence linked to this initiative[36], 4 out of 11 responses received from consumer organisations describe cross-border ticketing as fragmented and complex. The Greenpeace report also states: '*The rail ticketing system in Europe is overly complicated and not unified. For 44 out of the 109 cross-border routes analysed (40%), it was not – or not always – possible to purchase a through-ticket, i.e. a single ticket covering the entire journey. On most of these routes, a through-ticket was unavailable on any of the days analysed; on others, it was only available on certain days, depending on the train schedule.*'[37] This weaker consumer protection for cross-border rail journeys is also recognised in Mario Draghi's report: *'Operators active in more than one national market*

[31] TLK or *Twoje Linie Kolejowe* are long-distance trains with more stops and lower speeds than IC trains.
[32]https://kolejedolnoslaskie.pl/wp-content/uploads/2024/06/Zalacznik-nr-2-do-ZW-WB_dane-przewoznikow.pdf
[33]https://www.intercity.pl/pl/dokumenty/wspolny-bilet/tekst_ujednolicony_ZW-WB_zm_1-20_2507_2025.pdf
[34] https://www.gov.pl/web/infrastruktura/wspolny-bilet
[35] https://samtrafiken.se/tjanster/resplus
[36] https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/14691-Targeted-revision-of-Regulation-EU-2021-782-on-rail-passengers-rights-and-obligations_en
[37] https://greenpeace.at/uploads/2025/08/greenpeace-analysis-flight-vs-trains-2025.pdf

remain the exception in the EU. Consequently, the number of long-distance cross-border rail services in Europe has hardly increased during the last two decades. Consumers experience a lack of fast connections, complexity in booking multiple legs of journeys and weaker consumer passenger rights […]'[38].

The call for evidence related to this targeted revision (see Annex 2) points to a recurring frustration among passengers on the lack of passenger rights for journeys bought in a single transaction on a single platform. 36 citizens reported that passengers currently bear almost all the risk of delays and missed connections in multi-operator journeys, with no clear responsible party, inconsistent compensation practices, and frequent situations of being stranded without help. In addition, 9 citizens reported to have purchased routes that they assumed to be a single journey, only to find out after a disruption that their journey was considered as multiple separate contracts. 11 citizens described situations in which rail undertakings were shifting responsibility onto one another or using technicalities (i.e., delays slightly below a threshold on one leg, even if the journey was severely disrupted) to avoid liability. Several consumer associations and NGOs, like BEUC, ECCNet and T&E, also note the limited availability of through-tickets. Moreover, they see the current legal regime as too narrow, too complex, and not suited to how people actually buy and combine tickets today (often via digital platforms and involving several operators). 5 organisations out of 11 argue that stronger passenger protection can increase consumer confidence in rail travel and favour a multimodal shift from other means of transport. Moreover, the Eurobarometer survey 551, which is representative of the EU population, shows that 18% of citizens avoid rail connections operated by different rail operators for fear of being stranded in case of a missed connection[39].

Therefore, passengers who book a multi-operator journey, especially cross-border, are not always protected under EU law, even if they purchase all their tickets in a single transaction on one platform. They are only guaranteed EU protection (assistance, re-routing or reimbursement, and compensation) when they hold a through-ticket, which is not generally available for all rail journeys, especially cross-border, as shown above.

2.2. MULTILATERAL SECTOR AGREEMENTS OFFER LIMITED RELIEF

It needs to be acknowledged that some railway undertakings have entered into multilateral sector agreements to assist passengers if they miss a connection between rail services of different undertakings which are not covered by a through-ticket (e.g. Agreement on Journey Continuation (AJC)[40], Hop On the Next Available Train (HOTNAT)[41]). However, these business-to-business initiatives do not grant any individual rights to passengers and

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[38] Mario Draghi (2024), "The Future of European Competitiveness". See in particular the in-depth analysis of transport policies in Part B of the report and page 213.

[39] European Commission (2025), Eurobarometer 551 Multimodal Digital Mobility Service. Accessed https://europa.eu/eurobarometer/surveys/detail/3178

[40] See the latest information leaflet on the AJC on the website of the International Rail Transport Committee (CIT), published in December 2025: https://www.cit-rail.org/media/files/civ-products-april-2025/ajc_leaflet_2025-12-14_en.pdf?cid=437997 (Note: the full agreement is not public).

[41] See Railteam's website: https://www.railteam.eu/en/services-on-your-journey/hop-on-the-next-available-train-hotnat/ HOTNAT involves only a limited number of high-speed rail operators belonging to Railteam (Deutsche Bahn, Eurostar, ÖBB, SNCF, SBB, SNCB/NMBS and NS. It only covers their high-speed network.

are merely voluntary and self-binding on the undertakings[42]. They currently cover only approximately twenty-three railway undertakings for AJC and seven high-speed operators for HOTNAT. The AJC is limited to passengers undertaking international rail journeys and HOTNAT to passengers using specific cross-border high-speed rail services. As a result, passengers performing domestic long-distance and regional travel are left out of these agreements, even though they also form a substantial part of rail passengers in the EU.[43] These sector agreements are also not widely known by passengers and train staff[44], are limited to offering journey continuation on the next available service, subject to the availability of seats[45] and the conditions for making use of these agreements can be unclear to passengers[46].

In the feedback to the call for evidence[47], four consumer organisations and NGOs, as well as an association of new rail entrants[48], considered existing schemes to be insufficient and unknown to passengers. Conversely, six incumbent railway undertakings and their associations argue that the AJC represents a standard set by the sector which should be used as a basis for any further regulatory intervention.[49]

It needs to be noted that the need to improve the AJC to provide better support during disruptions and delays was included in the CER Ticketing Roadmap in 2021[50]. While the CER Ticketing Roadmap 6th Implementation Monitoring Report[51] notes progress on Action 8 (Better support during disruptions and delays), through expanded AJC membership over the years and increased digitisation of ticket inspections across railway undertakings[52], this voluntary scheme still falls short of robust, comprehensive protection for passengers during journey disruptions. Its non-universal adoption and limitation to journey continuation does not provide for comprehensive and legally-enforceable passengers' protection during multi-operator journeys, while lacking binding enforcement and relying on variable individual railway commitments rather than a level playing field

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[42] For example, the AJC's information leaflet states that "*As it is a commercial gesture, it is a self-binding offer from the railway undertakings and differs from the rights you can claim e.g. under the [RPRR]*".

[43] The combined share of regional, long-distance and international rail passengers out of the total number of passengers travelling by rail is estimated at 57% at EU level. See also section 5.1.

[44] See Annex 2: Call for evidence

[45] "*The AJC will allow you only to continue the journey by train, and does not reimburse you any costs for hotels, taxis, payments for the ticket or compensation. Nor will the participating railway undertakings provide you with complimentary meals or refreshments.*" (AJC information leaflet); "*HOTNAT allows travellers to take the next available high-speed service leaving from the same transit station as originally planned, when a delay on or cancellation of the inbound Railteam member's high-speed service prevents them from making their originally-planned connection.*" (Railteam website).

[46] To this end, CIT and the European Passengers' Federation (EPF) jointly developed a note which "*is intended as a lay-person's informal guide to what to do if passengers miss their connection on an international journey and want to benefit from the AJC.*", see https://www.epf.eu/wp/digitalisation-of-the-ajc/ and https://www.cit-rail.org/secure-media/files/civ-products-april-2025/ajc-note_2025-12-14_en.pdf?cid=437998 .

[47] Targeted revision of Regulation (EU) 2021/782 on rail passengers' rights and obligations

[48] Including ALLRAIL, BEUC, T&E, EPF, and UFC-Que Choisir.

[49] Including CER, SNCF, SNCB, České dráhy, ÖBB and Deutsche Bahn.

[50] CER Ticketing Roadmap 2021 available at: https://www.cer.be/images/publications/positions/210920_CER_Position_Paper_Ticketing_Roadmap.pdf

[51] CER Ticketing Roadmap 6th Implementation Monitoring Report, Spring 2025, available at: 250929_CER_Ticketing_Roadmap_6th_Report.pdf

[52] Notably by means of the UIC initiative on the Electronic Ticket Control Database (eTCD).

framework. Furthermore, and as shown by the CER Ticketing Roadmap 7th Implementation Monitoring Report, its further improvements are planned only by 2030 and are conditional on, amongst others, 'sustained commitment by railway undertakings' leaving a high degree of uncertainty as to the timely realisation of the industry goals[53].

3. NECESSITY AND ADDED VALUE OF EU ACTION

While rail passenger transport in the EU occurs mainly at the national level[54], cross-border rail travel is growing[55]. At the same time, to promote rail services and cross-border mobility, the EU must ensure that passengers travelling by rail across Member States enjoy the same rights. National legislation alone cannot address the complexities of cross-border journeys. EU-level intervention is therefore essential to guarantee uniform, high standards of protection for all rail passengers. Only binding EU rules can secure equal rights for passengers and a level playing field for operators[56].

Without EU action, passengers who miss connections between trains operated by different railway undertakings will likely continue to face limited support, even when tickets for a journey are purchased in a single transaction on a single platform. This can result in additional costs for alternative transport or overnight stays, undermining the attractiveness of rail - including cross-border connections - compared with less sustainable modes. Without EU action, gaps in passenger protection will persist, even with initiatives such as the Single Digital Booking and Ticketing Regulation or the Multimodal Digital Mobility Services framework. While these measures improve ticketing conditions, they do not cover passenger rights in the event of missed connections.

The European Union has already taken steps to improve rail passenger protection by means of the first rail passenger rights Regulation (EC) No 1371/2007 and the subsequent adoption of the (recast) Regulation (EU) 2021/782 on rail passengers' rights and obligations. While already going in the right direction, this legislation has not solved the insufficient protection of passengers during multi-operator journeys. The Treaty on the Functioning of the European Union confers upon the EU the competence to lay down appropriate provisions in the transport sector (Article 91 TFEU).

4. OBJECTIVES

In view of the problem identified in Section 2, the objective of this intervention is to contribute to ensuring rail passenger rights for cross-border, long-distance and regional rail journeys involving one or more connections carried out by at least two different railway

[53] https://www.cer.be/cer-reports/cer-ticketing-roadmap-7th-progress-report
[54] In 2022, domestic passenger services represented around 93% of all passenger-kilometres in the EU-27, whereas international rail passenger services accounted for around 7% of total rail traffic. Rail market monitoring (RMMS), July 2025.
[55] See for instance: Ministerial Platform on International Rail Passenger Transport (IRP) , International rail passenger market on the right track according to new progress report, 2024
[56] See also the first sentence of recital 5 of Regulation (EU) 2021/782: "*Granting the same rights to rail passengers taking international and domestic journeys seeks to raise the level of consumer protection in the Union, to ensure a level playing field for railway undertakings and to guarantee a uniform level of passengers' rights.*"

undertakings, provided that the passenger acquires a single ticket[57] for a journey in a single transaction. This ties to the objective of the same measure in the impact assessment accompanying the Proposal for a Regulation from the European Parliament and the Council on rail passengers' rights and obligations (recast), published in 2017[58], which was to improve the application and enforcement of the Regulation, so that all passengers can fully exercise their rights when travelling by rail in the EU. The interinstitutional negotiations on this legislative proposal resulted in the adoption of Regulation (EU) 2021/782 on rail passengers' rights and obligations. This intervention aims for a targeted amendment of that Regulation.

5. POLICY INTERVENTION

5.1. BASELINE SCENARIO

In line with the Better Regulation toolbox (Tool #60), the baseline has been designed to include the initiatives of the 'Fit for 55' package[59] and the amendment of the European Climate Law to include a 2040 climate target for the EU[60], of reducing the EU's net greenhouse gas emissions by 90% by 2040 relative to 1990, with a limited contribution towards the 2040 target of high-quality international credits. It also reflects the CO_2 emission performance standards for heavy-duty vehicles[61], the Euro 7 standards[62], the revised TEN-T Regulation[63], as well as the initiatives part of the Greening Freight package[64] and Roadworthiness package[65]. It also reflects the National Energy and Climate Plans prepared by the Member States under the Regulation 2018/1999 on the Governance of the Energy Union and Climate Action and submitted to the Commission during 2024-2025. The baseline is common to that of the impact assessment accompanying the initiatives on Multimodal Digital Mobility Services and the Single Digital Booking and ticketing regulation.

The baseline scenario assumes no further EU level intervention beyond the Regulation (EU) 2021/782 on rail passengers' rights and obligations. Despite the obligation on railway undertakings to make all reasonable efforts to cooperate between them to offer through-tickets, the baseline assumes no systematic and comprehensive cooperation and corresponding offer for long-distance and regional journeys in the Union. Therefore, without action at EU level, the current situation is likely to continue, meaning that passengers holding a single ticket for a multi-operator journey with one or more connections will not be guaranteed protection in the event of a missed connection, unless a through-ticket is in place.

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[57] Valid evidence, regardless of its form, of a through-ticket or of the conclusion of two or more transport contracts for a journey purchased on a single ticketing platform in a single commercial transaction from a railway undertaking, ticket vendor or tour operator.
[58] SWD(2017)318 final
[59] Delivering the European Green Deal - European Commission
[60] COM(2025) 524 final
[61] Regulation (EU) 2024/1610
[62] https://eur-lex.europa.eu/eli/reg/2024/1257/oj/eng
[63] Regulation - EU - 2024/1679 - EN - EUR-Lex
[64] Green Deal: Greening freight for more economic gain with less environmental impact (europa.eu).
[65] Updated rules for safer roads, less air pollution and digital vehicle documents

The baseline also incorporates perspectives on potential future developments captured in the 2022 Strategic Foresight Report[66] and during a foresight workshop organised by DG MOVE and JRC on 10 February 2025, analysing the impacts of the megatrends and drivers of change on the EU transport sector[67]. In particular, the projected transport activity draws on the long-term population projections from Eurostat and GDP growth from the *Ageing Report 2024*[68]. An increasingly connected world with high levels of access to digital products and services and in which new services, business models, life and work patterns emerge is the background against which the initiative is assessed.

The number of passengers travelling by rail is projected to increase from 8.6 billion in 2019 to 9.6 billion in 2028, 10.7 billion in 2030 and 12.5 billion by 2050, driven in particular by the completion of the TEN-T core network by 2030, the extended core network by 2040 and of the comprehensive network by 2050[69], supported by the CEF, Cohesion Fund and ERDF funding, but also by measures of the 'Fit for 55' package and the revised TEN-T Regulation.

The share of regional, long-distance and international rail passengers is estimated at 57% at EU level and is assumed to be kept constant over time in the baseline scenario[70]. Thus, the number of regional, long-distance and international rail passengers is projected to increase from 5.5 billion in 2028 to 6.1 billion in 2030 and 7.1 billion in 2050. Out of this, the number of regional, long-distance and international passengers taking journeys involving multiple rail undertakings (excluding through-tickets) is estimated at 748 million in 2028, increasing to 836 million in 2030 and 962 million in 2050[71]. For the analysis, all these journeys are assumed to be booked on one platform in a single transaction. However, acknowledging the large uncertainty regarding the estimates, sensitivity analysis has been further performed in section 6.5.

The number of passengers subject to delayed and cancelled trains that result in missed connections for journeys booked on one platform in a single transaction are estimated at 24.5 million in 2028, 25.8 million in 2030 and 15.9 million in 2050 (see Table 1). Their number is projected to increase until 2030, due to the expected increase in the rail travel, but post-2030 this is projected to be counterbalanced by improvements in punctuality, driven by the implementation of the TEN-T Regulation. More detailed information on the baseline scenario is available in Annex 3.

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[66] COM(2022) 289 final

[67] https://knowledge4policy.ec.europa.eu/foresight/tool/megatrends-hub_en#explore

[68] DG ECFIN, 2024 Ageing Report. Economic and Budgetary Projections for the EU Member States (2022-2070) - Economy and Finance

[69] The core network includes the most important connections between major cities and nodes, and must be completed by 2030. The extended core network needs to be completed ten years later, in 2040. The comprehensive network connects all regions of the EU to the core network and needs to be completed by 2050.

[70] Milieu consulting and Transport & Mobility Leuven (2026), Support study for a targeted revision of Regulation (EU) 2021/782 on rail passengers' rights and obligations.

[71] According to the support study, multi-operator rail journeys, other than through-tickets, represent around 13% of ticket sales in regional, long-distance, and international services at EU level.

Table 1: Number of passengers subject to delayed and cancelled trains that result in missed connections for journeys booked on one platform in a single transaction (in million)

Country	2028	2030	2040	2050
AT	0.68	0.67	0.55	0.44
BE	0.63	0.62	0.50	0.37
BG	0.03	0.03	0.03	0.03
CY	0.00	0.00	0.00	0.00
CZ	0.56	0.59	0.46	0.35
DE	10.75	11.31	8.52	6.23
DK	0.36	0.35	0.26	0.20
EE	0.00	0.00	0.00	0.00
EL	0.03	0.03	0.02	0.02
ES	1.44	1.55	1.28	0.95
FI	0.15	0.15	0.12	0.09
FR	3.91	4.07	3.47	2.90
HR	0.05	0.05	0.05	0.04
HU	0.48	0.45	0.38	0.36
IE	0.14	0.14	0.11	0.09
IT	1.93	2.14	1.88	1.37
LT	0.01	0.01	0.01	0.01
LU	0.04	0.03	0.03	0.02
LV	0.02	0.02	0.01	0.01
MT	0.00	0.00	0.00	0.00
NL	0.66	0.67	0.49	0.37
PL	1.30	1.46	1.23	1.15
PT	0.19	0.18	0.21	0.19
RO	0.32	0.36	0.31	0.23
SE	0.63	0.65	0.48	0.35
SI	0.02	0.02	0.02	0.02
SK	0.20	0.20	0.16	0.13
EU total	**24.54**	**25.75**	**20.59**	**15.94**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

5.2. DESCRIPTION OF THE POLICY INTERVENTION

The proposed policy intervention, corresponding to the policy measure proposed during the last revision (see Section 1 above) , aims to ensure that passengers holding a ticket or tickets for a journey involving successive regional, long-distance and international services operated by different railway undertakings are entitled to the full set of passenger rights where they miss one or more connections during their journey - namely reimbursement or re-routing, compensation, and assistance - provided that the ticket or the tickets were purchased on a single ticketing platform and as part of a single transaction (hereafter called "single ticket"). This ticketing platform on which the single ticket would be purchased, can be a MDMS platform, but does not have to be one. So also ticketing websites of railway undertakings or third-party vendors which do not meet the definition of a MDMS platform

would be considered in this intervention. For journeys under a single ticket exceeding 12 hours, the right to compensation should arise only in relation to the delay affecting the specific individual leg (or through-ticket). This should not apply where the journey under the single ticket involves a night train. In addition, railway undertakings should not be liable for the rights under this proposed policy intervention where a ticket vendor or tour operator combines its services in a single ticket without respecting the applicable minimum connection times. Where ticket vendors or tour operators fail to comply with this requirement, they should be liable to offer the choice to the passenger between the reimbursement of the single ticket and the reimbursement of the re-routing costs incurred by the passenger. Furthermore, they should be liable to pay a compensation of 75% of the amount paid for the single ticket. Consistently with the current protection of passengers for single-leg rail journeys under the Regulation, the liability for passenger rights would remain with the railway undertaking whose delayed or cancelled service caused a missed connection under a single ticket[72]. At the same time, railway undertakings whose services under a single ticket are missed due to a missed connection shall allow the passenger to continue the journey on their next service, subject to the availability of seats. Moreover, railway undertakings may entrust another railway undertaking, ticket vendor or tour operator with the processing of the rights to reimbursement, rerouting, assistance and compensation. Passengers should be clearly informed before purchase of the single ticket about this transfer of tasks. This transfer should not affect the liability of the transferring railway undertaking.

Hence, all passengers with a single ticket would get a comprehensive protection in the event of a travel disruption. As a result of the intervention, the scope of journeys protected by passenger rights would be extended from connecting journeys under through-tickets to all connecting journeys insofar these are bought under a single ticket for regional, long-distance and international rail services.

6. IMPACTS OF THE POLICY INTERVENTION

This section summarises the main expected economic, social and environmental impacts of the proposed policy intervention.

The proposed intervention is assumed to be implemented from 2028 onwards, so the assessment has been undertaken for the 2028-2050 period and covers the EU Member States. Costs and benefits are expressed as present value over the 2028- 2050 period, using a 3% discount rate. All costs and benefits are expressed in 2024 prices.

The estimation of the costs and benefits of introducing rights for 'single tickets', beyond what is currently applicable for through-tickets, relies on the projected number of journeys booked on one platform in a single transaction that are affected by train delays and cancellations resulting in a missed connection. Data was collected in the context of the support study[73] on rail passenger numbers (regional, long-distance and international

[72] While not mandated by the intervention, railway undertakings may decide to develop industry-level operational rules, modelled for instance on AJC/HOTNAT, to share liability and cooperate with regard to passenger assistance.

[73] Milieu consulting and Transport & Mobility Leuven (2026), Support study for a targeted revision of Regulation (EU) 2021/782 on rail passengers' rights and obligations.

passengers), punctuality performance, share of train cancellations, and the type of rights triggered by the missed connection (assistance, re-routing, reimbursement, compensation).

Costs and benefits were estimated in the context of the support study drawing on previous impact assessments[74], publicly available data (notably from Eurostat and the European Union Agency for Railways), feedback received through the call for evidence (see a summary in Annex 2), and targeted stakeholder interviews. Additional data was drawn from the national-level information gathered in the process of preparing the implementation report on the application of Regulation (EU) 2021/782. More detailed explanations on the methodology and results at Member State level are provided in Annex 3.

6.1. ECONOMIC IMPACTS

6.1.1. Impact on passengers

The measure is expected to benefit passengers in the event of a missed connection during a multi-operator journey bought under a single ticket by granting them full passenger rights (such as re-routing, reimbursement, compensation, and assistance) if they miss a connection on a rail journey involving multiple operators (regional, long-distance and international). In addition, passengers will also benefit from reduced hassle costs since they will have the right to claim their passenger rights from the rail operator whose delayed or cancelled service led to a missed connection.

Benefits for passengers due to re-routing, reimbursement, compensation, and assistance

Passengers with single tickets will have the right to **re-routing or reimbursement** where their arrival at the final destination under that single ticket is reasonably expected to be delayed by at least 60 minutes due to a missed connection. In such a situation, the passenger will have a choice between: (i) renouncing their journey and get full reimbursement of the single ticket; (ii) re-routing or continuation of the journey free of charge, either at the earliest opportunity or at a later date, at the passenger's convenience. Based on the available evidence, the proportion of passengers asking for re-routing is assumed at 90%[75]. For the purpose of the analysis, it is assumed that those 90% of passengers choosing re-routing will be re-routed in respect of all cancelled services as well as those delayed by at least 60 minutes[76]. However, as rerouting may also be needed when delays are shorter than 60 minutes, sensitivity analysis has been further performed as shown in section 6.5. Out of

[74] SWD(2017)318 final, SWD(2023)386. It should be noted that the assessment in the context of the SWD(2017)318 was not focused on individual measures, and limited data was available as acknowledged in the staff working document. The assumptions for quantifying the costs and benefits therefore draw on the SWD(2023)386 and further updated in the context of the support study.

[75] Milieu SRL (2026), Support study for the report on the implementation and results of Regulation (EU) 2021/782 on rail passengers' rights and obligations. It should be noted that in some cases the AJC and HOTNAT agreements are operational and some passengers on some multi-operator trips will be assisted in the baseline, albeit on a voluntary basis. However, the number of passengers assisted is not available. Also, some passengers neither ask for reimbursement nor for re-routing but simply abandon their journey without asking for reimbursement despite being eligible. For example, Germany reports 60-70% for re-routing, 10-15% for reimbursement, indicating that 15-30% choose neither.

[76] SWD(2023)386

the remaining 10% of passengers who are assumed not to request re-routing, it is further assumed that only 38% of them will actually ask for a reimbursement, with the rest making no reimbursement claim[77].

The benefits for the passengers consist of either: 1) the original ticket price that is reimbursed, multiplied by the number of affected passengers, or 2) not having to bear the cost of buying a new ticket or tickets at same prices to get to their final destination thanks to the re-routing offered by the railway undertaking. The average ticket price per Member State for regional, long-distance and international trips has been calculated based on the railway undertakings' revenues[78], the number of passengers[79] and the estimated length of regional, long-distance and international trips. Expressed as present value over 2028-2050, relative to the baseline, the benefits due to reimbursement or re-routing (see Table 2) are estimated at EUR 5.84 billion (i.e. EUR 182.3 million for reimbursement and EUR 5.66 billion for re-routing).

Where they have single tickets, passengers will also have the right to **compensation** in case they do not ask for reimbursement and provided that they arrive at the final destination with a delay of at least 60 minutes between the place of departure and the final destination stated in their single ticket. As above, it is assumed that 90% are expected to prefer re-routing. The proportion of passengers actually requesting compensation out of those that experience a delay of at least 60 minutes and do not ask for reimbursement is assumed at 38%[80]. At the same time, for journeys under a single ticket exceeding 12 hours, the right to compensation should arise only in relation to the delay affecting the specific individual transport contract, which corresponds to the baseline. This exemption should not apply where the journey under the single ticket involves a night train. Given the uncertainty to establish the number of passengers affected by this exemption, the assumption above is retained. In line with the RPRR, a compensation of 25% of the ticket price is assumed for delays of 60 to 119 minutes and 50% for delays above 120 minutes. It is also assumed that the re-routed passengers due to a cancellation will be delayed for 60-119 minutes, and benefit of a compensation of 25% of the ticket price, as they will typically be assigned to the next train one hour later. The compensation benefits for passengers, expressed as present value over 2028-2050, relative to the baseline, are estimated at EUR 632.3 million at EU level (see Table 2). Given the uncertainties in estimating compensation benefits and costs, a sensitivity analysis on the proportion of passengers actually requesting compensation is elaborated in section 6.5.

Passengers will equally have the right to **assistance** when a cancelled or delayed service causes a missed connection. Such assistance can comprise, depending on the circumstances, basic provision of information, meals, refreshments and accommodation. Based on the interviews with stakeholders, the average cost of such assistance is assumed

[77] In line with SWD(2023)386, the share of passengers that claim reimbursement has been assumed to be equal to that of passengers that claim reimbursement for travel by buses and coaches, in lack of specific data for rail.
[78] IRG-Rail (2024), 13th Market Monitoring Report, based on railway undertaking revenues for 2023. See Annex 3 for further explanation.
[79] Source: Eurostat.
[80] SWD(2023)386. Furthermore, SNCF (France) confirmed in an interview that for TGV, 40% of the passengers who experienced delays made a claim and received a compensation.

to be EUR 10 per passenger affected by the disruption and 5% of passengers are assumed to request assistance[81]. Expressed as present value over 2028-2050, relative to the baseline, the assistance benefits for passengers are estimated at EUR 169.6 million at EU level (see Table 2).

The total benefits to passengers for re-routing or reimbursement, compensation, and assistance, expressed as present value over 2028-2050 relative to the baseline, are estimated at EUR 6.64 billion at EU level (see Table 2).

Hassle costs savings for passengers

In addition to re-routing or reimbursement, compensation and assistance, the proposed intervention is expected to reduce **hassle costs** for passengers. This includes the efforts required to get the information by the passengers, the waiting time due to the missed connections and the effort to search for new tickets[82]. The hassle cost savings are quantified by multiplying the number of affected tickets by the time saved per ticket and the passengers' average value-of-time. The time saved per ticket is conservatively assumed at 15 minutes[83], and the average value of time at EUR 11.68 per hour at EU level[84], adjusted for country-specific differences and distinguishing between professional and leisure travel[85]. Total hassle costs savings for passengers, expressed as present value over 2028-2050, relative to the baseline, are estimated at EUR 1.14 billion at EU level (see Table 2).

Total benefits for passengers

Total benefits for passengers, expressed as present value over 2028-2050 relative to the baseline, are thus estimated at EUR 7.78 billion at EU level (see Table 2). Around 73% of these total benefits are related to re-routing. Another 15% of the total benefits represent hassle costs savings.

Table 2: Benefits for passengers at EU level (in million EUR, 2024 prices)

	2028	2030	2040	2050	Present value 2028-2050
Benefits due to re-routing, reimbursement, compensation, and assistance	443.2	465.0	375.0	291.0	6,642.8

[81] Assistance is estimated at 5% by Germany in its Country Research Template report, which records national-level information regarding the application of Regulation (EU) 2021/782. In France, requests for assistance are approximately 3 times less frequent than the requests for compensation. Since the percentage of passengers requesting compensation (among those entitled to do it) is estimated to 38%, the percentage of delayed passengers receiving assistance represents 12% in France.

[82] This does not include the cost of the actual ticket.

[83] A conservative assumption of 15 minutes savings is used. Drawing on a study by the World Bank (https://thedocs.worldbank.org/en/doc/3ecf7262788a3ec69c8a45bbd3342a28-0080022021/related/Spring2021-governance-talk-asli-0525.pdf), each complaint handling would benefit of 15 minutes saved under a conservative approach (lower bound) and up to 60 minutes saved (upper bound). See also SWD(2023)386.

[84] European Commission (2019): Handbook on the External Costs of Transport.

[85] Source: https://www.autorite-transports.fr/wp-content/uploads/2020/07/enquete-tagv-2019.pdf. From this, it is assumed that 27% of the train trips have a professional purpose, the remaining 73% are assumed to be leisure trips.

	2028	2030	2040	2050	Present value 2028-2050
Re-routing benefits	377.4	396.0	319.5	248.0	5,658.6
Reimbursement benefits	12.1	12.7	10.3	8.0	182.3
Compensation benefits	42.4	44.4	35.7	27.6	632.3
Assistance benefits	11.4	11.9	9.5	7.4	169.6
Hassle cost savings	76.9	80.5	63.8	48.9	1,136.9
Total benefits for passengers	**520.1**	**545.5**	**438.7**	**339.9**	**7,779.7**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

6.1.2. Impact on railway undertakings

For railway undertakings, the proposed measure would require operational adjustments. It would oblige them to extend the full range of passenger rights (reimbursement, re-routing, compensation and assistance) to more travellers, ensuring wider protection under single tickets. In particular, they would be liable to ensure these rights where the delay or cancellation of their service caused a missed connection for a passenger with a service of another railway undertaking, provided that these services are covered by the same single ticket. This would also lead to some administrative costs related to claims handling and process adaptation. However, undertakings already participating in AJC or HOTNAT agreements are likely to face lower additional costs, particularly for re-routing. At the same time, it could be expected that greater consumer confidence resulting from passenger rights would increase demand for rail travel thereby benefiting rail operators, though this effect cannot be quantified.

One-off and recurrent adjustment costs for railway undertakings

Railway undertakings are expected to incur **one-off adjustment costs** to ensure passenger rights in case of missed connections under a single ticket. It will be important for railway undertakings to define the extent of their financial liability, coordinating disruption agreements with other railway undertakings, updating technical request-handling processes, revising terms and passenger information, training sales and support staff, and reviewing the legal and financial implications. While not mandated by the intervention, railway undertakings may decide to enhance their mutual cooperation with a view to reciprocal assistance and information sharing necessary to ensure effective passenger rights (with the existing AJC and HOTNAT frameworks as likely bases for such cooperation), being understood that the railway undertaking whose delayed or cancelled service causes a missed connection shall by default bear the corresponding liability.

The one-off effort required is estimated at 100 person-days of work per railway undertaking. Assuming 7.2 working hours per day on average[86] and the tariff rates by Member State for the ISCO 3 category (technicians and associate professionals)[87] in 2024 prices, the one-off adjustment costs for the 158 railway undertakings[88] is estimated at EUR

[86] Actual and usual hours of work - Statistics Explained - Eurostat
[87] Eurostat Structure of earnings survey, Labour Force Survey data for Non-Wage Labour Costs.
[88] It is estimated that 158 railway undertakings will be directly affected by the intervention, of which 9 SMEs. Source: desk research based on websites of railway regulators, railway undertakings and competent authorities.

4 million in 2028 (of which EUR 216,000 for SME railway undertakings).

Railway undertakings will also incur **recurrent adjustment costs** related to the assistance, reimbursement, re-routing and compensation of passengers.

For most ***re-routing*** cases, when the passenger can continue the journey by taking the next train where seats are available which were eventually not sold, this does not represent a cost. However, in some cases, there might be costs to bear when re-routing is done by paying a ticket (or seat reservation) to another railway undertaking. There is no data available on how many of such operator-to-operator transactions could be performed. Moreover, since this cost is paid by railway undertakings to other railway undertakings, at aggregate level the impact is assumed to be neutral, as the first one bears the costs, and the second one gets the benefits of selling an otherwise unsold ticket. At the same time, it is noted that this may impact individual railway undertakings differently, depending on the route, the number of delays/cancellations they face that result in missed connections, and hence the impact of this re-routing cost will not be neutral at an individual rail operator level. However, given the limited availability of data, it is not possible to establish costs at individual railway undertaking level.

The adjustment costs related to the ***reimbursement*** of passengers are derived by multiplying the ticket price that is reimbursed with the number of affected passengers. The proportion of passengers actually requesting reimbursement out of those that experience a delay of at least 60 minutes is assumed at 38%[89]. As explained in detail in Annex 3, the average ticket price per Member State for regional, long-distance and international trips has been calculated based on the railway undertakings' revenues[90], the number of passengers[91] and the estimated length of regional, long-distance and international trips. Expressed as present value over 2028-2050, relative to the baseline, the adjustment costs for railway undertakings related to reimbursement (see Table 3) are estimated at EUR 182.3 million (of which EUR 1 million for SME railway undertakings).

The adjustment costs related to ***compensation***, are calculated in line with the RPRR, where a compensation of 25% of the ticket price is assumed for delays of 60 to 119 minutes and 50% for delays above 120 minutes. It is also assumed that the re-routed passengers due to a cancellation will be delayed for 60-119 minutes and will need to be paid a compensation of 25% of the ticket price, as they will typically be assigned to the next train one hour later. The adjustment costs for railway undertakings related to compensation are estimated at EUR 632.3 million, expressed as present value over 2028-2050 relative to the baseline (of which EUR 3.6 million for SME railway undertakings). At the same time, for journeys under a single ticket exceeding 12 hours, the right to compensation should arise only in relation to the delay affecting the specific individual transport contract, which corresponds to the baseline. This exemption should not apply where the journey under the single ticket involves a night train. Given the uncertainty to establish the number of passengers affected by the exemption, the exact reduction of costs cannot be precisely quantified and would be

[89] SWD(2023)386
[90] IRG-Rail (2024), 13th Market Monitoring Report, based on railway undertaking revenues for 2023.
[91] Source: Eurostat.

within the margin of the sensitivity analysis on the proportion of passengers actually requesting compensation in section 6.5.

Railway undertakings will equally have to provide ***assistance*** when a cancelled or delayed service causes a missed connection. Such assistance can comprise, depending on the circumstances, basic provision of information, meals, refreshments and accommodation. As explained in detail in Annex 3, based on the interviews with stakeholders, the average cost of such assistance is assumed to be EUR 10 per passenger affected by the disruption and 5% of passengers are assumed to request assistance[92]. Expressed as present value over 2028-2050, relative to the baseline, the adjustment costs for railway undertakings related to assistance of passengers are estimated at EUR 169.6 million at EU level (of which EUR 1 million for SME railway undertakings).

Thus, the total one-off and recurrent adjustment costs for railway undertakings are estimated at EUR 988.2 million (see Table 3), expressed as present value over 2028-2050 relative to the baseline (of which EUR 5.8 million for SME railway undertakings).

Recurrent administrative costs for railway undertakings

Railway undertakings will also experience recurrent administrative costs as they will need to handle an increased number of re-routing, reimbursement, compensation and assistance requests. This cost is derived by estimates of the time needed to handle each of the requests (re-routing, reimbursement, compensation and assistance), multiplied by the total number of requests in each Member State, and the tariff rates by Member State for the ISCO 3 category (technicians and associate professionals)[93] in 2024 prices.

The time needed to handle compensation and reimbursement claims (15 minutes) is derived based on the stakeholder consultation and previous impact assessments[94]. For the time needed to handle re-routing (5 minutes), it is assumed that a large proportion of re-routing will consist of simply allowing the passenger on the next available train, which would involve little administrative time, and only in a minor number of cases more complex re-routing would be offered as an alternative. For assistance, which can involve simple information provision, but also handling out refreshments and meals as well as the booking of hotels, 5 minutes are assumed per request. No recurrent administrative costs are assumed where requests are handled through automation. It is assumed that automation would cover 15% of requests for assistance, 20% of requests for reimbursement and compensation and 30% of requests for re-routing in 2028, rising to 90% by 2050. Given the uncertainty, sensitivity analysis has been further performed.

[92] Assistance is estimated at 5% by Germany in its Country Research Template report, which records national-level information regarding the application of Regulation (EU) 2021/782. In France, requests for assistance are approximately 3 times less frequent than the requests for compensation. Since the percentage of passengers requesting compensation (among those entitled to do it) is estimated to 38%, the percentage of delayed passengers receiving assistance represents 12% in France.

[93] Eurostat Structure of earnings survey, Labour Force Survey data for Non-Wage Labour Costs.

[94] SWD(2023)386

The total recurrent administrative costs for railway undertakings are estimated at EUR 1.15 billion (see Table 3), expressed as present value over 2028-2050 relative to the baseline (of which EUR 6.5 million for SME railway undertakings).

For the purpose of 'one in, one out' approach and the Calculator of Administrative Costs (AC) & Administrative Burdens (AB), the annual average recurrent administrative costs[95] for railway undertakings are estimated at EUR 96.1 million relative to the baseline (EUR 0.55 million for SMEs[96] and EUR 95.53 million for non-SME railway undertakings[97]).

Total costs for railway undertakings

The total costs for railway undertakings are estimated at EUR 2.14 billion (see Table 3), expressed as present value over 2028-2050 relative to the baseline (of which EUR 12.4 million for SME railway undertakings). Adjustment costs related to the compensation of the passengers provide around 30% of the total costs. Around 29% of these total costs are administrative costs for handling compensation requests and another 21% administrative costs for handling re-routing requests.

To get insights in the proportionality of the intervention, it is instructive to consider the 2028 costs for railway undertakings under the simplifying assumption that they fall entirely on the main national incumbent railway undertaking in each Member State. France and Germany have been selected here, as they represent the EU's two largest rail markets, and are jointly accounting for EUR 121 million i.e. 64% of the total EU intervention cost of EUR 188.7 million. For the national incumbents, and under the assumption, this would amount to EUR 87.4 million for Deutsche Bahn (Germany) and EUR 33.1 million for SNCF (France). Against DB's Integrated Rail System revenues of EUR 26.2 billion in 2024[98] and SNCF Group revenues of EUR 43.4 billion in the same year[99], these figures represent only 0.33% and 0.08% of their revenue bases, respectively. While not part of the baseline, it could be expected that some of these costs (especially related to re-routing) would be incurred anyway with the industry announcements to continue improving the industry-solutions, such as the AJC[100].

Table 3: Adjustment and administrative costs for railway undertakings at EU level (in million EUR, 2024 prices)

	2028	2030	2040	2050	Present value 2028-2050
Adjustment costs	69.8	69.0	55.5	43.0	988.2

[95] For the purpose of the Calculator of Administrative Costs (AC) & Administrative Burdens (AB), the annual average recurrent administrative costs are derived as simple averages (non-discounted) over a ten year period (2028-2037).
[96] EUR 60,811 for each of the 9 SME railway undertakings.
[97] EUR 641,166 for each of the 149 of the non-SME railway undertakings.
[98] https://ibir.deutschebahn.com/2024/en/combined-management-report/business-development/income-situation/revenues/
[99] https://echanges.dila.gouv.fr/OPENDATA/AMF/125/2025/03/FC125573457_20250312.pdf
[100] https://www.cer.be/cer-press-releases/rail-sector-continues-to-improve-passenger-experience-in-international-travel CER and its members have committed, under the CER Ticketing Roadmap, to further develop and expand the Agreement on Journey Continuation (AJC) as a key instrument to improve the passenger experience in international rail. CER indicates that AJC will be progressively enhanced.

	2028	2030	2040	2050	Present value 2028-2050
One-off adjustment costs	4.0				4.0
Re-routing costs	0.0	0.0	0.0	0.0	0.0
Reimbursement costs	12.1	12.7	10.3	8.0	182.3
Compensation costs	42.4	44.4	35.7	27.6	632.3
Assistance costs	11.4	11.9	9.5	7.4	169.6
Administrative costs	118.9	114.5	51.8	9.9	1,148.3
Re-routing administrative costs	46.1	44.5	20.3	4.2	448.9
Reimbursement administrative costs	5.0	4.8	2.2	0.4	48.7
Compensation administrative costs	64.7	62.2	27.9	5.1	621.8
Assistance administrative costs	3.0	2.9	1.3	0.2	28.8
Total costs for RUs	188.7	183.5	107.3	52.9	2,136.5

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Other impacts on railway undertakings

While difficult to quantify, stronger passenger rights protection following the intervention is expected to boost consumer confidence and stimulate demand for rail travel. This benefit is highlighted by the 2021 Steer and KCW study[101], as well as by the Eurobarometer survey on Multimodal Digital Mobility Services[102], where 18% responded that they avoid rail connections operated by different rail operators for fear of being stranded in case of a missed connection. In the same Eurobarometer survey, 12% of the respondents indicated that they would be encouraged to book a more environmentally friendly journey if it offered them the same level of passenger rights in case of delays, cancellations, or missed connections. The replies to the call for evidence point to the same conclusion, with 27 citizens indicating that the lack of rights and lower affordability of rail compared to air travel make it difficult for them to choose rail as a form of transport, and with 5 organisations arguing that stronger passenger protection can increase consumer confidence in rail (see Annex 2). With all this, it can therefore be expected that higher consumer confidence will translate into higher demand for rail travel. On the other hand, railway undertakings may pass additional costs on to consumers through higher ticket prices, the extent of which will depend on market competition, price regulation, state intervention and individual operators' cost structures and efficiency. The overall impact on the demand for rail travel is however expected to be positive, although not possible to quantify.

6.1.3. Impact on intermediaries

Intermediaries, including online ticket vendors and travel organisers, would need to familiarise themselves with the new regulation and may also need to adapt their policies and procedures to ensure compliance. In particular, when offering single tickets, they would have to adhere at least to the applicable minimum connection times. Where ticket vendors or tour operators fail to comply with this requirement, they should be liable to offer the choice to the passenger between the reimbursement of the single ticket and the reimbursement of the re-routing costs incurred by the passenger. Furthermore, they should

[101] Steer and KCW (2021), Final Report "Long-distance cross-border passenger rail services", p. 345.
[102] European Commission (2025). *Eurobarometer 551 Multimodal Digital Mobility Service Report.* Accessed https://europa.eu/eurobarometer/surveys/detail/3178, p. 55.

be liable to pay a compensation of 75% of the amount paid for the single ticket. At the same time, intermediaries may benefit from a larger volume of ticket bookings carried out via them.

One-off adjustment costs for intermediaries

Intermediaries are third parties that connect railway undertakings with passengers. Most are small travel agencies or tour operators with limited rail sales, often relying on specialised aggregators. A few major players, such as Trainline, Omio, Rail Europe and EuroTrain, focus on reselling tickets from multiple railway undertakings directly to passengers. Ticket vendors and tour operators may distribute combined tickets from different railway undertakings for a journey. Currently, if they do so on their own initiative, they must refund the full ticket price and pay 75% compensation of that amount if connections are missed, unless passengers were clearly informed in advance before purchase that the tickets represent separate contracts[103]. This particular liability would no longer apply under this intervention given that these ticket combinations would now entitle passengers to a full set of rights under the single ticket protection. At the same time, this liability would be substituted by another liability regime where ticket vendors and tour operators do not adhere to the applicable minimum connection times when offering a single ticket. The proposed measure is expected to incentivise ticket vendors and tour operators to improve their offer of single tickets, in order to reduce the likelihood of recurring reimbursements and compensation. Given the uncertainty to establish the number of passengers affected, the costs cannot be quantified although they are expected to be limited.

The one-off adjustment costs for intermediaries cover the effort to understand the regulation and to review the legal consequences. The specialised rail ticket sellers are expected to adapt the front-end website (update the terms and conditions), to adapt their overall strategy, and to take contact with the railway undertakings with whom they have a commercial agreement. The effort per intermediary is estimated at 0.5 person-day in 2028. There were 121,276 intermediaries (ticket vendors, tour operators and other reservation service and related activities) according to Eurostat in 2024[104], of which over 99% are SMEs. Assuming 7.2 working hours per day on average[105] and the tariff rate for the ISCO 3 category (technicians and associate professionals)[106] by Member State in 2024 prices, the one-off adjustment costs for the intermediaries are estimated at EUR 12.84 million (of which EUR 12.82 million for SME intermediaries).

Other impacts on intermediaries

It can also be expected that intermediaries will gain from the intervention as consumers will be more likely to book multi-operator journeys via them where these come with full

[103] Article 12(4)-(5) of RPRR
[104] ECTA estimates it rather to 80,000-90,000 and attributes the difference with Eurostat to including/excluding 1-person travel consultants.
[105] Actual and usual hours of work - Statistics Explained - Eurostat
[106] Eurostat Structure of earnings survey, Labour Force Survey data for Non-Wage Labour Costs.

passenger rights. In particular, their revenues may increase if more single tickets are bought through them. This impact was however not possible to quantify.

6.1.4. Impact on National Enforcement Bodies (NEBs)

Public authorities, particularly national enforcement bodies (NEBs) responsible for monitoring the application of the rules and handling passenger complaints, would also be affected by the policy intervention.

The planned initiative is expected to generate **one-off adjustment costs** for national enforcement bodies (NEBs), mainly linked to understanding the amendment, assessing its legal implications, and adapting complaint-handling procedures. The effort per NEB is assumed at 5 person-days, resulting in total one-off adjustment costs of EUR 0.03 million in 2028 at EU level. While the number of complaints may increase due to more single tickets, greater legal clarity will simplify enforcement. Overall, additional enforcement costs for NEBs and other complaint bodies are expected to remain very limited.

6.1.5. Impacts on competition

The intervention is likely to exert a positive impact on competition within the railway sector. By extending passenger rights to single ticket journeys across multiple railway undertakings, it incentivises new market entrants, particularly smaller undertakings, through network effects: their services gain visibility and viability when bundled with larger operators on digital platforms, mirroring how EU rail liberalisation since 2001 has spurred new entry and resulted in a drop in fares in those markets with higher competition[107]. The increased consumer confidence is also expected to lead to stronger competition between rail and air, especially with regard to short-haul connections, thereby contributing to modal shift towards more sustainable transport options.

6.1.6. Impacts on competitiveness

For railway undertakings, as shown in Table 3 above, the policy intervention is expected to result in total one-off and recurrent costs of EUR 2.14 billion expressed as present value over the period 2028-2050. Of this, adjustment costs represent EUR 988.2 million and administrative costs EUR 1.15 billion over the period 2028-2050. These costs may be passed on to consumers through higher ticket prices. The extent of the pass through will depend on market competition, price regulation, state intervention and individual operators' cost structures and efficiency and it is thus not possible to quantify. At the same time, while not quantifiable, the intervention is expected to result in higher consumer confidence, which can in turn be expected to result in greater demand for rail travel thereby also benefiting railway undertakings. The policy intervention also creates visibility for and incentivises new entrants in the rail services market, enabling them to innovate and compete with established railway undertakings.

[107] See for instance: https://op.europa.eu/en/publication-detail/-/publication/4ea76998-7955-11ef-bbbe-01aa75ed71a1

For intermediaries, the policy intervention is projected to result in one-off adjustment costs of EUR 12.8 million in 2028. Intermediaries are expected to gain from the intervention due to the expected higher number of transactions concluded through them.

The intervention is also expected to result in a positive impact on innovation, for both railway undertakings and intermediaries. With increased competition, they will need to improve user experience and customer care.

The entire economy is likely to benefit from these developments since transport represents a significant share of households' expenditures (12.8% in 2023)[108] and is a critical input for many economic sectors, notably tourism. This might result in knock-on effects throughout the entire economy in the long term, leveraging the initial impact on the transport sector.

The policy intervention will apply equally to all EU and non-EU intermediaries insofar as they will need to offer journeys involving multiple railway operators under a single ticket. It therefore does not introduce trade distortions. The impact on international competitiveness is expected to be neutral. The economic effects are confined to improving efficiency and performance within the EU passenger transport market.

6.1.7. Impacts on SMEs

Most SMEs in the rail sector are suppliers and thus outside the initiative's scope. Of the 158 railway undertakings affected, only 9 are SMEs[109]. Given their smaller scale, often focused on touristic or regional routes, typically passenger volumes are about one-tenth of those of larger operators. Taking into account the share of SMEs in the total number of railway undertakings in the scope and the fact that passenger volumes for SMEs are one-tenth of those of larger operators, the adjustment and administrative costs for SME railway undertakings are estimated at EUR 5.8 million and EUR 6.5 million, respectively, expressed as present value over 2028-2050. Thus, the total costs for SME railway undertakings would amount at EUR 12.4 million over 2028-2050, relative to the baseline (see Table 4).

The policy intervention is expected to create visibility for and incentivises new entrants in the rail services market, typically SMEs, enabling them to innovate and compete with established railway undertakings. Improved passenger rights linked to single tickets are expected to benefit SME railway undertakings in particular by enabling them to participate more fully in network effects that are currently dominated by large incumbent railway undertakings. When multi-leg journeys involving several operators are covered by a single ticket, passengers will enjoy clear, enforceable rights to assistance, reimbursement, and compensation in case of disruption, which increases trust in itineraries that include smaller railway undertakings alongside established ones.

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[108] This share includes the purchase of personal transport equipment, the operation of personal transport equipment and purchased transport services (for both passenger and goods transport services). Statistical pocketbook 2025 - Mobility and Transport - European Commission

[109] Source: desk research based on websites of railway regulators, railway undertakings and competent authorities.

Table 4: Adjustment and administrative costs for SME railway undertakings at EU level (in million EUR, 2024 prices)

	2028	2030	2040	2050	Present value over 2028-2050
Adjustment costs	0.59	0.39	0.32	0.25	5.82
One-off adjustment costs	0.22				0.22
Re-routing costs	0.00	0.00	0.00	0.00	0.00
Reimbursement costs	0.07	0.07	0.06	0.05	1.04
Compensation costs	0.24	0.25	0.20	0.16	3.60
Assistance costs	0.06	0.07	0.05	0.04	0.97
Administrative costs	0.68	0.65	0.29	0.06	6.54
Re-routing administrative costs	0.26	0.25	0.12	0.02	2.56
Reimbursement administrative costs	0.03	0.03	0.01	0.00	0.28
Compensation administrative costs	0.37	0.35	0.16	0.03	3.54
Assistance administrative costs	0.02	0.02	0.01	0.00	0.16
Total costs for SME RUs	**1.27**	**1.05**	**0.61**	**0.30**	**12.36**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

For intermediaries, over 99% are SMEs according to Eurostat data. One-off adjustment costs for SME intermediaries are estimated at EUR 12.82 million, expressed as present value over 2028-2050. Intermediaries are expected to gain from the intervention due to the expected higher number of transactions concluded through them, although it was not possible to quantify this impact. For SME intermediaries, being able to package several legs into a single ticket, intermediaries can market rail as a simple, "one-click" option comparable to air tickets, rather than a fragmented set of separate segments that consumers must piece together themselves with often no passenger rights in case of missed connections. This enables them to design and promote attractive, door-to-door and cross-border itineraries, integrate rail more effectively into wider travel offers, and provide clearer information on price, conditions and protection across the whole rail journey. In turn, this improves the visibility and appeal of rail for end-users, supports modal shift from less sustainable modes, and helps unlock additional demand and revenue for the rail sector as a whole.

A total of 14 stakeholders that replied to the call for evidence were SMEs (10 industry associations[110] and 4 SME intermediaries). None of them was an SME railway undertaking. SME intermediaries/travel agencies support the initiative but claimed that liability for disruptions should rest with the railway undertaking, citing their limited ability to intervene in real time during such disruptions. It needs to be recalled that this initiative puts liability for passenger rights under a single ticket on the railway undertaking whose delayed or cancelled service led to a missed connection under a single ticket and there is no liability for passenger rights imposed on the intermediary.

[110] CER, UITP, ALLRAIL, GBTA, WKO, ECTAA, VDV, Pearle, EU TravelTech and UTPF

6.2. SOCIAL IMPACTS

In terms of social impacts, the policy intervention is expected to benefit all passengers, including those with disabilities or reduced mobility, who may face increased challenges during journeys with multiple connections. It is also expected to benefit young people, who are more likely than other age groups to combine rail legs operated by different operators[111].

The impact on employment is expected to be positive for railway operators, due to a likely increase in the use of rail passenger services given the potential increase in demand driven by improved trust in rail transport thanks to the measure.

The impacts of the policy intervention are likely to be spread across EU Member States with railways on their territory, especially for cross-border journeys. The policy measure will also address the concerns of citizens who avoid rail journeys run by multiple rail operators for fear of being stranded in the case of a missed connection[112].

6.3. ENVIRONMENTAL IMPACTS

Improving rail passenger rights and trust in rail transport overall is expected to improve its attractiveness, and may result in a lower use of other, less environmental-friendly alternatives. This was also confirmed by several of the replies to the call for evidence, in which 27 citizens noted that the lack of rights and the lower affordability of rail compared to air travel (particularly on multi-operator trips) make it difficult for people to choose rail as a form of transport. Of these respondents, 8 specifically mentioned that they choose road or air transport over rail because rail is too complicated or expensive for international trips.

With the potential increase in demand for rail services, the targeted revision is expected to contribute to the goals of the Sustainable and Smart Mobility Strategy, which include doubling high-speed rail traffic by 2030 and making cross-border tickets easier to use and to buy[113]. The initiative is also in line with the European Green Deal objectives and the **European Climate Law**[114]. **No significant harm** is expected on the environment due to the policy intervention. The initiative contributes towards Sustainable Development Goal (SDG) #13 ("Climate action").

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[111] According to the Eurobarometer on Multimodal Digital Mobility Services, page 50, younger respondents (15-39) are more likely to have combined rail legs operated by different operators 'every few months or more frequently, for different journeys' (12%-13%) or 'every few months or more frequently, always for the same journey' (16-19%), compared to those aged 40-55 or 55+ (4-8% and 4-9%, respectively). Source: https://europa.eu/eurobarometer/surveys/detail/3178

[112] According to the Eurobarometer survey on Multimodal Digital Mobility Services, 18% of respondents avoid rail connections operated by different rail operators for fear of being stranded in case of a missed connection.

[113] Sustainable and Smart Mobility Strategy, pp. 3 and 8.

[114] Regulation (EU) 2021/1119 establishing the framework for achieving climate neutrality.

6.4. COST BENEFIT ANALYSIS

The estimates of costs and benefits, expressed as present value over 2028-2050, are summarised in Table 5.

Table 5: Summary of costs and benefits of the policy intervention - present value over 2028-2050 compared to the baseline (in million EUR, 2024 prices)

	Difference to the baseline
Passengers	
Benefits due to re-routing, reimbursement, compensation, and assistance	6,642.8
Re-routing benefits	5,658.6
Reimbursement benefits	182.3
Compensation benefits	632.3
Assistance benefits	169.6
Hassle cost savings	1,136.9
Railway undertakings	
Adjustment costs	988.2
One-off adjustment costs	4.0
Re-routing costs	0.0
Reimbursement costs	182.3
Compensation costs	632.3
Assistance costs	169.6
Administrative costs	1,148.3
Re-routing administrative costs	448.9
Reimbursement administrative costs	48.7
Compensation administrative costs	621.8
Assistance administrative costs	28.8
Intermediaries	
One-off adjustment costs	12.8
National Enforcement Bodies	
One-off adjustment costs	0.03
Total costs	**2,149.4**
Total benefits	**7,779.7**
Net benefits	**5,630.3**
Benefits to costs ratio	**3.6**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Total costs due to the policy intervention are projected at EUR 2.15 billion, expressed as present value over 2028-2050 relative to the baseline. Adjustment costs for railway undertakings related to the compensation of the passengers represent 29% of the total costs and the administrative costs for handling the compensation requests another 29% of the total costs. Administrative costs for railway undertakings for handling the re-routing requests of the passengers contribute another 21% of the total costs, while adjustment costs related to reimbursement and assistance provide each 8% of the total costs.

Total benefits due to the policy intervention are estimated at EUR 7.78 billion, expressed as present value over 2028-2050 relative to the baseline. Benefits for passengers due to re-routing represent 73% of the total benefits and the hassle costs savings 15% of the total benefits. Compensation benefits for passengers provide another 8% of the total benefits, and reimbursement and assistance benefits around 2% each.

Overall, the policy intervention results in **net benefits** estimated at EUR 5.63 billion expressed as present value over 2028-2050 relative to the baseline. The benefits to costs ratio is estimated at 3.6. In conclusion, the proposed intervention would significantly improve the protection of rail passengers across the EU while benefitting society at large.

6.5. SENSITIVITY ANALYSIS

Considering the uncertainty related to certain assumptions used in the analysis, sensitivity analysis has been performed with respect to:

- Share of multi-operator journeys performed under a single ticket (other than through-tickets);
- Level of automation for handling requests for compensation by railway undertakings;
- Time required for handling requests for compensation by railway undertakings;
- Time of re-routing;
- Synergies with the initiatives on Rail Ticketing Regulation (RTR) and the Regulation on Multimodal Booking (RMB)[115];
- Proportion of passengers actually requesting compensation out of those that experience a delay of at least 60 minutes and do not ask for reimbursement.

The results of the sensitivity analysis are compared to the 'central case', described in the previous sections. More detailed results of the sensitivity analysis performed are provided in Annex 3 (section 4).

Share of multi-operator journeys performed under a single ticket (other than through-tickets). The share of single tickets involving different rail operators for a single journey bought in a single transaction, other than through-tickets, is estimated at 13% at EU level in the central case. Two alternative cases have been tested: (i) 6% share of multi-operator journeys performed under a single ticket, other than through-tickets (Case A – 6%); (ii) 26% share of multi-operator journeys performed under a single ticket, other than through-tickets (Case A – 26%). The results for the two cases considered are compared to the central case. The total costs and benefits, as well as the net benefits, for the central case and the two alternative cases (Case A – 6% and Case A – 26%), expressed as present value over 2028-2050 relative to the baseline, are provided in the table below. The table shows that both alternative cases result in overall net benefits and similar benefits to costs ratio as the central case.

Table 6: Total costs, total benefits and net benefits for the central case and the two alternative cases (Case A – 6% and Case A – 26%) - present value over 2028-2050 compared to the baseline (in million EUR, 2024 prices)

	Central case	Case A – 6%	Case A – 26%
Total costs	2,149.4	1,019.6	4,362.1
Total benefits	7,779.7	3,658.1	15,851.6
Net benefits	5,630.3	2,638.5	11,489.5

[115] EU rules on multimodal digital mobility services and single digital booking & ticketing

	Central case	Case A – 6%	Case A – 26%
Benefits to costs ratio	3.6	3.6	3.6

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Level of automation for handling requests for compensation by railway undertakings. In the central case, it is assumed that automation would cover 20% of requests for compensation in 2028, rising to 90% by 2050. One alternative case is tested (Case B – 70%), where the share of requests for compensation handled automatically increases gradually from 15% in 2028 to 70% by 2050. The results for the alternative case considered is compared to the central case. The total costs and benefits, as well as the net benefits, for the central case and the alternative case (Case B – 70%), expressed as present value over 2028-2050 relative to the baseline, are provided in the table below. The table shows that the alternative case results in overall net benefits and somewhat lower benefits to costs ratio relative to the central case.

Table 7: Total costs, total benefits and net benefits for the central case and the alternative case (Case B – 70%) - present value over 2028-2050 compared to the baseline (in million EUR, 2024 prices)

	Central case	Case B – 70%
Total costs	2,149.4	2,279.9
Total benefits	7,779.7	7,779.7
Net benefits	5,630.3	5,499.7
Benefits to costs ratio	3.6	3.4

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Time required for handling requests for compensation by railway undertakings. In the central case, the average time required to handle a request for compensation (if not automated) is assumed at 15 minutes. Two alternative cases have been tested: (i) 10 minutes for handling a request for compensation by railway undertakings (Case C – 10 min); (ii) 20 minutes for handling a request for compensation by railway undertakings (Case C – 20 min). The results for the two cases considered are compared to the central case.

The total costs and benefits, as well as the net benefits, for the central case and the two alternative cases (Case C – 10 min and Case C – 20 min), expressed as present value over 2028-2050 relative to the baseline, are provided in the table below. The table shows that both alternative cases result in overall net benefits. The benefits to costs ratio is somewhat higher in Case C – 10 min and lower than in the central case in the Case C – 20 min.

Table 8: Total costs, total benefits and net benefits for the central case and the two alternative cases (Case C – 10 min and Case C – 20 min) - present value over 2028-2050 compared to the baseline (in million EUR, 2024 prices)

	Central case	Case C – 10 min	Case C – 20 min
Total costs	2,149.4	1,942.1	2,356.7
Total benefits	7,779.7	7,779.7	7,779.7
Net benefits	5,630.3	5,837.5	5,423.0
Benefits to costs ratio	3.6	4.0	3.3

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Time of re-routing. In the central case, it is assumed that passengers choosing re-routing will be re-routed in respect of all cancelled services as well as those delayed by at least 60 minutes. Two alternative cases have been tested: (i) passengers choosing re-routing will

be re-routed in respect of all cancelled services as well as those delayed by at least 5 minutes (Case D – 5 min); (ii) passengers choosing re-routing will be re-routed in respect of all cancelled services as well as those delayed by at least 120 minutes (Case D – 120 min). The results for the two alternative cases considered are compared to the central case.

The total costs and benefits, as well as the net benefits, for the central case and the two alternative cases (Case D – 5 min and Case D – 120 min), expressed as present value over 2028-2050 relative to the baseline, are provided in the table below. The table shows that both alternative cases result in overall net benefits. The benefits to costs ratio is much higher in Case D – 5 min and lower than in the central case in the Case D – 120 min.

Table 9: Total costs, total benefits and net benefits for the central case and the two alternative cases (Case D – 5 min and Case D – 120 min) - present value over 2028-2050 compared to the baseline (in million EUR, 2024 prices)

	Central case	Case D – 5 min	Case D – 120 min
Total costs	2,149.4	3,814.0	2,074.2
Total benefits	7,779.7	28,316.4	6,852.0
Net benefits	5,630.3	24,502.4	4,777.8
Benefits to costs ratio	3.6	7.4	3.3

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Synergies with the initiatives on Rail Ticketing Regulation (RTR) and the Regulation on Multimodal Booking (RMB). In the central case, the number of passengers travelling by rail is aligned with the baseline scenario of the impact assessment accompanying the RTR/RMB initiatives. In other words, as explained in section 5.1, the baseline is common to that of the impact assessment accompanying the RTR/RMB initiatives. An alternative case has been tested (Case E – RTR/RMB), where the number of passengers travelling by rail is aligned with the preferred policy option of the impact assessment accompanying the RMB and RTR initiatives. The results for the alternative case considered is compared to the central case.

The total costs and benefits, as well as the net benefits, for the central case and the alternative case (Case E – RTR/RMB), expressed as present value over 2028-2050 relative to the baseline, are provided in the table below. The table shows that the alternative case result in overall net benefits and similar benefits to costs ratio relative to the central case.

Table 10: Total costs, total benefits and net benefits for the central case and the alternative cases (Case E – RTR/RMB) - present value over 2028-2050 compared to the baseline (in million EUR, 2024 prices)

	Central case	Case E – RTR/RMB
Total costs	2,149.4	2,185.9
Total benefits	7,779.7	7,929.1
Net benefits	5,630.3	5,743.3
Benefits to costs ratio	3.6	3.6

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Proportion of passengers actually requesting compensation out of those that experience a delay of at least 60 minutes and do not ask for reimbursement. In the central case, the proportion of passengers actually requesting compensation out of those that experience a delay of at least 60 minutes and do not ask for reimbursement is assumed at 38%. Three alternative cases have been tested: (i) the proportion of passengers actually requesting compensation out of those that experience a delay of at least 60 minutes and do

not ask for reimbursement is 0% (Case F – 0%); (ii) the proportion of passengers actually requesting compensation out of those that experience a delay of at least 60 minutes and do not ask for reimbursement is 50% (Case F – 50%); (iii) the proportion of passengers actually requesting compensation out of those that experience a delay of at least 60 minutes and do not ask for reimbursement is 75% (Case F – 75%). The results for the three alternative cases considered are compared to the central case.

The total costs and benefits, as well as the net benefits, for the central case and the three alternative cases (Case F – 0%, Case F – 50% and Case F – 75%), expressed as present value over 2028-2050 relative to the baseline, are provided in the table below. The table shows that all alternative cases result in overall net benefits. The benefits to costs ratio is highest in Case F – 0% and lower in Case F – 50% and Case F – 75% relative to the central case.

Table 11: Total costs, total benefits and net benefits for the central case and the three alternative cases (Case F – 0%, Case F – 50% and Case F – 75%) - present value over 2028-2050 compared to the baseline (in million EUR, 2024 prices)

	Central case	Case F – 0%	Case F – 50%	Case F – 75%
Total costs	2,149.4	895.3	2,545.4	3,370.5
Total benefits	7,779.7	7,147.4	7,979.3	8,395.3
Net benefits	5,630.3	6,252.1	5,433.9	5,024.8
Benefits to costs ratio	3.6	8.0	3.1	2.5

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

7. STAKEHOLDERS' VIEWS ON THE PROPOSED INTERVENTION

The European Commission published a Call for Evidence to collect feedback from interested stakeholders. This Call gathered 215 contributions in total. The majority were submitted by EU citizens (154 responses, 71.2% of the total), followed by companies and businesses (17 responses, 7.9%). Non-EU citizens and business associations each provided 11 responses (5.1%), while public authorities submitted 8 (3.7%), including 3 from National Enforcement Bodies (1.4%). Consumer organisations contributed with 7 responses (3.3%), NGOs with 3 (1.4%), and other stakeholders with 3 (1.4%), with 1 response (0.5%) from an environmental organisation.

90 citizens expressed their support for the policy initiative. 45 citizens complained about the low availability of through-tickets and single tickets, especially for international trips. A recurring frustration, shared by 36 citizens, is that passengers currently bear almost all the risk of delays and missed connections in multi-operator journeys, with no clear responsible party, inconsistent compensation practices and frequent situations of being stranded without help. 9 citizens reported buying what 'felt' like a single trip, only to find out after disruption that their journey was treated as multiple separate contracts.

Companies and business associations displayed mixed views. 8 incumbent railway undertakings and their associations replied to the call for evidence. Overall, they tend to support stronger protection in principle but oppose extending full passenger rights to all single tickets. In their view, the Regulation should not undermine commercial initiatives such as the AJC. In addition, out of 4 new rail entrants and their associations which responded to the call for evidence 2 were supportive of the initiative, 1 opposed the

approach, and 1 did not explicitly state its support but gave some recommendations. Intermediaries and their associations[116] were generally supportive of the idea of extending passenger rights to single tickets, with caveats. Regarding SMEs, a total of 14 stakeholders that replied to the call for evidence were SMEs. 3 SME intermediaries/travel agencies and their association argued that liability for disruptions should rest with the operators, citing their limited ability to intervene in real time during such disruptions.

Consumer organisations, NGOs and public authorities who replied[117] generally backed the initiative. The 11 participating respondents identifying as consumer organisations and NGOs were supportive of extending EU rail passenger rights to cover multi-operator and cross-border journeys more effectively, even going beyond the approach of this targeted revision and suggesting guaranteeing passenger rights beyond single tickets.

A more detailed overview of the contributions to the call for evidence can be found in Annex 2.

[116] 9 responses: Omio, Trainline, eu travel tech, Rail Europe, KILROY Group, GSM Viaggi, GBTA, BT4Europe, ECTAA.

[117] The respondent public authorities were the Catalan Consumer Agency (Spain), the Austrian Federal Ministry of Labour, Social Affairs, Health, Care and Consumer Protection (Austria), the *Autorité de régulation des transports* (France), the Public Transport Authorities Organisation (Denmark), the Agentur für Passagier- und Fahrgastrechte (NEB – Austria), Transportstyrelsen (NEB – Sweden), ART - Italian Tranport Regulation Authority (NEB – Italy), Ombudsrail (Ombudsman – Belgium),

ANNEX 1: SELECTION OF CROSS-BORDER JOURNEYS

This annex presents an illustrative sample of multi-operator train journeys and indicates, for each, whether a through-ticket currently exists that would provide protection under Regulation (EU) 2021/782. The sample covers selected possible multi-operator journeys across several Member States and is intended to be indicative of current market practice, in particular the limited availability of through-tickets for many cross-border rail connections. Given the very large number of theoretically possible multi-operator journey combinations and connections across the Union, and the absence of a centralised dataset covering all such offers, it is not feasible to construct a complete, exhaustive inventory of multi-operator journeys. The examples included here should therefore be read as illustrative case studies rather than as a comprehensive mapping of all existing or potential through-ticketing arrangements.

Table 12: Selection of cross-border multi-operator rail journeys

Journey - Leg - *operating railway undertaking*	**Single ticket bought on…**	**Type of contract**
Bucharest (RO) to Sofia (BG) **Bucuresti Nord (RO) – Ruse (BG) - *CFR Călători & BDŽ*** Ruse (BG) – Sofia (BG) - *BDŽ*	CFR Călători bileteinternationale.cfrcalatori.ro/en/	Through-ticket
Brussels (BE) to Berlin (DE)[118] Brussels-Midi/Zuid (BE) – Cologne Hbf (DE) - *Eurostar* Cologne Hbf (DE) – Berlin Hbf (DE) - *DB*	DB www.bahn.de	Separate contracts

[118] This journey can also be booked as through- ticket with DB trains only

Journey - Leg - *operating railway undertaking*	**Single ticket bought on…**	**Type of contract**
Warszaw (PL) to Strasbourg (FR) Warszawa Centralna (PL) - Berlin Hbf (DE) - *PKP & DB* Berlin Hbf (DE) – Offenburg (DE) - *DB* Offenburg (DE) – Strasbourg (FR) - *DB*	DB www.bahn.de	Through-ticket
Vilnius (LT) to Tallinn (EE) Vilnius (LT) – Riga (LV) - *LTG Link* Riga (LV) – Valga (EE) - *Vivi* Valga (EE) – Tallinn (EE) - *Elron*	Elron www.elron.ee	Through-ticket
Warsaw (PL) to Vilnius (LT) Warszawa Centralna (PL) – Mockava (LT) - *PKP* Mockava (PL) – Vilnius (LT) - *LTG Link*	PKP Intercity www.intercity.pl	Through-ticket

Journey - Leg - *operating railway undertaking*	**Single ticket bought on…**	**Type of contract**
Marseille (FR) to Stuttgart (DE) Marseille Saint-Charles (FR) – Mannheim Hbf (DE) - *SNCF* Mannheim Hbf (DE) – Stuttgart (DE) - *DB*	SNCF Connect www.sncf-connect.com	Separate contracts
Madrid (ES) to Lisbon (PT) Madrid – Atocha (ES) – Badajoz (ES) - *Renfe* Badajoz (ES) – Encontramento (PT) - *CP* Encontramento (PT) – Lisboa-Oriente (PT) - *CP*	Omio www.omio.com	Separate contracts
Nice (FR) to Milan (IT) Nice Ville (FR) – Ventimiglia (IT) – *SNCF* Ventimiglia (IT) – Milano Centrale (IT) - *Trenitalia*	Omio www.omio.com	Separate contracts

Journey - Leg - *operating railway undertaking*	**Single ticket bought on…**	**Type of contract**
Hamburg (DE) to Stockholm (SE) Hamburg Hbf (DE) – Copenhagen Central (DK) - *DB & DSB* Copenhagen Central (DK) – Stockholm Central (SE) - *Snälltåget*	Omio www.omio.com	Separate contracts
Linz (AT) to Budapest (HU) Linz Hbf (AT) - Wien Meidling (AT) - *ÖBB* Wien Meidling (AT) – Budapest-Kelenföld (HU) - *Regiojet*	Omio www.omio.com	Separate contracts
Perpignan (FR) to Valencia (ES) Perpignan (FR) – Barcelona Sants (ES) - *SNCF* Barcelona Sants (ES) – Valencia Nord (ES) - *Renfe*	Trainline www.thetrainline.com	Separate contracts

Journey - Leg - *operating railway undertaking*	**Single ticket bought on…**	**Type of contract**
Munich (DE) to Rome (IT) München Hbf (DE) – Bologna Centrale (IT) - *ÖBB* Bologna Centrale (IT) – Rome Termini (IT) - *Trenitalia*	Trainline www.thetrainline.com	Separate contracts

ANNEX 2: CALL FOR EVIDENCE

The Call for Evidence on the targeted revision of Regulation (EU) 2021/782 on rail passengers' rights and obligations was published on 28 July 2025, with an eight-week feedback period, which closed on 22 September 2025.

1. Total number of contributions per stakeholder group and Member State

The call for evidence received 215 contributions in total (Table 13). Out of these, 154 were submitted by EU citizens (71.6%). The second largest group of contributions came from companies/businesses, with 17 responses (7.9%). Non-EU citizens accounted for 11 responses (5.1%). Business associations contributed 11 responses (5.1%). Public authorities accounted for 8 responses, representing 3.7% of all contributions. Out of these, 3 came from National Enforcement Bodies (NEBs), representing 1.4% of the responses. Consumer organisations and NGOs submitted 7 (3.3%) and 3 (1.4%) responses, respectively. Additional responses were received from other stakeholders (3 responses, 1.4%)[119] and an environmental organisation (1 response, 0.5%).

Table 13: Number of contributions by stakeholder group

Stakeholder group	Number of contributions received	Share of total contributions
EU citizen	154	71.6%
Company/business	17	7.9%
Business association	11	5.1%
Non-EU citizen	11	5.1%
Public authorities (excluding NEBs)	5	2.3%
NEBs	3	1.4%
Consumer organisation	7	3.3%
Non-governmental organisation (NGO)	3	1.4%
Other	3	1.4%
Environmental organisation	1	0.5%
Total	**215**	**100%**

[119] The 'other stakeholders' category includes a chamber of labour, an Alternative Dispute Resolution (ADR) company and an association of ADR bodies.

A total of 203 responses were from stakeholders in the EU Member States. Participation varied across Member States, with German respondents providing 45 responses (22.2%), followed by France with 27 responses (13.3%). Belgium and the Netherlands each contributed with 22 responses (10.8%), Italy with 19 responses (9.4%), and Austria with 13 responses (6.4%). Respondents from Poland and Denmark submitted 10 responses (4.9%) each, followed by 9 responses from Spain (4.4%), and 7 responses from Sweden (3.4%). Participation was lower in Czechia with 5 responses (2.5%), Hungary with 4 (2.0%), Ireland and Finland with 3 each (1.5%), Romania with 2 (1.0%), and Croatia and Lithuania with 1 each (0.5%).

2. Stakeholder views on the initiative

- **Citizens**

Across 165 replies from 21 countries, respondents identifying as citizens were very supportive of extending EU rail passenger rights in general.

45 citizens[120] complained about the low availability of through-tickets and single tickets, especially for international trips. A recurring frustration, shared by 36 citizens, is that passengers currently bear almost all the risk of delays and missed connections in multi-operator journeys, with no clear responsible party, inconsistent compensation practices and frequent situations of being stranded without help. Of those, 9 citizens reported buying what 'felt' like a single trip, only to find out after disruption that their journey was actually treated as multiple separate contracts.

This has consequences for the rail industry as a whole: 27 citizens mentioned that the lack of rights and the lower affordability of rail compared to air travel – particularly on multi-operator trips – make it difficult for people to choose rail as a form of transport. Of these respondents, 8 explicitly mention that they choose road or air transport over rail, as it is too complicated or expensive for international trips – potentially undermining the EU's own climate and transport goals.

With regard to the proposal to extend the passenger rights to all single tickets, defined as multi-leg journeys bought on a single platform in a single transaction irrespective of the number of operators involved, the analysis found that 90 citizens out of 165 support the initiative presented. Several other citizens (26) further argue that rights should also apply when separate tickets bought in different transactions (self-combined tickets) clearly form one journey. Several citizens not only support the targeted revision but also associate it with positive impacts on train travel: a total of 37 respondents out of 165 believe that improving passenger rights can increase the attractiveness and competitiveness of the rail sector vis-à-vis other modes of transports, contributing to the EU's climate goals. In their perspective, a stronger framework characterised by clearer liability, sounder protection mechanisms and simpler booking procedures can improve consumer confidence in rail travel reducing reliance on air and road transport. In addition, a few respondents (5 contributions) believe that the revision could contribute to reducing travel time for rail

[120] Distributed across Austria, Germany, France, Belgium, Czechia, Hungary, Italy, the Netherlands, Spain, Denmark, Sweden, Poland and the UK.

passengers. In their view, a more stringent framework could foster better coordination among operators, improve punctuality and eliminate the need for excessive buffer times currently required by passengers.

- **Companies/business associations**

Support for the initiative is mixed across businesses and varies by segment. More than half of business stakeholders (16 out of 28) that responded to the call for evidence broadly agreed with extending passenger rights to single tickets, while nine opposed the Commission's proposed extension of rights.

Table 14: Companies/business associations views on the initiative

Stakeholder group	Oppose	Support (with caveats)	Unclear
Intermediary	0	5	0
Intermediary association	0	4	0
Railway undertakings (RUs)	5	3	0
RU association	3	1	0
Local / Urban transport	0	0	2
Other	0	2	0
Transport association	1	0	0
Chamber of commerce	1	0	0
Other association	0	1	0
Total	**10**	**16**	**2**

8 incumbent railway undertakings and their associations replied to the call for evidence[121]. Overall, they tend to support stronger protection in principle, but oppose extending full passenger rights to all single tickets. In their view, the Regulation should not undermine commercial initiatives such as the AJC. Five of the major rail actors (ÖBB, DB, CER, SNCB, ČD) explicitly promote extending the AJC to more routes and operators, codifying this approach for certain ticket types. CER and incumbent railway undertakings also state that liability for missed connections should be put on the intermediary who has put together a multi-operator journey under a single ticket.

4 new rail entrants and their associations responded to the call for evidence (Transdev, Intermodalidad de Levante, ALLRAIL, and ITALO NTV). 2 of them were fully supportive of the initiative, 1 opposed the chosen approach, and 1 did not explicitly stated its support but gave some recommendations. ALLRAIL considers voluntary schemes such as AJC and HOTNAT insufficient and recommends that passengers purchasing tickets with reasonable connection times in a single transaction should always be protected. In their view, the regulatory framework should shift from a 'buyer beware' to a 'network assurance' logic, whereby journeys with realistic minimum connection times purchased in a single transaction should be always protected. ALLRAIL further supports the liability staying with the railway undertaking whose delayed or cancelled service led to a missed connection (causer pays). At the same time, ALLRAIL proposes a solution whereby

[121] CER, ÖBB, DB, SNCB, SNCF, ČD, UTPF and VDV.

railway undertakings with significant market power would be obliged to enter into through-ticketing agreements with willing other railway undertakings[122].

10 out of 13 RUs and associations that replied caution that imposing full passenger right obligations on single tickets could bring about a reduction in the supply of complex multi-leg journeys, including cross-border ones. Additionally, six of these organisations note that RUs could face prohibitive costs due to compensation. Therefore, these RUs and associations favour a protection framework based on the AJC or HOTNAT, which would allow operators to guarantee journey continuation, keeping liability costs at a minimum.

Intermediaries and their associations who responded to the call for evidence are generally supportive of the idea of extending passenger rights to single tickets, with caveats[123]. For instance, they stress that legal liability should fall on RUs and warn that an overly prescriptive or costly regime will decrease the availability of single tickets. Intermediaries contend that they cannot be primarily liable for disruptions as they do not operate services, set timetables, or control real-time information**.** 4 out of 9 intermediaries and their associations worry that placing full liability on ticket vendors would be disproportionate, as vendors would not be able to cover costs related to refunds, compensation and accommodation. This might expose intermediaries to severe financial risks, distort the level playing field with incumbent RUs and lead to a reduction or withdrawal of multi-leg offers. At the same time, they argue that well-designed rules could boost competitiveness; these include clear, standardised criteria for 'protected connections', reasonable minimum connection times, and mandatory fair, reasonable and non-discriminatory (FRAND) access to timetable, reservation and after-sales interfaces.

3 business stakeholders noted that minimum connection times need to be realistic for any multi-operator ticket to which passenger rights are made obligatory. Other business stakeholders (Trans-Mission, AirHelp, Pearle) welcome extending passenger rights to single tickets as this in line with their mission to improve the rail sector and support passengers. Meanwhile, local transport organisations (Wiener Stadtwerke, RATP Group) do not take a strong stance on the Commission's proposal, but underline the need for an explicit exclusion of urban and suburban railway services from the scope of the review.

Regarding SMEs, a total of 7 stakeholders that replied to the call for evidence had less than 10 employees, 2 had less than 50 employees, and 5 had less than 250 employees. Of these, 9 were associations of intermediaries or railway undertakings. 3 were labelled as intermediaries/travel agencies (GSM Viaggi, The Kilroy Group, and Rail Europe), one was a consultancy (Trans-Missions), and another one was a federation representing employers in the live performance sector (Pearle Live Performance Europe). The intermediaries/travel agencies argued that liability for disruptions should rest with the operators, citing their limited ability to intervene in real time during such disruptions.

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[122] https://www.allrail.eu/policies/the-great-rail-ticket-unbundling-part-ii-unbundle-passenger-rights-from-formal-through-ticketing/

[123] Intermediaries and intermediary associations that expressed support for the initiative (support or support with caveats) include GSM Viaggi, Global Business Travel Association (GBTA) Europe), Kilroy Group, Rail Europe, ECTAA, BT4Europe, eu travel tech, Omio, and Trainline.

- **Consumer organisations and NGOs**

The 11 participating respondents identifying as consumer organisations and NGOs are supportive of extending EU rail passenger rights to cover multi-operator and cross-border journeys more effectively. They see the current legal regime as too narrow, too complex, and not suited to how people actually buy and combine tickets today (often via digital platforms and involving several operators)[124]. 5 organisations out of 11 argue that stronger passenger protection can increase consumer confidence in rail travel and favour a multimodal shift from other means of transport, such as the aviation sector. Several consumers organisations and NGOs warn that the current legal situation where only passenger rights are granted to through-tickets leaves major gaps and can lead to situations where passengers are misled into believing they are protected when they are not.

4 responses received from consumer organisations out of 11 describe cross-border ticketing as fragmented and complex, underlining 'uneven national practice' and confusing booking and pricing procedures. Platforms often fail to offer the most suitable international combinations, and even when innovative multi-model products are available, liability and protections are unclear, leaving consumers unsure whether to trust these offers.

This group also tends to emphasise the lack of clear information available to passengers at the time of booking international or multi-operator tickets, especially via digital platforms and third-party sellers. This essentially confirms the problem noted in the call for evidence, namely that tickets purchased in a single transaction appear to be single journeys, but in effect do not come with guaranteed passenger rights, even the right to journey continuation. 4 of them note that existing voluntary schemes (e.g., AJC) are insufficient[125]. As such, for 10 out of 11 consumer organisations who responded to the call for evidence suggest guaranteeing passenger rights beyond single tickets. Thus, there is clear support in this group for clarifying – but also broadening – the existing definition of 'through-tickets' so that more combined journeys would fall under full protection. Five organisations out of 11 argue that stronger passenger protection can increase consumer confidence in rail travel and favour a multimodal shift from other means of transport, such as the aviation sector.

- **Public authorities**

Across the 8 public-authority submissions (3 of which are NEBs)[126], they are broadly supportive of strengthening rail passenger rights for multi-operator journeys, especially by clarifying and reinforcing Article 12 on through-tickets in Regulation (EU) 2021/782. Authorities generally agree that passengers should not be left unprotected when they buy combined tickets for a single journey, but they differ on how far obligations should extend

[124] See also https://www.beuc.eu/sites/default/files/publications/BEUC-X-2026-035_Targeted_revision_of_the_Rail_Passenger_Rights_Regulation_BEUC_additional_inputs_to_the_2025_call_for_evidence.pdf

[125] BEUC, T&E, UFC-Que Choisir, and EPF.

[126] The respondent public authorities were the Catalan Consumer Agency (Spain), the Austrian Federal Ministry of Labour, Social Affairs, Health, Care and Consumer Protection (Austria), the *Autorité de régulation des transports* (France), the Public Transport Authorities Organisation (Denmark), the Agentur für Passagier- und Fahrgastrechte (NEB – Austria), Transportstyrelsen (NEB – Sweden), ART - Italian Tranport Regulation Authority (NEB – Italy), Ombudsrail (Ombudsman – Belgium).

– particularly for separately purchased tickets, regional services, and the liability of platforms.

ANNEX 3: ANALYTICAL METHODS

1. DESCRIPTION OF THE ANALYTICAL METHODS USED

The analytical framework used for the purpose of this Staff Working Document builds on the *PRIMES-TREMOVE and ASTRA models*, as well as an excel-based tool developed in the context of the support study[127].

The main model used for developing the baseline scenario for this initiative is the PRIMES-TREMOVE transport model by E3-Modelling, a specific module of the PRIMES models. The model has a successful record of use in the Commission's energy, transport and climate policy assessments. In particular, it has been used for the impact assessments underpinning the Communication on a 2040 climate target[128], the "Fit for 55" package[129], the impact assessments accompanying the 2030 Climate Target Plan[130] and the Staff Working Document accompanying the Sustainable and Smart Mobility Strategy[131], the Commission's proposal for a Long Term Strategy[132] as well as for the 2020 and 2030 EU's climate and energy policy framework.

The baseline scenario of the ASTRA model has been calibrated on the PRIMES-TREMOVE results. The ASTRA model has been further used for deriving the projected number of passengers in the baseline, consistent with the PRIMES-TREMOVE transport activity projections. The model provides results at Member State and EU level on economic, social and environmental indicators, including external costs. The ASTRA model is a well-established model that has been used for numerous impact assessments in the energy, transport and climate action fields for the past 15 years[133].

For the assessment of the impacts of the policy intervention, an Excel-based tool was developed to quantify the effects on costs and benefits in the context of the support study[134]. This tool relies on the Standard Cost Model.

The proposed intervention is assumed to be implemented from 2028 onwards. The assessment has been undertaken for the 2028-2050 period and refers to EU27. Costs and benefits are expressed as present value over the 2028-2050 period, using a 3% discount rate. All costs and benefits are expressed in 2024 prices.

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[127] Milieu consulting and Transport & Mobility Leuven (2026), Support study for a targeted revision of Regulation (EU) 2021/782 on rail passengers' rights and obligations.
[128] EUR-Lex - 52024DC0063 - EN - EUR-Lex (europa.eu)
[129] Delivering the European Green Deal | European Commission (europa.eu)
[130] SWD(2020)176 final
[131] EUR-Lex - 52020SC0331 - EN - EUR-Lex (europa.eu)
[132] Source: 2050 long-term strategy (europa.eu)
[133] For example, Register of Commission Documents - SWD(2023)351; Register of Commission Documents - SWD(2023)443; Register of Commission Documents - SWD(2021)472; Register of Commission Documents - SWD(2021)474
[134] Milieu consulting and Transport & Mobility Leuven (2026), Support study for a targeted revision of Regulation (EU) 2021/782 on rail passengers' rights and obligations.

1.1. PRIMES-TREMOVE model

The PRIMES-TREMOVE transport model projects the evolution of demand for passengers and freight transport, by transport mode, and transport vehicle/technology, following a formulation based on microeconomic foundation of decisions of multiple actors[135]. Operation, investment and emission costs, various policy measures, utility factors and congestion are among the drivers that influence the projections of the model. The projections of activity, equipment (fleet), usage of equipment, energy consumption and emissions (and other externalities) constitute the set of model outputs.

The PRIMES-TREMOVE transport model can therefore provide the quantitative analysis for the transport sector in the EU, candidate and neighbouring countries covering activity, equipment, energy and emissions. The model accounts for each country separately which means that the detailed long-term outlooks are available both for each country and in aggregate forms (e.g. EU level).

In the transport field, PRIMES-TREMOVE is suitable for modelling *soft measures* (e.g. eco-driving, labelling); *economic measures* (e.g. subsidies and taxes on fuels, vehicles, emissions; ETS for transport when linked with PRIMES; pricing of congestion and other externalities such as air pollution, accidents and noise; measures supporting R&D); *regulatory measures* (e.g. CO_2 emission performance standards for new light-duty vehicles and heavy-duty vehicles; EURO standards on road transport vehicles; technology standards for non-road transport technologies, deployment of Intelligent Transport Systems) and *infrastructure policies for alternative fuels* (e.g. deployment of refuelling/recharging infrastructure for electricity, hydrogen, LNG, CNG). Used as a module that contributes to the PRIMES energy system model, PRIMES-TREMOVE can show how policies and trends in the field of transport contribute to economy-wide trends in energy use and emissions. Using data disaggregated per Member State, the model can show differentiated trends across Member States.

The PRIMES-TREMOVE has been developed and is maintained by E3-Modelling, based on, but extending features of, the open source TREMOVE model developed by the TREMOVE[136] modelling community. Part of the model (e.g. the utility nested tree) was built following the TREMOVE model[137]. Other parts, like the component on fuel consumption and emissions, follow the COPERT model[138].

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[135] A detailed description of the model is available at: PRIMES MODEL

[136] https://www.tmleuven.be/en/navigation/TREMOVE.

[137] Several model enhancements were made compared to the standard TREMOVE model, as for example: for the number of vintages (allowing representation of the choice of second-hand cars); for the technology categories which include vehicle types using electricity from the grid and fuel cells. The model also incorporates additional fuel types, such as biofuels (when they differ from standard fossil fuel technologies), LPG, LNG, hydrogen and e-fuels. In addition, representation of infrastructure for refuelling and recharging are among the model refinements, influencing fuel choices. A major model enhancement concerns the inclusion of heterogeneity in the distance of stylised trips; the model considers that the trip distances follow a distribution function with different distances and frequencies. The inclusion of heterogeneity was found to be of significant influence in the choice of vehicle-fuels especially for vehicles-fuels with range limitations.

[138] COPERT | Calculations of Emissions from Road Transport

Data inputs

The main data sources for inputs to the PRIMES-TREMOVE model, such as for activity and energy consumption, come from EUROSTAT databases and from the Statistical Pocketbook EU transport in figures[139]. Excise taxes are derived from DG TAXUD excise duty tables. Other data comes from different sources such as research projects (e.g. TRACCS and New Mobility Pattern projects) and reports. In the context of this exercise, the PRIMES-TREMOVE transport model is calibrated to 2005, 2010, 2015 and 2020-2023 historical data, as well as the most recent data on the structure of the road transport vehicle fleet for the first half of 2025 from the European Alternative Fuels Observatory (EAFO)[140].

1.2. ASTRA - ASsessment of TRAnsport Strategies

ASTRA is a strategic model based on the Systems Dynamics Modelling approach simulating the transport system development in combination with the economy and the environment until the year 2050[141].

ASTRA consists of different modules, each related to one specific aspect such as the economy, transport demand or the vehicle fleet. The main modules cover the following aspects:

1. Population and social structure (age cohorts and income groups)
2. Economy (e.g. GDP, input-output tables, employment, consumption and investment both at aggregate and at sectoral level)
3. Foreign trade (inside EU and to partners from outside EU)
4. Transport (including demand estimation, modal split, transport cost and infrastructure networks)
5. Vehicle fleet (passenger and freight road vehicles by segment and drivetrain)
6. Environment (including air pollutant emissions, CO_2 emissions, energy consumption).

The economy module simulates the main economic variables. Some of these variables (e.g. GDP) are transferred to the transport generation module, which uses the input to generate a distributed transport demand.

The transport component is represented by means of two classical 4-stage transport models, one for passenger and one for freight transport, including endogenous feedback on all stages. Even if a full origin-destination matrix is not modelled, demand is segmented according to trip purpose and in different distance bands to better consider the competition between alternative modes. The transport network is not explicitly represented but information on network capacity is considered in a simplified way for the different transport modes drawing on the TRUST network transport model. In the transport module, demand is split by mode of transport. The traffic performance by mode is associated with

[139] Statistical pocketbook 2025 - Mobility and Transport - European Commission
[140] Homepage | European Alternative Fuels Observatory
[141] A detailed description of the model is available at https://www.astra-model.eu/

the composition of the fleet (computed in the vehicle fleet module) and the emissions factors (defined in the environmental module), in order to estimate total emissions.

Several feedback effects take place in the ASTRA model. For instance, the economy module provides the level of income to the fleet module, in order to estimate vehicle purchase. The economy module then receives information on the total number of purchased vehicles from the fleet module to account for this item of transport consumption and investment. Furthermore, changes in the economic system feed into changes of the transport behaviour and alter origins, destinations and volumes of European transport flows.

The indicators that ASTRA can produce cover a wide range of impacts, in particular transport system operation, economic, environmental and social indicators. The environment module uses input from the transport module (in terms of vehicle-kilometres travelled per mode and geographical context) and from the vehicle fleet module (in terms of composition of vehicle fleets by type of powertrain), in order to compute fuel consumption, greenhouse gas emissions and air pollutant emissions from transport.

Strategic assessment capabilities in ASTRA cover a wide range of transport measures and investments with flexible timing and levels of implementation. Geographically, ASTRA covers all EU Member States plus the United Kingdom, Norway and Switzerland.

The model is built in the Vensim software and is developed and maintained by TRT, M-Five and ISI Fraunhofer. The ASTRA model is a well-established model that has been used for numerous impact assessments in the energy, transport and climate action fields for the past 15 years. A dedicated version of the ASTRA model was developed by TRT and M-Five on behalf of JRC and is being used since 2013, when the first version was developed as part of the ASSIST project. The baseline scenario of the ASTRA model has been calibrated on the PRIMES-TREMOVE results.

Data inputs

The main data sources for inputs to the ASTRA model, such as for activity and energy consumption, come from EUROSTAT databases and from the Statistical Pocketbook EU transport in figures[142]. Excise taxes are derived from DG TAXUD excise duty tables. Other data comes from different sources such as research projects (e.g. New Mobility Pattern projects) and reports. In the context of this exercise, the ASTRA transport model is calibrated to 2005, 2010, 2015 and 2020-2023 historical data. As explained above, the baseline scenario of the ASTRA model has been calibrated on the PRIMES-TREMOVE results.

[142] Statistical pocketbook 2025 - Mobility and Transport - European Commission

2. BASELINE

2.1. Main assumptions of the baseline scenario

As explained in section 1 of this Annex, the baseline scenario for this impact assessment has been developed with the PRIMES-TREMOVE model. The baseline scenario of the ASTRA model has been calibrated on the PRIMES-TREMOVE results.

The assumptions used for developing baseline scenarios that underpin impact assessments in the energy, transport and climate policy areas, are consulted regularly with Member States and other stakeholders in the context of the so-called Reference scenario process. The baseline scenario underpinning this initiative builds on the work on the EU Reference scenario process 2025, that is currently ongoing. In this context, the PRIMES-TREMOVE model (and subsequently the ASTRA model) has been calibrated on the latest available statistics. The macro-economic projections, the energy price projections and the technology assumptions have been consulted with Member States during a meeting of the Reference scenario expert group on 5 June 2024. In addition, bilateral meetings with Member States took place between September 2024 and April 2025 to discuss the national policies to be reflected, based on the updated National Energy and Climate Plans prepared by the Member States under the Regulation 2018/1999 on the Governance of the Energy Union and Climate Action and submitted to the Commission during 2024-2025.

The technology assumptions, that drive the magnitude of the impacts on costs and benefits, are based on a rigorous literature review carried out by E3-Modelling in collaboration with the JRC and building on studies conducted for the Commission and used in previous impact assessments on related topics[143]. Continuing the approach adopted in the long-term strategy in 2018 and for the Reference Scenario 2020, the Commission consulted on the technology assumptions with Member States and stakeholders in 2024, as further explained in the following sections.

The baseline scenario reflects the projected higher energy prices driven by the Russian invasion of Ukraine. Beyond this aspect, it was however not possible to quantify the impact of the Russian invasion of Ukraine, as there is large uncertainty with respect to its impacts, in particular for the medium to long-term. While its impact is felt in terms of trade (e.g., grain, bulk fertilizers and hydrocarbons) and in certain geographical areas, the impact on the baseline of this initiative is expected to be limited.

The main assumptions related to economic development, international energy prices and technologies are described below.

2.1.1. Economic assumptions

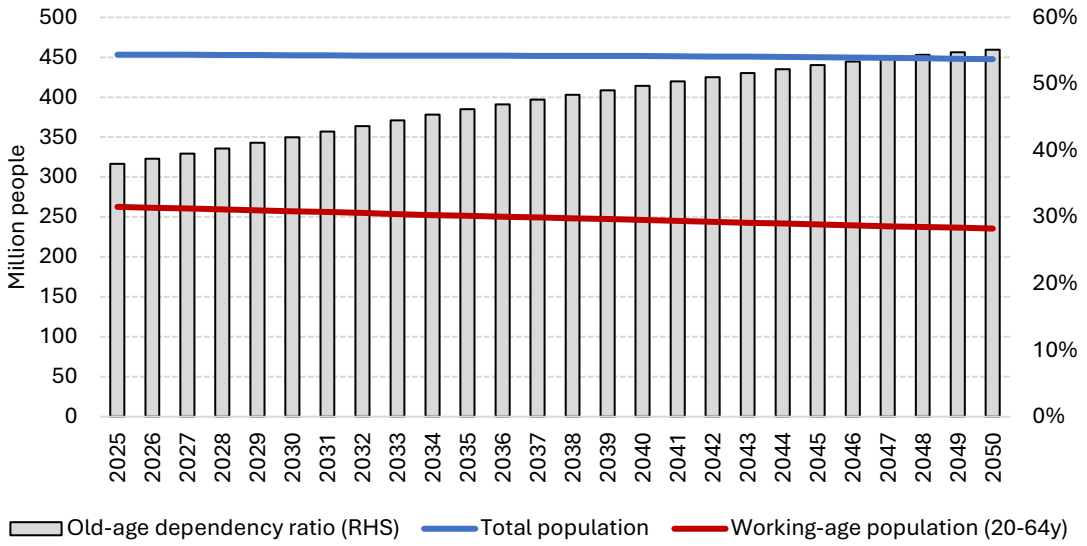
The modelling work is based on socio-economic assumptions describing the expected evolution of the European society. Long-term projections on population dynamics and

[143] Sources include: ACEA, Bloomberg, NEF, Goldman Sachs, ICCT, IEA, Ricardo, DEA, other scientific publications.

economic activity form part of the input to the model and are used to estimate transport activity, particularly relevant for this impact assessment.

Population projections rely on Eurostat's long-term projections (EUROPOP2023)[144]. The EU population is projected to remain broadly stable over the projection period to 2050. However, there is a noticeable trend towards the ageing of the population, with a 10% decline in the working-age population aged 20 to 64 between 2025 and 2050 and an increase in the old-age dependency ratio from 38% to 55.2% (Figure 2).

Figure 2: Population assumptions



Source: Eurostat

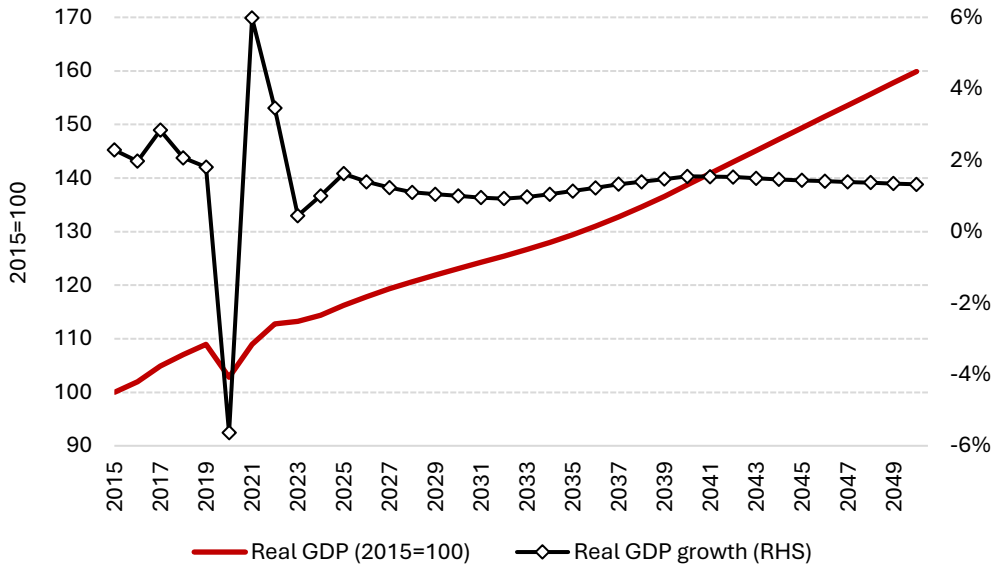
Economic projections have taken place in an unusually unstable context in the past few years, as the EU and world economies were hit first by the COVID pandemic and second by Russia's war of aggression against Ukraine, with the ensuing sharp increase in international energy prices. The GDP projections for 2025 rely on the Spring Forecast[145] of the Directorate General for Economic and Financial Affairs (DG ECFIN). From 2025 onwards, the GDP growth projections converge to those prepared by DG ECFIN for the 2024 Ageing Report[146]. At EU level, real GDP is projected to be 23% higher in 2030 than in 2015, 39% higher in 2040, and 60% higher in 2050 compared to 2015.

Projections on the sectoral composition of GDP were prepared using the GEM-E3 computable general economic model. It is projected that the EU economy will continue to become increasingly services-oriented, with the sector's share rising from close to 74% of total gross value added (GVA) in 2016-2020 to around 75% in 2040 and 76% in 2050. While the share of the transport sector in total GVA declined during the COVID pandemic, the projections assume that this was only a temporary phenomenon, and that the sector's

[144] EUROPOP2023 (proj_23n).
[145] DG ECFIN, https://ec.europa.eu/commission/presscorner/detail/en/ip_22_6782
[146] DG ECFIN, 2024 Ageing Report. Economic and budgetary projections for the EU Member States (2022-2070).

share remains broadly constant at close to 5% of the total. This is consistent with recent economic developments.

Figure 3: EU GDP (2015 = 100) and GDP growth (%)



Source: DG ECFIN

2.1.2. International energy prices assumptions

Alongside socio-economic projections, transport modelling requires projections of international fuel prices. The table below shows the oil prices assumptions of the baseline used in this impact assessment.

Table 15: Oil prices assumptions

Oil	2015	2020	2030	2040	2050
in $'2023 per boe	62.6	48.0	92.8	105.7	131.6
in €'2023 per boe	57.5	44.0	85.2	97.0	120.7

2.1.3. Technology assumptions

Modelling scenarios on the evolution of the transport system is highly dependent on the assumptions on the development of technologies - both in terms of performance and costs. For the purpose of the development of the baseline, these assumptions have been updated based on a rigorous literature review carried out by external consultants in collaboration with the JRC.

Continuing the approach adopted in the long-term strategy in 2018 and for the Reference Scenario 2020, the Commission consulted on the technology assumptions with Member States and stakeholders in 2024. In particular, the technology database of PRIMES-TREMOVE transport model was discussed with Member States during a meeting of the Reference scenario expert group on 5 June 2024. They also benefited from a dedicated consultation workshop with stakeholders, held on 22-23 October 2024.

2.1.4. Policies in the Baseline scenario

In line with the Better Regulation toolbox (Tool #60), the baseline has been designed to include the initiatives of the 'Fit for 55' package[147] and the proposed amendment of the European Climate Law to include a 2040 climate target for the EU[148], of reducing the EU's net greenhouse gas emissions by 90% by 2040 relative to 1990, with a limited contribution towards the 2040 target of high-quality international credits. It also reflects the CO_2 emission performance standards for heavy-duty vehicles[149], the Euro 7 standards[150], the revised TEN-T Regulation[151], as well as the initiatives part of the Greening Freight package[152] and Roadworthiness package[153]. It further reflects the National Energy and Climate Plans prepared by the Member States under the Regulation 2018/1999 on the Governance of the Energy Union and Climate Action and submitted to the Commission during 2024-2025. The baseline is common to that of the impact assessment accompanying the initiatives on Multimodal Digital Mobility Services and the Single Digital Booking and ticketing regulation.

The baseline scenario assumes no further EU level intervention beyond the Regulation (EU) 2021/782 on rail passengers' rights and obligations. Despite the obligation on railway undertakings to make all reasonable efforts to cooperate between them to offer through-tickets, the baseline assumes no systematic and comprehensive cooperation and corresponding offer for long-distance and regional journeys in the Union. Thus, without EU level intervention, the current situation is expected to persist, with passengers with a single ticket for a multi-operator journey with one or more connections not being guaranteed protection in the event of a missed connection in the absence of a through-ticket.

The baseline also incorporates perspectives on potential future developments captured in the 2022 Strategic Foresight Report[154] and during a foresight workshop organised by DG MOVE and JRC on 10 February 2025, analysing the impacts of the megatrends and drivers of change on the EU transport sector[155]. In particular, the projected transport activity draws on the long-term population projections from Eurostat and GDP growth from the *Ageing Report 2024*[156]. An increasingly connected world with high levels of access to digital products and services and in which new services, business models, life and work patterns emerge is the background against which the initiative is assessed.

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[147] Delivering the European Green Deal - European Commission
[148] COM(2025) 524 final
[149] Regulation (EU) 2024/1610
[150] Regulation - 2024/1257 - EN - EUR-Lex
[151] Regulation - EU - 2024/1679 - EN - EUR-Lex
[152] Green Deal: Greening freight for more economic gain with less environmental impact (europa.eu).
[153] Updated rules for safer roads, less air pollution and digital vehicle documents
[154] COM(2022) 289 final
[155] https://knowledge4policy.ec.europa.eu/foresight/tool/megatrends-hub_en#explore
[156] DG ECFIN, 2024 Ageing Report. Economic and Budgetary Projections for the EU Member States (2022-2070) - Economy and Finance

2.2. Baseline scenario results

2.2.1. Number of passengers

Total number of passengers travelling by rail. The number of passengers travelling by rail is projected to increase from 8.6 billion in 2019 to 9.6 billion in 2028, 10.7 billion in 2030 and 12.5 billion by 2050, driven in particular by the completion of the TEN-T core network by 2030, the extended core network by 2040 and of the comprehensive network by 2050, supported by the CEF, Cohesion Fund and ERDF funding, but also by measures of the 'Fit for 55' package and the revised TEN-T Regulation.

Table 16: Projected number of passengers travelling by rail at EU level in the baseline (million)

	2019	2028	2030	2040	2050	2019-2030	2019-2040	2019-2050
Number of passengers	8,639	9,639	10,720	11,864	12,525	24.1%	37.3%	45.0%

Source: Ricardo et al. (2026), Impact assessment support study; ASTRA. Note: Excluding tram and metro.

The projected number of passengers travelling by rail, by Member State, is provided in the table below.

Table 17: Projected number of passengers travelling by rail, by Member State, in the baseline (million)

Country	2019	2028	2030	2040	2050
AT	315	358	367	393	396
BE	317	340	353	390	394
BG	21	23	25	30	37
CY	0	0	0	0	0
CZ	194	212	239	254	257
DE	2,938	3,200	3,596	3,736	3,742
DK	207	224	229	233	235
EE	8	9	9	10	11
EL	20	16	20	20	21
ES	635	787	900	1,008	1,038
FI	93	93	98	100	102
FR	1,265	1,430	1,575	1,833	2,078
HR	20	27	29	34	40
HU	273	314	316	368	469
IE	50	55	60	60	73
IT	898	978	1,155	1,375	1,380
LT	5	8	11	15	16
LU	25	32	33	34	35
LV	19	21	22	22	23
MT	0	0	0	0	0
NL	389	412	447	451	452
PL	344	428	512	592	727
PT	176	224	227	370	443

Country	2019	2028	2030	2040	2050
RO	70	86	104	121	127
SE	265	271	294	299	301
SI	13	17	17	24	32
SK	81	76	81	90	97
EU total	**8,639**	**9,639**	**10,720**	**11,864**	**12,525**

Source: Ricardo et al. (2026), Impact assessment support study; ASTRA. Note: Excluding tram and metro.

Number of regional, long-distance and international rail passengers. The share of regional, long-distance and international rail passengers is estimated at 57% at EU level, with a variation of around 20% depending on the Member State[157]. The shares at Member State level are kept constant over time in the baseline scenario. The number of regional, long-distance and international rail passengers is projected to increase from around 5 billion in 2023 to 5.5 billion in 2028, 6.1 billion in 2030 and 7.1 billion in 2050.

Table 18: Projected number of regional, long-distance and international rail passengers, by Member State, in the baseline (million)

Country	2023	2028	2030	2040	2050
AT	197	208	214	229	231
BE	178	185	193	213	215
BG	12	13	14	18	21
CY	0	0	0	0	0
CZ	119	131	148	157	159
DE	1,796	1,968	2,211	2,297	2,301
DK	103	107	110	111	112
EE	5	5	5	6	7
EL	6	6	7	7	8
ES	274	317	363	406	418
FI	60	62	66	67	68
FR	893	979	1,078	1,255	1,423
HR	14	16	17	20	24
HU	116	122	122	142	182
IE	33	36	39	39	47
IT	492	556	657	782	785
LT	3	5	7	9	9
LU	13	15	15	16	16
LV	12	12	13	13	13
MT	0	0	0	0	0
NL	208	221	240	242	243

[157] Milieu consulting and Transport & Mobility Leuven (2026), Support study for a targeted revision of Regulation (EU) 2021/782 on rail passengers' rights and obligations. The 2017 IA assumed that regional, long-distance, and international services accounted for 81% of passenger-kilometres. This share exceeds the corresponding share of passengers for those services, as urban and suburban journeys are numerous but contribute fewer passenger-kilometres per trip.

Country	2023	2028	2030	2040	2050
PL	208	248	296	343	421
PT	43	47	48	78	93
RO	48	57	69	80	84
SE	153	161	174	177	178
SI	7	7	8	11	14
SK	46	47	49	55	59
EU total	**5,039**	**5,530**	**6,163**	**6,773**	**7,131**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Number of regional, long-distance and international passengers taking journeys involving multiple rail undertakings (excluding through-tickets). According to the support study, multi-operator rail journeys, other than through-tickets, represent around 13% of ticket sales in regional, long-distance, and international services at EU level. This share is estimated based on stakeholder consultation, expert opinions[158] and the 2024 Eurobarometer survey on Multimodal Digital Mobility Service[159]. Thus, the number of regional, long-distance and international passengers taking journeys involving multiple rail undertakings (excluding through-tickets) is estimated at 748 million in 2028, increasing to 836 million in 2030 and 962 million in 2050.

For the analysis, all these journeys are assumed to be booked on one platform in a single transaction. However, acknowledging the large uncertainty regarding the estimates, sensitivity analysis has been further performed.

Table 19: Projected number of regional, long-distance and international passengers taking journeys involving multiple rail undertakings (excluding through-tickets), by Member State, in the baseline (million)

Country	2023	2028	2030	2040	2050
AT	23	25	25	27	27
BE	19	20	21	23	23
BG	1	1	1	1	2
CY	0	0	0	0	0
CZ	16	18	20	22	22
DE	285	312	350	364	365
DK	12	12	12	12	13
EE	0	0	0	0	0
EL	1	1	1	1	1
ES	39	45	51	57	59
FI	5	5	6	6	6
FR	114	125	137	160	181

[158] The share of total number of combined journey rail tickets that are not a trough ticket, varies from 13% in 2019 to 16% in 2024 in Croatia. According to SNCF Voyageurs (France) estimations, 94% of the tickets that include a transfer are sold as a through ticket in 2024 (TGV + other train from SNCF Voyageurs).
[159] Flash Eurobarometer 551 – Multimodal Digital Mobility Service
https://europa.eu/eurobarometer/surveys/detail/3178

Country	2023	2028	2030	2040	2050
HR	1	1	1	2	2
HU	13	14	14	16	21
IE	4	4	4	5	5
IT	53	60	71	85	85
LT	0	0	0	1	1
LU	1	1	1	1	1
LV	1	1	1	1	1
MT	0	0	0	0	0
NL	20	21	23	23	23
PL	35	42	51	58	72
PT	5	5	6	9	11
RO	6	8	9	11	11
SE	19	20	22	22	22
SI	1	1	1	1	1
SK	6	6	6	7	7
EU total	**680**	**748**	**836**	**914**	**962**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

2.2.2. Number of passengers subject to delayed and cancelled trains that result in missed connections for journeys booked on one platform in a single transaction

Considering a typical rail journey (regional, long-distance and international) consisting of two legs each operated by a different railway undertaking[160], it is assumed that a missed connection with the second leg occurs due to a delay or cancellation of the first leg.

For the purpose of the analysis, it is assumed that a delay of at least 60 minutes on the first leg results in a missed connection on the subsequent leg(s) of the journey performed under the single ticket, which will subsequently lead to a delay at arrival at the final destination of at least 60 minutes or more. While delays of shorter duration may result in missed connections, the 60 minutes mirrors the current legal threshold for reimbursement and re-routing, assistance and compensation. This assumption is also supported by evidence from Renfe's guaranteed connection for its own trains, which applies only when there is a delay of at least 60 minutes between the arrival of the first train and the departure of the second train, if the connection takes place within the same train station[161].

Punctuality figures have been gathered for each Member State for 2023 drawing on the individual Service Quality Reports for RUs available on European Union Agency for Railways (ERA) website[162]. These Service Quality Reports provide details for each Member State on the trains that are delayed above 5 minutes. Based on this data, as shown

[160] The assumption that a typical multi-operator rail journey (that is not a through-ticket) involves two operators and one connection between them is also supported by Annex 1.

161 https://www.renfe.com/es/en/ayuda/informacion-legal-viajeros/condiciones-generales-renfe-viajeros

[162] ERA (2025), Service Quality Reports, https://www.era.europa.eu/library/railway-undertakings-service-quality-reports

in the table below, at EU level, 13.61% of trains were delayed above 5 minutes on average in 2023.

Table 20: Share of delayed trains (above 5 minutes), EU average for 2023

Data source	International	Domestic long-distance	International, long-distance and regional trains	Average
ERA Service Quality Reports	28.12%	22.94%	9.49%	13.61%

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Data on delays above 60 minutes is not widely available. However, for some RUs the proportion of trains delayed by 60-119 minutes and above 120 minutes, compared to all trains delayed above 5 minutes, is available in the service quality reports. The table below shows the data for the RUs with sufficient data to allow performing a statistical analysis for the shares above 60 and 120 minutes. For each of them, the most recent year (2021-2024) is shown.

Regression analysis was performed to determine the probability of a delay of at least 60 or 120 minutes compared to the probability of a delay of at least 5 minutes. This was used to fill in the data gaps for Member States that lacked data for longer delay durations. Based on the table below, the analysis shows that in 2023:

- 0.83% of the regional, international and long-distance trains (i.e. 6.13% of the 13.61% trains with a delay of more than 5 minutes) experienced a delay of 60-119 minutes;
- 0.26% of the regional, international and long-distance trains (i.e. 1.89% of the 13.61% trains with a delay of more than 5 minutes) experienced a delay of more than 120 minutes.

In the baseline scenario, improvements in punctuality are projected over time due to the implementation of the TEN-T Regulation[163]. Thus, by 2050, 0.44% of the regional, international and long-distance trains are projected to experience a delay of 60-119 minutes and 0.10% of the regional, international and long-distance trains a delay of more than 120 minutes.

In lack of other data available, it has been assumed that the share of affected passengers is the same as the share of affected trains.

[163] The effect of the implementation of the TEN-T Regulation on the 5 minutes punctuality draws on the impact assessment underpinning the Proposal for a Regulation of the European Parliament and of the Council amending Regulations (EC) No 261/2004, (EC) No 1107/2006, (EU) No 1177/2010, (EU) No 181/2011 and (EU) 2021/782 as regards enforcement of passenger rights in the Union Proposal for a Regulation of the European Parliament and of the Council on passenger rights in the context of multimodal journeys (SWD(2023) 386 final): (i) below 80% punctuality, an improvement of 1 percentage point of the punctuality is assumed on yearly basis; (ii) between 80% and 90%, an improvement of 0.5 percentage point of the punctuality is assumed on yearly basis; (iii) between 90% and 95%, an improvement of 0.25 percentage point of the punctuality is assumed on yearly basis. It was further assumed that punctuality cannot improve above 95%, meaning that 5% of the trains will be delayed by at least 5 minutes. Based on this, the share of regional, international and long-distance trains delayed by 60-119 minutes and by more than 120 minutes was further calculated.

Table 21: Share of trains delayed above 5 minutes, above 60 minutes, for 60-119 minutes and above 120 minutes, by type of trains and RU. (-) means that there is no data available.

			% delay (>5')				% delay (>60')				% delay (60'-119')				% delay (>120')			
	RU	Year	Long distance	Regio-nal	Inter-national	Average for all distances	Long distance	Regio-nal	Inter-national	Average for all distances	Long distance	Regio-nal	Inter-national	Average for all distances	Long distance	Regio-nal	Inter-national	Average for all distances
IT	Trenitalia	2024	11.600	6.400	28.500	-	2.400	0.100	1.700	-	1.900	0.100	1.300	-	0.500	0.0	0.300	-
ES	Renfe	2021	17.850	7.510	-	-	1.110	0.870	-	-	0.810	0.740	-	-	0.300	0.130	-	-
SE	SJ	2024	41.000	13.000	-	13.000	-	-	-	-	-	-	-	-	-	-	-	-
BE	Eurostar (THI)	2024	-	-	-	23.100	-	-	-	-	-	-	-	-	-	-	-	-
BE	SNCB /NMBS	2024	12.300	8.400	25.550	10.300	-	-	-	0.042	-	-		0.040				0.002
FR	Eurostar (London)	2022	-	-	30.400	-	-	-	-	-	-	-	-	-	-	-	-	-
BE	Eurostar	2024	-	-	30.300	-	-	-	-	-	-	-	-	-	-	-	-	-
FR	SNCF	2022	-	-	16.300	11.700	-	-	-	-	-	-	-	-	-	-	-	-
AT	ÖBB	2023	19.700	4.300		5.000	1.400	0	-	0.100	1.100	0	-	0.100	0.300	0	-	0
NL	NS	2023	-	-	31.700	6.300	-	-	-	0.100	-	-	-	0.100	-	-	-	0
DE	DB	2024	37.500	-	-	-	2.800	-	-	-	2.400	-	-	-	0.400	-	-	-
DE	Flixtrain	2024	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ES	ELRON	2024	-	-	-	3.650	-	-	-	-	-	-	-	-	-	-	-	-
DK	DSB	2024	13.650	11.625	-	9.478	-	-	-	0.024	-	-	-	0.010	-	-	-	0.014

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study, based on ERA Service Quality Report data

The number of passengers subject to trains delayed for 60-119 minutes and above 120 minutes that result in missed connections for journeys booked on one platform in a single transaction is provided in the tables below.

Table 22: Number of passengers subject to trains delayed for 60-119 minutes that result in missed connections for journeys booked on one platform in a single transaction (in million)

Country	2028	2030	2040	2050
AT	0.08	0.08	0.08	0.08
BE	0.12	0.12	0.10	0.07
BG	0.00	0.00	0.00	0.01
CY	0.00	0.00	0.00	0.00
CZ	0.10	0.11	0.08	0.07
DE	2.56	2.66	1.93	1.38
DK	0.06	0.06	0.04	0.04
EE	0.00	0.00	0.00	0.00
EL	0.01	0.01	0.01	0.00
ES	0.29	0.31	0.26	0.18
FI	0.01	0.02	0.02	0.02
FR	0.73	0.77	0.65	0.54
HR	0.02	0.02	0.02	0.01
HU	0.12	0.11	0.09	0.08
IE	0.03	0.03	0.02	0.02
IT	0.39	0.42	0.38	0.26
LT	0.00	0.00	0.00	0.00
LU	0.01	0.01	0.00	0.00
LV	0.00	0.00	0.00	0.00
MT	0.00	0.00	0.00	0.00
NL	0.12	0.12	0.08	0.07
PL	0.22	0.25	0.20	0.22
PT	0.05	0.04	0.05	0.04
RO	0.11	0.12	0.10	0.07
SE	0.12	0.12	0.09	0.07
SI	0.00	0.00	0.00	0.00
SK	0.05	0.05	0.04	0.03
EU total	**5.20**	**5.43**	**4.24**	**3.26**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Table 23: Number of passengers subject to trains delayed above 120 minutes that result in missed connections for journeys booked on one platform in a single transaction (in million)

Country	2028	2030	2040	2050
AT	0.02	0.02	0.03	0.03
BE	0.04	0.04	0.03	0.02
BG	0.00	0.00	0.00	0.00
CY	0.00	0.00	0.00	0.00
CZ	0.03	0.03	0.02	0.02
DE	0.79	0.82	0.60	0.42
DK	0.02	0.02	0.01	0.01

Country	2028	2030	2040	2050
EE	0.00	0.00	0.00	0.00
EL	0.00	0.00	0.00	0.00
ES	0.09	0.09	0.08	0.06
FI	0.00	0.00	0.00	0.00
FR	0.23	0.24	0.20	0.17
HR	0.01	0.01	0.00	0.00
HU	0.04	0.03	0.03	0.02
IE	0.01	0.01	0.01	0.01
IT	0.12	0.13	0.12	0.08
LT	0.00	0.00	0.00	0.00
LU	0.00	0.00	0.00	0.00
LV	0.00	0.00	0.00	0.00
MT	0.00	0.00	0.00	0.00
NL	0.04	0.04	0.03	0.02
PL	0.07	0.08	0.06	0.07
PT	0.01	0.01	0.01	0.01
RO	0.03	0.04	0.03	0.02
SE	0.04	0.04	0.03	0.02
SI	0.00	0.00	0.00	0.00
SK	0.02	0.02	0.01	0.01
EU total	**1.60**	**1.67**	**1.31**	**1.00**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

A cancellation of the first leg of a journey booked on one platform in a single transaction is also assumed to result in a missed connection and a delay of at least 60 minutes at the final destination.

Based on the information available in the ERA Service Quality Reports[164] and a T&E study[165], the average share of trains affected by cancellations resulting in missed connections is estimated at 2.76% for each Member States in 2023[166]. This average rate is expected to decline to 1.21% in 2050, given the expected improved quality of services driven by the implementation of the TEN-T Regulation[167]. In lack of other data available, it has been assumed that the share of affected passengers is the same as the share of affected trains.

[164] ERA (2025), Service Quality Reports, https://www.era.europa.eu/library/railway-undertakings-service-quality-reports

[165] T&E (2024). Mind the Gap! Europe's Rail Operators: A Comparative Ranking

[166] A weighted average was calculated using ERA data from operators providing sufficient detail to distinguish between (sub)urban, regional, long-distance, and international passengers: Trenitalia (IT, 2024), Renfe (ES, 2021), SNCB/NMBS (BE, 2024), SNCF (FR, 2022), ÖBB (AT, 2023), NS (NL, 2023), DB (DE, 2024), and DSB (DK, 2024). The overall average also takes into account the T&E study.

[167] A yearly rate of decline of 3% in the proportion of cancelled trains is considered due to the implementation of the TEN-T Regulation (SWD(2023) 386 final).

Table 24: Share of cancelled trains, EU average for 2023

Data source	International	Domestic long-distance	International, long-distance and regional trains
T&E study	3.12%		2.38%
ERA Service Quality Reports	2.93%	2.24%	1.91%

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

The number of passengers subject to cancelled trains that result in missed connections for journeys booked on one platform in a single transaction is provided in the table below.

Table 25: Number of passengers subject to cancelled trains that result in missed connections for journeys booked on one platform in a single transaction (in million)

Country	2028	2030	2040	2050
AT	0.58	0.56	0.44	0.33
BE	0.47	0.46	0.38	0.28
BG	0.03	0.03	0.02	0.02
CY	0.00	0.00	0.00	0.00
CZ	0.43	0.46	0.36	0.27
DE	7.40	7.82	5.99	4.43
DK	0.28	0.27	0.21	0.15
EE	0.00	0.00	0.00	0.00
EL	0.02	0.02	0.01	0.01
ES	1.06	1.14	0.95	0.72
FI	0.13	0.13	0.10	0.07
FR	2.95	3.06	2.63	2.20
HR	0.03	0.03	0.03	0.02
HU	0.33	0.31	0.27	0.25
IE	0.10	0.10	0.07	0.07
IT	1.43	1.58	1.39	1.03
LT	0.01	0.01	0.01	0.01
LU	0.03	0.03	0.02	0.02
LV	0.02	0.02	0.01	0.01
MT	0.00	0.00	0.00	0.00
NL	0.51	0.52	0.38	0.28
PL	1.00	1.13	0.96	0.87
PT	0.13	0.12	0.15	0.13
RO	0.18	0.21	0.18	0.14
SE	0.47	0.48	0.36	0.27
SI	0.01	0.01	0.01	0.01
SK	0.14	0.14	0.11	0.09
EU total	**17.74**	**18.65**	**15.05**	**11.67**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Overall, in the baseline scenario the number of passengers subject to delayed and cancelled trains that result in missed connections for journeys booked on one platform in a single transaction are estimated at 24.5 million in 2028, 25.8 million in 2030 and 15.9 million in

2050 at EU level. Their number is projected to increase until 2030, due to the expected increase in the rail travel, but post-2030 this is projected to be counterbalanced by improvements in punctuality, driven by the implementation of the TEN-T Regulation.

Table 26: Number of passengers subject to delayed and cancelled trains that result in missed connections for journeys booked on one platform in a single transaction (in million)

Country	2028	2030	2040	2050
AT	0.68	0.67	0.55	0.44
BE	0.63	0.62	0.50	0.37
BG	0.03	0.03	0.03	0.03
CY	0.00	0.00	0.00	0.00
CZ	0.56	0.59	0.46	0.35
DE	10.75	11.31	8.52	6.23
DK	0.36	0.35	0.26	0.20
EE	0.00	0.00	0.00	0.00
EL	0.03	0.03	0.02	0.02
ES	1.44	1.55	1.28	0.95
FI	0.15	0.15	0.12	0.09
FR	3.91	4.07	3.47	2.90
HR	0.05	0.05	0.05	0.04
HU	0.48	0.45	0.38	0.36
IE	0.14	0.14	0.11	0.09
IT	1.93	2.14	1.88	1.37
LT	0.01	0.01	0.01	0.01
LU	0.04	0.03	0.03	0.02
LV	0.02	0.02	0.01	0.01
MT	0.00	0.00	0.00	0.00
NL	0.66	0.67	0.49	0.37
PL	1.30	1.46	1.23	1.15
PT	0.19	0.18	0.21	0.19
RO	0.32	0.36	0.31	0.23
SE	0.63	0.65	0.48	0.35
SI	0.02	0.02	0.02	0.02
SK	0.20	0.20	0.16	0.13
EU total	**24.54**	**25.75**	**20.59**	**15.94**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

While the affected number of passengers is limited in absolute numbers, it needs to be noted that the impact of a missed connection on an individual passenger is high and has a chilling effect on the willingness to travel by rail. According to a Eurobarometer survey 18% of respondents fear being stranded when travelling on separate tickets[168].

[168] European Commission (2025), Eurobarometer No. 3178.

3. IMPACTS OF THE POLICY INTERVENTION ON COSTS AND COSTS SAVINGS

This section explains the inputs used and provides the detailed assessment of the impacts of the policy intervention on costs and costs savings.

3.1. Impact on passengers

The measure is expected to benefit passengers in the event of a missed connection during a multi-operator journey bought under a "single ticket" by granting them full passenger rights (such as re-routing, reimbursement, compensation, and assistance) if they miss a connection on a rail journey involving multiple operators provided that they hold a single ticket. In addition, passengers will also benefit from reduced hassle costs. More detailed explanations on the calculation of the benefits and hassle costs savings are provided below.

Benefits due to re-routing or reimbursement

Passengers with single tickets will have the right to re-routing or reimbursement where their arrival at the final destination is reasonably expected to be delayed due to a missed connection. In such a situation, the passenger will have a choice between: (i) renouncing to their journey and get full reimbursement of the ticket; (ii) re-routing or continuation of the journey free of charge, either at the earliest opportunity or at a later date, at the passenger's convenience. Based on the available evidence, the proportion of passengers asking for re-routing is assumed at 90%[169]. For the purpose of the analysis, it is assumed that those 90% of passenger choosing re-routing will be re-routed in respect of all cancelled services as well as those delayed by at least 60 minutes[170]. Out of the remaining 10% of passengers who are assumed not to request re-routing, it is further assumed that only 38% of them will actually ask for a reimbursement, with the rest making no claim[171].

The benefits for the passengers consist of either: 1) the original ticket price that is reimbursed, multiplied by the number of affected passengers, or 2) not having to bear the cost of buying a new ticket or tickets at same prices to get to their final destination thanks to the re-routing offered by the railway undertaking. The average ticket price per Member State for regional, long-distance and international trips has been calculated based on the

[169] Milieu SRL (2026), Support study for the report on the implementation and results of Regulation (EU) 2021/782 on rail passengers' rights and obligations. It should be noted that in some cases the AJC and HOTNAT agreements are operational and some passengers on some multi-operator trips will be assisted in the baseline, albeit on a voluntary basis. However, the number of passengers assisted is not available. Also, some passengers neither ask for reimbursement nor for re-routing but simply abandon their journey without asking for reimbursement despite being eligible. For example, Germany reports 60-70% for re-routing, 10-15% for reimbursement, indicating that 15-30% chooses neither.
[170] SWD(2023)386
[171] SWD(2023)386

railway undertaking's revenues[172], the number of passengers[173] and the estimated length of regional, long-distance and international trips. The average ticket prices for regional, long-distance and international trips per Member State for 2023 (expressed in 2024 prices) are presented in the table below. For the assessment, they are kept constant over time in 2024 prices.

Table 27: Average ticket price per passenger for regional, long-distance and international trips, by Member State (in EUR, in 2024 prices)

Country	Average ticket price per passenger (in EUR)
AT	17.2
BE	31.0
BG	13.1
CY	-
CZ	18.5
DE	15.6
DK	15.1
EE	16.2
EL	30.0
ES	20.8
FI	9.8
FR	24.2
HR	9.9
HU	16.0
IE	16.4
IT	20.0
LT	32.9
LU	37.6
LV	6.7
MT	-
NL	26.4
PL	13.9
PT	15.7
RO	18.5
SE	12.7

[172] IRG-Rail (2024), 13th Market Monitoring Report, based on railway undertaking revenues for 2023. The average ticket price has been estimated for regional, long-distance and international rail services by first estimating the average length of such services in each Member State and then multiplying this distance by the estimated ticket price per passenger-kilometer in that Member State. The latter is obtained by dividing total passenger revenues by the total number of passenger-kilometers of the relevant incumbent railway undertaking. As no disaggregated data on revenue per passenger-kilometer by service type are available, the same estimated price per passenger-kilometer is applied to all services (regional, long-distance and international) within each Member State.

[173] Source: Eurostat.

Country	Average ticket price per passenger (in EUR)
SI	29.7
SK	17.7

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

The benefits for passengers due to reimbursement, by Member State, are provided in the table below. Expressed as present value over 2028-2050, relative to the baseline, they are estimated at EUR 182.3 million at EU level.

Table 28: Benefits for passengers due to reimbursement, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	0.38	0.37	0.29	0.22
BE	0.55	0.54	0.44	0.33
BG	0.01	0.01	0.01	0.01
CY	0.00	0.00	0.00	0.00
CZ	0.30	0.32	0.25	0.19
DE	4.38	4.63	3.55	2.62
DK	0.16	0.16	0.12	0.09
EE	0.00	0.00	0.00	0.00
EL	0.02	0.02	0.02	0.01
ES	0.84	0.90	0.75	0.57
FI	0.05	0.05	0.04	0.03
FR	2.72	2.82	2.42	2.02
HR	0.01	0.01	0.01	0.01
HU	0.20	0.19	0.16	0.15
IE	0.06	0.06	0.05	0.04
IT	1.08	1.20	1.06	0.78
LT	0.01	0.01	0.01	0.01
LU	0.04	0.04	0.03	0.02
LV	0.00	0.00	0.00	0.00
MT	0.00	0.00	0.00	0.00
NL	0.51	0.52	0.39	0.28
PL	0.53	0.59	0.51	0.46
PT	0.08	0.07	0.09	0.08
RO	0.13	0.14	0.12	0.10
SE	0.00	0.00	0.00	0.00
SI	0.00	0.00	0.00	0.00
SK	0.00	0.00	0.00	0.00
EU total	**12.07**	**12.68**	**10.31**	**8.02**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

The benefits for passengers due to re-routing, by Member State, are provided in the table below. Expressed as present value over 2028-2050, relative to the baseline, they are estimated at EUR 5,658.6 million at EU level.

Table 29: Benefits for passengers due to re-routing, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	10.36	10.08	8.32	6.57
BE	16.89	16.54	13.48	9.97
BG	0.37	0.37	0.34	0.32
CY	0.00	0.00	0.00	0.00
CZ	8.97	9.54	7.41	5.67
DE	143.73	151.27	114.17	83.54
DK	4.78	4.60	3.39	2.65
EE	0.06	0.06	0.05	0.04
EL	0.65	0.73	0.54	0.41
ES	25.89	27.79	22.99	17.19
FI	1.28	1.29	1.01	0.80
FR	82.24	85.40	73.01	61.02
HR	0.44	0.45	0.38	0.33
HU	6.65	6.25	5.30	4.94
IE	2.00	2.04	1.49	1.32
IT	33.37	36.97	32.53	23.70
LT	0.27	0.36	0.36	0.27
LU	1.15	1.12	0.84	0.66
LV	0.11	0.11	0.08	0.06
MT	0.00	0.00	0.00	0.00
NL	15.06	15.39	11.32	8.56
PL	15.60	17.57	14.80	13.85
PT	2.56	2.44	2.87	2.52
RO	5.00	5.62	4.79	3.57
SE	0.00	0.00	0.00	0.00
SI	0.00	0.00	0.00	0.00
SK	0.00	0.00	0.00	0.00
EU total	**377.42**	**395.97**	**319.46**	**247.96**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Compensation benefits

Where they have single tickets, passengers will also have the right to compensation in case they do not ask for reimbursement and provided that they arrive at the final destination with a delay of at least 60 minutes between the place of departure and the final destination stated in their single ticket. As above, it is assumed that 90% are expected to prefer re-routing. The proportion of passengers actually requesting compensation out of those that experience a delay of at least 60 minutes and do not ask for reimbursement is assumed at 38%[174]. In line with the RPRR, a compensation of 25% of the ticket price is assumed for

[174] SWD(2023)386. Furthermore, SNCF (France) confirmed in an interview that for TGV, 40% of the passengers who experienced delays made a claim and received a compensation.

delays of 60 to 119 minutes and 50% for delays above 120 minutes. It is also assumed that the re-routed passengers due to a cancellation will be delayed for 60-119 minutes, and benefit of a compensation of 25% of the ticket price, as they will typically be assigned to the next train one hour later. At the same time, for journeys under a single ticket exceeding 12 hours, the right to compensation should arise only in relation to the delay affecting the specific individual transport contract, which corresponds to the baseline. This exemption should not apply where the journey under the single ticket involves a night train. Given the uncertainty to establish the number of passengers affected by the exemption, the exact reduction of benefits cannot be precisely quantified and would be within the margin of the sensitivity analysis on the proportion of passengers actually requesting compensation in section 6.5.

The compensation benefits for passengers, by Member State, are provided in the table below. Expressed as present value over 2028-2050, relative to the baseline, they are estimated at EUR 632.3 million at EU level.

Table 30: Compensation benefits for passengers, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	1.06	1.04	0.87	0.71
BE	1.83	1.79	1.46	1.07
BG	0.04	0.04	0.04	0.03
CY	0.00	0.00	0.00	0.00
CZ	0.96	1.02	0.79	0.61
DE	15.99	16.80	12.61	9.19
DK	0.51	0.49	0.36	0.29
EE	0.01	0.01	0.00	0.00
EL	0.07	0.08	0.06	0.05
ES	2.81	3.01	2.49	1.85
FI	0.13	0.13	0.11	0.09
FR	8.86	9.20	7.85	6.56
HR	0.05	0.05	0.04	0.04
HU	0.74	0.69	0.59	0.54
IE	0.22	0.23	0.17	0.15
IT	3.62	4.01	3.53	2.56
LT	0.03	0.04	0.04	0.03
LU	0.12	0.12	0.09	0.07
LV	0.01	0.01	0.01	0.01
MT	0.00	0.00	0.00	0.00
NL	1.61	1.64	1.20	0.92
PL	1.66	1.87	1.57	1.49
PT	0.29	0.27	0.32	0.28
RO	0.59	0.66	0.56	0.42
SE	0.75	0.76	0.57	0.42
SI	0.05	0.05	0.05	0.05
SK	0.35	0.35	0.28	0.22

Country	2028	2030	2040	2050
EU total	**42.35**	**44.37**	**35.66**	**27.64**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Assistance benefits

Passengers will equally have the right to **assistance** when a cancelled or delayed service causes a missed connection. Such assistance can comprise, depending on the circumstances, basic provision of information, meals, refreshments and accommodation. Based on the interviews with stakeholders, the average cost of such assistance is assumed to be EUR 10 per passenger affected by the disruption[175] and 5% of passengers are assumed to request assistance[176].

The assistance benefits for passengers, by Member State, are provided in the table below. Expressed as present value over 2028-2050, relative to the baseline, they are estimated at EUR 169.6 million at EU level.

Table 31: Assistance benefits for passengers, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	0.31	0.30	0.25	0.20
BE	0.29	0.29	0.23	0.17
BG	0.01	0.01	0.01	0.01
CY	0.00	0.00	0.00	0.00
CZ	0.26	0.27	0.21	0.16
DE	5.01	5.26	3.96	2.89
DK	0.17	0.16	0.12	0.09
EE	0.00	0.00	0.00	0.00
EL	0.01	0.01	0.01	0.01
ES	0.67	0.72	0.59	0.44
FI	0.07	0.07	0.05	0.04
FR	1.81	1.88	1.61	1.34
HR	0.03	0.03	0.02	0.02
HU	0.23	0.21	0.18	0.17
IE	0.07	0.07	0.05	0.04
IT	0.89	0.99	0.87	0.63
LT	0.00	0.01	0.01	0.00

[175] Assistance can comprise, depending on the circumstances, different types of services and goods such as meals, refreshments and hotel accommodation. For an hourly frequency, or 15 trains per day, it is estimated that all 15 possible delayed or cancelled trains lead to assistance with a drink and snack (EUR 2 per passenger), 3 of them to a meal (EUR 10 per passenger) and one (the last one) to a hotel (EUR 100 per passenger). The average per passenger is thus estimated at EUR 10. This assumption is based on interviews with stakeholders and market prices.

[176] Assistance is estimated at 5% by Germany in its Country Research Template report, which records national-level information regarding the application of Regulation (EU) 2021/782. In France, requests for assistance are approximately 3 times less frequent than the requests for compensation. Since the percentage of passengers requesting compensation (among those entitled to do it) is estimated to 38%, the percentage of delayed passengers receiving assistance represents 12% in France.

Country	2028	2030	2040	2050
LU	0.02	0.02	0.01	0.01
LV	0.01	0.01	0.01	0.00
MT	0.00	0.00	0.00	0.00
NL	0.30	0.31	0.23	0.17
PL	0.60	0.67	0.57	0.53
PT	0.09	0.08	0.10	0.09
RO	0.15	0.17	0.15	0.11
SE	0.29	0.30	0.22	0.16
SI	0.01	0.01	0.01	0.01
SK	0.10	0.10	0.08	0.06
EU total	**11.38**	**11.95**	**9.54**	**7.38**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Total benefits for passengers due to re-routing, reimbursement, compensation, and assistance

The total benefits due to re-routing, reimbursement, compensation, and assistance by Member State are provided in the table below. Expressed as present value over 2028-2050, relative to the baseline, they are estimated at EUR 6,642.8 million at EU level.

Table 32: Total benefits due to re-routing, reimbursement, compensation, and assistance for passengers, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	12.11	11.79	9.74	7.69
BE	19.56	19.15	15.61	11.54
BG	0.43	0.44	0.40	0.38
CY	0.00	0.00	0.00	0.00
CZ	10.49	11.15	8.66	6.63
DE	169.11	177.96	134.29	98.25
DK	5.62	5.41	3.99	3.12
EE	0.07	0.07	0.06	0.05
EL	0.75	0.84	0.63	0.48
ES	30.20	32.42	26.82	20.05
FI	1.53	1.53	1.21	0.95
FR	95.63	99.31	84.89	70.95
HR	0.53	0.54	0.45	0.39
HU	7.82	7.35	6.23	5.81
IE	2.35	2.39	1.75	1.55
IT	38.97	43.17	37.98	27.68
LT	0.31	0.42	0.41	0.32
LU	1.32	1.29	0.97	0.76
LV	0.13	0.13	0.10	0.08
MT	0.00	0.00	0.00	0.00
NL	17.47	17.86	13.13	9.94

Country	2028	2030	2040	2050
PL	18.39	20.71	17.45	16.33
PT	3.01	2.87	3.38	2.96
RO	5.87	6.60	5.63	4.18
SE	1.04	1.06	0.80	0.58
SI	0.06	0.05	0.06	0.06
SK	0.44	0.44	0.35	0.28
EU total	**443.23**	**464.97**	**374.97**	**291.00**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Hassle costs savings for passengers

In addition to re-routing or reimbursement, compensation and assistance, the proposed intervention is expected to reduce **hassle costs** for passengers. This includes the efforts required to get the information by the passengers, the waiting time due to the missed connections and the effort to search for new tickets[177]. The hassle cost savings are quantified by multiplying the number of affected tickets by the time saved per ticket and the passengers' average value-of-time. The time saved per ticket is conservatively assumed at 15 minutes[178], and the average value of time at EUR 11.68 per hour at EU level[179], adjusted for country-specific differences and distinguishing between professional and leisure travel[180].

The hassle costs savings for passengers, by Member State, are provided in the table below. Expressed as present value over 2028-2050, relative to the baseline, they are estimated at EUR 1,136.9 million at EU level.

Table 33: Hassle costs savings for passengers, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	2.51	2.44	2.03	1.61
BE	2.24	2.19	1.78	1.32
BG	0.05	0.05	0.05	0.04
CY	0.00	0.00	0.00	0.00
CZ	1.63	1.73	1.34	1.03
DE	37.81	39.77	29.96	21.90
DK	1.21	1.16	0.85	0.67
EE	0.01	0.01	0.01	0.01
EL	0.05	0.05	0.04	0.03

[177] This does not include the cost of the actual ticket.

[178] A conservative assumption of 15 minutes savings is used. Drawing on a study by the World Bank (https://thedocs.worldbank.org/en/doc/3ecf7262788a3ec69c8a45bbd3342a28-0080022021/related/Spring2021-governance-talk-asli-0525.pdf), each complaint handling would benefit of 15 minutes saved under a conservative approach (lower bound) and up to 60 minutes saved (upper bound). See also SWD(2023)386.

[179] European Commission (2019): Handbook on the External Costs of Transport.

[180] Source: https://www.autorite-transports.fr/wp-content/uploads/2020/07/enquete-tagv-2019.pdf. From this, it is assumed that 27% of the train trips have a professional purpose, the remaining 73% are assumed to be leisure trips.

Country	2028	2030	2040	2050
ES	3.63	3.89	3.22	2.40
FI	0.46	0.46	0.37	0.29
FR	10.72	11.13	9.51	7.95
HR	0.09	0.10	0.08	0.07
HU	1.23	1.16	0.98	0.91
IE	0.67	0.68	0.50	0.44
IT	5.21	5.77	5.08	3.70
LT	0.02	0.03	0.03	0.02
LU	0.24	0.23	0.18	0.14
LV	0.04	0.04	0.03	0.02
MT	0.00	0.00	0.00	0.00
NL	2.53	2.58	1.90	1.44
PL	2.83	3.19	2.68	2.52
PT	0.39	0.38	0.44	0.39
RO	0.61	0.69	0.58	0.43
SE	2.18	2.23	1.67	1.23
SI	0.04	0.04	0.04	0.04
SK	0.52	0.52	0.41	0.33
EU total	**76.91**	**80.52**	**63.77**	**48.94**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Total benefits for passengers

The total benefits for passengers due to re-routing, reimbursement, compensation and assistance as well as reduced hassle costs are provided in the table below, by Member State. Expressed as present value over 2028-2050, relative to the baseline, they are estimated at EUR 7,779.7 million at EU level.

Table 34: Total benefits for passengers, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	14.62	14.23	11.77	9.31
BE	21.80	21.34	17.39	12.86
BG	0.48	0.49	0.45	0.42
CY	0.00	0.00	0.00	0.00
CZ	12.12	12.88	10.00	7.66
DE	206.92	217.73	164.25	120.14
DK	6.82	6.57	4.84	3.79
EE	0.08	0.08	0.07	0.06
EL	0.80	0.90	0.67	0.50
ES	33.83	36.31	30.04	22.45
FI	1.99	1.99	1.58	1.25
FR	106.35	110.44	94.40	78.90
HR	0.63	0.64	0.53	0.46
HU	9.05	8.50	7.21	6.72

Country	2028	2030	2040	2050
IE	3.03	3.08	2.25	1.99
IT	44.18	48.94	43.06	31.37
LT	0.33	0.45	0.44	0.34
LU	1.56	1.52	1.14	0.90
LV	0.17	0.17	0.13	0.10
MT	0.00	0.00	0.00	0.00
NL	20.00	20.44	15.03	11.37
PL	21.23	23.90	20.13	18.85
PT	3.41	3.25	3.82	3.35
RO	6.48	7.29	6.21	4.62
SE	3.22	3.29	2.46	1.81
SI	0.10	0.09	0.10	0.10
SK	0.96	0.96	0.77	0.61
EU total	**520.15**	**545.49**	**438.74**	**339.94**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

3.2. Impact on railway undertakings

It is estimated that 158 railway undertakings will be directly affected by the intervention[181]. These include all railway undertakings which have a license for passenger transport and operate trains on regional or longer distances (excluding railway undertakings who operate on urban and suburban lines only). Out of the 158 railway undertakings 9 are small and medium sized enterprises.

One-off and recurrent adjustment costs for railway undertakings

Railway undertakings are expected to incur **one-off adjustment costs** to ensure passenger rights in case of missed connections under a single ticket. It will be important for railway undertakings to define the extent of their financial liability, coordinating disruption agreements with other railway undertakings, updating technical request-handling processes, revising terms and passenger information, training sales and support staff, and reviewing the legal and financial implications. While not mandated by the intervention, railway undertakings may decide to enhance their mutual cooperation with a view to reciprocal assistance and information sharing necessary to ensure effective passenger rights (with the existing AJC and HOTNAT frameworks as likely bases for such cooperation), being understood that the railway undertaking whose delayed or cancelled service causes a missed connection shall by default bear the corresponding liability.

The one-off effort required is estimated at 100 person-days of work per railway undertaking. Assuming 7.2 working hours per day on average[182] and the tariff rates by Member State for the ISCO 3 category (technicians and associate professionals)[183] in 2024

[181] Source: desk research based on websites of railway regulators, railway undertakings and competent authorities.
[182] Actual and usual hours of work - Statistics Explained - Eurostat
[183] Eurostat Structure of earnings survey, Labour Force Survey data for Non-Wage Labour Costs.

prices, the one-off adjustment costs for the 158 railway undertakings[184] is estimated at EUR 4 million in 2028 (of which EUR 216,000 for SME railway undertakings).

Table 35: One-off adjustment costs for railway undertakings, by Member State (in thousand EUR, in 2024 prices)

Country	Total one-off adjustment costs	of which for SMEs
AT	276	33
BE	34	0
BG	7	0
CY	0	0
CZ	103	17
DE	1,534	68
DK	197	0
EE	16	0
EL	12	0
ES	152	41
FI	26	0
FR	194	0
HR	10	0
HU	30	0
IE	34	0
IT	379	0
LT	11	0
LU	35	0
LV	13	0
MT	0	0
NL	176	32
PL	126	14
PT	24	0
RO	42	11
SE	515	0
SI	16	0
SK	28	0
EU total	**3,990**	**216**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Railway undertakings will also incur **recurrent adjustment costs** related to the assistance, reimbursement, re-routing and compensation of passengers.

For most ***re-routing*** cases, when the passenger can continue the journey by taking the next train where seats are available which were eventually not sold, this does not represent a cost. However, in some cases, there might be costs to bear when re-routing is done by paying a ticket (or seat reservation) to another railway undertaking. There is no data

[184] It is estimated that 158 railway undertakings will be directly affected by the intervention.

available on how many of such operator-to-operator transactions could be performed. Moreover, since this cost is paid by railway undertakings to other railway undertakings, at aggregate level the impact is assumed to be neutral, as the first one bears the costs, and the second one gets the benefits of selling an otherwise unsold ticket. At the same time, it is noted that this may impact individual railway undertakings differently, depending on the route, ticket pricing policy, the number of delays/cancellations they face that result in missed connections, and hence the impact of this re-routing cost will not be neutral at an individual rail operator level. However, given the limited availability of data, it is not possible to establish costs at individual railway undertaking level.

The adjustment costs related to the ***reimbursement*** of passengers (i.e. those who experience a delay of at least 60 minutes and do not request rerouting) are derived by multiplying the ticket price that is reimbursed with the number of affected passengers. The proportion of such passengers actually requesting reimbursement is assumed at 38%[185]. The average ticket price per Member State for regional, long-distance and international trips has been calculated based on the railway undertaking's revenues[186], the number of passengers[187] and the estimated length of regional, long-distance and international trips. Expressed as present value over 2028-2050, relative to the baseline, the adjustment costs for railway undertakings related to reimbursement are estimated at EUR 182.3 million (of which EUR 1 million for SME railway undertakings). The costs for 2028, 2030, 2040 and 2050 by Member State are provided in the table below.

Table 36: Recurrent adjustment costs for railway undertakings for reimbursement of passengers, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	0.38	0.37	0.29	0.22
BE	0.55	0.54	0.44	0.33
BG	0.01	0.01	0.01	0.01
CY	0.00	0.00	0.00	0.00
CZ	0.30	0.32	0.25	0.19
DE	4.38	4.63	3.55	2.62
DK	0.16	0.16	0.12	0.09
EE	0.00	0.00	0.00	0.00
EL	0.02	0.02	0.02	0.01
ES	0.84	0.90	0.75	0.57
FI	0.05	0.05	0.04	0.03
FR	2.72	2.82	2.42	2.02
HR	0.01	0.01	0.01	0.01
HU	0.20	0.19	0.16	0.15
IE	0.06	0.06	0.05	0.04
IT	1.08	1.20	1.06	0.78
LT	0.01	0.01	0.01	0.01

[185] SWD(2023)386
[186] IRG-Rail (2024), 13th Market Monitoring Report, based on railway undertaking revenues for 2023.
[187] Source: Eurostat.

Country	2028	2030	2040	2050
LU	0.04	0.04	0.03	0.02
LV	0.00	0.00	0.00	0.00
MT	0.00	0.00	0.00	0.00
NL	0.51	0.52	0.39	0.28
PL	0.53	0.59	0.51	0.46
PT	0.08	0.07	0.09	0.08
RO	0.13	0.14	0.12	0.10
SE	0.00	0.00	0.00	0.00
SI	0.00	0.00	0.00	0.00
SK	0.00	0.00	0.00	0.00
EU total	**12.07**	**12.68**	**10.31**	**8.02**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

The adjustment costs related to ***compensation***, are calculated in line with the RPRR, where a compensation of 25% of the ticket price is assumed for delays of 60 to 119 minutes and 50% for delays above 120 minutes. It is also assumed that the re-routed passengers due to a cancellation will be delayed for 60-119 minutes and will need to be paid a compensation of 25% of the ticket price, as they will typically be assigned to the next train one hour later. At the same time, for journeys under a single ticket exceeding 12 hours, the right to compensation should arise only in relation to the delay affecting the specific individual transport contract, which corresponds to the baseline. This exemption should not apply where the journey under the single ticket involves a night train. Given the uncertainty to establish the number of passengers affected by the exemption, the exact reduction of costs cannot be precisely quantified and would be within the margin of the sensitivity analysis on the proportion of passengers actually requesting compensation in section 6.5. The adjustment costs for railway undertakings related to compensation are estimated at EUR 632.3 million, expressed as present value over 2028-2050 relative to the baseline (of which EUR 3.6 million for SME railway undertakings). The costs for 2028, 2030, 2040 and 2050 by Member State are provided in the table below.

Table 37: Recurrent adjustment costs for railway undertakings for compensation of passengers, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	1.06	1.04	0.87	0.71
BE	1.83	1.79	1.46	1.07
BG	0.04	0.04	0.04	0.03
CY	0.00	0.00	0.00	0.00
CZ	0.96	1.02	0.79	0.61
DE	15.99	16.80	12.61	9.19
DK	0.51	0.49	0.36	0.29
EE	0.01	0.01	0.00	0.00
EL	0.07	0.08	0.06	0.05
ES	2.81	3.01	2.49	1.85
FI	0.13	0.13	0.11	0.09
FR	8.86	9.20	7.85	6.56

Country	2028	2030	2040	2050
HR	0.05	0.05	0.04	0.04
HU	0.74	0.69	0.59	0.54
IE	0.22	0.23	0.17	0.15
IT	3.62	4.01	3.53	2.56
LT	0.03	0.04	0.04	0.03
LU	0.12	0.12	0.09	0.07
LV	0.01	0.01	0.01	0.01
MT	0.00	0.00	0.00	0.00
NL	1.61	1.64	1.20	0.92
PL	1.66	1.87	1.57	1.49
PT	0.29	0.27	0.32	0.28
RO	0.59	0.66	0.56	0.42
SE	0.75	0.76	0.57	0.42
SI	0.05	0.05	0.05	0.05
SK	0.35	0.35	0.28	0.22
EU total	**42.35**	**44.37**	**35.66**	**27.64**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Railway undertakings will equally have to provide ***assistance*** when a cancelled or delayed service causes a missed connection. Such assistance can comprise, depending on the circumstances, basic provision of information, meals, refreshments and accommodation. As explained in section 6.1.1, based on the interviews with stakeholders, the average cost of such assistance is assumed to be EUR 10 per passenger affected by the disruption and 5% of passengers are assumed to request assistance[188]. Expressed as present value over 2028-2050, relative to the baseline, the adjustment costs for railway undertakings related to assistance of passengers are estimated at EUR 169.6 million at EU level (of which EUR 1 million for SME railway undertakings). The costs for 2028, 2030, 2040 and 2050 by Member State are provided in the table below.

Table 38: Recurrent adjustment costs for railway undertakings for assistance of passengers, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	0.31	0.30	0.25	0.20
BE	0.29	0.29	0.23	0.17
BG	0.01	0.01	0.01	0.01
CY	0.00	0.00	0.00	0.00
CZ	0.26	0.27	0.21	0.16
DE	5.01	5.26	3.96	2.89
DK	0.17	0.16	0.12	0.09

[188] Assistance is estimated at 5% by Germany in its Country Research Template report, which records national-level information regarding the application of Regulation (EU) 2021/782. In France, requests for assistance are approximately 3 times less frequent than the requests for compensation. Since the percentage of passengers requesting compensation (among those entitled to do it) is estimated to 38%, the percentage of delayed passengers receiving assistance represents 12% in France.

Country	2028	2030	2040	2050
EE	0.00	0.00	0.00	0.00
EL	0.01	0.01	0.01	0.01
ES	0.67	0.72	0.59	0.44
FI	0.07	0.07	0.05	0.04
FR	1.81	1.88	1.61	1.34
HR	0.03	0.03	0.02	0.02
HU	0.23	0.21	0.18	0.17
IE	0.07	0.07	0.05	0.04
IT	0.89	0.99	0.87	0.63
LT	0.00	0.01	0.01	0.00
LU	0.02	0.02	0.01	0.01
LV	0.01	0.01	0.01	0.00
MT	0.00	0.00	0.00	0.00
NL	0.30	0.31	0.23	0.17
PL	0.60	0.67	0.57	0.53
PT	0.09	0.08	0.10	0.09
RO	0.15	0.17	0.15	0.11
SE	0.29	0.30	0.22	0.16
SI	0.01	0.01	0.01	0.01
SK	0.10	0.10	0.08	0.06
EU total	**11.38**	**11.95**	**9.54**	**7.38**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Total recurrent adjustment costs for railway undertakings are estimated at EUR 984.2 million, expressed as present value over 2028-2050 relative to the baseline (of which EUR 5.6 million for SME railway undertakings). The costs for 2028, 2030, 2040 and 2050 by Member State are provided in the table below.

Table 39: Total recurrent adjustment costs for railway, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	1.75	1.71	1.42	1.13
BE	2.67	2.62	2.13	1.58
BG	0.07	0.07	0.06	0.06
CY	0.00	0.00	0.00	0.00
CZ	1.52	1.62	1.25	0.96
DE	25.38	26.70	20.12	14.71
DK	0.84	0.81	0.59	0.47
EE	0.01	0.01	0.01	0.01
EL	0.10	0.12	0.09	0.07
ES	4.32	4.63	3.83	2.86
FI	0.25	0.25	0.20	0.16
FR	13.39	13.90	11.88	9.93

Country	2028	2030	2040	2050
HR	0.09	0.09	0.08	0.07
HU	1.17	1.10	0.93	0.87
IE	0.35	0.36	0.26	0.23
IT	5.60	6.20	5.46	3.97
LT	0.04	0.06	0.06	0.04
LU	0.18	0.17	0.13	0.10
LV	0.02	0.02	0.02	0.01
MT	0.00	0.00	0.00	0.00
NL	2.42	2.47	1.82	1.38
PL	2.79	3.14	2.64	2.48
PT	0.45	0.43	0.51	0.44
RO	0.87	0.98	0.83	0.62
SE	1.04	1.06	0.80	0.58
SI	0.06	0.05	0.06	0.06
SK	0.44	0.44	0.35	0.28
EU total	**65.81**	**69.00**	**55.51**	**43.04**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Total one-off and recurrent adjustment costs for railway undertakings are estimated at EUR 988.2 million, expressed as present value over 2028-2050 relative to the baseline (of which EUR 5.8 million for SME railway undertakings). The costs for 2028, 2030, 2040 and 2050 by Member State are provided in the table below.

Table 40: Total one-off and recurrent adjustment costs for railway, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	2.03	1.71	1.42	1.13
BE	2.70	2.62	2.13	1.58
BG	0.07	0.07	0.06	0.06
CY	0.00	0.00	0.00	0.00
CZ	1.62	1.62	1.25	0.96
DE	26.92	26.70	20.12	14.71
DK	1.03	0.81	0.59	0.47
EE	0.03	0.01	0.01	0.01
EL	0.12	0.12	0.09	0.07
ES	4.47	4.63	3.83	2.86
FI	0.27	0.25	0.20	0.16
FR	13.58	13.90	11.88	9.93
HR	0.10	0.09	0.08	0.07
HU	1.20	1.10	0.93	0.87
IE	0.38	0.36	0.26	0.23
IT	5.98	6.20	5.46	3.97
LT	0.05	0.06	0.06	0.04

Country	2028	2030	2040	2050
LU	0.21	0.17	0.13	0.10
LV	0.04	0.02	0.02	0.01
MT	0.00	0.00	0.00	0.00
NL	2.60	2.47	1.82	1.38
PL	2.92	3.14	2.64	2.48
PT	0.48	0.43	0.51	0.44
RO	0.91	0.98	0.83	0.62
SE	1.55	1.06	0.80	0.58
SI	0.07	0.05	0.06	0.06
SK	0.47	0.44	0.35	0.28
EU total	**69.80**	**69.00**	**55.51**	**43.04**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Recurrent administrative costs for railway undertakings

Railway undertakings will also experience recurrent administrative costs as they will need to handle an increased number of re-routing, reimbursement, compensation and assistance requests. This cost is derived by estimates of the time needed to handle each of the requests (re-routing, reimbursement, compensation and assistance), multiplied by the total number of requests in each Member State, and the tariff rates by Member State for the ISCO 3 category (technicians and associate professionals)[189] in 2024 prices.

Table 41: Time estimates to handle requests and share of their automation

	Time in minutes	Share of automated handling in 2028	Share of automated handling in 2050
Reimbursement	15	20%	90%
Re-routing	5	30%	90%
Compensation	15	20%	90%
Assistance	5	15%	90%

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

The time needed to handle compensation and reimbursement claims (15 minutes) is derived based on the stakeholder consultation and previous impact assessments[190]. For the time needed to handle re-routing (5 minutes), it is assumed that a large proportion of re-routing will consist of simply allowing the passenger on the next available train, which would involve little administrative time, and only in a minor number of cases more complex re-routing would be offered as an alternative. For assistance, which can involve simple information provision, but also handling out refreshments and meals as well as the booking of hotels, 5 minutes are assumed per request. No recurrent administrative costs are assumed where requests are handled through automation. It is assumed that automation would cover 15% of requests for assistance, 20% of requests for reimbursement and

[189] Eurostat Structure of earnings survey, Labour Force Survey data for Non-Wage Labour Costs.
[190] SWD(2023)386

compensation and 30% of requests for re-routing in 2028, rising to 90% by 2050. Given the uncertainty, sensitivity analysis has been further performed.

The recurrent administrative costs for railway undertakings for handling reimbursement requests are provided in the table below, by Member State. Expressed as present value over 2028-2050, relative to the baseline, they are estimated at EUR 48.7 million at EU level.

Table 42: Recurrent administrative costs for railway undertakings for handling reimbursement requests, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	0.19	0.17	0.08	0.01
BE	0.17	0.15	0.07	0.01
BG	0.00	0.00	0.00	0.00
CY	0.00	0.00	0.00	0.00
CZ	0.07	0.07	0.03	0.01
DE	2.44	2.38	1.03	0.18
DK	0.12	0.10	0.04	0.01
EE	0.00	0.00	0.00	0.00
EL	0.00	0.00	0.00	0.00
ES	0.21	0.21	0.10	0.02
FI	0.03	0.03	0.01	0.00
FR	0.86	0.82	0.40	0.08
HR	0.00	0.00	0.00	0.00
HU	0.03	0.03	0.01	0.00
IE	0.04	0.03	0.01	0.00
IT	0.36	0.36	0.18	0.03
LT	0.00	0.00	0.00	0.00
LU	0.01	0.01	0.00	0.00
LV	0.00	0.00	0.00	0.00
MT	0.00	0.00	0.00	0.00
NL	0.16	0.15	0.06	0.01
PL	0.11	0.12	0.06	0.01
PT	0.02	0.01	0.01	0.00
RO	0.02	0.02	0.01	0.00
SE	0.16	0.15	0.06	0.01
SI	0.00	0.00	0.00	0.00
SK	0.02	0.02	0.01	0.00
EU total	**5.03**	**4.85**	**2.20**	**0.40**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

The recurrent administrative costs for railway undertakings for handling re-routing requests are provided in the table below, by Member State. Expressed as present value over 2028-2050, relative to the baseline, they are estimated at EUR 448.9 million at EU level.

Table 43: Recurrent administrative costs for railway undertakings for re-routing requests, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	1.49	1.34	0.64	0.14
BE	1.49	1.35	0.63	0.13
BG	0.02	0.02	0.01	0.00
CY	0.00	0.00	0.00	0.00
CZ	0.58	0.57	0.25	0.05
DE	23.38	22.69	9.89	1.94
DK	1.01	0.90	0.38	0.08
EE	0.00	0.00	0.00	0.00
EL	0.02	0.02	0.01	0.00
ES	1.92	1.90	0.91	0.18
FI	0.27	0.25	0.11	0.02
FR	7.62	7.29	3.60	0.81
HR	0.04	0.04	0.02	0.00
HU	0.33	0.29	0.14	0.04
IE	0.34	0.32	0.13	0.03
IT	3.20	3.27	1.66	0.33
LT	0.01	0.01	0.01	0.00
LU	0.09	0.08	0.03	0.01
LV	0.02	0.01	0.01	0.00
MT	0.00	0.00	0.00	0.00
NL	1.36	1.28	0.54	0.11
PL	0.96	1.00	0.48	0.12
PT	0.16	0.14	0.10	0.02
RO	0.18	0.19	0.09	0.02
SE	1.43	1.34	0.58	0.11
SI	0.02	0.02	0.01	0.00
SK	0.20	0.18	0.08	0.02
EU total	**46.13**	**44.49**	**20.33**	**4.17**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

The recurrent administrative costs for railway undertakings for handling compensation requests are provided in the table below, by Member State. Expressed as present value over 2028-2050, relative to the baseline, they are estimated at EUR 621.8 million at EU level.

Table 44: Recurrent administrative costs for railway undertakings for compensation requests, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	2.02	1.81	0.86	0.16
BE	2.08	1.88	0.87	0.15
BG	0.02	0.02	0.01	0.00
CY	0.00	0.00	0.00	0.00
CZ	0.80	0.79	0.35	0.06

Country	2028	2030	2040	2050
DE	33.07	32.01	13.68	2.39
DK	1.39	1.23	0.51	0.10
EE	0.01	0.01	0.00	0.00
EL	0.03	0.03	0.01	0.00
ES	2.68	2.64	1.24	0.22
FI	0.36	0.34	0.15	0.03
FR	10.59	10.12	4.91	0.98
HR	0.06	0.05	0.02	0.01
HU	0.47	0.41	0.20	0.04
IE	0.48	0.45	0.19	0.04
IT	4.47	4.56	2.28	0.40
LT	0.01	0.01	0.01	0.00
LU	0.12	0.11	0.05	0.01
LV	0.02	0.02	0.01	0.00
MT	0.00	0.00	0.00	0.00
NL	1.88	1.77	0.74	0.13
PL	1.33	1.37	0.66	0.15
PT	0.23	0.20	0.13	0.03
RO	0.27	0.28	0.13	0.02
SE	1.99	1.87	0.79	0.14
SI	0.03	0.02	0.01	0.00
SK	0.28	0.26	0.12	0.02
EU total	**64.68**	**62.25**	**27.93**	**5.10**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

The recurrent administrative costs for railway undertakings for handling assistance requests are provided in the table below, by Member State. Expressed as present value over 2028-2050, relative to the baseline, they are estimated at EUR 28.8 million at EU level.

Table 45: Recurrent administrative costs for railway undertakings for assistance requests, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	0.09	0.08	0.04	0.01
BE	0.10	0.09	0.04	0.01
BG	0.00	0.00	0.00	0.00
CY	0.00	0.00	0.00	0.00
CZ	0.04	0.04	0.02	0.00
DE	1.54	1.49	0.63	0.10
DK	0.06	0.06	0.02	0.00
EE	0.00	0.00	0.00	0.00
EL	0.00	0.00	0.00	0.00
ES	0.12	0.12	0.06	0.01
FI	0.02	0.02	0.01	0.00

Country	2028	2030	2040	2050
FR	0.49	0.47	0.23	0.04
HR	0.00	0.00	0.00	0.00
HU	0.02	0.02	0.01	0.00
IE	0.02	0.02	0.01	0.00
IT	0.21	0.21	0.11	0.02
LT	0.00	0.00	0.00	0.00
LU	0.01	0.00	0.00	0.00
LV	0.00	0.00	0.00	0.00
MT	0.00	0.00	0.00	0.00
NL	0.09	0.08	0.03	0.01
PL	0.06	0.06	0.03	0.01
PT	0.01	0.01	0.01	0.00
RO	0.01	0.01	0.01	0.00
SE	0.09	0.09	0.04	0.01
SI	0.00	0.00	0.00	0.00
SK	0.01	0.01	0.01	0.00
EU total	**3.01**	**2.90**	**1.29**	**0.22**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Thus, the total recurrent administrative costs for railway undertakings for handling reimbursement, re-routing, compensation and assistance requests, expressed as present value over 2028-2050 relative to the baseline, are estimated at EUR 1.15 billion at EU level.

Table 46: Total recurrent administrative costs for railway undertakings, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	3.80	3.41	1.61	0.32
BE	3.84	3.46	1.61	0.30
BG	0.04	0.04	0.02	0.00
CY	0.00	0.00	0.00	0.00
CZ	1.49	1.45	0.65	0.12
DE	60.44	58.57	25.23	4.62
DK	2.58	2.29	0.96	0.19
EE	0.01	0.01	0.01	0.00
EL	0.06	0.06	0.02	0.00
ES	4.93	4.87	2.30	0.43
FI	0.69	0.63	0.29	0.06
FR	19.56	18.71	9.14	1.91
HR	0.10	0.09	0.04	0.01
HU	0.86	0.75	0.36	0.08
IE	0.88	0.82	0.34	0.08
IT	8.24	8.41	4.23	0.77

Country	2028	2030	2040	2050
LT	0.02	0.02	0.01	0.00
LU	0.22	0.20	0.09	0.02
LV	0.04	0.04	0.02	0.00
MT	0.00	0.00	0.00	0.00
NL	3.48	3.28	1.38	0.26
PL	2.46	2.55	1.23	0.29
PT	0.42	0.37	0.25	0.05
RO	0.48	0.50	0.24	0.04
SE	3.67	3.45	1.48	0.27
SI	0.05	0.04	0.03	0.01
SK	0.51	0.47	0.21	0.04
EU total	**118.85**	**114.49**	**51.75**	**9.89**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

Total adjustment and administrative costs for railway undertakings

Overall, the total adjustment and administrative costs for railway undertakings, expressed as present value over 2028-2050 relative to the baseline, are estimated at EUR 2.14 billion at EU level. Total costs for 2028, 2030, 2040 and 2050 by Member State are provided in the table below.

Table 47: Total adjustment and administrative costs for railway undertakings, by Member State (in million EUR, in 2024 prices)

Country	2028	2030	2040	2050
AT	5.83	5.11	3.03	1.45
BE	6.54	6.08	3.75	1.87
BG	0.11	0.11	0.08	0.06
CY	0.00	0.00	0.00	0.00
CZ	3.11	3.07	1.90	1.08
DE	87.36	85.27	45.35	19.32
DK	3.62	3.10	1.56	0.66
EE	0.04	0.02	0.01	0.01
EL	0.17	0.18	0.11	0.07
ES	9.40	9.51	6.14	3.29
FI	0.96	0.88	0.48	0.21
FR	33.14	32.61	21.02	11.84
HR	0.20	0.18	0.12	0.07
HU	2.06	1.85	1.29	0.95
IE	1.26	1.18	0.60	0.31
IT	14.22	14.61	9.69	4.74
LT	0.07	0.08	0.07	0.05
LU	0.43	0.37	0.21	0.12
LV	0.08	0.06	0.03	0.02
MT	0.00	0.00	0.00	0.00

Country	2028	2030	2040	2050
NL	6.08	5.75	3.19	1.64
PL	5.37	5.69	3.87	2.77
PT	0.89	0.80	0.75	0.50
RO	1.39	1.48	1.08	0.66
SE	5.22	4.51	2.27	0.85
SI	0.12	0.10	0.08	0.06
SK	0.98	0.91	0.57	0.32
EU total	**188.66**	**183.49**	**107.26**	**52.94**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

3.3. Impact on intermediaries

Intermediaries are third parties that connect railway undertakings with passengers. Most are small travel agencies or tour operators with limited rail sales, often relying on specialised aggregators. A few major players, such as Trainline, Omio, Rail Europe and EuroTrain, focus on reselling tickets from multiple railway undertakings directly to passengers. Ticket vendors and tour operators may distribute combined tickets from different railway undertakings for a journey. Under the Regulation, if they do so on their own initiative, they must refund the full ticket price and pay 75% compensation of that amount if connections are missed, unless passengers were clearly informed in advance before purchase that the tickets represent separate contracts[191]. This particular liability would no longer apply under this intervention given that these ticket combinations would now entitle passengers to a full set of rights under the single ticket protection. At the same time, this liability would be substituted by another liability regime where ticket vendors and tour operators do not adhere to the applicable minimum connection times when offering a single ticket. The proposed measure is expected to incentivise ticket vendors and tour operators to improve their offer of single tickets, in order to reduce the likelihood of recurring reimbursements and compensation. Given the uncertainty to establish the number of passengers affected, the costs cannot be quantified although they are expected to be limited.

The one-off adjustment costs for intermediaries cover the effort to understand the regulation and to review the legal consequences. The specialised rail ticket sellers are expected to adapt the front-end website (update the terms and conditions), to adapt their overall strategy, and to take contact with the railway undertakings with whom they have a commercial agreement, to agree on a procedure. The effort per intermediary is estimated at 0.5 person-day in 2028. There were 121,276 intermediaries (ticket vendors, tour operators and other reservation service and related activities) according to Eurostat in 2024[192], of which over 99% are SMEs. Assuming 7.2 working hours per day on average[193] and the tariff rate for the ISCO 3 category (technicians and associate professionals)[194] by

[191] Article 12(4)-(5) of RPRR

[192] ECTA estimates it rather to 80,000-90,000 and attributes the difference with Eurostat to including/excluding 1-person travel consultants.

[193] Actual and usual hours of work - Statistics Explained - Eurostat

[194] Eurostat Structure of earnings survey, Labour Force Survey data for Non-Wage Labour Costs.

Member State in 2024 prices, the one-off adjustment costs for the intermediaries are estimated at EUR 12.84 million (of which EUR 12.82 million for SME intermediaries).

Table 48: One-off adjustment costs for intermediaries, by Member State (in thousand EUR, in 2024 prices)

Country	Total one-off adjustment costs	of which for SMEs
AT	366	365
BE	347	351
BG	66	66
CY	37	37
CZ	479	478
DE	1,770	1,766
DK	148	148
EE	55	55
EL	285	286
ES	1,507	1,505
FI	330	330
FR	1,639	1,637
HR	162	162
HU	118	118
IE	238	233
IT	2,466	2,464
LT	81	81
LU	15	15
LV	53	53
MT	36	36
NL	1,061	1,060
PL	415	414
PT	336	336
RO	147	147
SE	480	479
SI	90	90
SK	108	108
EU total	**12,835**	**12,822**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

3.4. Impact on National Enforcement Bodies (NEBs)

The planned initiative is expected to generate **one-off adjustment costs** for national enforcement bodies (NEBs), mainly linked to understanding the amendment, assessing its legal implications, and adapting complaint-handling procedures. The effort per NEB is assumed at 5 person-days. Assuming 7.2 working hours per day on average[195] and the tariff

[195] Actual and usual hours of work - Statistics Explained - Eurostat

rate for the ISCO 3 category (technicians and associate professionals)[196] by Member State in 2024 prices, the total one-off adjustment costs for NEBs are estimated at EUR 0.03 million in 2028.

While the number of complaints may increase due to more single tickets, greater legal clarity will simplify enforcement. Overall, additional enforcement costs for NEBs and other complaint bodies are expected to remain very limited.

Table 49: One-off adjustment costs for NEBs, by Member State (in thousand EUR, in 2024 prices)

Country	Total one-off adjustment costs
AT	1.5
BE	1.7
BG	0.4
CY	0.9
CZ	0.7
DE	1.6
DK	2.0
EE	0.8
EL	0.6
ES	0.9
FI	1.3
FR	1.4
HR	0.5
HU	0.5
IE	1.7
IT	1.2
LT	0.6
LU	1.8
LV	0.6
MT	0.7
NL	1.5
PL	0.5
PT	0.6
RO	0.4
SE	1.6
SI	0.8
SK	0.7
EU total	**27.4**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

[196] Eurostat Structure of earnings survey, Labour Force Survey data for Non-Wage Labour Costs.

4. SENSITIVITY ANALYSIS

Considering the uncertainty related to certain assumptions used in the analysis, sensitivity analysis has been performed with respect to:

- Share of multi-operator journeys performed under a single ticket (other than through-tickets);
- Level of automation by 2050 for handling requests for compensation by railway undertakings;
- Time required for handling requests for compensation by railway undertakings;
- Time of re-routing;
- Synergies with the initiatives on the Rail Ticketing Regulation (RTR) and the Regulation on Multimodal Booking (RMB)[197];
- Proportion of passengers actually requesting compensation out of those that experience a delay of at least 60 minutes and do not ask for reimbursement.

The results of the sensitivity analysis are compared to the 'central case', described in the previous sections.

4.1. Share of multi-operator journeys performed under a single ticket (other than through-tickets)

The share of single tickets involving different rail operators for a single journey bought in a single transaction, other than through-tickets, is estimated at 13% at EU level in the central case. Two alternative cases have been tested: (i) 6% share of multi-operator journeys performed under a single ticket, other than through-tickets (Case A – 6%); (ii) 26% share of multi-operator journeys performed under a single ticket, other than through-tickets (Case A – 26%). The results for the two cases considered are compared to the central case.

The summary of costs and benefits for the central case and the two alternative cases (Case A – 6% and Case A – 26%), expressed as present value over 2028-2050 relative to the baseline, is provided in the table below. The table shows that both alternative cases result in overall net benefits and similar benefits to costs ratio as the central case.

Table 50: Summary of costs and benefits for the central case and the two alternative cases (Case A – 6% and Case A – 26%) - present value over 2028-2050 compared to the baseline (in million EUR, 2024 prices)

	Central case	Case A – 6%	Case A – 26%
Passengers			
Benefits due to re-routing, reimbursement, compensation, and assistance	6,642.8	3,123.5	13,535.2
Re-routing benefits	5,658.6	2,660.7	11,529.7
Reimbursement benefits	182.3	85.7	371.4
Compensation benefits	632.3	297.3	1,288.4

[197] EU rules on multimodal digital mobility services and single digital booking & ticketing

	Central case	Case A – 6%	Case A – 26%
Assistance benefits	169.6	79.8	345.6
Hassle cost savings	1,136.9	534.6	2,316.4
Railway undertakings			
Adjustment costs	988.2	466.8	2,009.4
One-off adjustment costs	4.0	4.0	4.0
Re-routing costs	0.0	0.0	0.0
Reimbursement costs	182.3	85.7	371.4
Compensation costs	632.3	297.3	1,288.4
Assistance costs	169.6	79.8	345.6
Administrative costs	1,148.3	539.9	2,339.8
Re-routing administrative costs	448.9	211.1	914.7
Reimbursement administrative costs	48.7	22.9	99.3
Compensation administrative costs	621.8	292.4	1,267.0
Assistance administrative costs	28.8	13.6	58.8
Intermediaries			
One-off adjustment cost	12.8	12.8	12.8
National Enforcement Bodies			
One-off adjustment cost	0.03	0.03	0.03
Total costs	**2,149.4**	**1,019.6**	**4,362.1**
Total benefits	**7,779.7**	**3,658.1**	**15,851.6**
Net benefits	**5,630.3**	**2,638.5**	**11,489.5**
Benefits to costs ratio	**3.6**	**3.6**	**3.6**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

4.2. Level of automation for handling requests for compensation by railway undertakings

In the central case, it is assumed that automation would cover 20% of requests for compensation in 2028, rising to 90% by 2050. One alternative case is tested (Case B – 70%), where the share of requests for compensation handled automatically increases gradually from 15% in 2028 to 70% by 2050. The results for the alternative case considered is compared to the central case.

The summary of costs and benefits for the central case and the alternative case (Case B – 70%), expressed as present value over 2028-2050 relative to the baseline, is provided in the table below. The table shows that the alternative case result in overall net benefits and somewhat lower benefits to costs ratio relative to the central case.

Table 51: Summary of costs and benefits for the central case and the alternative cases (Case B – 70%) - present value over 2028-2050 compared to the baseline (in million EUR, 2024 prices)

	Central case	Case B – 70%
Passengers		
Benefits due to re-routing, reimbursement, compensation, and assistance	6,642.8	6,642.8
Re-routing benefits	5,658.6	5,658.6
Reimbursement benefits	182.3	182.3
Compensation benefits	632.3	632.3
Assistance benefits	169.6	169.6
Hassle cost savings	1,136.9	1,136.9
Railway undertakings		
Adjustment costs	988.2	988.2

	Central case	Case B – 70%
One-off adjustment costs	4.0	4.0
Re-routing costs	0.0	0.0
Reimbursement costs	182.3	182.3
Compensation costs	632.3	632.3
Assistance costs	169.6	169.6
Administrative costs	1,148.3	1,278.8
Re-routing administrative costs	448.9	448.9
Reimbursement administrative costs	48.7	48.7
Compensation administrative costs	621.8	752.3
Assistance administrative costs	28.8	28.8
Intermediaries		
One-off adjustment cost	12.8	12.8
National Enforcement Bodies		
One-off adjustment cost	0.03	0.03
Total costs	**2,149.4**	**2,279.9**
Total benefits	**7,779.7**	**7,779.7**
Net benefits	**5,630.3**	**5,499.7**
Benefits to costs ratio	**3.6**	**3.4**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

4.3. Time required for handling requests for compensation by railway undertakings

In the central case, the average time required to handle a request for compensation (if not automated) is assumed at 15 minutes. Two alternative cases have been tested: (i) 10 minutes for handling a request for compensation by railway undertakings (Case C – 10 min); (ii) 20 minutes for handling a request for compensation by railway undertakings (Case C – 20 min). The results for the two cases considered are compared to the central case.

The summary of costs and benefits for the central case and the two alternative cases (Case C – 10 min and Case C – 20 min), expressed as present value over 2028-2050 relative to the baseline, is provided in the table below. The table shows that both alternative cases result in overall net benefits. The benefits to costs ratio is somewhat higher in Case C – 10 min and lower than the central case in the Case C – 20 min.

Table 52: Summary of costs and benefits for the central case and the two alternative cases (Case C – 10 min and Case C – 20 min) - present value over 2028-2050 compared to the baseline (in million EUR, 2024 prices)

	Central case	Case C – 10 min	Case C – 20 min
Passengers			
Benefits due to re-routing, reimbursement, compensation, and assistance	6,642.8	6,642.8	6,642.8
Re-routing benefits	5,658.6	5,658.6	5,658.6
Reimbursement benefits	182.3	182.3	182.3
Compensation benefits	632.3	632.3	632.3
Assistance benefits	169.6	169.6	169.6
Hassle cost savings	1,136.9	1,136.9	1,136.9
Railway undertakings			
Adjustment costs	988.2	988.2	988.2
One-off adjustment costs	4.0	4.0	4.0

	Central case	Case C – 10 min	Case C – 20 min
Re-routing costs	0.0	0.0	0.0
Reimbursement costs	182.3	182.3	182.3
Compensation costs	632.3	632.3	632.3
Assistance costs	169.6	169.6	169.6
Administrative costs	1,148.3	941.0	1,355.6
Re-routing administrative costs	448.9	448.9	448.9
Reimbursement administrative costs	48.7	48.7	48.7
Compensation administrative costs	621.8	414.5	829.1
Assistance administrative costs	28.8	28.8	28.8
Intermediaries			
One-off adjustment cost	12.8	12.8	12.8
National Enforcement Bodies			
One-off adjustment cost	0.03	0.03	0.03
Total costs	**2,149.4**	**1,942.1**	**2,356.7**
Total benefits	**7,779.7**	**7,779.7**	**7,779.7**
Net benefits	**5,630.3**	**5,837.5**	**5,423.0**
Benefits to costs ratio	**3.6**	**4.0**	**3.3**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

4.4. Time of re-routing

In the central case, it is assumed that passengers choosing re-routing will be re-routed in respect of all cancelled services as well as those delayed by at least 60 minutes. Two alternative cases have been tested: (i) passengers choosing re-routing will be re-routed in respect of all cancelled services as well as those delayed by at least 5 minutes (Case D – 5 min); (ii) passengers choosing re-routing will be re-routed in respect of all cancelled services as well as those delayed by at least 120 minutes (Case D – 120 min). The results for the two alternative cases considered are compared to the central case.

The summary of costs and benefits for the central case and the two alternative cases (Case D – 5 min and Case D – 120 min), expressed as present value over 2028-2050 relative to the baseline, is provided in the table below. The table shows that both alternative cases result in overall net benefits. The benefits to costs ratio is much higher in Case D – 5 min and lower than in the central case in the Case D – 120 min.

Table 53: Summary of costs and benefits for the central case and the two alternative cases (Case D – 5 min and Case D – 120 min) - present value over 2028-2050 compared to the baseline (in million EUR, 2024 prices)

	Central case	Case D – 5 min	Case D – 120 min
Passengers			
Benefits due to re-routing, reimbursement, compensation, and assistance	6,642.8	27,179.5	5,715.2
Re-routing benefits	5,658.6	26,195.3	4,731.0
Reimbursement benefits	182.3	182.3	182.3
Compensation benefits	632.3	632.3	632.3
Assistance benefits	169.6	169.6	169.6
Hassle cost savings	1,136.9	1,136.9	1,136.9
Railway undertakings			
Adjustment costs	988.2	988.2	988.2
One-off adjustment costs	4.0	4.0	4.0

	Central case	Case D – 5 min	Case D – 120 min
Re-routing costs	0.0	0.0	0.0
Reimbursement costs	182.3	182.3	182.3
Compensation costs	632.3	632.3	632.3
Assistance costs	169.6	169.6	169.6
Administrative costs	1,148.3	2,813.0	1,073.1
Re-routing administrative costs	448.9	2,113.6	373.7
Reimbursement administrative costs	48.7	48.7	48.7
Compensation administrative costs	621.8	621.8	621.8
Assistance administrative costs	28.8	28.8	28.8
Intermediaries			
One-off adjustment cost	12.8	12.8	12.8
National Enforcement Bodies			
One-off adjustment cost	0.03	0.03	0.03
Total costs	**2,149.4**	**3,814.0**	**2,074.2**
Total benefits	**7,779.7**	**28,316.4**	**6,852.0**
Net benefits	**5,630.3**	**24,502.4**	**4,777.8**
Benefits to costs ratio	**3.6**	**7.4**	**3.3**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

4.5. Synergies with the initiatives on Rail Ticketing Regulation (RTR) and the Regulation on Multimodal Booking (RMB)

In the central case, the number of passengers travelling by rail is aligned with the baseline scenario of the impact assessment accompanying the initiatives on RTR and RMB. In other words, as explained in section 5.1, the baseline is common to that of the impact assessment accompanying the initiatives on RTR and RMB. An alternative case has been tested (Case E – RTR/RMB), where the number of passengers travelling by rail is aligned with the preferred policy option of the impact assessment accompanying the initiatives on RTR and RMB. The results for the alternative case considered is compared to the central case.

The summary of costs and benefits for the central case and the alternative case (Case E – RTR/RMB), expressed as present value over 2028-2050 relative to the baseline, is provided in the table below. The table shows that the alternative case result in overall net benefits and similar benefits to costs ratio relative to the central case.

Table 54: Summary of costs and benefits for the central case and the alternative cases (Case E – RTR/RMB) - present value over 2028-2050 compared to the baseline (in million EUR, 2024 prices)

	Central case	Case E – RTR/RMB
Passengers		
Benefits due to re-routing, reimbursement, compensation, and assistance	6,642.8	6,771.0
Re-routing benefits	5,658.6	5,767.9
Reimbursement benefits	182.3	185.8
Compensation benefits	632.3	644.5
Assistance benefits	169.6	172.8
Hassle cost savings	1,136.9	1,158.1
Railway undertakings		
Adjustment costs	988.2	1,007.1
One-off adjustment costs	4.0	4.0
Re-routing costs	0.0	0.0

	Central case	Case E – RTR/RMB
Reimbursement costs	182.3	185.8
Compensation costs	632.3	644.5
Assistance costs	169.6	172.8
Administrative costs	1,148.3	1,165.9
Re-routing administrative costs	448.9	455.8
Reimbursement administrative costs	48.7	49.5
Compensation administrative costs	621.8	631.3
Assistance administrative costs	28.8	29.3
Intermediaries		
One-off adjustment cost	12.8	12.8
National Enforcement Bodies		
One-off adjustment cost	0.03	0.03
Total costs	**2,149.4**	**2,185.9**
Total benefits	**7,779.7**	**7,929.1**
Net benefits	**5,630.3**	**5,743.3**
Benefits to costs ratio	**3.6**	**3.6**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study

4.6. Proportion of passengers actually requesting compensation out of those that experience a delay of at least 60 minutes and do not ask for reimbursement

In the central case, the proportion of passengers actually requesting compensation out of those that experience a delay of at least 60 minutes and do not ask for reimbursement is assumed at 38%. Three alternative cases have been tested: (i) the proportion of passengers actually requesting compensation out of those that experience a delay of at least 60 minutes and do not ask for reimbursement is 0% (Case F – 0%); (ii) the proportion of passengers actually requesting compensation out of those that experience a delay of at least 60 minutes and do not ask for reimbursement is 50% (Case F – 50%); (iii) the proportion of passengers actually requesting compensation out of those that experience a delay of at least 60 minutes and do not ask for reimbursement is 75% (Case F – 75%). The results for the three alternative cases considered are compared to the central case.

The summary of costs and benefits for the central case and the three alternative cases (Case F – 0%, Case F – 50% and Case F – 75%), expressed as present value over 2028-2050 relative to the baseline, is provided in the table below. The table shows that all alternative cases result in overall net benefits. The benefits to costs ratio is highest in Case F – 0% and lower in Case F – 50% and Case F – 75% relative to the central case.

Table 55: Summary of costs and benefits for the central case and the three alternative cases (Case F – 0%, Case F – 50% and Case F – 75%) - present value over 2028-2050 compared to the baseline (in million EUR, 2024 prices)

	Central case	Case F – 0%	Case F – 50%	Case F – 75%
Passengers				
Benefits due to re-routing, reimbursement, compensation, and assistance	6,642.8	6,010.5	6,842.5	7,258.5
Re-routing benefits	5,658.6	5,658.6	5,658.6	5,658.6
Reimbursement benefits	182.3	182.3	182.3	182.3
Compensation benefits	632.3	0.0	832.0	1,248.0

	Central case	Case F – 0%	Case F – 50%	Case F – 75%
Assistance benefits	169.6	169.6	169.6	169.6
Hassle cost savings	1,136.9	1,136.9	1,136.9	1,136.9
Railway undertakings				
Adjustment costs	988.2	355.9	1,187.9	1,603.9
One-off adjustment costs	4.0	4.0	4.0	4.0
Re-routing costs	0.0	0.0	0.0	0.0
Reimbursement costs	182.3	182.3	182.3	182.3
Compensation costs	632.3	0.0	832.0	1,248.0
Assistance costs	169.6	169.6	169.6	169.6
Administrative costs	1,148.3	526.5	1,344.7	1,753.8
Re-routing administrative costs	448.9	448.9	448.9	448.9
Reimbursement administrative costs	48.7	48.7	48.7	48.7
Compensation administrative costs	621.8	0.0	818.2	1,227.3
Assistance administrative costs	28.8	28.8	28.8	28.8
Intermediaries				
One-off adjustment cost	12.8	12.8	12.8	12.8
National Enforcement Bodies				
One-off adjustment cost	0.03	0.03	0.03	0.03
Total costs	**2,149.4**	**895.3**	**2,545.4**	**3,370.5**
Total benefits	**7,779.7**	**7,147.4**	**7,979.3**	**8,395.3**
Net benefits	**5,630.3**	**6,252.1**	**5,433.9**	**5,024.8**
Benefits to costs ratio	**3.6**	**8.0**	**3.1**	**2.5**

Source: Milieu consulting and Transport & Mobility Leuven (2026), Support study