

CONNECTION FAILED

*An analysis of existing and potential direct rail
connections between major European cities
compared to air connections*
July 2024



CONNECTION FAILED

GREENPEACE



Analysis by Greenpeace Central and Eastern Europe IMPRINT

Greenpeace Central & Eastern Europe
Wiedner Hauptstraße 120-124
1050 Vienna, Austria
Phone: +43 1 545 4580
Email: office@greenpeace.at

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INTRODUCTION

Aviation is one of the world's most climate-damaging and inequitable industries. While only 1% of the world's population is responsible for [more than half](#) of global climate emissions from aviation, the consequences affect everyone around the world, from extreme weather events to pollution-related illnesses and disruption from noise.

Flying is the [fastest growing source](#) of transport-related greenhouse gas emissions in the EU. In the face of a looming climate emergency, action should be taken to curb this boom that is putting our future at risk. Yet, far from taking a responsible approach, EU institutions and national governments continue to subsidise climate change through giveaways to airlines and airports, while closing down railway stations and lines. As a result, air traffic in Europe has returned to [pre-pandemic](#) levels.

On average in Europe, planes produce almost five times as many harmful greenhouse gases as trains. While more and more rail companies are significantly reducing their emissions by electrifying and switching to green electricity, making planes in some countries more than ten times worse than trains in terms of emissions, the aviation industry is doing almost nothing to reduce its emissions.

One of the reasons people choose between flying and travelling by train is the availability of good, direct connections. By train, you could leave Paris at 8 a.m. and arrive in Copenhagen at 9:30 p.m. But you need to change trains twice, in Cologne and Hamburg, and risk missing your connecting train twice. And you need

three rail companies for this journey, Eurostar to Cologne, Deutsche Bahn to Hamburg and DSB Danish Railways to Copenhagen. The SNCF can sell you a ticket for the full trip (“through ticket”), but you’ll have to be very lucky to get one for less than €300. On the other hand, five airlines fly daily between Paris and Copenhagen, with prices starting at €14.99. So why take the greener train on this route?

Citizens deserve to have access to a clean, efficient and affordable transport system that does not harm the climate, people and our planet.

It is high time to make rail more comfortable and affordable than flying across Europe.

SUMMARY AND KEY FINDINGS

Greenpeace has analysed 990 routes between 45 major cities in all European countries¹, to compare the number of existing and potential direct train connections with direct flight connections. This report shows that European cities are still far better connected by air than by rail, encouraging people to fly rather than take the train, despite aviation's damaging impact on the climate. Furthermore, the analysis exposes the considerable untapped potential for new direct trains (with a journey time of less than 18 hours) to replace flights, and identifies the reasons for the massively poor train connectivity across the continent. Greenpeace proposes solutions to policy makers on how to make rail more attractive for cross-border journeys.

The main findings on the train connectivity are presented in the form of a scorecard using a traffic light colour system.

¹ except island states (but including the UK), the five smallest states (Andorra, Liechtenstein, Monaco, San Marino, Vatican City), Russia, Belarus and the Caucasus region (Armenia, Azerbaijan and Georgia).

10 KEY FINDINGS

- Of 990 routes between 45 European cities that Greenpeace analysed, only **12% are currently served by direct trains**, while **69% are served by direct flight**. This is **almost six times as many direct flights as direct train connections** between European cities.
- Of the 990 routes, **42% – 419 routes – could easily be served by direct daytime or night trains** of under 18 hours travel time using existing rail tracks.²
- However, at present **only 27% – 114 of the 419 potential direct train routes – are in fact served by direct train**, leaving 73% – 305 potential routes – unserved.
- The **untapped potential for direct trains** between European cities is considerable: **Direct train connections in Europe could be more than tripled** using existing track infrastructure.
- The **top 5 cities best connected by direct train** in Europe are (in this order): **Vienna (17 direct train connections), Munich (15), Berlin (14), Paris and Zurich (13 each)**.
- The **six worst connected cities** by direct train are Athens, Lisbon, Pristina, Sarajevo, Skopje and Tallinn (each with zero direct train connections to other European cities).
- In **none of the 45 cities analysed is the potential for direct trains fully exploited**. Even Vienna, the city with the most direct train connections in Europe, has direct trains on only 59% of the possible routes. Most cities have direct train connections on less than 50% of the potential routes.
- With the **reactivation** of some currently closed train links, such as between Greece and Bulgaria or between Croatia and Bosnia, all 990 routes could be travelled by train (although this may involve many changes and a long journey time on some routes).
- There are **more direct flights** than direct train connections from/to all 45 cities analysed (except for Kyiv). Even when comparing the number of direct flights with direct trains only for routes with a train travel time of below 18 hours, there is only one city with more direct train than flight connections, namely Bratislava, which has a very small airport due to its proximity to Vienna. In all other cities, the number of direct flights on routes which could be served by train of less than 18 hours travel time is at

² With additional infrastructure investments leading to an average train speed of at least 80 km/h on all train routes, the number of direct train connections could even be increased to 54% on the routes analysed.

least 53% higher than the number of direct train connections. In 29 of the 45 cities, there are at least three times as many direct flights as there are greener direct train connections to cities that can or could be reached by train within 18 hours.

- Europe **lacks direct train** connections on many important routes, such as Paris–Rome, Madrid–Paris, or London–Berlin, which are among the busiest short-haul flight routes in Europe, each with well over one million passengers per year. These three routes could each be travelled by direct train within 10 hours and 30 minutes.

METHODOLOGY IN BRIEF

The main part of this report analysed 45 European cities for their existing and potential direct train and flight connections. The cities are located across Europe, only excluding island states, the five smallest states, Russia, Belarus, and Armenia, Azerbaijan and Georgia as the three members of the Council of Europe from the Caucasus, and include the capital city of each country (except Zurich for Switzerland), all other cities with more than one million inhabitants (except Kharkiv) and the second and third largest cities in the five most populated countries analysed. Additionally, Helsinki and Tirana were researched for train connectivity but excluded from the statistics, since there is no existing or potential train connection within 18 hours to any other city. Most data in this report, therefore, refer to routes between 45 cities.

In the sections of the report comparing cities with each other, three cities at the periphery, Chisinau, Istanbul and Kyiv, were excluded.

A potential direct train connection is defined as a route that could be travelled by direct train within 18 hours using existing rail tracks (tracks which are currently in use either for passenger or freight transport or both). The analysis also distinguishes between potential trains with a journey time below and above 12 hours – trains above 12 hours are usually operated as night trains with sleeper compartments, while trains below 12 hours can be operated as day or night trains. The analysis included only regular trains and flights, excluding seasonal services.

In addition, eight other cities of national relevance such as Frankfurt or Geneva were analysed for their connections with the 45 cities. But routes between these additional cities were not analysed. These eight cities are not included in the overall results, but only in the national sections of this report.

Amsterdam	Budapest	Ljubljana	Oslo	Sofia
Athens	Chisinau	London	Paris	Stockholm
Barcelona	Cologne	Luxembourg	Podgorica	Tallinn
Belgrade	Copenhagen	Lyon	Prague	Valencia
Berlin	Edinburgh	Madrid	Pristina	Vienna
Birmingham	Hamburg	Marseille	Riga	Vilnius
Bratislava	Istanbul	Milan	Rome	Warsaw
Brussels	Kyiv	Munich	Sarajevo	Zagreb
Bucharest	Lisbon	Naples	Skopje	Zurich

Table 1: 45 cities analysed for all 990 routes between them

Düsseldorf	Hanover	Stuttgart
Frankfurt/Main	Manchester	Toulouse
Geneva	Nuremberg	

Table 2: eight other cities of national relevance which were analysed for their connections to the 45 cities

All details on the methodology can be found in [annex 5](#).

IMPORTANCE OF DIRECT TRAINS

There are many different reasons why direct train connections are important. They include:

Accessibility. For people with reduced mobility, a direct train is crucial. Passengers with reduced mobility may need help getting on and off the train. But would not need help changing trains, and do not need to rely on barrier-free accessibility or the availability of support staff at transfer stations. Also, when travelling with small children and/or a lot of luggage, the convenience of a direct train is much greater.

Time. Direct trains are quicker because there is no need to change trains. The time saving may be only a few minutes on some well-connected routes, but can be many hours on others.

Simplicity. It is often much easier for passengers to find out about direct trains and to buy a ticket.

Reliability. With a direct train there is no risk of being stranded at a transfer station due to missed connection trains. A direct train may be late but it will still arrive at its destination, barring any unforeseen circumstances. This saves travellers a lot of stress.

Price. Direct trains are often much cheaper than connecting trains, especially if more than one railway company is involved, and even more so, if you have to buy separate tickets for different legs of the journey (see [excursus](#) on prices).

Passenger rights. In principle, EU regulations ensure a high level of consumer protection for train passengers, for example by obliging railway companies to refund part of the ticket price in the event of major delays, or even to pay for necessary accommodation. However, there is no right to compensation if you have bought tickets for different sections of your trip from different rail companies. (It is often cheaper to buy a ticket from A to B from railway company X, and a ticket from B to C from railway company Y, than to buy a through ticket from A to C from one railway company).

OVERALL RESULTS FOR EUROPE

Results for all 990 routes in bullet points

- Of 990 routes between 45 European cities that Greenpeace analysed, only **12% are currently served by direct trains**, while **69% are served by direct flight**. This is almost **six times as many direct flights as direct train connections** between European cities.
- Of the 990 routes, **42% – 419 routes – could easily be served by direct train** of under 18 hours travel time using existing rail infrastructure.
- However, at present **only 27% – 114 of the 419 potential direct train routes – are in fact served by direct train**, leaving 73% – 305 potential routes – unserved.
- The **untapped potential for direct trains** between European cities is considerable: **Direct train connections in Europe could be more than tripled** using existing rail infrastructure.
- The **top five cities best connected by direct train** in Europe are (in this

order): **Vienna (17 direct train connections), Munich (15), Berlin (14), Paris and Zurich (13 each).**

- The **six worst connected cities** by direct train are Athens, Lisbon, Pristina, Sarajevo, Skopje and Tallinn (each with zero direct train connections to other European cities).
- In **none of the 45 cities analysed is the potential for direct trains fully exploited**. Even Vienna, the city with the most direct train connections in Europe, has direct trains on only 59% of the possible routes. Most cities have direct train connections on less than 50% of the potential routes.
- With the **reactivation** of some currently closed train links, such as between Greece and Bulgaria or between Croatia and Bosnia, all 990 routes could be travelled by train (although this may involve many changes and a long journey time on some routes).
- There are **more direct flights** than direct train connections from/to all 45 cities analysed except for Bratislava (which has a very small airport due to its proximity to Vienna). In all other cities, the number of direct flights on routes which could be served by train of less than 18 hours travel time is at least 53% higher than the number of direct train connections. In 29 of the 45 cities, there are at least three times as many direct flights as there are greener direct train connections to cities that can or could be reached by train within 18 hours.
- Europe **lacks direct train** connections on many important routes, such as Paris–Rome, Madrid–Paris, or London–Berlin, which are among the busiest short-haul flight routes in Europe, each with well over one million passengers per year. These three routes could each be travelled by direct train within 10 hours and 30 minutes.
- Of the missing 305 direct train routes, 139 (46%) would have a travel time within 12 hours (day or night train), and 166 (54%) between 12 and 18 hours (night train).
- With investments in rail infrastructure allowing a minimum average speed of 80 km/h on all train routes, 54% of all routes could be travelled by a direct train within 18 hours in the future. These are 120 more routes. With an average speed of 80 km/h, around 1,500 km can be travelled, making polluting short-haul flights obsolete.
- Of the 419 routes between 45 European cities that can or could be travelled by train within 18 hours, currently 335 (80%) can be travelled by a direct flight. This is almost three times as many direct flights as existing direct train connections.

- Of the existing 114 direct train routes, 55 are day trains, 26 can be travelled both with a direct day or a night train, and 33 can be travelled only with a direct night train.
- Of the 990 routes, 820 can be travelled by train at the moment, though it might require many transfers and a very long travelling time. The longest train journey between the 45 cities is Tallinn–Lisbon. In total, it would take five days, eight hours and 10 minutes, require 13 transfers, and four nights at stations or in hotels.
- Of the 990 routes, 170 routes currently cannot be travelled by any train at the moment. These are all routes to and from Greece, Northern Macedonia, Bosnia and Kosovo, since these four countries are currently not connected by passenger trains with any other country.

Table with main results

Total routes analysed (between 45 cities)	990	
↳ Routes that can or could be travelled by a direct train within 18h with existing tracks	419	42%
↳ Routes with an existing direct train connection	114	27% of all routes that could be travelled by a direct train < 18h
		12% of all 990 routes
↳ Existing routes with a direct day train only	55	48%
↳ Existing routes with a direct night train only	33	29%
↳ Existing routes with both a direct day and a direct night train	26	23%
Potential but currently not existing direct train connections (routes below 18h)	305	
↳ Number of missing day or night trains (below 12h)	139	46%
↳ Number of missing night trains (between 12 and 18h)	166	54%
Routes that could be travelled by train within 18h with moderate infrastructure investment (1,500 km = short-haul flight distance, average train speed 80 km/h)	539	54%
Routes that currently can be travelled by train	820	83%

(including long train journeys and connecting trains)		
Routes that could be travelled by future train connections (including long train journeys and connecting trains)	990	100%
Routes with a possible direct train <18h that can be travelled by direct flight	335	80% of those routes which could be travelled by direct train within 18h
Total number of routes that can be travelled by direct flight	679	69%

Table 3a: Table with main results

The scorecard

The scorecard shows how well cities are connected by direct trains. It indicates train connectivity as a percentage of available direct train connections to possible direct train connections (less than 18 hours).

For example, the scale means:

- 100%: There are direct train connections (of under 18 hours travel time) available to all cities analysed.
- 0%: There is not a single direct train connection available to any of the cities analysed
- 50%: There are direct train connections (of under 18 hours travel time) to 50% of all cities analysed.

The scorecard includes all cities analysed, except Chisinau, Kyiv and Istanbul. These three cities were excluded because they have additional train connections to cities and countries not within the scope of this analysis.

Percentage of available direct trains (ratio to possible direct trains)	45 main European cities analysed (990 routes)	8 additional cities of national relevance
95-100		
90		
85		
80		
75		
70		
65		
60		
55	Vienna	
50	Munich Berlin	
45	Zurich	
40	Paris Budapest Bucharest	Frankfurt/Main
35	Brussels Prague	
30	Riga Stockholm Warsaw Amsterdam Cologne Hamburg	Stuttgart Düsseldorf
25	Vilnius Bratislava	
20	Marseille Barcelona Milan	Hanover
15	London Luxembourg Lyon Madrid Rome Oslo Ljubljana Zagreb	Manchester Nuremberg
10	Sofia Copenhagen Valencia Edinburgh Podgorica	Geneva Toulouse
5	Birmingham Naples Belgrade	
0	Athens Lisbon Tallinn Sarajevo Pristina Skopje	

Table 3b: Scorecard for all cities analysed

1	Vienna	59%	14	Cologne	31%	29	Podgorica	14%
2	Munich	52%	16	Bratislava	25%	30	Copenhagen	14%
3	Berlin	50%	16	Vilnius	25%	31	Sofia	13%
4	Zurich	46%	18	Marseille	23%	31	Valencia	13%
5	Paris	45%	19	Barcelona	23%	33	Edinburgh	12%
6	Bucharest	43%	20	Milan	21%	34	Naples	9%
7	Budapest	41%	21	Ljubljana	19%	35	Birmingham	9%
8	Brussels	39%	21	London	19%	36	Belgrad	6%
9	Prague	38%	23	Luxembourg	18%	37	Athens	0%
10	Hamburg	34%	23	Lyon	18%	37	Lisbon	0%
11	Riga	33%	25	Madrid	18%	37	Tallinn	0%
11	Stockholm	33%	26	Rome	17%	37	Pristina	0%
13	Warsaw	32%	27	Oslo	17%	37	Sarajevo	0%
14	Amsterdam	31%	28	Zagreb	15%	37	Skopje	0%

Table 3c: Train connectivity for 45 cities, sorted by percentages

- None of the cities analysed has a higher proportion of direct train connections than 59%. This means that slightly more than half of the destinations that *could* be reached by a direct train within 18 hours actually *can* be reached by a direct train. Vienna, with 59%, is the city with the highest proportion of direct train connections. Munich and Berlin are in 2nd and 3rd place. All other cities including Zurich and Paris in 4th and 5th place, have direct train connections of less than 50% of their full potential.
- There are six cities analysed without a single direct train connection to any other city analysed: Athens, Lisbon, Pristina, Sarajevo, Skopje and Tallinn. Greece, Northern Macedonia, Bosnia and Kosovo currently do not have any active passenger rail connection with any other country.
- 22 out of 42 cities analysed (52%) have a direct train connectivity of less than 20%, meaning that less than one out of five possible direct train routes can currently be travelled with a direct train.
- Cities in Central Europe are better connected by direct train and therefore rank higher on the scorecard, while cities in the UK, South-East Europe and Spain are particularly poorly connected.

Very important missing direct train connections

Europe is missing direct train connections on routes between some major cities, such as Paris–Rome, Madrid–Paris, or London–Berlin, which are among the busiest

short-haul flight routes in Europe with well over one million passengers each year. The following tables show examples for very important missing direct train connections. To identify major connections that are currently not served by direct train, Greenpeace has applied two main criteria: the proximity of the non-connected cities and if they overlap with some of the most used short-haul flight routes, which is an indicator for the relevance of the route.

Route	Current travel time by train, best possible connection ³	Transfers	Estimated travel time of a direct train
Amsterdam–Hamburg	5h15m	Osnabrück	4h45m
Amsterdam–Luxembourg	5h34m	Brussels	5h15m
Athens–Sofia	Not possible		12h30m
Bucharest–Sofia	9h34m	Ruse	9h
Cologne–London	5h05m	Brussels	3h55m
Copenhagen–Oslo	8h32m	Gothenburg	7h40m
Lisbon–Madrid	8h48m	Entroncamento, Badajoz	8h40m
Ljubljana–Milan	8h51m	Villach, Venice	7h10m
Lyon–Zurich	4h50m	Geneva	4h50m
Riga–Tallinn	10h6m	Valga	6h30m
Rome–Zurich	8h2m	Milan	7h20m
Vienna–Zagreb	8h23m	Villach	6h10m

Table 4: Missing routes due to proximity

³ In most cases, Greenpeace chose the quickest connection as the best possible connection.

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train ⁴	Flight passengers, 2023
Milan–London	11h25m	Geneva, Paris (Nord/Gare de Lyon)	10h20m	2,709,000
Madrid–London	13h59m	Barcelona, Paris (Nord/Gare de Lyon)	12h15m	2,575,000
Paris–Madrid	10h4m	Barcelona	9h40m	2,543,000
Paris–Lisbon	26h42m	Barcelona, Madrid, Badajoz, Entroncamento	17h45m	2,422,000
Paris–Rome	10h53m	Geneva, Milan	10h30m	2,247,000
Geneva–London	8h1m	Paris (Gare de Lyon/Nord)	6h	2,171,000
Lisbon–Madrid	8h48m	Entroncamento and Badajoz	8h40m	2,096,000
Rome–London	15h52m	Milan, Zurich, Paris (Nord/Gare de Lyon)	13h10m	2,079,000
Copenhagen–London	15h31m	Hamburg, Cologne, Brussels	12h50m	1,823,000
Berlin–London	9h46m	Cologne, Brussels	8h10m	1,491,000
Budapest–London	20h50m	Stuttgart, Paris	18h	1,424,000
Copenhagen–Oslo	8h32m	Gothenburg	7h40m	1,352,000

Table 5: 12 most used short-haul flight routes between the 45 cities with a missing direct train alternative below 18 hours.

Future possible direct train connections with infrastructure improvements

Especially in the Eastern part of Europe, trains are currently very slow on many routes. For example, the Bucharest–Vienna night train has an average travel speed

⁴ The estimated travel times for connections via Paris are based on using the direct route Lyon–Paris Disneyland–Paris CDG–Lille, as it is used for the direct Marseille–Brussels train.

of less than 60 km/h. With investment in rail infrastructure, allowing an average travel speed of 80 km/h on all train routes between the cities analysed, all routes between cities with a distance of around 1,500 km could be travelled by train within 18 hours. This is roughly equivalent to an overland air distance of 1,300 km. With this investment, almost all European short-haul flights, defined as 1,500 km distance, could be replaced by a direct train alternative (except flights to islands or over the sea).

An average train speed of 80 km/h can be achieved relatively easily by upgrading existing rail infrastructure, without the very expensive, time-consuming and sometimes also environmentally damaging construction of new high-speed lines. Such investments typically include the renewal or replacement of bridges, tracks or switches, electrification, local bypasses, additional parallel tracks on some lines, some short tunnels or train control systems.

On the existing high-speed rail network in Europe, much longer distances than 1,500 km can be travelled by train within 18 hours. For example, the Madrid–Amsterdam route is almost 2,300 km long and can already be travelled by train in 14h4m, including the time for two transfers in Barcelona and Paris.

In addition to the 419 potential train connections that could be achieved simply using existing tracks between the 45 cities, a further 120 connections could be introduced in the future with moderate infrastructure investments.

The following table shows examples of cities that would benefit from infrastructure improvements that would allow them to reach cities up to 1,500 km away within 18 hours. Notably, most of these cities are located in Central & Eastern and South-Eastern Europe.

	Number of potential, additional future train connections	Examples for destinations accessible within 18h, after infrastructure improvements
Sarajevo	17	Istanbul, Prague, Zurich
Bucharest	12	Munich, Prague, Warsaw
Prague	10	Kyiv, Tallinn, Sofia
Athens	9	Bratislava, Budapest, Vienna
Belgrade	9	Berlin, Hamburg, Warsaw
Sofia	9	Ljubljana, Kyiv, Zagreb
Bratislava	8	Riga, Skopje, Sarajevo
Munich	8	Bucharest, Riga, Sofia
Riga	8	Berlin, Hamburg, Vienna

Vilnius	8	Cologne, Munich, Zagreb
Ljubljana	8	Athens, Barcelona, Sofia
Zagreb	8	Bucharest, Copenhagen, Marseille
Berlin	8	Belgrade, Kyiv, Tallinn
Vienna	7	Athens, Sofia, Vilnius
Warsaw	7	Belgrade, Bucharest, Sofia
Budapest	5	Athens, Riga, Vilnius
Zurich	4	Podgorica, Sarajevo, Skopje
Milan	4	Podgorica, Sarajevo, Skopje

Table 6: Number of additional potential future direct connections per city after infrastructure improvements⁵

A comparison of direct train and direct flight connections

- 679 of all 990 routes (69%) between 45 European cities can be travelled by a direct flight. This is **almost six times as many direct flights** as existing direct train connections (114).
- Of 419 routes between 45 European cities that could be travelled by direct train within 18 hours, 335 (80%) can be travelled by direct flight, whereas only 114 can currently be travelled by direct train. These are **three times as many direct flights** as direct train connections.
- There are **more direct flights** than direct train connections from/to all 45 cities analysed (except for Kyiv). Even when comparing the number of direct flights with direct trains only for routes with a train travel time of below 18 hours, there is only one city with more direct train than flight connections, namely Bratislava⁶, which has a very small airport due to its proximity to Vienna.
- In all cities except Kyiv, Chisinau and Bratislava, the number of direct flights on routes which could be travelled by train within 18 hours is at least 53% higher than the number of direct train connections.
 - In 36 of the 45 cities, there are at least twice as many direct flights as direct train connections to cities that can or could be reached by train within 18 hours.
 - In 29 of the 45 cities, there are at least three times as many direct flights as direct train connections to cities that can or could be

⁵ This information for all cities can be found in the country sections.

⁶ The Bratislava airport was designed as a regional airport during Czechoslovak times, after that, the nearby Vienna Airport was used as the main airport for travels to and from Bratislava.

- reached by train within 18 hours.
- In 23 of the 45 cities, there are at least four times as many direct flights as direct train connections to cities that can or could be reached by train within 18 hours.
- In 18 of the 45 cities, there are at least five times as many direct flights as direct train connections to cities that can or could be reached by train within 18 hours.
- With 42 direct flight connections to all 44 other cities analysed, Athens is together with London and Istanbul the best connected city by direct flights. At the same time, Athens cannot be reached by train from any other city, as there have been no passenger trains to or from Greece in any direction for five years.
- There are six cities where all destinations that could be reached by train within 18 hours are served by direct flight: London⁷, Riga, Tallinn, Stockholm, Istanbul and Lisbon.

WHY ARE THERE SO FEW DIRECT TRAIN CONNECTIONS IN EUROPE?

There is no simple answer to the question why there are so few direct train connections in Europe. Greenpeace has identified the following factors, which cannot be quantified.

Lack of infrastructure investment. Since 1995, all European countries combined have invested 66% more in roads than in rail. Some countries have invested even more than three times as much in roads as in rail. Most of these countries now have very low average rail speeds and have very few direct cross-border train connections: Romania, Estonia, Bulgaria, Croatia and Greece.

Lack of rolling stock. There are many different electricity, signalling and safety systems for railways in Europe, and even different track gauges. For example, a normal German high-speed train cannot simply run on the French rail network but needs to have equipment for the two different national systems. Also largely due to a historic lack of money for investment and partly due to a higher demand for short and medium distance rail journeys, many railway companies have concentrated on national connections and are short of interoperable rolling stock and sleeper carriages. New connections are rather introduced on commuter routes than on cross-border connections.

Lack of political will, belief and support. In most European countries, governments still generally favour road and air transport over rail. As a result, governments rarely mandate and fund railways to provide additional cross-border services

⁷ Due to the proximity, one hour by train only, there is no flight between London and Birmingham.

under the PSO regime, failing to create a level playing field in the taxation of rail and air transport, leaving air transport largely untaxed. Also due to a lack of political support, [hundreds](#) of direct train connections in Europe have been closed in the last two decades, with the most recent peak during the COVID crisis. With a largely national mindset, there is also little support for harmonising rail regulations in Europe which would make cross-border rail transport easier and more efficient.

Shortcomings in the European regulatory framework for cross-border rail.

Coordinating international trains is difficult because more than [11,000](#) national rules apply to the European rail market, including safety systems, language, and signalling. The EU has started to harmonise the rules but this is taking many years also due to the reluctance of many national governments. In the meantime, coordinating international train services between operators is time-consuming and costly.

High rail tolls. Most countries are asking for a very high rail toll which the rail operator has to pay to the infrastructure operator for using the infrastructure. Suspending this toll can reduce operational costs especially for night trains [by 20%](#)⁸ which is decisive for the cost calculation of new night trains. [Belgium](#) is one of the few countries which have skipped this toll for night trains leading to the reintroduction of night trains from and to Brussels. The high rail tolls are especially disadvantageous to rail over cars since there are not too many road tolls in Europe.

Unfair competition of flights. The closure of hundreds of trains over the last two decades has coincided with falling air fares and the emergence of low-cost carriers such as Ryanair, easyJet and Wizzair. Railways are also at a massive disadvantage to airlines, which enjoy tax breaks such as exemption from kerosene tax and no VAT on international flights. As a result, the railways have lost their competitive edge over the airlines, particularly in the overnight train sector. The more airfares fell, the less people used night trains and the more night trains were phased out.

Lack of cooperation. The European railway market is dominated by national public railway companies with long traditions. For all these railway companies, the home market is by far the most important market. While historically there was good cooperation among railway companies on timetables and ticket sales, the international cooperation got worse some decades ago with the upcoming liberalisation and the uprising of airlines. Also the complexity of different national regulations is not fostering cross-border cooperation. The Austrian railway company ÖBB, the largest operator of night trains in Europe, is one of the few railway companies with a clear European mindset.

Lack of data. Air transport data are systematically collected for ALL European air routes and published by EUROSTAT. For example, it is known that in December

⁸ Origin of this data: Austrian Railway Company ÖBB

2023 exactly [5,260](#) people flew from Luxembourg to Munich and 4,763 people from Munich to Luxembourg. Such data does not exist for rail transport. The most you can find on Eurostat is the number of passengers between countries, but not between cities and not even for all European countries. Railway companies also do not know exactly where their own passengers travel. They only know for the tickets they sell themselves or that are sold by other ticket companies for their trains. For example, if you travel by train from Vienna to London, the Austrian railway company ÖBB will only know that you travelled to Brussels on their night train because you have to buy a separate ticket from Eurostar. Conversely, Eurostar does not know that you started somewhere else. This is not a solid foundation for introducing new train services.

HOW TO GET MORE DIRECT TRAINS?

There are many options and ways to introduce more direct trains in Europe. While politicians and railway companies would perhaps cite hundreds of reasons why it is difficult, there are steps – some are easier than others – to boost rail connectivity. And indeed, not everything in the railway sector can be changed overnight, especially given the massive underfunding of the sector in recent decades. A Greenpeace report showed that since 1995, all European countries combined have invested 66% more in roads than rail.

Greenpeace sees the following options for increasing the number of direct train connections:

The easiest. 2 out of 1. Combining a train from A to B with a train from B to C to form a train from A to C. This is particularly easy if both trains are operated by the same railway company. The measure could be implemented more or less immediately and without significant investment costs.

Example 1: Paris–Madrid

Paris–Madrid is the most used short-haul intra-EU flight for which there is no direct train service. In 2023, 2.5 million passengers flew between the two cities. The fastest current train connection takes 10h4m including a change at Barcelona Sants. A direct train would take around 9h30m, which could be both a day or a night train, and would therefore be a real alternative to polluting flights. The French SNCF operates the direct service between Paris and Barcelona, and the SNCF subsidiary OUIGO is also one of the four railway companies operating trains between Barcelona and Madrid. So it cannot be too complicated to start with the Paris–Madrid route.

Example 2: London–Cologne

There are several Eurostar trains running from London to Brussels-Midi, and several Eurostar trains running from Brussels-Midi to Cologne. But there is no direct train from London to Cologne, whereas there are direct trains from London to Amsterdam via Brussels-Midi. So why not start with a direct connection between Germany and the UK? It would not take longer than four hours. In 2019, 540,000 passengers flew between London and Cologne, so the lack of demand cannot be a reason either.

Example 3: Copenhagen–Oslo

Every hour, a train is running between Copenhagen and Göteborg, every second hour a train is running between Göteborg and Oslo. But there is not a single direct train between Denmark and Norway. Why not? A direct train would take no longer than 7h15m. By air, around 1.5 million people travel between the two cities each year. So the lack of demand cannot be the reason.

The second easiest. Prolonging train routes. This is particularly easy for night trains, since night train wagons are not used differently during the day. A night train from A to B can simply be extended to a route from A via B to C. This measure does not require investment in rolling stock. For example, the Polish railway company recently extended its night train between Warsaw and Vienna to a route from Warsaw via Vienna to Munich.

Example 1: Vienna–Naples

The ÖBB night train from Vienna to Rome takes 13h52m. It could easily be extended to Naples, adding only another two hours to the journey. In 2023, 232,000 passengers flew between Vienna and Naples, so the demand is there.

Example 2: Zagreb–Cologne

The daily night train operated by the Croatian railway company from Zagreb to Stuttgart takes 13h. It could easily be prolonged to Cologne, adding another three hours of travelling time.

New train routes as a business model. Surely there are routes with no direct train connection and a high demand. Under these circumstances the route can be operated as a business case for railway companies, either traditional state-owned or private ones, and such routes can be initiated by themselves by cooperating with infrastructure operators and other railway companies. Governments can support such new trains by improving frame conditions and/or promotion.

Example 1: London–Barcelona

London–Barcelona is the most used short-haul flight route in Europe where there is no alternative direct train connection. In 2023, 2.8 million people flew on this route. Currently, the fastest train connection takes 10h56m, but includes a rather complicated transfer with local transport in Paris from Paris Nord to Paris Gare de Lyon. As the direct high speed train from Brussels to Marseille shows, it is possible to cross the Paris region without a change of stations. A direct train from London to Barcelona would take less than 10 hours, and would therefore pose a real alternative to the polluting flight. Given the high flight demand on this route, and the usually very high occupancy rate of the Paris–Barcelona trains, this train is likely to be profitable for Eurostar and/or the French SNCF railway company. However, it is possible that one of the companies might need to purchase new rolling stock for this new route. But even in this case, latest in some years an inauguration should be possible.

Example 2: Paris–Rome

Paris–Rome is the second most used short-haul intra-EU flight for which there is no direct train service. In 2019, 2.25 million passengers flew between the two cities. The fastest current train connection takes 10h53m including two changes at Geneva and Milan. A direct high-speed train would take around 10h40m, while the reintroduction of the conventional night train, phased-out [in 2013](#), would take around 15h. Both would therefore be a real alternative to polluting flights. Given the high flight demand on this route, and the usually very high occupancy rate of the French and Italian high speed trains, this train is likely to be profitable for SNCF and/or Trenitalia or another private railway company. However, it is possible that one of the companies might need to purchase new rolling stock for this new route. But even in this case, it should be possible to launch the service within two years at the latest.

New train routes that need public support. There are definitely some train routes that can be expected to have low occupancy, at least in the beginning. This is especially relevant in countries where the train has got a poor image due to lack of investment or other reasons. In such cases, governments can ask (and pay) railway companies to operate certain routes. In the EU jargon, this is called “public service obligations (PSOs)”. Depending on whether or not the railway company has available rolling stock, the introduction of these trains can take from a few months to about two years for day trains and three years for night trains.

Example 1: Zagreb–Vienna

Despite the proximity of the two capitals, the direct train was phased out in 2023 due to permanent delays and a low demand. Despite this, in 2023, 135,000 people flew, and even more took the bus or the car which were the quicker and more reliable means of transport between the two cities. Both the Croatian as well as

the Austrian government could help to reintroduce this connection through public service obligations (PSOs).

Example 2: Madrid–Lisbon

Since 2020, there has been no direct train between the two capitals, despite 1.56 million flight passengers on this route in the year before. Flight prices on the Iberian Peninsula are usually extremely low. Therefore, this route might need public support (PSOs), ideally granted by both the Spanish and Portuguese governments, until the demand for the train is high enough to cover the railway company's costs. The currently quickest train connection takes 8h48m with two transfers. A direct train connection would be possible in around 8h30m and would therefore pose a real alternative to the polluting flight.

EXCURSUS: TICKET PRICES FOR DIRECT TRAINS

Greenpeace has published a number of reports showing that, on average, it is much cheaper to fly than to take the train. One of the many reasons for this situation is that connecting trains, especially if more than one railway company is involved, are often more expensive than direct trains, and even more so if you have to buy separate tickets for each section of the train.

This section gives some examples of such journeys, but does not give a complete assessment of all costs for all journeys.

Example 1: Vienna–Brussels⁹

Three times a week there is a direct ÖBB night train between Vienna and Brussels. On other days the best connection is the ÖBB night train from Vienna to Düsseldorf, followed by the Eurostar, formerly Thalys, train to Brussels. ÖBB cannot sell Eurostar tickets, so a separate purchase is required.

Cost range for the direct night train Vienna–Brussels: €54.90 – €94.90

Cost range for the night train Vienna–Düsseldorf: €64.90 – €94.90

+

Cost range for the Eurostar from Düsseldorf to Brussels: €50 – €80

⁹ Data researched on 8.4. for the first half of May via tickets.oebb.at, www.eurostar.com and www.ryanair.com, cheapest category, no discounts considered

While a night train journey from Vienna to Brussels costs almost the same as from Vienna to Düsseldorf, the additional Eurostar ticket increases the total price of the Vienna–Brussels journey in any case by more than 50%, and in some cases even by more than 100%.

Except on Sundays, flight prices on this route range from €16.32 to €81.32. The direct train from Vienna to Brussels can be cheaper than the flight on some days, while the train journey with a change in Düsseldorf is always more expensive than the flight.

Example 2: Prague–Amsterdam¹⁰

Three times a week, the European sleeper train connects Prague with Amsterdam. On other days the best train connections are day trains with a transfer in Berlin. The Czech railways are able to sell through tickets for the complete journey.

Cost range for the direct night train Prague–Amsterdam: €49 – €69

Cost for the through ticket from Prague to Amsterdam via Berlin: CZK1703 (€67.30)

Except on the only day where the night train cost €69, the direct night train is clearly cheaper.

Except on Sundays, flight prices for this route range from CZK1,034 (€40.90) to CZK2,134 (€84.40), making the direct night train more competitive with the polluting flight than the day train connection including a transfer in Berlin.

Example 3: Stuttgart–Paris and Stuttgart–Lyon¹¹

The air distances from Stuttgart to Paris and to Lyon are very similar, at 500 km and 470 km respectively. While there is a direct train connection between Stuttgart and Paris, a journey from Stuttgart to Lyon requires a transfer in Strasbourg. Both DB and SNCF can sell tickets for both routes, but DB prices were found to be cheaper for most trips analysed.

DB price range for the direct train Stuttgart–Paris: €44.90–€89.90

DB price range for the route Stuttgart–Lyon via Strasbourg: €99.90–€104.90

The 500 km journey from Stuttgart to Paris with the direct train cost up to 50% less than the 470 km journey from Stuttgart to Lyon requiring a transfer in Strasbourg.

¹⁰ Data researched on 8.4. for the first half of June via europeansleeper.com, cd.cz, www.eurostar.com and www.easyjet.com, cheapest category, no discounts considered

¹¹ Data researched on 23.4. for the period 13.-17.5. via bahn.de and sncf.fr, cheapest category, no discounts considered

Example 4: Madrid–Marseille and Madrid–Toulouse

The distances from Madrid to Marseille and to Toulouse are similar, 1,100 km and 1,000 km. While there is a direct train connection between Madrid and Marseille, a journey from Madrid to Toulouse requires at least one transfer in Narbonne, or even two at Barcelona and Perpignan. Tickets for the direct Madrid–Marseille train are only sold by the Spanish railway company RENFE, while tickets for the Madrid–Toulouse route are only sold by the French railway company SNCF (or buying a ticket from RENFE to Narbonne, and a separate ticket from SNCF to Toulouse).

RENFE price range for the direct train Madrid–Marseille: €135–€189

SNCF price range for Madrid–Toulouse: €188.80–€251.20

Despite being the slightly shorter route, the indirect Madrid–Toulouse train is 30–60% more expensive than the direct Madrid–Marseille train.

CONCLUSIONS AND DEMANDS

This analysis shows that there is a clear lack of direct train connections in Europe. With almost six times as many direct air connections, the availability of direct rail connections is an important factor for people choosing between a polluting flight and a greener train, especially as direct cross-border trains are not only more convenient and reliable, but often cheaper than connecting trains.

Greenpeace is therefore calling on national governments to introduce more direct long-distance and cross-border day and night rail services by increasing cross-border cooperation with other governments, encouraging better cooperation between railway companies, improving the necessary framework conditions such as reducing toll taxes, and directly commissioning direct train services where they are not yet economically viable (PSOs, public service obligations).

To increase the number of direct train connections in Europe in the future, governments will have to invest much more in rail infrastructure, ideally by shifting investment from road and air to rail. This investment is particularly important in countries where even the main rail lines are currently in poor condition, such as Romania, Croatia or Bulgaria. Greenpeace suggests prioritising investment in existing lines rather than building new high-speed rail lines, as the former will have a much faster impact, is more cost-effective and potentially less damaging to the environment.

Greenpeace is calling on the European Commission to speed up already announced measures to boost cross-border rail transport in Europe. These

measures include a unified train information system involving all rail companies providing regular passenger services, a unified booking system, in particular allowing the purchase of through tickets for all routes in Europe (excluding local lines), or speeding up technical and legal harmonisation. The EU Commission must also support the purchase of new and second-hand rolling stock.

More generally, the EU should develop a new Rail strategy to make travelling by train the best option for European people. The EU Commission and national governments should take effective measures to create a level playing field between airlines and railways, such as the introduction of an effective kerosene tax, the abolition of VAT on train tickets in all countries, or measures against wage dumping in the low-cost airline sector.

ANNEX 1: RESULTS PER COUNTRY IN ALPHABETIC ORDER

Austria (Vienna)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Vienna. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Austria, while the overall results for Europe can be found [here](#).

- 91% or 40 out of the 44 routes analysed from/to Vienna can be travelled by direct flight, while only 39% – 17 of these routes – can be travelled by direct train. This is more than twice as many direct flights as direct train connections between Vienna and the rest of Europe. As such, Vienna is far better connected by air than rail, encouraging people to fly instead of taking the train.
- However, at present 59% – 17 of the 29 potential direct train routes below 18 hours from/to Vienna – are in fact served by direct train, leaving 41% – 12 of the 29 potential routes – unserved. Nevertheless, this is the best result of all 45 cities analysed.
- Also, with its 17 direct train connections, Vienna is the city in Europe with the highest number of direct train connections.
- Of the 17 direct train connections to/from Vienna, **13 are served by night trains with six of them served both by day and night trains**. With this number, Vienna is also the city with the most night trains.
- Of the potential but currently non-existent direct train connections (of under 18 hours travel time) to/from Vienna, perhaps the most obvious one is

to/from Zagreb. This connection existed until the end of 2023. According to ÖBB, this line was closed due to the unreliability of the Croatian railway company. The second most obvious missing day (or night) train connection is to/from Belgrade.

- While 59% of the routes between Vienna and other major European cities which could be travelled by train within 18 hours are served by direct train, 90% – 26 out of the 29 routes – are served by direct flight.¹²
- Vienna **lacks direct train** connections on **some important European routes**, such as **Vienna–London, Vienna–Barcelona and Vienna–Copenhagen**, which are among the busiest short-haul flight routes from/to Austria. These routes could each be travelled by a night direct train.
- Another key European route that could be served by direct train from Austria is to Southern France, for example, Vienna–Lyon or Vienna–Marseille. These routes could each be travelled by a direct night train.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, seven additional cities could be served by a direct train to/from Vienna in the future. These are: Athens, Riga, Sofia, Podgorica, Pristina, Skopje and Chisinau. Almost all of the investment will have to be made outside Austria.

	Number	%
Existing and potential direct train connections to 44 cities <18h	29	
Total number of existing direct train connections	17	59%
Night trains only	7	41%
Day trains only	4	24%
Both day and night trains	6	35%
Total missing direct train connections below 18 hours	12	
Below 12 hours	3	
Additional future possible direct train connections <18h, with investment	7	
Direct flight connections on routes with an existing or possible direct train connection <18h	26	90%
Percentage of more direct flights than direct trains		53%
Direct flights (44 other cities)	40	91%

Table 7: Key data for Vienna

¹² Only 3 of these 29 cities cannot be reached by a direct flight: Bratislava, which is too close to Vienna for a flight, Kyiv, which cannot be reached by air due to the war, and Ljubljana.

Destinations with an existing direct day train connection	Bratislava, Budapest, Ljubljana, Prague
Destinations with an existing direct night train connection (only)	Amsterdam, Brussels, Bucharest, Kyiv, Milan, Paris, Rome
Destinations with existing direct day and night train connections	Berlin, Cologne, Hamburg, Munich, Warsaw, Zurich
Missing direct trains connections <12h	Belgrade, Luxembourg, Zagreb
Missing direct trains connections 12–18h	Barcelona, Birmingham, Copenhagen, London, Lyon, Marseille, Naples, Sarajevo, Vilnius
Additional destinations after infrastructure investment (<1,500 km)	Athens, Chisinau, Podgorica, Pristina, Riga, Sarajevo, Sofia

Table 8: Destination analysis for Vienna

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023
Vienna–London	13h34m ¹³	Frankfurt, Brussels	12h	1,258,000
Vienna–Barcelona	20h6m	Zurich, Geneva, Lyon	18h	698,000
Vienna–Copenhagen	17h29m	Hamburg	17h25m	520,000
Vienna–Belgrade	19h47m ¹⁴	Budapest, Szeged, Subotica, Novi Sad	10h30m	259,000
Vienna–Naples	14h45m	Bologna	13h50m	232,000
Vienna–Zagreb	8h23m	Villach	6h10m	135,000

Table 9: examples for missing train connections for Vienna, including Top 5 flights without direct train connection <18h

¹³ Quickest day time train connection

¹⁴ Stopover in Szeged or Subotica required

Balkan, 6 non-EU countries

This section summarises the findings for the six non-EU Balkan countries: Albania (Tirana), Bosnia (Sarajevo), Kosovo (Pristina), Montenegro (Podgorica), Northern Macedonia (Skopje) and Serbia (Belgrade).

- This region has the worst cross-border rail connections in Europe.
- Despite all countries having operational railway companies, four countries only have domestic rail connections, and cannot be reached by train from any other country: Albania, Bosnia, Kosovo and Northern Macedonia.
- Albania's capital city Tirana is the only capital analysed without a railway station since it was [demolished](#) in 2013.
- The only cross-border train route in this region is the night train between Belgrade and Montenegro (Podgorica and further to Bar).
- All trains in this region are very slow.
- Serbia is the only country of these six which can be reached by train from another country. However, the only way to enter Serbia is the route Budapest–Belgrade, with three transfers in Szeged, Subotica and Novi Sad. Current refurbishments on this route are supposed to be finished in 2025, leading to a hopefully better rail connectivity of Belgrade.
- There is currently no train connection between Serbia and Croatia, nor between Serbia and Romania or Bulgaria.
- Belgrade could be reached by train from 18 cities within 18 hours, including Rome, Zurich and Prague. For Podgorica, only seven other cities could be reached by train with the existing track infrastructure.
- This region would benefit most from upgrading the existing tracks to an average speed of 80 km/h. For example, it would then be possible to reach Sarajevo by train from 17 more cities.

Baltic countries (Riga, Tallinn, Vilnius)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Riga, Tallinn and Vilnius. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for the three Baltic countries, while the overall results for Europe can be found [here](#).

- Overall, the three Baltic countries Estonia, Latvia and Lithuania have a railway system in a poor stage and are badly connected with other countries.
- Tallinn is not connected by direct train with any other city analysed. It is only possible to travel by train to Riga with local trains with a long transfer time at the border station. In total, the journey takes around 10 hours.
- Riga is only connected by direct train with Vilnius. This train was only

introduced recently and runs once a day in each direction.

- Apart from Riga, Vilnius is directly connected by train to Warsaw, though due to different gorge sizes and lacking flexible rolling stock, a change of train is needed at the border station.
- There is no night train available in any of the Baltic countries.
- Due to the poor state of the railways in the Baltic countries, the total number of cities that could be reached by train within 18 hours is quite low. Only three cities each could be reached from Riga and Tallinn, and eight from Vilnius.
- The most obvious missing direct day train connection is Tallinn–Riga. Vilnius–Berlin could be travelled by night train in 13h30m. However, as neither Lithuanian Railways nor Deutsche Bahn operate night trains, this route is unlikely to be introduced in the near future.
- With moderate investment in rail infrastructure, allowing an average speed of 80 km/h on all train routes, nine additional cities could be served by direct trains from Riga and Vilnius within 18 hours, including Hamburg, Munich and Zagreb.
- Currently there are massive rail construction works undergoing in the Baltic countries (“[Rail Baltica](#)” project is aiming to connect all three countries with Poland by 2030) that might allow even more cities to be directly linked by train in the future.

	Number	%	Number	%	Number	%
	Riga		Vilnius		Tallinn	
Existing and potential direct train connections to 44 cities <18h	3		8		3	
Total number of existing direct train connections	1	33%	2	25%	0	0%
Night trains only	0	0%	0	0%	0	
Day trains only	1	100%	2	100%	0	
Both day and night trains	0	0%	0	0%	0	
Total missing direct train connections below 18 hours	2		6		3	
Below 12 hours	2		1		2	
Additional future possible direct train connections <18h, with investment	9		9		3	
Direct flight connections on routes with an existing or possible direct train connection <18h	3	100%	6	75%	3	100%
Percentage of more direct flights than direct trains		200%		200%		
Direct flights (44 other cities)	35	80%	18	41%	21	48%

Table 10: Key data for Riga, Vilnius and Tallinn

Destinations with an existing direct day train connection	Vilnius
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Tallinn, Warsaw
Missing direct trains connections 12–18h	none
Additional destinations after infrastructure investment (<1,500 km)	Berlin, Bratislava, Budapest, Chisinau, Hamburg, Kyiv, Munich, Prague, Vienna

Table 11: Destination analysis for Riga

Destinations with an existing direct day train connection	none
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Riga, Vilnius
Missing direct trains connections 12–18h	Warsaw
Additional destinations after infrastructure investment (<1,500 km)	Berlin, Kyiv, Prague

Table 12: Destination analysis for Tallinn

Destinations with an existing direct day train connection	Riga, Warsaw
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Tallinn
Missing direct trains connections 12–18h	Berlin, Bratislava, Hamburg, Prague, Vienna

Additional destinations after infrastructure investment (<1,500 km)

Belgrade, Bucharest, Budapest, Chisinau, Cologne, Kyiv, Ljubljana, Munich, Zagreb

Table 13: Destination analysis for Vilnius

Belgium (Brussels)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Brussels. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Belgium, while the overall results for Europe can be found [here](#).

- Despite being the capital city of the EU and geographically in a central position, Brussels is not well connected by direct trains. Only 11 cities can be reached by an existing direct train, while 28 cities could be reached by a direct train within 18 hours. This is a direct train connectivity of only 39%.
- Only four cities analysed can be reached by a direct night train, Berlin, Munich, Prague and Vienna. None of these night trains operate daily.
- There is no direct train connection to 61% of the cities that could be reached by a direct train within 18 hours. Important destinations without a direct train connection within 12 hours include Hamburg, Madrid and Zurich. Missing night train connections include Rome, Warsaw and Zagreb.
- All other 44 cities analysed can be reached by a direct flight, except Cologne and Luxembourg, both of which are too close to fly, and Kyiv.
- There are 136% more direct flights than direct trains to destinations that could be reached by train within 18 hours.
- The most important missing train connections from Brussels under 12 hours are Madrid and Barcelona, which are by far the most used short-haul flight routes from Brussels without a direct train alternative, followed by Milan and Geneva. Other important and quite short direct train connections would be to Hamburg and Zurich.
- The most important missing night train destination is Rome, which is in the top 5 short-haul flights from Brussels without a direct train alternative.

	Number	%
Existing and potential direct train connections to 44 cities <18h	28	
Total number of existing direct train connections	11	39%
Night trains only	4	36%
Day trains only	7	64%
Both day and night trains	0	0%
Total missing direct train connections below 18 hours	17	
Below 12 hours	9	
Direct flight connections on routes with an existing or possible direct train connection <18h	26	93%
Percentage of more direct flights than direct trains		136%
Direct flights (44 other cities)	41	93%

Table 14: Key data for Brussels

Destinations with an existing direct day train connection	Amsterdam, Cologne, London, Luxembourg, Lyon, Marseille, Paris
Destinations with an existing direct night train connection (only)	Berlin, Munich, Prague, Vienna
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Barcelona, Birmingham, Bratislava, Copenhagen, Edinburgh, Geneva, ¹⁵ Hamburg, Madrid, Milan, Zurich
Missing direct trains connections 12–18h	Budapest, Ljubljana, Naples, Rome, Stockholm, Valencia, Warsaw, Zagreb

Table 15: Destination analysis for Brussels

¹⁵ Due to the methodology chosen, Geneva is not included in the statistics for Brussels. But it is mentioned here as part of the Top 5 flights from Brussels without a direct train alternative.

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023 ¹⁶
Brussels–Madrid	12h23m	Valence, Barcelona	11h40m	1,125,000
Brussels–Barcelona	9h17m	Valence	8h55m	920,000
Brussels–Milan	9h30m	Paris (Nord/ Gare de Lyon), Geneva	9h10m	786,000
Brussels–Rome	12h57m	Paris (Nord/ Gare de Lyon), Geneva, Milan	12h30m	773,000
Brussels–Geneva	5h17m	Paris (Nord/Gare de Lyon)	5h	495,000
Brussels–Zurich	7h37m	Frankfurt	6h10m	291,000
Brussels–Hamburg	6h26m	Cologne	5h40m	140,000

Table 16: examples for missing direct train connections from/to Brussels, including Top 5 flights without direct train connection <18h

Bulgaria (Sofia)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Sofia. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Bulgaria, while the overall results for Europe can be found [here](#).

¹⁶ Data include flights from/to Brussels Airport and Charleroi Airport, and from/to all airports belonging to the destination.

- Sofia is very poorly connected by cross-border direct trains. Only one city, Istanbul, can be reached by an existing direct train, while eight cities could be reached by a direct train within 18 hours. This is a direct train connectivity of only 13%.
- The train connection to Istanbul runs overnight and is operated by the Turkish railway company. The Bulgarian railway company is operating domestic night trains but no international one.
- There is no direct train connection to 87% of the cities that could be reached by a direct train within 18 hours.
- The most important missing day train connection is the one to Bucharest. Currently, there is a pure summer service on this route.
- Other important destinations without a direct train connection within 12 hours include Belgrade and Skopje. Currently, there are no passenger trains crossing the borders both to Serbia and North Macedonia. Travelling from Sofia to Belgrade by train would require travelling through Romania and Hungary.
- An important night train connection is missing for Athens. This connection was closed in 2019. Athens cannot be reached by any train from Sofia, since there is currently no passenger transport over the Greek border too.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, 9 additional cities could be served by a direct train to/from Sofia in the future.
- There are 400% more direct flights than direct trains to destinations that could be reached by train within 18 hours. Out of the 44 European cities analysed, 29 can be reached by a direct flight.
- Flight passenger data for Sofia on Eurostat look incomplete, there is for example no data available for Sofia–Belgrade. The direct flight between Sofia and Zagreb only started in 2024. For these reasons, flight passenger data for Sofia are not fully included in this report. From the available data, Athens would be the most used short-haul flight route from Sofia with a missing train connection below 18 hours, with 152,000 flight passengers in 2023.

	Number	%
Existing and potential direct train connections to 44 cities <18h	8	
Total number of existing direct train connections	1	13%
Night trains only	1	100%
Day trains only	0	0%
Both day and night trains	0	0%
Total missing direct train connections below 18 hours	7	
Below 12 hours	4	
Additional future possible direct train connections <18h, with investment	9	

Direct flight connections on routes with an existing or possible direct train connection <18h	5	63%
Percentage of more direct flights than direct trains		400%
Direct flights (44 other cities)	29	66%

Table 17: Key data for Sofia

Destinations with an existing direct day train connection (only)	none
Destinations with an existing direct night train connection (only)	Istanbul
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Belgrade, Bucharest, Pristina, Skopje
Missing direct trains connections 12–18h	Athens, Sarajevo, Zagreb
Additional destinations after infrastructure investment (<1,500 km)	Bratislava, Chisinau, Kyiv, Ljubljana, Munich, Podgorica, Prague, Vienna, Warsaw

Table 18: Destination analysis for Sofia

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train
Sofia–Belgrade	1d13h57m	Vidin, Craiova, Orastie, Bekescsaba, Szeged, Subotica, Novi Sad	11h30m (direct route)
Sofia–Bucharest	9h34m	Ruse	9h
Sofia–Athens	Not possible		12h30m

Table 19: examples for missing direct train connections from/to Sofia

Croatia (Zagreb)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Zagreb. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Croatia, while the overall results for Europe can be found [here](#).

- Zagreb is poorly connected by cross-border direct trains. Only four cities analysed can be reached by an existing direct train, while 26 cities could be reached by a direct train within 18 hours. This is a direct train connectivity of only 15%.
- Only two cities analysed can be reached by a direct night train, Munich and Zurich.
- The other two cities that can be reached by a direct train are Budapest and Ljubljana. These both direct train connections are rare. There is only one train pair a day to Budapest and three to Ljubljana.
- There is no direct train connection to 85% of the cities that could be reached by a direct train within 18 hours.
- The two most obvious missing train connections under 12 hours are to Belgrade and Vienna. There is currently no passenger train crossing the Croatian–Serbian border.
- The most important missing night train connection from Zagreb is Frankfurt, which is the most used short-haul flight route from Zagreb without a direct train alternative, followed by London, Amsterdam and Paris.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, eight additional cities could be served by a direct train to/from Zagreb in the future.
- There are 350% more direct flights than direct trains to destinations that could be reached by train within 18 hours.

	Number	%
Existing and potential direct train connections to 44 cities <18h	26	
Total number of existing direct train connections	4	15%
Night trains only	2	50%
Day trains only	2	50%
Both day and night trains	0	0%
Total missing direct train connections below 18 hours	22	
Below 12 hours	7	
Additional future possible direct train connections <18h, with investment	8	
Direct flight connections on routes with an existing or possible direct train connection <18h	18	69%
Percentage of more direct flights than direct trains		350%
Direct flights (44 other cities)	25	57%

Table 20: Key data for Zagreb

Destinations with an existing direct day train connection (only)	Budapest, Ljubljana
Destinations with an existing direct night train connection (only)	Munich, Zurich
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Belgrade, Bratislava, Milan, Prague, Rome, Sarajevo, Vienna
Missing direct trains connections 12–18h	Amsterdam, Berlin, Brussels, Cologne, Hamburg, London, Luxembourg, Lyon, Naples, Paris, Podgorica, Pristina, Skopje, Sofia, Warsaw
Additional destinations after infrastructure investment (<1,500 km)	Athens, Bucharest, Chisinau, Copenhagen, Istanbul, Marseille, Kyiv, Vilnius

Table 21: Destination analysis for Zagreb

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023
Zagreb–Frankfurt	12h35m	Villach	12h30m	346,000
Zagreb–London	21h52m	Stuttgart, Paris	16h15m	218,000
Zagreb–Amsterdam	20h15m	Stuttgart, Cologne, Amsterdam	18h	197,000
Zagreb–Paris	16h55m	Stuttgart	16h30m	180,000
Zagreb–Vienna	8h23m	Villach	6h10m	135,000
Zagreb–Brussels	17h57m	Stuttgart, Frankfurt	17h15m	130,000
Zagreb–Belgrade	27h52m ¹⁷	Budapest, Szeged, Subotica, Novi Sad	6h	62,000
Zagreb–Prague	12h8m	Graz	11h10m	No direct flight

Table 22: examples for missing direct train connections from/to Zagreb

Czechia (Prague)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Prague. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Czechia, while the overall results for Europe can be found [here](#).

- Prague is rather poorly connected by cross-border direct trains. Only 10 cities analysed can be reached by an existing direct train, while 26 cities could be reached by a direct train within 18 hours. This is a direct train connectivity of only 38%. However, this means that 62% (or 16) of the cities cannot be reached by a direct train.

¹⁷ Stopover in Szeged or Subotica required

- Five cities analysed can be reached by a direct night train. Amsterdam, Brussels and Zurich are directly served only by night train, while Budapest and Warsaw are served by both day and night trains.
- While only 38% of the routes between Prague and other major European cities which could be travelled by train within 18 hours are served by direct train, 77% – 20 out of these 26 routes – are served by direct flight. Thus, Prague is still far better connected by air than rail, encouraging people to fly instead of taking the train.
- Among the most important missing train destinations within 12 hours are Cologne, Ljubljana and Paris. Among the most important missing night train destinations are London, Milan and Rome.
- Passenger data per airport pair are not available for the Czech Republic and therefore cannot be included in this analysis.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, 10 additional cities could be served by a direct train to/from Prague within 18 hours in the future including Bucharest and Sofia.

	Number	%
Existing and potential direct train connections to 44 cities <18h	26	
Total number of existing direct train connections	10	38%
Night trains only	3	30%
Day trains only	5	50%
Both day and night trains	2	20%
Total missing direct train connections below 18 hours	16	
Below 12 hours	6	
Additional future possible direct train connections <18h, with investment	10	
Direct flight connections on routes with an existing or possible direct train connection <18h	20	77%
Percentage of more direct flights than direct trains		100%
Direct flights (44 other cities)	33	75%

Table 23: Key data for Prague

Destinations with an existing direct day train connection	Berlin, Bratislava, Hamburg, Munich, Vienna ¹⁸
Destinations with an existing direct night train connection (only)	Amsterdam, Brussels, Zurich
Destinations with existing direct day and night train connections	Budapest, Warsaw
Missing direct trains connections <12h	Cologne, Copenhagen, Ljubljana, Luxembourg, Paris, Zagreb
Missing direct trains connections 12–18h	Belgrade, Birmingham, London, Lyon, Marseille, Milan, Naples, Rome, Stockholm, Vilnius
Additional destinations after infrastructure investment (<1,500 km)	Bucharest, Chisinau, Kyiv, Podgorica, Pristina, Riga, Sarajevo, Skopje, Sofia, Tallinn

Table 24: Destination analysis for Prague

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train
Prague–Ljubljana	10h54m	Graz	9h40m
Prague–Cologne	8h47m	Berlin	8h
Prague–Milan	13h10m	Munich, Verona	12h40m
Prague–Paris	12h41m	Munich, Stuttgart	10h10m

Table 25: examples for missing direct train connections from/to Prague

Denmark (Copenhagen)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Copenhagen. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Denmark, while the overall results for Europe can be found [here](#).

¹⁸ The night train to/from Vienna stops in the middle of the night, and was therefore not included in this analysis.

- Copenhagen is very poorly connected by direct trains. Only three cities analysed can be reached by an existing direct train, while 22 cities could be reached by a direct train within 18 hours. This is a direct train connectivity of only 14%.
- Berlin can be reached by a direct night train, Hamburg can be reached both by day and night train, and Stockholm can be reached by direct day trains.
- There is no direct train connection to 86% of the cities that could be reached by a direct train within 18 hours.
- The most important missing train connection from Copenhagen under 12 hours is Oslo, which is the second most used short-haul flight route from Copenhagen without a direct train alternative, followed by Amsterdam and Frankfurt. Oslo is the only capital of a neighbouring country without a direct train connection from Copenhagen. Another missing and rather short direct train connection is to Brussels.
- The most important missing night train destinations are London, Paris and Vienna, all of which are in the top 6 short-haul flights without a direct train alternative.
- Other than by direct train, all cities analysed except Bratislava can be reached by direct flight from the Copenhagen airport. There are 600% more direct flights than direct trains to destinations that could be reached by train within 18 hours. The high number of direct flight connections show the high need for cross-border journeys from and to Copenhagen.
- With moderate investment in Europe's rail infrastructure, allowing an average speed of 80 km/h on all train routes, 1 additional city, Zagreb, could be served by a direct night train in the future. Almost all of the investment for this potential route will have to be made in Slovenia and Croatia.

	Number	%
Existing and potential direct train connections to 44 cities <18h	22	
Total number of existing direct train connections	3	14%
Night trains only	1	33%
Day trains only	1	33%
Both day and night trains	1	33%
Total missing direct train connections below 18 hours	19	
Below 12 hours	7	
Additional future possible direct train connections <18h, with investment	1	
Direct flight connections on routes with an existing or possible direct train connection <18h	21	95%
Percentage of more direct flights than direct trains		600%
Direct flights (44 other cities)	40	91%

Table 26: Key data for Copenhagen

Destinations with an existing direct day train connection	Stockholm
Destinations with an existing direct night train connection (only)	Berlin
Destinations with existing direct day and night train connections	Hamburg
Missing direct trains connections <12h	Amsterdam, Brussels, Cologne, Luxembourg, Munich, Oslo, Prague
Missing direct trains connections 12–18h	Birmingham, Bratislava, Budapest, Ljubljana, London, Lyon, Marseille, Milan, Paris, Vienna, Warsaw, Zurich
Additional destinations after infrastructure investment (<1,500 km)	Zagreb

Table 27: Destination analysis for Copenhagen

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023
Copenhagen–London	15h31m	Hamburg, Cologne, Brussels	12h50m	1,823,000
Copenhagen–Oslo	8h32m	Gothenburg	7h40m	1,352,000
Copenhagen–Amsterdam	10h34m	Hamburg, Osnabrück	9h30m	1,124,000
Copenhagen–Paris	14h41m	Hamburg, Cologne	12h10m	980,000
Copenhagen–Frankfurt	10h34m	Hamburg	9h40m	548,000
Copenhagen–Vienna	19h51m	Hamburg	17h50m ¹⁹	539,000

¹⁹ This is the estimated time for a conventional night train based on the Hamburg–Vienna route. A direct high-speed train could run the full route in around 14 hours.

Copenhagen–Brussels	12h9m	Hamburg, Cologne	10h50m	416,000
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Table 28: examples for missing direct train connections from/to Copenhagen, including Top 6 flights (all above 500,000 passengers in 2023) without direct train connection <18h

Finland (Helsinki)

There are currently no international train connections to Finland. One reason is the shut-down of the train connection with Russia (Saint-Petersbourg) due to the Ukraine war, the other reason is that there is also no passenger train running between Finland and Sweden at the moment. Even with the reopening of the railway line between North Sweden and North Finland, the train route from Helsinki to Stockholm would take longer than 18 hours.

For this reason, this report is not containing more data on Finland.

France (Paris, Lyon, Marseille, Toulouse)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Paris, Marseille and Lyon, and some other cities of national relevance including Toulouse as the 4th largest French city. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for France, while the overall results for Europe can be found [here](#).

Vienna	59%
Berlin	50%
Zurich	46%
Paris	45%
Brussels	39%
Marseille	23%
Lyon	18%
Luxembourg	18%
Toulouse	13%

Table 29a: Percentage of available direct trains (ratio to possible direct trains) for French cities compared to selected other cities

- Paris is the city in Europe with the fourth highest number of direct train connections, after Vienna, Munich and Berlin. 13 of the 44 routes between Paris and other European cities analysed are served by direct trains.
- Despite belonging to the cities with the most direct train connections, even on routes to/from Paris the untapped potential for direct trains is considerable: Direct trains are offered on only 45% of the 29 routes between Paris and other European cities which could be travelled by a direct train with a maximum journey time of 18 hours, using the existing tracks.
- Thus, 55% – 16 out of 29 – of the routes between Paris and other cities are not currently served by a direct train (with a journey time of less than 18 hours), although they could be served by using the existing tracks.
- While 45% of the routes between Paris and other major European cities which could be travelled by train within 18 hours are served by direct train, 93% – 27 out of the 29 routes, all except Bratislava and Cologne – are served by direct flight.
- Thus, Paris is still far better connected by air than rail, encouraging people to fly instead of taking the train.
- Marseille, Lyon and Toulouse are all poorly connected by direct trains with other cities. There are only six direct trains from Marseille, five from Lyon and three from Toulouse. This means that for Marseille only 23% (6 out of 28) of routes that could be served by a direct train are served by a direct train, while for Lyon this percentage is at 18% (5 out of 26) and even lower at 13% for Toulouse (3 out of 24).
- There is no international train going to Toulouse, while Marseille and Lyon are at least directly connected with Spain, Belgium and Luxembourg each.
- Night trains are a rare species in France. Cross-border night trains only run from Paris to Berlin, Munich and Vienna; in addition, there are some domestic night trains including the Paris–Marseille and Paris–Toulouse routes.
- The French railway company SNCF operates the domestic night trains, but no international ones. Both night trains running to France are operated by the Austrian railway company ÖBB.
- Unlike international rail services, all French cities analysed are well served by direct trains with each other, both in terms of frequency and speed.
- Thanks to the efficient high-speed rail network in France and all neighbouring countries, the number of European cities analysed that could be reached by a direct train from France within 18 hours is high. This is the case for 29 destinations from Paris, 28 from Lyon, 26 from Marseille and 24 from Toulouse.
- The most obvious missing direct train connections for Paris are the routes to Rome and Madrid²⁰, both being among the Top five most used short-haul flights routes in Europe without a direct train connection. Both routes could

²⁰ The Spanish railway company Renfe expects the Madrid–Paris connection to be ready by the end of 2024.

be travelled in less than 12 hours by train. Paris–Venice is the fourth most used short-haul flight route from Paris without a direct train alternative. Based on flight passenger numbers, the most important missing night train connections from Paris are Lisbon and Copenhagen.

- London and Lisbon are among the Top three short-haul flights without direct train alternatives for Marseille, Lyon and Toulouse each. The other Top three routes are Marseille–Munich, Lyon–Amsterdam and Toulouse–Brussels. Except Lisbon, all these routes could be easily travelled with a day train.
- Other very important missing direct train connections include Lyon–Zurich, Marseille–Milan/Rome and Toulouse–Madrid.
- While there are few direct train connections, there are many more direct flights from Marseille, Lyon and Toulouse to all cities that could be reached by train within 18 hours. From Lyon, 79% of these cities are served by a direct flight, from Marseille it is 81%, and even from the smaller Toulouse Airport, 58% are served with a direct flight. All French cities analysed are therefore much better connected by air than by rail, which encourages people to fly rather than take the train.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, in total three additional cities could be served by a direct train to/from France within 18 hours in the future, Marseille–Zagreb, Lyon–Belgrade and Lyon–Sarajevo. Most of the investment for these routes will have to be made outside France.

FRANCE	Number	%	Number	%	Number	%	Number	%
	Paris		Marseille		Lyon		Toulouse	
Existing and potential direct train connections <18h to 44/45 cities	29/44		26/44		28/44		24/45	
Total number of existing direct train connections	13	45%	6	23%	5	18%	3	13%
Night trains only	2	15%	0	0%	0	0%	0	0%
Day trains only	9	69%	5	83%	5	100%	2	67%
Both day and night trains	2	15%	1	17%	0	0%	1	33%
Total missing direct train connections below 18 hours	16		20		23		21	
Below 12 hours	9		12		14		14	
Additional future possible direct train connections <18h, with investments	0		1		2		0	
Direct flight connections on routes with an existing or	27	93%	21	81%	22	79%	14	58%

possible direct train connection <18h								
Percentage of more direct flights than direct trains		108%		250%		340%		387%
Direct flights to 44 cities (45 for Toulouse)	39	89%	25	57%	27	61%	21	47%

Table 29b: Key data for the French cities analysed

Destinations with an existing direct day train connection (only)	Amsterdam, Barcelona, Brussels, Cologne, London, Luxembourg, Lyon, Milan, Zurich
Destinations with an existing direct night train connection (only)	Berlin, Vienna
Destinations with existing direct day and night train connections	Marseille, Munich
Missing direct trains connections <12h	Birmingham, Edinburgh, Hamburg, Ljubljana, Madrid, Naples, Prague, Rome, Valencia
Missing direct trains connections 12–18h	Bratislava, Budapest, Copenhagen, Lisbon, Stockholm, Warsaw, Zagreb
Additional destinations after infrastructure investment (<1,500 km)	none

Table 30: Destination analysis for Paris

Destinations with an existing direct day train connection (only)	Barcelona, Brussels, Luxembourg, Lyon, Madrid
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	Paris
Missing direct trains connections <12h	Amsterdam, Berlin, Birmingham, Cologne, Edinburgh, London, Milan, Munich, Naples, Rome, Valencia, Zurich
Missing direct trains connections 12–18h	Bratislava, Budapest, Copenhagen, Hamburg, Lisbon, Ljubljana, Prague, Vienna
Additional destinations after infrastructure investment (<1,500 km)	Zagreb

Table 31: Destination analysis for Marseille

Destinations with an existing direct day train connection (only)	Barcelona, Brussels, Luxembourg, Marseille, Paris
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Amsterdam, Berlin, Birmingham, Cologne, Edinburgh, Hamburg, London, Madrid, Milan, Munich, Naples, Rome, Valencia, Zurich
Missing direct trains connections 12–18h	Bratislava, Budapest, Copenhagen, Lisbon, Ljubljana, Prague, Vienna, Warsaw, Zagreb
Additional destinations after infrastructure investment (<1,500 km)	Belgrade, Sarajevo

Table 32: Destination analysis for Lyon

Destinations with an existing direct day train connection (only)	Lyon, Marseille
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	Paris
Missing direct trains connections <12h	Amsterdam, Barcelona, Birmingham, Brussels, Cologne, Edinburgh, Hamburg, London, Luxembourg, Madrid, Milan, Munich, Valencia, Zurich
Missing direct trains connections 12–18h	Berlin, Copenhagen, Lisbon, Naples, Prague, Rome, Vienna
Additional destinations after infrastructure investment (<1,500 km)	none

Table 33: Destination analysis for Toulouse

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023
Paris–Madrid	10h3m	Barcelona	9h40m	2,543,000
Paris–Lisbon	27h19m ²¹	Barcelona, Madrid, Badajoz, Entroncamento	17h45m	2,422,000
Paris–Rome	10h53m	Geneva, Milan	10h30m	2,247,000
Paris–Venice	10h24m	Geneva, Milan	9h50m	1,188,000
Paris–Copenhagen	13h39m	Cologne, Hamburg	12h15m	975,000
Marseille–London	8h14m	Paris (Gare de Lyon/Nord)	6h15m	601,000
Marseille–Lisbon	30h56m ²²	Madrid, Vigo, Porto	17h	275,000
Marseille–Munich	10h14m	Mannheim	10h10m	192,000
Marseille–Amsterdam	8h38m	Brussels	7h30m	157,000
Marseille–Rome	10h40m	Nice, Ventimiglia, Genova	9h50m	142,000
Lyon–London	5h30m	Paris (Gare de Lyon/Nord)	5h	619,000
Lyon–Amsterdam	6h6m	Paris (Gare de Lyon/Nord)	5h45m	291,000
Lyon–Lisbon	32h23m ²³	Montpellier, Madrid, Badajoz, Entroncamento	16h	281,000
Lyon–Zurich	4h50m	Geneva	4h50m	No direct flight
Lyon–Milan	7h5m	Geneva	6h15m	n.a.
Toulouse–London	9h1m	Paris (Montparnasse/Nord)	7h30m	519,000

²¹ Stopover in Barcelona required

²² Stopover in Vigo required

²³ Stopover in Vigo required

Toulouse–Lisbon	30h17m ²⁴	Narbonne, Madrid, Vigo, Porto	16h40m	257,000
Toulouse–Brussels	6h48m	Paris (Montparnasse, Nord)	6h15m	250,000
Toulouse–Madrid	7h2m	Narbonne	6h30m	189,000

Table 34: examples for missing direct train connections from/to the French cities analysed, including Top 5 flights without direct train connection <18h from Paris, and Top 3 flights for Marseille, Lyon and Toulouse each.

Germany

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Berlin, Munich, Hamburg and Cologne, and some other cities of national relevance including Düsseldorf, Frankfurt/Main, Hanover, Nuremberg and Stuttgart, as the cities with large airports. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Germany, while the overall results for Europe can be found [here](#).

Vienna	59%	Düsseldorf	33%
Munich	52%	Stuttgart	33%
Berlin	50%	Cologne	31%
Zurich	46%	Amsterdam	31%
Paris	45%	Hanover	23%
Brussels	39%	Luxembourg	18%
Frankfurt	38%	Nuremberg	16%
Hamburg	34%	Copenhagen	14%

Table 35a: Percentage of available direct trains (ratio to possible direct trains) for German cities compared to selected other cities

Summary for all nine German cities analysed

- Munich and Berlin, with 15 and 14 respectively, have the second and third most direct train connections of all 45 cities analysed, after Vienna. Both

²⁴ Stopover in Vigo required

cities have at least half of the possible direct train connections within 18 hours. In Frankfurt/Main, Hamburg, Stuttgart, Düsseldorf and Cologne, the availability of direct train connections is significantly lower than in Munich and Berlin, ranging between 30 and 40% (9-11 out of 29-30 potential connections), which means that 60-70% of the potential direct train connections within 18 hours do not exist. The availability of direct connections is poor in Hanover, with only 23% (7 out of 30 potential connections). Of all the German cities surveyed, Nuremberg has the poorest availability of direct train connections, with only 16% (5 out of 31 potential connections).

- Despite Deutsche Bahn having stopped operating night trains some years ago, the connectivity with night trains in Germany is poor but still above the European average, thanks to the Austrian, Croatian, Hungarian, Polish, Swedish and some private railway companies.
- The transport systems of all cities analysed are clearly favouring flights over trains, and thus encouraging people to fly rather than choosing the greener train. The worst offer with direct trains in relation to direct flights was found for Frankfurt. The number of direct flights to destinations that could be reached by train within 18 hours is 155% higher than the number of direct trains to these cities (11 trains vs 28 flights out of 29 destinations). The ratio of trains to planes is only slightly better in Düsseldorf (10 trains vs 25 flights out of 30 destinations). Even from the small Hanover airport, 71% more direct flights are departing than direct trains from the Hanover train station.
- Germany also would be a clear beneficiary of rail infrastructure upgrades, mainly necessary in the Eastern part of Europe, allowing an average speed of 80 km/h on all main routes. Under this condition, up to eight additional destinations, mainly in the Eastern part of Europe, could be reached by train within 18 hours in the future, including Munich–Bucharest, Berlin–Tallinn, Berlin–Kyiv and Hamburg–Belgrade.

The following sections present the results by city. Part A describes the results for the four largest German cities, which were among the 45 cities analysed in full. Part B describes the results for the additionally selected five German cities, which were only analysed for their connectivity to the other 45 cities, but not for the routes between them (for example, Stuttgart–Nuremberg was not analysed).²⁵

²⁵ In order to ensure a fair comparison of German cities with other European cities, routes between the four large cities and the other five cities are not included in the statistics for the four large cities but only in the statistics for the five additional cities (for example, the data for Nuremberg–Berlin is only included in the Nuremberg dataset, not in the Berlin dataset).

Part A: Four largest cities (Berlin, Cologne, Hamburg, Munich)

	Number	%	Number	%	Number	%	Number	%
	Berlin		Cologne		Hamburg		Munich	
Existing and potential direct train connections to 44 cities <18h	28		29		29		29	
Total number of existing direct train connections	14	50%	9	31%	10	34%	15	52%
Night trains only	5	36%	0	0%	1	10%	7	47%
Day trains only	4	29%	5	56%	5	50%	3	20%
Both day and night trains	5	36%	4	44%	4	40%	5	33%
Total missing direct train connections below 18 hours	14		20		19		14	
Below 12 hours	7		14		8		8	
Additional future possible direct train connections <18h, with investments	8		3		3		8	
Direct flight connections on routes with an existing or possible direct train connection	24	86%	16	55%	22	76%	28	97%
Percentage of more direct flights than direct trains		71%		78%		120%		87%
Direct flights to 44 cities	37	84%	25	57%	32	73%	37	84%

Table 35b: Key data for the four largest German cities (part of the 45 cities fully analysed)

Findings for Berlin:

- Berlin is the city in Europe with the third highest number of direct train connections, after Vienna and Munich. 14 of the 44 routes between Berlin and other European cities analysed are served by direct trains.
- Despite Deutsche Bahn not operating night trains anymore, Berlin is also the city analysed with the third highest number of night train connections. 10 of the 44 routes between Berlin and the other European cities analysed are served by night trains, five of them are served by both a direct day and a direct night train.
- Despite belonging to the cities with the most direct train connections, even on routes to/from Berlin the untapped potential for direct trains is considerable: Direct trains are offered on only half of the 28 routes between Berlin and other European cities which could be travelled by a direct train with a maximum journey time of 18 hours, using the existing tracks.

- Thus, another half – 14 out of 28 – of the routes between Berlin and other cities are not currently served by a direct train (with a journey time of less than 18 hours), although they could be by using the existing tracks.
- While half of the routes between Berlin and other major European cities which could be travelled by train within 18 hours are served by direct train, 86% – 24 out of the 28 routes, all except Bratislava, Hamburg, Ljubljana and Prague – are served by direct flight.
- Thus, Berlin is still far better connected by air than rail, encouraging people to fly instead of taking the train.
- The most important missing train connection from Berlin under 12 hours is London, which is by far the most used short-haul flight route from Berlin without a direct train alternative, followed by Milan and Luxembourg. The latter is the only capital of a neighbouring country without a direct train connection.
- The most important missing night train destinations are Barcelona, Rome and Oslo, all of which are in the top five short-haul flights without a direct train alternative.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, eight additional cities in the Eastern part of Europe could be served by a direct train from Berlin in the future, including Belgrade, Tallinn and Kyiv.

Destinations with an existing direct day train connection (only)	Hamburg, Munich, Prague, Warsaw ²⁶
Destinations with an existing direct night train connection (only)	Brussels, Copenhagen, Paris, Stockholm, Zurich
Destinations with existing direct day and night train connections	Amsterdam, Bratislava, Budapest, Cologne, Vienna
Missing direct trains connections <12h	Birmingham, Ljubljana, London, Luxembourg, Lyon, Marseille, Milan
Missing direct trains connections 12–18h	Barcelona, Edinburgh, Naples, Oslo, Rome, Vilnius, Zagreb
Additional destinations after infrastructure investment (<1,500 km)	Belgrade, Chisinau, Kyiv, Podgorica, Pristina, Riga, Sarajevo, Tallinn

Table 36: Destination analysis for Berlin

²⁶ Direct train connections to the five German cities additionally analysed are not included here.

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers 2023
Berlin–London	9h46m	Cologne, Brussels	8h10m	1,491,000
Berlin–Milan	11h41m	Munich, Verona	10h45m	576,000
Berlin–Barcelona	19h30m	Basel (Bad. BF, SBB), Mulhouse, Montpellier	16h	537,000
Berlin–Rome	14h6m	Munich, Verona	13h20m	322,000
Berlin–Oslo	18h52m	Malmö, Gothenborg	17h10m	256,000
Berlin–Luxembourg	8h22m	Koblenz	7h30m	93,000

Table 37: examples for missing train connections for Berlin, including Top five flights without direct train connection <18h

Findings for Cologne:

- Despite being one of Europe's major rail hubs, where the Berlin–Brussels and Frankfurt–Amsterdam routes cross, Cologne is very poorly connected by direct trains to other major European cities. Only nine of the 44 routes between Cologne and other European cities analysed are served by direct trains. These are clearly less direct train connections compared to Berlin and Munich.
- Despite Deutsche Bahn not operating night trains anymore, there are four cities, Berlin, Munich, Vienna and Zurich, which still can be reached by night trains, all of them operated by the Austrian railway company ÖBB. All of these four cities can also be reached by direct day trains.
- The untapped potential for direct trains on routes to/from Cologne is very high: Direct trains are offered on only 31% (9 of the 29) of routes between Cologne and other European cities which could be travelled by a direct train with a maximum journey time of 18 hours, using the existing tracks.
- Thus, 69% – 20 out of 29 – of the routes between Cologne and other cities are currently not served by a direct train (with a journey time of less than 18 hours), although they could be by using the existing tracks.
- While only one third of the routes between Cologne and other major European cities which could be travelled by train within 18 hours are served by direct train, 55% – 16 out of the 29 routes – are served by direct flight from the Cologne-Bonn Airport. The nearby and much larger Düsseldorf airport serves 9 more routes, connecting the Rhineland metropolitan region much better by plane than by train.²⁷

²⁷ In German: [Metropolregion Rheinland](#)

- Thus, Cologne is far better connected by air than rail, encouraging people to fly instead of taking the train.
- The most important missing train connection from Cologne under 12 hours is London, which is by far the most used short-haul flight route from Cologne without a direct train alternative, followed by Barcelona, Milan and Rome.
- Among the most important missing night train destinations are Stockholm, Oslo and Zagreb.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, three additional cities in the Eastern part of Europe could be served by a direct train within 18 hours in the future, including Belgrade and Vilnius.

Destinations with an existing direct day train connection (only)	Amsterdam, Brussels, Hamburg, Luxembourg, Paris ²⁸
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	Berlin, Munich, Vienna, Zurich
Missing direct trains connections <12h	Barcelona, Birmingham, Bratislava, Budapest, Copenhagen, Edinburgh, Ljubljana, London, Lyon, Marseille, Milan, Prague, Rome, Warsaw
Missing direct trains connections 12–18h	Madrid, Naples, Oslo, Stockholm, Valencia, Zagreb
Additional destinations after infrastructure investment (<1,500 km)	Belgrade, Sarajevo, Vilnius

Table 38: Destination analysis for Cologne

²⁸ Direct train connections to the five German cities additionally analysed are not included here.

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers 2023
Cologne–London	5h05m	Brussels	3h55m	504,000
Cologne–Barcelona	12h43m	Paris (Nord/Gare de Lyon)	10h40m	291,000
Cologne–Milan	9h48m	Basel	8h10m	262,000
Cologne–Rome	12h15m	Mannheim, Bern, Milan	11h15m	182,000
Cologne–Bologna	12h21m	Munich	9h20m	109,000
Cologne–Budapest	11h35m	Vienna	11h05m	67,000
Cologne–Prague	8h39m	Berlin	8h	Data n.a.

Table 39: examples for missing train connections for Cologne, including Top five flights without direct train connection <18h

Findings for Hamburg:

- Hamburg is rather poorly connected by direct trains with important European cities. Only 10 of the 44 routes between Hamburg and other European cities analysed are served by direct trains. These are clearly less direct train connections compared to Berlin and Munich, though at least the same number of cities could be reached by train from Hamburg within 18 hours.
- Despite Deutsche Bahn not operating night trains anymore, there are 5 cities which still can be reached by night trains, all of them operated by Austrian or Swedish railway companies.
- The untapped potential for direct trains on routes to/from Hamburg is high: Direct trains are offered on only 34% (10 of the 29) of routes between Hamburg and other European cities which could be travelled by a direct train with a maximum journey time of 18 hours, using the existing tracks.
- Thus, 66% – 19 out of 29 – of the routes between Hamburg and other cities are currently not served by a direct train (with a journey time of less than 18 hours), although they could be by using the existing tracks.
- While only one third of the routes between Hamburg and other major European cities which could be travelled by train within 18 hours are served by direct train, 76% – 22 out of the 29 routes – are served by direct flight.

- Thus, Hamburg is still far better connected by air than rail, encouraging people to fly instead of taking the train.
- The most important missing train connection from Hamburg under 12 hours is London, which is by far the most used short-haul flight route from Hamburg without a direct train alternative, followed by Paris and Amsterdam.
- The most important missing night train destinations are Barcelona and Madrid, both are in the top 5 short-haul flights without a direct train alternative. Another important missing night train connection is to Oslo.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, 3 additional cities in the Eastern part of Europe could be served by a direct train within 18 hours in the future, including Belgrade and Riga.

Destinations with an existing direct day train connection (only)	Berlin, Bratislava, Budapest, Cologne, Prague ²⁹
Destinations with an existing direct night train connection (only)	Stockholm
Destinations with existing direct day and night train connections	Copenhagen, Munich, Vienna, Zurich
Missing direct trains connections <12h	Amsterdam, Birmingham, Brussels, London, Luxembourg, Lyon, Paris, Warsaw
Missing direct trains connections 12–18h	Barcelona, Edinburgh, Ljubljana, Madrid, Marseille, Milan, Naples, Oslo, Rome, Vilnius, Zagreb
Additional destinations after infrastructure investment (<1,500 km)	Belgrade, Riga, Sarajevo

Table 40: Destination analysis for Hamburg

²⁹ Direct train connections to the five German cities additionally analysed are not included here.

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023 ³⁰
Hamburg–London	10h2m	Cologne, Brussels	8h	838,000
Hamburg–Paris	8h12m	Cologne	7h30m	374,000
Hamburg–Amsterdam	5h15m	Osnabrück	4h45m	349,000
Hamburg–Barcelona	20h48m ³¹	Dortmund, Brussels, Valence	15h15m	269,000
Hamburg–Madrid	23h54m ³²	Dortmund, Brussels, Valence, Barcelona	18h	215,000
Hamburg–Warsaw	7h45m	Berlin	7h20m	115,000
Hamburg–Oslo	15h59m	Lund, Gothenburg	13h	97,000

Table 41: examples for missing train connections for Hamburg, including Top five flights without direct train connection <18h

Findings for Munich:

- Munich is the city in Europe with the second highest number of direct train connections, after Vienna. 15 of the 44 routes between Munich and other European cities analysed are served by direct trains.
- Despite Deutsche Bahn not operating night trains anymore, Munich is also the city in Europe with the second highest number of night train connections. 12 of the 44 routes between Munich and the other European cities analysed are served by night trains, 5 of them are served by both a direct day and a direct night train.
- Despite belonging to the cities with the most direct train connections, even on routes to/from Munich the untapped potential for direct trains is considerable: Direct trains are offered on only 52% (15 of the 29) of routes between Munich and other European cities which could be travelled by a direct train with a maximum journey time of 18 hours, using the existing tracks.
- Thus, 48% – 14 out of 29 – of the routes between Munich and other cities are not currently served by a direct train (with a journey time of less than 18 hours), although they could be by using the existing tracks.

³⁰ Flight data include flights to all London and Paris airports.

³¹ Including a 3.5 hours stay overnight in Dortmund

³² Including a 3.5 hours stay overnight in Dortmund

- While a bit more than half of the routes between Munich and other major European cities which could be travelled by train within 18 hours are served by direct train, 97% – 28 out of the 29 routes, all except Bratislava – are served by direct flight.
- Thus, Munich is still far better connected by air than rail, encouraging people to fly instead of taking the train.
- The most important missing train connection from Munich under 12 hours is London, which is by far the most used short-haul flight route from Munich without a direct train alternative, followed by Copenhagen. The missing direct train to Bratislava is the shortest of all the missing connections.
- The most important missing night train destinations are Barcelona and Madrid, both are in the top five short-haul flights without a direct train alternative. Another important missing night train connection is to Stockholm.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, eight additional cities in the Eastern part of Europe could be served by a direct train from Munich in the future, including Bucharest, Riga and Sofia.

Destinations with an existing direct day train connection (only)	Berlin, Prague, Zurich ³³
Destinations with an existing direct night train connection (only)	Amsterdam, Brussels, Ljubljana, Milan, Rome, Warsaw, Zagreb
Destinations with existing direct day and night train connections	Budapest, Cologne, Hamburg, Paris, Vienna
Missing direct trains connections <12h	Birmingham, Bratislava, Copenhagen, London, Luxembourg, Lyon, Marseille, Naples
Missing direct trains connections 12–18h	Barcelona, Belgrade, Edinburgh, Madrid, Stockholm, Valencia
Additional destinations after infrastructure investment (<1,500 km)	Bucharest, Podgorica, Pristina, Riga, Sarajevo, Skopje, Sofia, Vilnius

Table 42: Destination analysis for Munich

³³ Direct train connections to the five German cities additionally analysed are not included here.

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023 ³⁴
Munich–London	10h10m	Frankfurt, Brussels	8h50m	1,361,000
Munich–Madrid	17h40m	Karlsruhe–Durlach, Karlsruhe, Strasbourg, Lyon, Barcelona	15h20m	831,000
Munich–Barcelona	14h38m	Paris (Nord/Gare de Lyon)	13h	767,000
Munich–Copenhagen	11h13m	Hamburg	11h	472,000
Munich–Stockholm	18h39m	Hamburg	16h20m	455,000
Munich–Bratislava	5h9m	Vienna	5h05m	—
Munich–Naples	10h59m	Bologna	10h30m	276,000

Table 43: examples for missing train connections for Munich, including Top five flights without direct train connection <18h

³⁴ Flight data include flights to all London and Paris airports, but not flights from/to Memmingen.

Part B: Five additional cities (Düsseldorf, Frankfurt, Hanover, Nuremberg, Stuttgart)

	Number	%	Number	%	Number	%	Number	%	Number	%
	Düsseldorf		Frankfurt/ Main		Hanover		Nuremberg		Stuttgart	
Existing and potential direct train connections to 45 cities <18h	30		29		30		31		30	
Total number of existing direct train connections	10	33%	11	38%	7	23%	5	16%	10	33%
Night trains only	0	0%	0	0%	0	0%	0	0%	3	30%
Day trains only	7	70%	11	100%	5	71%	5	100%	1	10%
Both day and night trains	3	30%	0	0%	2	29%	0	0%	1	10%
Total missing direct train connections below 18 hours	20		18		23		26		20	
Below 12 hours	13		13		12		20		16	
Additional future possible direct train connections <18h, with investments	3		5		3		7		6	
Direct flight connections on routes with an existing or possible direct train connection	25	83%	28	97%	12	40%	11	35%	22	73%
Percentage of more direct flights than direct trains		150%		155%		71%		127%		120%
Direct flights to 45 cities	35	78%	44	98%	18	40%	17	38%	25	56%

Table 44: Key data for the five other German cities analysed

Findings for Düsseldorf:

- Despite being the capital city of the most populated German federal state, Düsseldorf is poorly connected by direct trains to other major European cities. Only 10 of the 45 routes between Düsseldorf and other European cities analysed are served by direct trains. These are clearly less direct train connections compared to Berlin and Munich.
- Despite Deutsche Bahn not operating night trains anymore, there are three cities, Munich, Vienna and Zurich, which still can be reached by night trains, all of them operated by the Austrian railway company ÖBB. All of these three cities can also be reached by direct day trains.
- The untapped potential for direct trains on routes to/from Düsseldorf is very high: Direct trains are offered on only one third (10 of the 30) of routes between Düsseldorf and other European cities which could be travelled by a direct train with a maximum journey time of 18 hours, using the existing tracks.
- Thus, two thirds – 20 out of 30 – of the routes between Düsseldorf and other cities are currently not served by a direct train (with a journey time of less than 18 hours), although they could be by using the existing tracks.
- While only one third of the routes between Düsseldorf and other major European cities which could be travelled by train within 18 hours are served by direct train, 83% – 25 out of the 30 routes – are served by direct flights from the Düsseldorf Airport.
- Thus, Düsseldorf is far better connected by air than rail, encouraging people to fly instead of taking the train.
- The most important missing train connection from Düsseldorf under 12 hours is London, which is by far the most used short-haul flight route from Düsseldorf without a direct train alternative, followed by Barcelona, Copenhagen and Milan.
- The most important missing night train destination is Madrid, which is in the top five short-haul flights without a direct train alternative. Other important missing night train connections are Stockholm and Oslo.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, three additional cities in the Eastern part of Europe could be served by a direct train within 18 hours in the future, Belgrade, Sarajevo and Vilnius.

Destinations with an existing direct day train connection (only)	Amsterdam, Berlin, Brussels, Cologne, Hamburg, Luxembourg, Paris
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	Munich, Vienna, Zurich
Missing direct trains connections <12h	Barcelona, Birmingham, Bratislava,

	Budapest, Copenhagen, Edinburgh, Ljubljana, London, Lyon, Marseille, Milan, Prague, Warsaw
Missing direct trains connections 12–18h	Madrid, Naples, Oslo, Rome, Stockholm, Valencia, Zagreb
Additional destinations after infrastructure investment (<1,500 km)	Belgrade, Sarajevo, Vilnius

Table 45: Destination analysis for Düsseldorf

Route	Current travel time, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023
Düsseldorf–London	6h44m	Brussels	4h45m	728,000
Düsseldorf–Barcelona	13h21m	Brussels, Valence	11h20m	403,000
Düsseldorf–Madrid	16h27m	Brussels, Valence, Barcelona	13h10m	365,000
Düsseldorf–Copenhagen	8h53m	Hamburg	8h	234,000
Düsseldorf–Milan	10h16m	Basel	8h40m	217,000
Düsseldorf–Marseille	8h43m	Paris (Nord/Gare de Lyon)	8h15m	No direct flight

Table 46: examples for missing train connections for Düsseldorf, including Top five flights without direct train connection <18h

Findings for Frankfurt/Main:

- Despite being home to Germany's largest airport, Frankfurt is poorly connected by direct trains to other major European cities. Only 11 of the 45 routes between Frankfurt and other European cities analysed are served by direct trains. These are clearly less direct train connections compared to Berlin and Munich.
- Surprisingly for a city in central Germany, there is currently no reasonable night train service from and to Frankfurt. Two night train lines, Brussels–Berlin and Zurich–Prague, are passing Frankfurt between two and four a.m., and were therefore not counted as night train connections in this report.
- The untapped potential for direct trains on routes to/from Frankfurt is very high: Direct trains are offered on only 38% (11 of the 29) of routes between

Frankfurt and other European cities which could be travelled by a direct train with a maximum journey time of 18 hours, using the existing tracks.

- Thus, 62 % – 18 out of 29 – of the routes between Frankfurt and other cities are currently not served by a direct train (with a journey time of less than 18 hours), although they could be by using the existing tracks.
- While only 38% of the routes between Frankfurt and other major European cities which could be travelled by train within 18 hours are served by direct train, 97% – 28 out of the 29 routes – are served by direct flights from the Frankfurt Airport. The only exception is Cologne, which is literally too close for a flight.
- Thus, Frankfurt is far better connected by air than rail, encouraging people to fly instead of taking the train.
- The most important missing train connection from Frankfurt under 12 hours is London, which is by far the most used short-haul flight route from Frankfurt without a direct train alternative, followed by Barcelona, Milan, Rome and Copenhagen. The missing direct train to Luxembourg is the shortest of all the missing connections.
- The most important missing night train destinations are Madrid and Stockholm, both are in the top seven short-haul flights from Frankfurt without a direct train alternative.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, five additional cities in the Eastern part of Europe could be served by a direct train within 18 hours in the future, Belgrade, Sarajevo and Vilnius.

Destinations with an existing direct day train connection (only)	Amsterdam, Berlin, Brussels, Cologne, Hamburg, Lyon, Marseille, Munich, Paris, Vienna, Zurich
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Barcelona, Birmingham, Bratislava, Budapest, Copenhagen, Edinburgh, Ljubljana, London, Luxembourg, Milan, Prague ³⁵ , Rome, Warsaw
Missing direct trains connections 12–18h	Madrid, Naples, Stockholm, Valencia, Zagreb
Additional destinations after infrastructure investment (<1,500 km)	Podgorica, Pristina, Sarajevo, Skopje, Vilnius

Table 47: Destination analysis for Frankfurt/Main

³⁵ The night train to/from Prague arrives/departs in the middle of the night, and was therefore not counted as a direct train connection.

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023 ³⁶
Frankfurt–London	6h29m	Brussels	5h20m	1,690,000
Frankfurt–Madrid	15h44m	Strasbourg, Lyon, Barcelona	13h35m	866,000
Frankfurt–Barcelona	12h38m	Strasbourg, Lyon	10h50m	816,000
Frankfurt–Milan	7h55m	Bern	7h20m	787,000
Frankfurt–Rome	11h22m	Bern, Milan	10h25m	568,000
Frankfurt–Copenhagen	10h37m	Hamburg	9h50m	544,000
Frankfurt–Stockholm	17h59m	Hamburg	17h30m	510,000
Frankfurt–Budapest	9h58m	Vienna	9h15m	460,000
Frankfurt–Prague	8h4m	Regensburg	6h40m	406,000
Frankfurt–Manchester	9h16m	Brussels, London (StPancras/ Euston)	7h45m	379,000
Frankfurt–Luxembourg	4h41m	Koblenz	3h50m	No direct flight

Table 48: examples for missing train connections for Frankfurt, including Top 10 flights without direct train connection <18h

Findings for Hanover:

- Hanover is poorly connected by direct trains with important European cities. Only seven of the 45 routes between Hanover and other European cities analysed are served by direct trains. These are clearly less direct train connections compared to Berlin and Munich, though almost the same number of cities could be reached by train from Hanover within 18 hours.
- Despite Deutsche Bahn not operating night trains anymore, there are two

³⁶ Flight data include flights to all London, Milan and Rome airports, but not flights from/to Frankfurt-Hahn.

cities which still can be reached by night trains, Vienna and Zurich.

- The untapped potential for direct trains on routes to/from Hanover is high: Direct trains are offered on only 23% (seven of the 30) of routes between Hanover and other European cities which could be travelled by a direct train with a maximum journey time of 18 hours, using the existing tracks.
- Thus, 77% – 23 out of 30 – of the routes between Hanover and other cities are currently not served by a direct train (with a journey time of less than 18 hours), although they could be by using the existing tracks.
- While only 23% of the routes between Hanover and other major European cities which could be travelled by train within 18 hours are served by direct train, 40% – 12 out of the 30 routes – are served by direct flight from the small Hanover Airport. 10 more destinations are served by flights from the nearby Hamburg Airport.
- Thus, Hanover is far better connected by air than rail, encouraging people to fly instead of taking the train.
- The most important missing train connection from Hanover under 12 hours is London, which is the most used short-haul flight route from Hanover without a direct train alternative, followed by Paris, Copenhagen and Milan.
- The most important missing night train destination is Barcelona, which is the top three most used short-haul flight from Hanover without a direct train alternative. Other important missing night train connections are Stockholm and Oslo.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, three additional cities in the Eastern part of Europe could be served by a direct train within 18 hours in the future, including Belgrade and Riga.

Destinations with an existing direct day train connection (only)	Amsterdam, Berlin, Cologne, Hamburg, Munich
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	Vienna, Zurich
Missing direct trains connections <12h	Birmingham, Bratislava, Brussels, Budapest, Copenhagen, London, Luxembourg, Lyon, Marseille, Milan, Paris, Prague, Warsaw
Missing direct trains connections 12–18h	Barcelona, Edinburgh, Ljubljana, Madrid, Naples, Oslo, Rome, Stockholm, Vilnius, Zagreb
Additional destinations after infrastructure investment (<1,500 km)	Belgrade, Riga, Sarajevo

Table 49: Destination analysis for Hanover

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023
Hanover–London	7h47m	Cologne, Brussels	6h50m	180,000
Hanover–Paris	6h35m	Cologne	6h10m	129,000
Hanover–Barcelona	23h7m	Cologne, Paris (Nord/Austerlitz), Toulouse, Narbonne	13h10m	86,000
Hanover–Copenhagen	6h14m	Hamburg	6h	21,000
Hanover–Milan	11h2m	Basel	10h30m	n.a. ³⁷
Hanover–Prague	6h48m	Dresden	6h40m	No direct flight

Table 50: examples for missing train connections for Hanover, including Top five flights without direct train connection <18h

Findings for Nuremberg:

- Nuremberg is the German city analysed with least direct train connections. Only five of the 45 routes between Nuremberg and other European cities analysed are served by direct trains. These are clearly less direct train connections compared to Berlin and Munich, though the same number of cities could be reached by train from Nuremberg within 18 hours.
- Surprisingly for a city in central Germany, there is currently no reasonable night train service from and to Nuremberg. Two night train lines, Vienna–Hamburg and Vienna–Amsterdam, are passing Nuremberg between 1:30 and 4 a.m., and were therefore not counted as night train connections in this report.
- The untapped potential for direct trains on routes to/from Nuremberg is very high: Direct trains are offered on only 16% (5 of the 31) of routes between Nuremberg and other European cities which could be travelled by a direct train with a maximum journey time of 18 hours, using the existing tracks.

³⁷ This flight only started in 2024. With a frequency of four flights per week, this is likely to be one of the top 5 routes for Hannover without a direct rail alternative.

- Thus, 84% – 26 out of 31 – of the routes between Nuremberg and other cities are currently not served by a direct train (with a journey time of less than 18 hours), although they could be by using the existing tracks.
- While only 16% of the routes between Nuremberg and other major European cities which could be travelled by train within 18 hours are served by direct train, 35% – 11 out of the 31 routes – are served by direct flight from the small Nuremberg Airport. All other destinations, except Bratislava, are served by flights from the nearby Munich Airport.
- Thus, Nuremberg is far better connected by air than rail, encouraging people to fly instead of taking the train.
- The most important missing train connection from Nuremberg under 12 hours is London, which is the most used short-haul flight route from Hanover without a direct train alternative, followed by Amsterdam, Paris, Budapest and Zurich. The missing train connection to Prague is the shortest missing connection from Nuremberg.
- Important missing night train destinations are Stockholm and Barcelona.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, seven additional cities in the Eastern part of Europe could be served by a direct train within 18 hours in the future, including Bucharest, Sofia and Riga.

Destinations with an existing direct day train connection (only)	Berlin, Cologne, Hamburg, Munich, Vienna
Destinations with an existing direct night train connection (only)	none ³⁸
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Amsterdam, Birmingham, Bratislava, Brussels, Budapest, Copenhagen, Edinburgh, Ljubljana, London, Luxembourg, Lyon, Marseille, Milan, Naples, Paris, Prague, Rome, Warsaw, Zagreb, Zurich
Missing direct trains connections 12–18h	Barcelona, Belgrade, Madrid, Stockholm, Valencia, Vilnius
Additional destinations after infrastructure investment (<1,500 km)	Bucharest, Podgorica, Pristina, Riga, Sarajevo, Skopje, Sofia

Table 51: Destination analysis for Nuremberg

³⁸ All night trains stop in Nuremberg between 1:30 and 5 am and are therefore not counted as night trains.

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023
Nuremberg–London	8h57m	Frankfurt, Brussels	7h20m	200,000
Nuremberg–Amsterdam	6h37m	Düsseldorf	6h10m	168,000
Nuremberg–Paris	6h34m	Stuttgart	5h40m	123,000
Nuremberg–Budapest	7h48m	Vienna	7h5m	48,000
Nuremberg–Zurich	5h26m	Munich	4h45m	47,000
Nuremberg–Prague	4h40m	Schwandorf	4h40m	No direct flight

Table 52: examples for missing train connections for Nuremberg, including Top five flights without direct train connection <18h

Findings for Stuttgart:

- Stuttgart is poorly connected by direct trains to other major European cities. Only 10 of the 45 routes between Stuttgart and other European cities analysed are served by direct trains. These are clearly less direct train connections compared to Berlin and Munich.
- Despite Deutsche Bahn not operating night trains anymore, there are four cities, Budapest, Ljubljana, Vienna and Zagreb, that still can be reached by night trains, operated by the Croatian and Hungarian railway companies.
- The untapped potential for direct trains on routes to/from Stuttgart is very high: Direct trains are offered on only one third (10 of the 30) of routes between Stuttgart and other European cities which could be travelled by a direct train with a maximum journey time of 18 hours, using the existing tracks.
- Thus, two thirds – 20 out of 30 – of the routes between Stuttgart and other cities are currently not served by a direct train (with a journey time of less than 18 hours), although they could be by using the existing tracks.
- While only one third of the routes between Stuttgart and other major European cities which could be travelled by train within 18 hours are served by direct train, 73% – 22 out of the 30 routes – are served by direct flights from the Stuttgart Airport.
- Thus, Stuttgart is far better connected by air than rail, encouraging people to fly instead of taking the train.
- The most important missing train connection from Stuttgart under 12 hours

is London, which is the most used short-haul flight route from Stuttgart without a direct train alternative, followed by Barcelona, Amsterdam, Rome and Milan. The missing direct train to Brussels is the shortest missing connection.

- Among the most important missing night train destinations are Stockholm and Belgrade.
- With moderate investment in Europe's rail infrastructure, allowing an average speed of 80 km/h on all train routes, six additional cities in the Eastern part of Europe could be served by a direct train within 18 hours in the future, including Sarajevo and Vilnius.

Destinations with an existing direct day train connection (only)	Berlin, Cologne, Hamburg, Munich, Paris, Zurich
Destinations with an existing direct night train connection (only)	Budapest, Ljubljana, Zagreb
Destinations with existing direct day and night train connections	Vienna
Missing direct trains connections <12h	Amsterdam, Barcelona, Birmingham, Bratislava, Brussels, Copenhagen, Edinburgh, London, Luxembourg, Lyon, Marseille, Milan, Naples, Prague, Rome, Warsaw
Missing direct trains connections 12–18h	Belgrade, Madrid, Stockholm, Valencia
Additional destinations after infrastructure investment (<1,500 km)	Podgorica, Pristina, Sarajevo, Skopje, Sofia, Vilnius

Table 53: Destination analysis for Stuttgart

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023
Stuttgart–London	7h38m	Paris	6h10m	353,000
Stuttgart–Barcelona	12h17m	Paris (Est/Gare de Lyon)	10h40m	320,000
Stuttgart–Amsterdam	6h17m	Frankfurt Airport	5h40m	283,000
Stuttgart–Rome	11h25m	Munich, Bologna	11h	79,000

Stuttgart–Milan	8h34m	Zurich	7h30m	71,000
Stuttgart–Brussels	4h33m	Frankfurt Airport	4h30m	No direct flight
Stuttgart–Lyon	6h4m	Strasbourg	5h20m	No direct flight

Table 54: examples for missing train connections for Stuttgart, including Top five flights without direct train connection <18h

Greece (Athens)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Athens. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Greece, while the overall results for Europe can be found [here](#).

- Athens is not at all connected by cross-border direct train to any other city. Even worse, since 2019 there has not been any single passenger train entering or leaving Greece.
- With the currently poor rail infrastructure, only 5 cities could be reached by train within 18 hours, Belgrade, Istanbul, Pristina, Skopje and Sofia.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, nine additional cities could be served by a direct train to/from Athens in the future including Budapest, Bucharest and Vienna.
- All of the European cities analysed can be reached by direct flight, except Pristina and Kyiv. By that, Athens has the highest air connectivity of all cities analysed (together with London and Istanbul). Thus, Greece and Athens are fully encouraging people to fly instead of taking the train.

	Number	%
Existing and potential direct train connections to 44 cities <18h	5	
Total number of existing direct train connections	0	0%
Total missing direct train connections below 18 hours	5	

Below 12 hours	2	
Additional future possible direct train connections <18h, with investments	9	
Direct flight connections on routes with an existing or possible direct train connection <18h	4	80%
Direct flights to 44 cities	42	95%

Table 55: Key data for Athens

Destinations with an existing direct day train connection (only)	none
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Pristina, Skopje
Missing direct trains connections 12–18h	Belgrade, Istanbul, Sofia
Additional destinations after infrastructure investment (<1,500 km)	Bratislava, Bucharest, Budapest, Chisinau, Ljubljana, Podgorica, Sarajevo, Vienna, Zagreb

Table 56: Destination analysis for Athens

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train
Athens–Belgrade	Not possible		15h30m
Athens–Sofia	Not possible		12h30m

Table 57: examples for missing direct train connections from/to Athens

Hungary (Budapest)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Budapest. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Hungary, while the overall results for Europe can be found [here](#).

- Budapest is the city in the newer EU-member states with the highest number of direct train connections to the other cities analysed in absolute terms. 12 destinations are served by direct train. However, nearby Vienna has three more direct train connections.
- Budapest also has relatively many night train connections. Seven cities analysed can be reached by a direct night train. Only Vienna, Munich and Zurich offer more night train connections.
- 41% of the 29 cities that can or could be reached by a direct train within 18 hours with the existing tracks can be reached by an existing direct train. However, this means that 59% (or 17) of the cities cannot be reached by a direct train.
- Despite the relatively good rail network, there are 92% more polluting direct flights to the cities that can or could be reached by train within 18 hours.
- The most obvious missing direct day train connection is to Belgrade. This direct connection was closed in 2019 due to construction works; a train journey from Budapest to Belgrade currently requires three changes. It is however possible that the direct Budapest–Belgrade connection will restart in 2025.
- The most important missing train connection from Budapest under 12 hours is Frankfurt, which is the second most used short-haul flight route from Budapest without a direct train alternative.
- Among the most important missing night train destinations are London, Milan, Brussels, Amsterdam and Paris, which are all among the Top six short-haul flights from Budapest without a direct train alternative.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, five additional cities could be served by a direct train to/from Budapest within 18 hours in the future. These are: Athens, Chisinau, Istanbul, Riga and Vilnius.

	Number	%
Existing and potential direct train connections to 44 cities <18h	29	
Total number of existing direct train connections	12	41%
Night trains only	2	17%

Day trains only	5	42%
Both day and night trains	5	42%
Total missing direct train connections below 18 hours	17	
Below 12 hours	2	
Additional future possible direct train connections <18h, with investment	5	
Direct flight connections on routes with an existing or possible direct train connection <18h	23	79%
Percentage of more direct flights than direct trains		92%
Direct flights (44 other cities)	36	82%

Table 58: Key data for Budapest

Destinations with an existing direct day train connection	Bratislava, Hamburg, Ljubljana, Vienna, Zagreb
Destinations with an existing direct night train connection (only)	Zurich, Kyiv
Destinations with existing direct day and night train connections	Berlin, Bucharest, Munich, Prague, Warsaw
Missing direct trains connections <12h	Belgrade, Cologne
Missing direct trains connections 12–18h	Amsterdam, Brussels, Copenhagen, London, Luxembourg, Lyon, Marseille, Milan, Naples, Paris, Podgorica, Pristina, Rome, Sarajevo, Skopje
Additional destinations after infrastructure investment (<1,500 km)	Athens, Chisinau, Istanbul, Riga, Vilnius

Table 59: Destination analysis for Budapest

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers (2023)
Budapest–London	20h50m	Stuttgart, Paris	18h	1,424,000
Budapest–Frankfurt	9h56m	Vienna	9h5m	461,000

Budapest– Milan	16h7m	Salzburg	12h30m	458,000
Budapest– Brussels	16h55m	Stuttgart, Frankfurt	16h	424,000
Budapest– Amsterdam	18h19m	Vienna	17h30m	383,000
Budapest– Paris	15h53m	Stuttgart	15h30m	381,000
Budapest– Belgrade	14h37m	Szeged, Subotica, Novi Sad	8h	n.a.

Table 60: examples for missing direct train connections from/to Budapest, including Top 6 flights without direct train connection <18h

Italy (Rome, Milan, Naples)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Rome, Milan and Naples. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Italy, while the overall results for Europe can be found [here](#).

Vienna	59%
Zurich	46%
Paris	45%
Brussels	39%
Milan	21%
Rome	17%
Naples	9%

Table 61a: Percentage of available direct trains (ratio to possible direct trains) for Italian cities compared to selected other cities

- The three largest Italian cities are poorly connected to other countries by direct trains. Only four of the cities analysed outside Italy are served by direct trains: Munich and Vienna by night trains from Rome and Milan, and Zurich and Paris by daytime trains from Milan. There are no international trains to Naples.

- Trenitalia is operating domestic night trains, but no international ones. All night trains running to Italy are operated by the Austrian railway company ÖBB.
- Unlike international rail services, all Italian cities analysed are well served by direct trains, both in terms of frequency and speed.
- Thanks to the efficient high-speed rail network in Italy, France and Germany, the number of cities that could be reached by a direct train from Italy within 18 hours is high. This is the case for 28 destinations from Milan, 23 from Rome and 22 from Naples.
- This means that for Rome, only 17% (4 out of 23) of the destinations that could be reached by a direct train, can be reached by an existing direct train. For Milan, this percentage is at 21% (6 out of 28), and the lowest at 9% (2 out of 22) for Naples.
- The most obvious missing direct train connections are Rome–Paris, Rome–Zurich, Milan–Ljubljana and Milan–Barcelona. All these routes could be travelled in less than 12 hours by train. Rome–Berlin and Rome–London could be travelled in less than 18 hours by train.
- While there are few direct train connections, there are direct flights from Rome and Milan to all cities that could be reached by train within 18 hours except Ljubljana. Even from the smaller Naples Airport, 19 out of 22 destinations are served with a direct flight. All Italian cities are therefore much better connected by air than by rail, which encourages people to fly rather than take the train.
- For the three largest Italian cities, the connectivity by air to all 44 cities analysed is well above the European average. Most flights to the cities analysed depart from Milan. 91% of all cities can be reached by direct flight from Milan, for Rome it is 89%. Even for the smallest of the three airports, Naples, 77% of the cities analysed can be reached by direct flight with most of the missing destinations in the Balkan region.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, four additional cities could be served by a direct train to/from Milan within 18 hours in the future. For Rome and Naples, such investment would allow one additional route. Almost all the investment for these routes will have to be made outside Italy.

	Number	%	Number	%	Number	%
	Rome		Milan		Naples	
Existing and potential direct train connections to 44 cities <18h	23		28		22	
Total number of existing direct train connections	4	17%	6	21%	2	9%
Night trains only	2	50%	2	33%	0	0%
Day trains only	1	25%	2	33%	1	50%
Both day and night trains	1	25%	2	33%	1	50%
Total missing direct train connections below 18 hours	19		22		20	
Below 12 hours	7		12		6	
Additional destinations after infrastructure investment (<1,500 km)	1		4		1	
Direct flight connections on routes with an existing or possible direct train connection <18h	22	96%	27	96%	19	86%
Percentage of more direct flights than direct trains		450%		350%		850%
Direct flights (44 other cities)	39	89%	40	91%	34	77%

Table 61b: Key data for the three largest Italian cities

Destinations with an existing direct day train connection (only)	Naples
Destinations with an existing direct night train connection (only)	Munich, Vienna
Destinations with existing direct day and night train connections	Milan
Missing direct trains connections <12h	Cologne, Ljubljana, Lyon, Marseille, Paris, Zagreb, Zurich
Missing direct trains connections 12–18h	Amsterdam, Barcelona, Belgrade, Berlin, Birmingham, Bratislava, Brussels, Budapest, Hamburg, London, Luxembourg, Prague
Additional destinations after infrastructure investment (<1,500 km)	Sarajevo

Table 62: Destination analysis for Rome

Destinations with an existing direct day train connection (only)	Paris, Zurich
Destinations with an existing direct night train connection (only)	Munich, Vienna
Destinations with existing direct day and night train connections	Naples, Rome
Missing direct trains connections <12h	Amsterdam, Barcelona, Berlin, Bratislava, Brussels, Cologne, Ljubljana, London, Luxembourg, Lyon, Marseille, Zagreb
Missing direct trains connections 12–18h	Belgrade, Birmingham, Budapest, Copenhagen, Edinburgh, Hamburg, Madrid, Prague, Valencia, Warsaw
Additional destinations after infrastructure investment (<1,500 km)	Podgorica, Pristina, Sarajevo, Skopje

Table 63: Destination analysis for Milan

Destinations with an existing direct day train connection (only)	Rome
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	Milan
Missing direct trains connections <12h	Ljubljana, Lyon, Marseille, Munich, Paris, Zurich
Missing direct trains connections 12–18h	Amsterdam, Barcelona, Belgrade, Berlin, Bratislava, Cologne, Brussels, Budapest, Hamburg, London, Luxembourg, Prague, Vienna, Zagreb
Additional destinations after infrastructure investment (<1,500 km)	Sarajevo

Table 64: Destination analysis for Naples

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023
Rome–Paris	10h53m	Milan, Geneva	10h30m	2,205,000
Rome–London	16h52m	Milan, Zurich, Paris (Gare de Lyon/Nord)	14h10m	2,079,000
Rome–Barcelona	25h48m ³⁹	Torino, Chambéry-Challes-les-Eaux, Lyon, Nîmes	15h10m	1,485,000
Rome–Brussels	14h9m	Milan, Zurich, Paris (Gare de Lyon/Nord)	13h10m	771,000
Rome–Amsterdam	16h4m	Milan, Lugano, Basel	15h30m	733,000
Rome–Zurich	8h2m	Milan	7h20m	450,000
Rome–Berlin	13h47m	Bologna, Munich	13h20m	319,000
Rome–Marseille	10h40m	Genova, Ventimiglia, Nice	9h50m	172,000
Milan–London	11h25m	Paris (Nord/Gare de Lyon), Geneva ⁴⁰	10h20m	2,709,000
Milan–Barcelona	11h29m	Geneva, Lyon	11h20m	1,384,000
Milan–Madrid	14h35m	Geneva, Lyon, Barcelona	14h5m	1,332,000
Milan–Frankfurt	8h3m	Bern	7h30m	787,000
Milan–Brussels	9h30m	Geneva,	9h10m	780,000

³⁹ Stopover in Lyon required

⁴⁰ The current direct Milan–Paris connection is not an option for Milan–London since it arrives in Paris later than the last Eurostar departure for London.

		Paris (Nord/Gare de Lyon)		
Milan–Prague	13h10m	Verona, Munich	12h40m	545,000
Milan–Ljubljana	8h51m	Venice, Villach	7h10m	No direct flight
Naples–London	24h35m ⁴¹	Torina, Paris (Gare de Lyon/Nord)	15h10m	827,000
Naples–Paris	14h29m	Milan, Zurich	11h45m	791,000
Naples–Barcelona	26h1m ⁴²	Milan, Geneva, Lyon, Nimes	16h15m	393,000
Naples–Munich	10h43m	Bologna	10h30m	278,000
Naples–Frankfurt	12h43m	Milan, Lugano, Basel	12h15m	204,000

Table 65: examples for missing direct train connections from/to the 3 largest Italian cities, including Top 5 flights without direct train connection <18h each

Luxembourg (Luxembourg City)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Luxembourg City. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Luxembourg, while the overall results for Europe can be found [here](#).

- Despite being geographically in a central position, Luxembourg is very poorly connected by direct trains. Only five cities analysed can be reached by an existing direct train, while 28 cities could be reached by a direct train within

⁴¹ Stopover in Paris required

⁴² Stopover in Geneva required

18 hours. This is a direct train connectivity of only 18%.

- Only five cities analysed can be reached by a direct train, Brussels, Cologne, Lyon, Marseille and Paris.
- There is not a single night train entering or leaving Luxembourg.
- There is no direct train connection to 82% of the cities that could be reached by a direct train within 18 hours.
- The most important missing train connection from Luxembourg under 12 hours is London, which is the most used short-haul flight route from Luxembourg without a direct train alternative, followed by Milan, Frankfurt/Main, Amsterdam and Munich.
- Important missing night train connections include Rome, Stockholm and Warsaw.
- Other than by direct train, 22 cities which could be reached by train within 18 hours can be reached by direct flight from the Luxembourg airport. There are 340% more direct flights than direct trains to destinations that could be reached by train within 18 hours. The high number of direct flight connections show the high need for cross-border rail journeys from and to Luxembourg.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, two additional cities, Belgrade and Sarajevo, could be served by a direct train within 18 hours in the future.

	Number	%
Existing and potential direct train connections to 44 cities <18h	28	
Total number of existing direct train connections	5	18%
Night trains only	0	0%
Day trains only	5	100%
Both day and night trains	0	0%
Total missing direct train connections below 18 hours	23	
Below 12 hours	15	
Additional future possible direct train connections <18h, with investment	2	
Direct flight connections on routes with an existing or possible direct train connection within 18 hours	22	79%
Percentage of more direct flights than direct trains		340%
Direct flights (44 other cities)	29	66%

Table 66: Key data for Luxembourg

Destinations with an existing direct day train connection	Brussels, Cologne, Lyon, Marseille, Paris
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Amsterdam, Barcelona, Berlin, Birmingham, Bratislava, Copenhagen, Edinburgh, Hamburg, London, Madrid, Milan, Munich, Prague, Vienna, Zurich
Missing direct trains connections 12–18h	Budapest, Ljubljana, Naples, Rome, Stockholm, Valencia, Warsaw, Zagreb
Additional destinations after infrastructure investment (<1,500 km)	Belgrade, Sarajevo

Table 67: Destination analysis for Luxembourg

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023
Luxembourg–London	6h46m	Brussels	5h40m	399,000
Luxembourg–Milan	9h19m	Mulhouse, Basel	8h	255,000
Luxembourg–Frankfurt	3h55m	Koblenz	3h45m	190,000
Luxembourg–Amsterdam	5h33m	Brussels	5h15m	160,000
Luxembourg–Munich	5h49m	Strasbourg, Mannheim	5h40m	152,000
Luxembourg–Berlin	8h45m	Koblenz	7h30m	93,000

Table 68: examples for missing direct train connections from/to Luxembourg, including Top five flights without direct train connection <18h

Moldova (Chisinau)

- There are two direct train connections available for Chisinau: a night train from and to Bucharest, and, despite the Ukraine war, a night train from and to Kyiv.
- Due to geography and a very slow rail speed in Moldova and Romania, there is currently no other city that could be reached by train within 18 hours.
- Despite the different track gauges in Moldova and Romania, there is no need to change trains.
- Chisinau would be one of the biggest beneficiaries of a rail investment programme that would allow an average speed of 80 km/h on all routes in Europe. An additional 18 destinations could be reached by train within 18 hours, including Vienna, Belgrade and Budapest. Some of these routes would pass through Ukraine, so an end to the war is a prerequisite for realising the full potential.
- Despite its small size, Chisinau has direct flights to 22 of the cities analysed, clearly favouring air travel over rail.

Netherlands (Amsterdam)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Amsterdam. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for the Netherlands, while the overall results for Europe can be found [here](#).

- Despite being geographically in a central position, Amsterdam is poorly connected by direct trains. Only nine cities analysed can be reached by an existing direct train, while 29 cities could be reached by a direct train within 18 hours. This is a direct train connectivity of only 31%.
- Only five cities analysed can be reached by a direct night train, Berlin, Munich, Prague, Vienna and Zurich. The Dutch railway company NS is not operating night trains, all night trains to and from Amsterdam are operated by the Austrian railway company ÖBB or by the private company Europeansleeper.
- There is no direct train connection to 69% of the cities that could be reached by a direct train within 18 hours.
- The most important missing train connection from Amsterdam under 12 hours is Barcelona, which is the most used short-haul flight route from

Amsterdam without a direct train alternative, followed by Copenhagen, Milan and Manchester. Other important missing and rather short train connections are to Hamburg and Luxembourg.

- The most important missing night train destination is Madrid, which is the second most used short haul flight from Amsterdam without a direct train alternative. Other important missing night train connections are to Stockholm, Oslo and Rome.
- There are 200% more direct flights than direct trains to destinations that could be reached by train within 18 hours.
- 84% of all 44 destinations analysed can be reached by direct flight from Amsterdam including all cities in the EU analysed except Bratislava and Cologne.

	Number	%
Existing and potential direct train connections to 44 cities <18h	29	
Total number of existing direct train connections	9	31%
Night trains only	4	44%
Day trains only	4	44%
Both day and night trains	1	11%
Total missing direct train connections below 18 hours	20	
Below 12 hours	10	
Direct flight connections on routes with an existing or possible direct train connection <18h	27	93%
Percentage of more direct flights than direct trains		200%
Direct flights (44 other cities)	37	84%

Table 69: Key data for Amsterdam

Destinations with an existing direct day train connection	Brussels, Cologne, London, Paris
Destinations with an existing direct night train connection (only)	Munich, Prague, Vienna, Zurich
Destinations with existing direct day and night train connections	Berlin
Missing direct trains connections <12h	Barcelona, Birmingham, Copenhagen, Edinburgh, Hamburg, Luxembourg, Lyon, Marseille, Milan, Warsaw

Missing direct trains connections 12–18h	Bratislava, Budapest, Ljubljana, Madrid, Naples, Oslo, Rome, Stockholm, Valencia, Zagreb
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Table 70: Destination analysis for Amsterdam

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023
Amsterdam–Barcelona	11h12m	Paris (Nord/Gare de Lyon)	10h10m	1,463,000
Amsterdam–Copenhagen	11h6m	Duisburg, Hamburg	10h15m	1,120,000
Amsterdam–Madrid	14h35m	Paris (Nord/Gare de Lyon), Barcelona	12h55m	1,052,000
Amsterdam–Milan	11h32m	Paris (Nord/Gare de Lyon), Geneva	11h15m	1,046,000
Amsterdam–Manchester	6h59m	London (StPancras/Euston)	6h30m	947,000
Amsterdam–Warsaw	13h22m	Berlin	11h30m	555,000
Amsterdam–Hamburg	5h15m	Osnabrück	4h45m	351,000
Amsterdam–Luxembourg	5h34m	Brussels	5h15m	161,000
Amsterdam–Marseille	7h45m	Paris (Nord/Gare de Lyon)	7h30m	158,000

Table 71: examples for missing direct train connections from/to Amsterdam, including Top five flights without direct train connection <18h

Norway (Oslo)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Oslo. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Norway, while the overall results for Europe can be found [here](#).

- Oslo is very poorly connected by cross-border direct trains. Only one city analysed can be reached by an existing direct train, while six cities could be reached by a direct train within 18 hours. This is a direct train connectivity of only one sixth (17%).
- The only cross-border direct train goes to Stockholm, which is at least a convenient connection with five train pairs a day.
- While the Norwegian railway company Vy operates several domestic night trains, there is no international night train running from and to Oslo.
- There is no direct train connection to 83% of the cities that could be reached by a direct train within 18 hours.
- The obvious most important missing direct train destination is Copenhagen. Oslo–Copenhagen is also the most used international short-haul flight route from Oslo with almost 1.5 million passengers a year. A direct train between the two cities would not last longer than 7h40m.
- Other destinations without a direct night train connection include Amsterdam, Berlin, Cologne/Düsseldorf and Hamburg, all of them are among the Top five short-haul flights from Oslo without a direct train alternative.
- All cities analysed that can or could be reached by train within 18 hours, can be reached by a direct flight, except Cologne (but nearby Düsseldorf can be reached by direct flight). There are 400% more direct flights than direct trains to these destinations.
- 32 out of 44 cities analysed can be reached by direct flight. This is 73%, while only one of these cities (2%) can be reached by a direct train.

	Number	%
Existing and potential direct train connections to 44 cities <18h	6	
Total number of existing direct train connections	1	17%
Night trains only	0	0%
Day trains only	1	100%
Both day and night trains	0	0%
Total missing direct train connections below 18 hours	5	
Below 12 hours	1	
Direct flight connections on routes with an existing or possible direct train connection <18h	5	83%
Percentage of more direct flights than direct trains		400%
Direct flights (44 other cities)	32	73%

Table 72: Key data for Oslo

Destinations with an existing direct day train connection	Stockholm
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Copenhagen
Missing direct trains connections 12–18h	Amsterdam, Berlin, Cologne, Hamburg

Table 73: Destination analysis for Oslo

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train ⁴³	Flight passengers, Gardermoen and Torp, 2023
Oslo–Copenhagen	8h32m	Gothenburg	7h40m	1,339,000
Oslo–Amsterdam	20h14m	Gothenburg, Malmö, Hamburg, Osnabrück	17h45m	761,000
Oslo–Berlin	17h32m	Gothenburg, Malmö	16h	256,000
Oslo–Düsseldorf	17h35m	Gothenburg, Malmö, Hamburg	16h10m	145,000
Oslo–Hamburg	14h14m	Gothenburg, Malmö	13h	115,000

Table 74: examples for missing direct train connections from/to Oslo, including Top five flights without direct train connection <18h

Poland (Warsaw)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Warsaw. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Poland, while the overall results for Europe can be found [here](#).

- Warsaw is rather poorly connected by cross-border direct trains. Only eight cities analysed can be reached by an existing direct train, while 25 cities could be reached by a direct train within 18 hours. This is a direct train connectivity of only 32%.
- Six cities analysed can be reached by a direct night train, Bratislava, Budapest, Kyiv, Munich, Prague and Vienna. Except for Kyiv and Munich, all of them are served both by day and night train connections.
- Berlin and Vilnius can be reached by a direct day train. The train connection to Vilnius counts as a direct connection although a change of trains is needed at the Polish–Lithuanian border due to different gauges.
- There is no direct train connection to 68% of the cities that could be

⁴³ Some routes are possible with a high-speed night trains

reached by a direct train within 18 hours.

- The most important missing train connection from Warsaw under 12 hours is Amsterdam, which is the third most used short-haul flight route from Warsaw without a direct train alternative. Other important missing direct train connections below 12 hours are to Hamburg and Riga.
- The most important missing night train destination is London, which is by far the most used short-haul flight from Warsaw without a direct train alternative, followed by Paris, Milan and Brussels.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, eight additional cities could be served by a direct train to/from Warsaw in the future, including Bucharest and Sofia.
- While only 32% of the routes between Warsaw and other major European cities which could be travelled by train within 18 hours are served by direct train, 84% – 21 out of the 25 routes – are served by direct flight. Thus, Warsaw is still far better connected by air than rail, encouraging people to fly instead of taking the train.

	Number	%
Existing and potential direct train connections to 44 cities <18h	25	
Total number of existing direct train connections	8	32%
Night trains only	2	25%
Day trains only	2	25%
Both day and night trains	4	50%
Total missing direct train connections below 18 hours	17	
Below 12 hours	5	
Additional future possible direct train connections <18h, with investment	8	
Direct flight connections on routes with an existing or possible direct train connection <18h	21	84%
Percentage of more direct flights than direct trains		163%
Direct flights (44 other cities)	38	86%

Table 75: Key data for Warsaw

Destinations with an existing direct day train connection (only)	Berlin, Vilnius
Destinations with an existing direct night train connection (only)	Munich, Kyiv

Destinations with existing direct day and night train connections	Bratislava, Budapest, Prague, Vienna
Missing direct trains connections <12h	Amsterdam, Cologne, Hamburg, Ljubljana, Riga
Missing direct trains connections 12–18h	Birmingham, Brussels, Copenhagen, London, Luxembourg, Lyon, Milan, Paris, Stockholm, Tallinn, Zagreb, Zurich
Additional destinations after infrastructure investment (<1,500 km)	Belgrade, Bucharest, Chisinau, Podgorica, Pristina, Sarajevo, Skopje, Sofia

Table 76: Destination analysis for Warsaw

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, Modlin and Chopin, 2023
Warsaw–London	16h26m	Berlin, Cologne, Brussels	14h	1,330,000
Warsaw–Paris	15h36m	Berlin, Cologne	13h20m	748,000
Warsaw–Amsterdam	13h29m	Berlin	11h30m	555,000
Warsaw–Milan	20h29m	Vienna, Venice	17h30m	481,000
Warsaw–Brussels	13h4m	Berlin (Gesundbrunnen/Hbf), Cologne	12h30m	470,000
Warsaw–Riga	25h57m ⁴⁴	Vilnius	10h30m ⁴⁵	202,000
Warsaw–Hamburg	7h50m	Berlin	7h30m	98,000
Warsaw–Zagreb	21h17m	Salzburg, Villach	13h40m	n.a.

⁴⁴ Stopover in Vilnius required

⁴⁵ Potential route via Kaunas, not running through Vilnius

Table 77: examples for missing direct train connections from/to, including Top five short-haul flights from Modlin and Chopin Airports without direct train connection <18h

Portugal (Lisbon)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Lisbon. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Portugal, while the overall results for Europe can be found [here](#).

- Lisbon is not connected by a cross-border direct train to any other city. Travelling by train to Spain is currently only possible by using regional trains. A journey to Madrid includes at least two transfers.
- Despite being at the geographic edge of Europe, thanks to a large high-speed rail network in Spain and France, six out of the other 44 cities analysed could be reached by train within 18 hours, including the three largest French cities Paris, Marseille and Lyon. Also the Swiss city of Geneva could be reached within 18 hours.
- All Spanish cities could be reached in less than 12 hours by a direct train.
- The obvious most missing direct train is to Madrid. Considering the actual flight passenger numbers, Paris would be the most important direct train.
- All cities that could be reached by train within 18 hours can be reached by direct flight. Of the routes to all 44 cities analysed, 34 are served by a direct flight. Mostly smaller cities in Central & Eastern Europe, the Balkan and in the Baltics cannot be reached by direct flight. Thus, Lisbon is fully encouraging people to fly instead of taking the train.

	Number	%
Existing and potential direct train connections to 44 cities <18h	6	
Total number of existing direct train connections	0	0%
Total missing direct train connections below 18 hours	6	
Below 12 hours	3	
Direct flight connections on routes with an existing or possible direct train connection <18h	6	100%
Direct flights to 44 cities	34	77%

Table 78: Key data for Lisbon

Destinations with an existing direct day train connection (only)	none
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Barcelona, Madrid, Valencia
Missing direct trains connections 12–18h	Lyon, Marseille, Paris

Table 79: Destination analysis for Lisbon

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023
Lisbon–Paris	26h33m ⁴⁶	Entroncamento, Badajoz, Madrid, Barcelona	17h45m	2,503,000
Lisbon–Madrid	8h48m	Entroncamento, Badajoz	8h40m	2,096,000
Lisbon–Barcelona	13h21m	Entroncamento, Badajoz, Merida, Madrid	11h20m	1,392,000
Lisbon–Geneva	29h23m ⁴⁷	Entroncamento, Badajoz, Mérida, Madrid, Barcelona	18h	802,000
Lisbon–Lyon	28h20m ⁴⁸	Entroncamento, Badajoz, Madrid, Barcelona	16h40m	329,000
Lisbon–Marseille	24h57m ⁴⁹	Entroncamento, Badajoz, Madrid, Barcelona, Narbonne	15h50m	324,000

Table 80: examples for missing direct train connections from/to Lisbon, Top six flights without direct train connection <18h

⁴⁶ Stopover in Madrid required

⁴⁷ Stopover in Barcelona required

⁴⁸ Stopover in Barcelona required

⁴⁹ Stopover in Madrid required

Romania (Bucharest)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Bucharest. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Romania, while the overall results for Europe can be found [here](#).

- The connectivity by direct trains for Bucharest does not fit into any of the "poorly connected" or "well connected" categories. Due to the poor state of the railway network in Romania and neighbouring countries, only seven cities could be reached by a direct train within 18 hours. However, three of them can be reached by direct train, resulting in a direct train connectivity of 43%, which is 50% higher than the European average.
- The three cities with a direct train connection are Budapest, Chisinau and Vienna. In addition, there is a direct night train to Istanbul only during the summer period (which has not been taken into account in the statistics of this report due to the chosen methodology).
- Budapest, Chisinau and Vienna are served by night trains operated by the Romanian railway company CFR. Budapest can also be reached by a direct day train.
- There is no direct train connection to 57% of the cities that could be reached by a direct train within 18 hours.
- The obvious most important missing day train connection is the one to Sofia. There was a summer-only service on this route in 2023, but it was not included in the 2024 timetable at the time of writing.
- Other important destinations without a direct train connection within 18 hours include Belgrade and Bratislava.
- Bucharest would be one of the biggest beneficiaries of all the cities analysed if moderate investment in Europe's rail infrastructure allowed an average speed of 80 km/h on all train routes: 13 additional cities could be served by a direct train to/from Bucharest in the future.
- There are twice as many direct flights as direct trains to destinations that could be reached by train within 18 hours. Bratislava is the only city that could be reached by train within 18 hours without a direct flight connection from Bucharest. Of the 44 European cities analysed, 33 can be reached by a direct flight.
- Flight passenger data for Bucharest are incomplete at Eurostat, for example, passenger numbers to Belgrade and Sofia are not available there.

	Number	%
Existing and potential direct train connections to 44 cities <18h	7	
Total number of existing direct train connections	3	43%
Night trains only	2	67%
Day trains only	0	0%
Both day and night trains	1	33%
Total missing direct train connections below 18 hours	4	
Below 12 hours	1	
Additional future possible direct train connections <18h, with investment	12	
Direct flight connections on routes with an existing or possible direct train connection <18h	6	86%
Percentage of more direct flights than direct trains		100%
Direct flights (44 other cities)	33	75%

Table 81: Key data for Bucharest

Destinations with an existing direct day train connection (only)	none
Destinations with an existing direct night train connection (only)	Chisinau, Vienna
Destinations with existing direct day and night train connections	Budapest
Missing direct trains connections <12h	Sofia
Missing direct trains connections 12–18h	Belgrad, Bratislava, Istanbul
Additional destinations after infrastructure investment (<1,500 km)	Athens, Kyiv, Ljubljana, Munich, Podgorica, Prague, Pristina, Sarajevo, Skopje, Vilnius, Warsaw, Zagreb

Table 82: Destination analysis for Bucharest

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train
Bucharest–Belgrade	1d3h12m	Bekescsaba, Szeged, Subotica, Novi Sad	16h30m
Bucharest–Sofia	9h34m	Ruse	9h

Table 83: examples for missing direct train connections from/to Bucharest

Slovakia (Bratislava)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Bratislava. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Slovakia, while the overall results for Europe can be found [here](#).

- Bratislava is poorly connected by cross-border direct trains. Only seven cities analysed can be reached by an existing direct train, while 28 cities could be reached by a direct train within 18 hours. This is a direct train connectivity of only 25%. Neighbouring cities such as Prague, Budapest or Vienna have a much higher number of cross-border direct train connections.
- Only two cities analysed can be reached by a direct night train, Berlin and Warsaw.
- The other five cities that can be reached by a direct train are Budapest, Hamburg, Prague, Vienna and Zurich.
- There is no direct train connection to 75% of the cities that could be reached by a direct train within 18 hours. Important destinations without a direct train connection within 12 hours include Brussels, Munich and Zagreb. Important night train connections are missing for London, Milan and Paris.
- With moderate investment in Europe’s rail infrastructure, allowing an average speed of 80 km/h on all train routes, eight additional cities could be served by a direct train to/from Bratislava in the future. These are: Athens, Chisinau, Kyiv, Podgorica, Pristina, Skopje, and Sofia.
- Bratislava is the only city analysed with fewer direct flights than direct train connections on routes which could be travelled by train within 18 hours. This is due to the historical reason that Bratislava airport was built as a regional airport during the communist period and the proximity of Vienna airport, which can be reached in one hour from Bratislava.
- London and Milan are the two most used short-haul flight destinations from

Bratislava without a direct train connection below 18 hours, with 204,000 and 101,000 passengers each in 2023.

	Number	%
Existing and potential direct train connections to 44 cities <18h	28	
Total number of existing direct train connections	7	25%
Night trains only	0	0%
Day trains only	5	71%
Both day and night trains	2	29%
Total missing direct train connections below 18 hours	21	
Below 12 hours	8	
Additional future possible direct train connections <18h, with investment	8	
Direct flight connections on routes with an existing or possible direct train connection <18h	4	14%
Direct flights (44 other cities)	8	18%

Table 84: Key data for Bratislava

Destinations with an existing direct day train connection (only)	Budapest, Hamburg, Prague, Vienna, Zurich
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	Berlin, Warsaw
Missing direct trains connections <12h	Belgrade, Brussels, Cologne, Ljubljana, Luxembourg, Milan, Munich, Zagreb
Missing direct trains connections 12–18h	Amsterdam, Barcelona, Birmingham, Bucharest, Copenhagen, London, Lyon, Marseille, Naples, Paris, Rome, Sarajevo, Vilnius
Additional destinations after infrastructure investment (<1,500 km)	Athens, Chisinau, Kyiv, Podgorica, Pristina, Riga, Skopje, Sofia

Table 85: Destination analysis for Bratislava

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train
Bratislava–Munich	5h15m	Vienna	5h05m
Bratislava–Ljubljana	7h14m	Vienna	7h05m
Bratislava–London	14h58m ⁵⁰	Salzburg, Stuttgart, Paris	13h
Bratislava–Milan	14h31m	Vienna	11h

Table 86: examples for missing direct train connections from/to Bratislava

Slovenia (Ljubljana)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Ljubljana. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Slovenia, while the overall results for Europe can be found [here](#).

- Ljubljana is poorly connected by cross-border direct trains. Only five cities analysed can be reached by an existing direct train, while 27 cities could be reached by a direct train within 18 hours. This is a direct train connectivity of only 19%.
- Only two cities analysed can be reached by a direct night train, Munich and Zurich.
- The other three cities that can be reached by a direct train are Budapest, Vienna and Zagreb. All these direct train connections are rare. There is only one train pair a day to Vienna, two to Budapest and three to Zagreb.
- There is no direct train connection to 81% of the cities that could be reached by a direct train within 18 hours.
- The most important missing train connection from Ljubljana under 12 hours is Frankfurt, which is the second most used short-haul flight route from Ljubljana without a direct train alternative, followed by Paris and Belgrade. Other important missing direct train connections below 12 hours are Milan and Prague.
- The most important missing night train destination is London, which is the most used short-haul flight route from Ljubljana, followed by Brussels. Also

⁵⁰ Quickest day train connection

a night train to Warsaw and Amsterdam were needed.

- With moderate investment in Europe's rail infrastructure, allowing an average speed of 80 km/h on all train routes, eight additional cities could be served by a direct train to/from Ljubljana in the future. These are: Athens, Barcelona, Bucharest, Chisinau, Istanbul, Kyiv, Sofia and Vilnius.
- Although Ljubljana's airport is very small and many Slovenians fly from nearby Zagreb airport, there are 200% more direct flights than direct trains to destinations that could be reached by train within 18 hours.

	Number	%
Existing and potential direct train connections to 44 cities <18h	27	
Total number of existing direct train connections	5	19%
Night trains only	2	40%
Day trains only	3	60%
Both day and night trains	0	0%
Total missing direct train connections below 18 hours	22	
Below 12 hours	11	
Additional future possible direct train connections <18h, with investment	8	
Direct flight connections on routes with an existing or possible direct train connection <18h	13	48%
Percentage of more direct flights than direct trains		160%
Direct flights (44 other cities)	16	36%

Table 87: Key data for Ljubljana

Destinations with an existing direct day train connection (only)	Budapest, Vienna, Zagreb
Destinations with an existing direct night train connection (only)	Munich, Zurich
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Belgrade, Berlin, Bratislava, Cologne, Milan, Naples, Paris, Prague, Rome, Sarajevo, Warsaw
Missing direct trains connections 12–18h	Amsterdam, Brussels, Copenhagen, Hamburg, London, Luxembourg, Lyon,

	Marseille, Podgorica, Pristina, Skopje
Additional destinations after infrastructure investment (<1,500 km)	Athens, Barcelona, Bucharest, Chisinau, Istanbul, Kyiv, Sofia, Vilnius

Table 88: Destination analysis for Ljubljana

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023
Ljubljana–London	19h17m	Stuttgart, Paris	16h45m	158,000
Ljubljana–Frankfurt	10h17m	Villach, Salzburg	10h	112,000
Ljubljana–Paris	14h20m	Stuttgart	11h45	87,000
Ljubljana–Belgrade	25h6m ⁵¹	Budapest, Szeged, Subotica, Novi Sad	8h	79,000
Ljubljana–Brussels	15h22m	Stuttgart, Frankfurt	14h45m	61,000
Ljubljana–Prague	10h13m	Graz	10h	No direct flight
Ljubljana–Milan	10h40m	Villach, Venice	7h	No direct flight

Table 89: examples for missing direct train connections from/to Ljubljana

Spain (Madrid, Barcelona, Valencia)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Madrid, Barcelona and Valencia. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Spain, while the overall results for Europe can be found [here](#).

⁵¹ Stopover in Szeged or Subotica required

Vienna	59%
Munich	52%
Berlin	50%
Paris	45%
Barcelona	23%
Madrid	18%
Valencia	13%
Lisbon	0%

Table 90a: Percentage of available direct trains (ratio to possible direct trains) for Spanish cities compared to selected other cities

- All Spanish cities are poorly connected to other countries by direct trains. The only two direct train lines are Madrid–Barcelona–Marseille and Barcelona–Lyon–Paris.
- There is currently no single night train running from, to or within Spain.
- Unlike international rail services, all Spanish cities analysed are well served by direct trains, both in terms of frequency and speed.
- Paris, Marseille and Lyon are the only three cities abroad that can be reached by a direct train from Barcelona, while Marseille is the only city abroad that can be reached from Madrid. There are no international direct trains to Valencia.
- Thanks to the efficient high-speed rail network in Spain and France, the number of cities that could be reached by a direct train from Spain within 18 hours is high. This is the case for 22 out of 36 destinations from Barcelona, 17 from Madrid and 16 from Valencia.
- This means that for Barcelona, only 23% of the destinations that could be reached by a direct train, can be reached by an existing direct train. For Madrid, this percentage is even lower at 18%, and 13% for Valencia.
- The two most obvious missing direct train connections are Madrid–Lisbon and Madrid–Paris⁵², both of which are among the most used short-haul flight routes for Spain. Madrid–Brussels, Barcelona–Amsterdam, Barcelona–Milan and Barcelona–Geneva/Zurich could also be travelled in less than 12 hours by train.
- While there are few direct train connections, there are direct flights from Madrid, Barcelona and Valencia to all but one of the cities reached by train within 18 hours (Cologne for Madrid and Bratislava for Barcelona and Valencia). All Spanish cities are therefore much better connected by air than by rail, which encourages people to fly rather than take the train.
- For all three Spanish cities, the connectivity by air to all 44 cities analysed is well above the European average. Even for the smallest of the three

⁵² Renfe expects the Madrid–Paris connection to be ready by the end of 2024.

airports, Valencia, 75% of the cities analysed can be reached by direct flights, while for Barcelona the figure is 84%, and 77% for Madrid. Most destinations without direct flights are smaller cities in Central- & Southeast Europe.

	Number	%	Number	%	Number	%
	Madrid		Barcelona		Valencia	
Existing and potential direct train connections to 44 cities <18h	17		22		16	
Total number of existing direct train connections	3	18%	5	23%	2	13%
Night trains only	0	0%	0	0%	0	0%
Day trains only	3	100%	5	100%	2	100%
Both day and night trains	0	0%	0	0%	0	0%
Total missing direct train connections below 18 hours	14		17		14	
Below 12 hours	5		10		4	
Direct flight connections on routes with an existing or possible direct train connection <18h	16	94%	21	95%	15	94%
Percentage of more direct flights than direct trains		433%		320%		650%
Direct flights (44 other cities)	34	77%	37	84%	33	75%

Table 90b: Key data for the three largest Spanish cities

Destinations with an existing direct day train connection (only)	Barcelona, Marseille, Valencia
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Brussels, Lisbon, Luxembourg, Lyon, Paris
Missing direct trains connections 12–18h	Amsterdam, Birmingham, Cologne, Edinburgh, Hamburg, London, Milan, Munich, Zurich

Table 91: Destination analysis for Madrid

Destinations with an existing direct day train connection (only)	Paris, Lyon, Madrid, Marseille, Valencia
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Amsterdam, Birmingham, Brussels, Cologne, Edinburgh, Lisbon, London, Luxembourg, Milan, Zurich
Missing direct trains connections 12–18h	Berlin, Bratislava, Hamburg, Munich, Naples, Rome, Vienna

Table 92: Destination analysis for Barcelona

Destinations with an existing direct day train connection (only)	Barcelona, Madrid
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Lisbon, Lyon, Marseille, Paris
Missing direct trains connections 12–18h	Amsterdam, Birmingham, Brussels, Cologne, Edinburgh, London, Luxembourg, Milan, Munich, Zurich

Table 93: Destination analysis for Valencia

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers 2023
Madrid–Paris	10h4m	Barcelona	9h40m	2,584,000
Madrid–London	13h59m	Barcelona, Paris (Gare de Lyon/Nord)	12h15m	2,575,000
Madrid–Lisbon	8h48m	Badajoz, Entroncamento	8h40m	1,858,000
Madrid–Rome	26h ⁵³	Barcelona, Valence,	17h45m	1,755,000

		Chambéry- Challes-les-Eaux, Milan, Rome		
Madrid–Milan	16h30m	Barcelona, Valence, Chambéry-Challes-les-Eaux	14h5m	1,333,000
Madrid–Brussels	11h37m	Barcelona, Paris (Gare de Lyon/Nord)	11h10m	1,023,000
Barcelona–London	11h11m	Paris (Gare de Lyon / Nord)	9h40m	2,771,000
Barcelona–Rome	21h34m	Valence, Geneva, Brig, Milan	15h10m	1,488,000
Barcelona–Amsterdam	11h16m	Paris (Gare de Lyon / Nord)	10h10m	1,464,000
Barcelona–Milan	13h24m	Valence, Geneva, Brig	11h20m	1,367,000
Barcelona–Lisbon	13h21m	Madrid, Mérida, Badajoz, Entroncamento	11h20m	1,185,000
Barcelona–Brussels	9h24m	Lyon	8h50m	920,000
Valencia–London	24h25m ⁵⁴	Barcelona, Paris	13h	671,000
Valencia–Paris	11h13m	Barcelona	10h	602,000
Valencia–Amsterdam	23h30m ⁵⁵	Barcelona, Paris (Gare de Lyon / Nord), Brussels	15h	408,000
Valencia–Milan	24h38m ⁵⁶	Barcelona, Narbonne, Lyon, Geneva	14h20m	399,000
Valencia–Brussels	13h38m	Barcelona, Valence, Lyon	12h10m	303,000
Valencia–Frankfurt	25h54m	Barcelona, Paris (Gare de Lyon/Est)	14h30m	251,000

Table 94: examples for missing direct train connections from/to the three largest Spanish cities, including Top six flights each without direct train connection <18h

⁵³ Stopover in Milan required

⁵⁴ Stopover in Paris required

⁵⁵ Stopover in Paris or Brussels required

⁵⁶ Stopover in Geneva required

Sweden (Stockholm)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Stockholm. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Sweden, while the overall results for Europe can be found [here](#).

- Stockholm is poorly connected by direct trains. Only four cities analysed can be reached by an existing direct train, while 12 cities could be reached by a direct train within 18 hours. This is a direct train connectivity of only one third.
- Only two cities analysed can be reached by a direct day train, Copenhagen and Oslo, and two by a direct night train, Hamburg and Berlin.
- There is no direct train connection to two thirds of the cities that could be reached by a direct night train within 18 hours. The most important destinations without a direct night train connection include Amsterdam, Paris, Frankfurt, Munich and Brussels, which are the Top five short-haul flight routes from Stockholm without a direct train connection.
- All cities analysed that can or could be reached by train within 18 hours, can be reached by a direct flight. There are 200% more direct flights than direct trains to these destinations.
- 35 out of 44 cities analysed can be reached by direct flight. This is 80%, while only 9% of these cities can be reached by a direct train.

	Number	%
Existing and potential direct train connections to 44 cities <18h	12	
Total number of existing direct train connections	4	33%
Night trains only	2	50%
D'Day trains only	2	50%
Both day and night trains	0	0%
Total missing direct train connections below 18 hours	8	
Below 12 hours	0	
Direct flight connections on routes with an existing or possible direct train connection <18h	12	100%
Percentage of more direct flights than direct trains		200%
Direct flights (44 other cities)	35	80%

Table 95: Key data for Stockholm

Destinations with an existing direct day train connection	Copenhagen, Oslo
Destinations with an existing direct night train connection (only)	Hamburg, Berlin
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	none
Missing direct trains connections 12–18h	Amsterdam, Brussels, Cologne, Luxembourg, Munich, Paris, Prague, Warsaw

Table 96: Destination analysis for Stockholm

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct night train ⁵⁷	Flight passengers, 2022 ⁵⁸
Stockholm–Amsterdam	18h32m	Hamburg, Osnabrück	17h15m	673,000
Stockholm– Paris	22h32m	Hamburg, Cologne	18h	578,000
Stockholm–Frankfurt	18h26m	Hamburg	14h50m	471,000
Stockholm–Munich	19h6m	Hamburg	16h20m	418,000
Stockholm–Brussels	20h1m	Hamburg, Cologne	17h	235,000

Table 97: examples for missing direct train connections from/to Stockholm, including Top five flights without direct train connection <18h

⁵⁷ Some routes are possible with a high-speed night trains

⁵⁸ 2023 data are not yet available for Sweden. Due to COVID restrictions, in 2022, air traffic in Sweden was between 20 and 40% lower than in normal years.

Switzerland (Zurich, Geneva)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including Zurich, and some other cities of national relevance including Geneva as the second largest Swiss city. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for Switzerland, while the overall results for Europe can be found [here](#).

The results for Zurich and Geneva cannot be assessed together, since the existing connectivity with direct train connections for Zurich is better than the European average, while the train connectivity of Geneva is among the worst in Europe.

Vienna	59%
Munich	52%
Berlin	50%
Zurich	46%
Paris	45%
Milan	21%
Rome	17%
Geneva	14%

Table 98a: Percentage of available direct trains (ratio to possible direct trains) for Swiss cities compared to selected other cities

Findings for Zurich:

- Zurich is the city in Europe with the fourth highest number of direct train connections, after Vienna, Munich and Berlin. 13 of the 44 routes between Zurich and other European cities analysed are served by direct trains.
- Zurich is also the city in Europe with the fourth highest number of night train connections. Nine of the 44 routes between Zurich and the other European cities analysed are served by night trains, three of them are served by both a direct day and a direct night train.
- Despite belonging to the cities with the most direct train connections, even on routes to/from Zurich the untapped potential for direct trains is considerable: Direct trains are offered on only 46% of the 28 routes between Zurich and other European cities which could be travelled by a direct train with a maximum journey time of 18 hours, using the existing tracks.
- Thus, 54% – 15 out of 28 – of the routes between Zurich and other cities

are not currently served by a direct train (with a journey time of less than 18 hours), although they could be by using the existing tracks.

- While 46% of the routes between Zurich and other major European cities which could be travelled by train within 18 hours are served by direct train, 89% – 25 out of the 28 routes, all except Bratislava, Lyon and Valencia – are served by direct flight.
- Thus, Zurich is still far better connected by air than rail, encouraging people to fly instead of taking the train.
- The most important missing train connection from Zurich under 12 hours is London, which is by far the most used short-haul flight route from Zurich without a direct train alternative, followed by Barcelona and Rome.
- The most important missing night train destinations are Madrid and Belgrade, both are in the top five short-haul flights from Zurich without a direct train alternative.
- With moderate investment in Europe's rail infrastructure, allowing an average speed of 80 km/h on all train routes, 4 additional cities in the Balkan region could be served by a direct train from Zurich in the future.

Findings for Geneva:

- Despite hosting the [UN's](#) second largest office making the city one of the largest conference centres in Europe, Geneva is very poorly connected to other countries by direct trains.
- Only four out of 45 routes between Geneva and other European cities analysed are served by direct trains, Lyon, Milan, Paris, and Zurich.
- 29 cities could be reached from Geneva with a direct train within 18 hours. This means that there are direct train connections on only 14% of routes which could be served by a direct train.
- While there are many destinations which are served by night train from Zurich, there is not a single night train to and from Geneva.
- The untapped potential for direct train connections is very high: Direct trains are not offered on 86% of the 29 routes between Geneva and other European cities which could be travelled by a direct train with a maximum journey time of 18 hours, using the existing tracks.
- While only 14% of the routes between Geneva and other major European cities which could be travelled by train within 18 hours are served by direct train, 76% – 22 out of the 29 routes – are served by direct flight. The number of direct flights is extremely high considering the relatively small size of the city and the proximity to the large Zurich Airport.
- Thus, Geneva is far better connected by air than rail, encouraging people to fly instead of taking the train.
- The most important missing train connection from Geneva under 12 hours is London, which is by far the most used short-haul flight route from Geneva without a direct train alternative, followed by Amsterdam and Barcelona. The shortest missing direct train connection is Marseille, which could be just a four hour trip. Also a direct train connection to Germany would be very important.

- The most important missing night train destination is Lisbon, which is in the top five short-haul flights from Geneva without a direct train alternative.
- With moderate investment in Europe's rail infrastructure, allowing an average speed of 80 km/h on all train routes, Belgrade could also be served by a direct train from Geneva in the future.

	Number	%	Number	%
	Zurich		Geneva	
Existing and potential direct train connections to 44 cities <18h	28		29	
Total number of existing direct train connections	13	46%	4	14%
Night trains only	6	46%	0	0%
Day trains only	4	31%	4	100%
Both day and night trains	3	23%	0	0%
Total missing direct train connections below 18 hours	15		25	
Below 12 hours	10		18	
Additional future possible direct train connections <18h, with investments	4		1	
Direct flight connections on routes with an existing or possible direct train connection <18h	25	89%	22	76%
Percentage of more direct flights than direct trains		92%		450%
Direct flights to 44/45 cities	40/44	91%	35/45	78%

Table 98b: Key data for Zurich and Geneva

Destinations with an existing direct day train connection	Bratislava, Milan, Munich, Paris ⁵⁹
Destinations with an existing direct night train connection (only)	Amsterdam, Berlin, Budapest, Ljubljana, Prague, Zagreb
Destinations with existing direct day and night train connections	Cologne, Hamburg, Vienna

⁵⁹ Due to the chosen methodology, the Zurich to Geneva route is not included in the results for Zurich.

Missing direct trains connections <12h	Barcelona, Birmingham, Brussels, Edinburgh, London, Luxembourg, Lyon, Marseille, Naples, Rome
Missing direct trains connections 12–18h	Belgrade, Copenhagen, Madrid, Valencia, Warsaw
Additional destinations after infrastructure investment (<1,500 km)	Podgorica, Pristina, Sarajevo, Skopje

Table 99: Destination analysis for Zurich

Destinations with an existing direct day train connection	Lyon, Milan, Paris, Zurich
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Amsterdam, Barcelona, Berlin, Birmingham, Bratislava, Brussels, Cologne, Edinburgh, Hamburg, London, Luxembourg, Madrid, Marseille, Munich, Naples, Rome, Valencia, Vienna
Missing direct trains connections 12–18h	Budapest, Copenhagen, Lisbon, Ljubljana, Prague, Warsaw, Zagreb
Additional destinations after infrastructure investment (<1,500 km)	Belgrade

Table 100: Destination analysis for Geneva

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023
Zurich–London	7h56m	Paris (Gare de Lyon/Nord)	7h	1,639,000
Zurich–Barcelona	11h9m	Geneva, Lyon	9h50m	673,000
Zurich–Madrid	13h8m	Geneva, Lyon, Barcelona	12h30m	648,000

Zurich–Rome	8h2m	Milan	7h20m	448,000
Zurich–Belgrade	27h3m ⁶⁰	Budapest, Zuglo, Szeged, Subotica, Novi Sad	18h	436,000
Zurich–Brussels	6h10m	Paris (Gare de Lyon/Nord)	6h	290,000
Geneva–London	8h1m	Paris (Gare de Lyon/Nord)	6h	2,171,000
Geneva–Lisbon	1d11h	Lyon, Barcelona, Madrid, Merida, Badajoz, Abrantes	17h	691,000
Geneva–Amsterdam	7h15m	Paris (Gare de Lyon/Nord)	7h	590,000
Geneva–Barcelona	7h9m	Lyon	7h	514,000
Geneva–Madrid	10h15m	Lyon, Barcelona	9h45m	507,000
Geneva–Marseille	4h14m	Lyon	4h	419,000 (to Nice)
Geneva–Munich	6h22m	Zurich	6h20m	197,000
Geneva–Vienna	10h50m	Zurich	10h40m	169,000

Table 101: examples for missing direct train connections from/to Zurich and Geneva, including Top 5 flights each without direct train connection <18h

UK (London, Birmingham, Edinburgh, Manchester)

In this report, Greenpeace analysed rail and air connections between 45 major European cities including London, Birmingham and Edinburgh, and some other cities of national relevance including Manchester as the 3rd largest metropolitan region in the UK. The purpose of the research was to identify existing and potential direct rail connections, and to compare them with the number of direct flights on the same routes. The following section summarises the results for the UK, while the overall results for Europe can be found [here](#).

⁶⁰ Stopover in Szeged or Subotica required

Vienna	59%
Munich	52%
Berlin	50%
Brussels	39%
London	19%
Manchester	14%
Edinburgh	12%
Birmingham	9%

Table 102a: Percentage of available direct trains (ratio to possible direct trains) for UK cities compared to selected other cities

The UK is poorly connected to other countries by direct trains. The only three direct train lines are from London to Paris, Brussels and Amsterdam.

- There is not a single international train to any other UK city than London. [Originally](#), the Eurostar network was designed and built in a way that cities such as Manchester could be directly connected with continental Europe by train, but such connections never were implemented.
- There is currently no single night train running from or to the UK, while there are several domestic night train routes.
- Unlike international rail services, all UK cities analysed are well served by direct trains, both in terms of frequency and speed.
- Thanks to the efficient high-speed rail network in the UK and all North-West European countries, the number of cities that could be reached by a direct train from the UK within 18 hours is high. Out of 44 other cities analysed, 27 of them could be reached from London with a train within 18 hours. The number for potential direct train routes declines from South to North, but even from Edinburgh, 17 cities could be reached by train within 18 hours including Madrid and Milan.
- This means that for London, only 19% of the destinations that could be reached by a direct train, can be reached by an existing direct train. For Manchester, this percentage is even lower at 14%, 12% for Edinburgh and 9% for Birmingham.
- There are many important missing direct train connections. The easiest one to introduce is probably London–Cologne since this route is already served by the Eurostar network. Many routes from London belong to Europe's most used short-haul flight routes but do not have a direct train connection. With respect to passenger numbers, very important missing train destinations are Madrid, Milan, Rome, Copenhagen, Berlin and Zurich. Except Copenhagen, all these cities can be reached by train in less or just a bit more than 12 hours.
- While there are so few direct train connections, there are direct flights from London to all cities reachable by train within 18 hours (except to Birmingham that is too close for a flight). Also from Edinburgh, there are

direct flights to all cities reachable by train within 18 hours, except to Luxembourg. Even from the smaller Birmingham and Manchester Airports the connectivity with polluting flights is much better than with trains. There are 13 direct flights from Birmingham, and 16 from Manchester, to cities that could be reached by train within 18 hours.

- All UK cities analysed are therefore much better connected by air than by rail, which encourages people to fly rather than take the train.

	Number	%	Number	%	Number	%	Number	%
	London		Birmingham		Edinburgh		Manchester	
Existing and potential direct train connections to 44/45 cities <18h	27/44		23/44		17/44		21/45	
Total number of existing direct train connections	5	19%	2	9%	2	12%	3	14%
Night trains only	0	0%	0	0%	0	0%	0	0%
Day trains only	4	80%	2	100%	1	50%	3	100%
Both day and night trains	1	20%	0	0%	1	50%	0	0%
Total missing direct train connections below 18 hours	22		21		15		18	
Below 12 hours	10		12		9		12	
Direct flight connections on routes with an existing or possible direct train connection <18h	26	96%	13	57%	16	94%	16	76%
Percentage of more direct flights than direct trains		420%		550%		700%		433%
Direct flights to 44 cities (45 for Manchester)	42	95%	23	52%	32	73%	27	60%

Table 102b: Key data for the UK cities analysed

Destinations with an existing direct day train connection (only)	Amsterdam, Birmingham, Brussels, Paris ⁶¹
Destinations with an existing direct night train connection (only)	none

⁶¹ Due to the chosen methodology, the routes to Manchester are not included in the results of the other cities.

Destinations with existing direct day and night train connections	Edinburgh
Missing direct trains connections <12h	Barcelona, Berlin, Cologne, Hamburg, Luxembourg, Lyon, Marseille, Milan, Munich, Zurich
Missing direct trains connections 12–18h	Bratislava, Budapest, Copenhagen, Ljubljana, Madrid, Naples, Prague, Rome, Valencia, Vienna, Warsaw, Zagreb

Table 103: Destination analysis for London

Destinations with an existing direct day train connection (only)	Edinburgh, London
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Amsterdam, Barcelona, Berlin, Brussels, Cologne, Hamburg, Luxembourg, Lyon, Marseille, Munich, Paris, Zurich
Missing direct trains connections 12–18h	Bratislava, Copenhagen, Madrid, Milan, Prague, Rome, Valencia, Vienna, Warsaw

Table 104: Destination analysis for Birmingham

Destinations with an existing direct day train connection (only)	Birmingham
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	London
Missing direct trains connections <12h	Amsterdam, Barcelona, Brussels, Cologne, Luxembourg, Lyon, Marseille, Paris, Zurich
Missing direct trains connections 12–18h	Berlin, Hamburg, Madrid, Milan, Munich, Valencia

Table 105: Destination analysis for Edinburgh

Destinations with an existing direct day train connection (only)	Birmingham, Edinburgh, London
Destinations with an existing direct night train connection (only)	none
Destinations with existing direct day and night train connections	none
Missing direct trains connections <12h	Amsterdam, Barcelona, Berlin, Brussels, Cologne, Hamburg, Luxembourg, Lyon, Marseille, Munich, Paris, Zurich
Missing direct trains connections 12–18h	Madrid, Milan, Prague, Rome, Valencia, Vienna

Table 106: Destination analysis for Manchester

Route	Current travel time by train, best possible connection	Transfers	Estimated travel time of a direct train	Flight passengers, 2023
London–Madrid	13h59m	Paris (Nord/Gare de Lyon), Barcelona	12h15m	2,575,000
London–Milan	11h25m	Paris (Nord/Gare de Lyon), Geneva	10h20m	2,709,000
London–Rome	15h52m	Paris (Nord/Gare de Lyon), Zurich, Milan	13h10m	2,079,000
London–Copenhagen	15h31m	Brussels, Cologne, Hamburg	12h50m	1,823,000
London–Cologne	4h11m	Brussels	4h	504,000
London–Lyon	5h30m	Paris (Gare de Lyon/Nord)	5h	619,000
Birmingham–Barcelona	13h40m	London, Paris (Nord/Gare de Lyon)	11h30m	250,000

Edinburgh–Paris	8h28m	London (KingsCross/ StPancras)	7h30m	513,000
Manchester– Berlin	12h27m	London, Brussels, Cologne	11h15m	235,000

Table 107: examples for missing direct train connections from/to the UK cities analysed

Ukraine (Kyiv)

- Despite the ongoing war, there are still direct night train connections to four other cities analysed: Budapest, Chisinau (Moldova), Warsaw, and Vienna. These trains provide the best means of travel for individuals needing to visit family and friends or for essential reasons between Kyiv and other countries, since there are no flights available.
- Despite the differing track gauges between Ukraine and EU countries, passengers do not need to change trains.

ANNEX 2: TIPS FOR CONSUMERS HOW TO BUY A TICKET

Organising a cross-border rail journey is often not as easy as finding and buying a plane ticket. While there are plenty of flight platforms that can show you the best and cheapest connections in seconds, direct you to the right booking systems and allow you to complete the whole booking process in minutes, finding the best train connections and buying the best and cheapest tickets often requires a lot of experience and even then a lot of time.

Step 1: Find your possible train connections

All the timetables provided by public railway companies work differently. As there is no single train information system, passengers need to check the timetables of the public railway companies. The best timetable systems currently available are on the websites of the German and Austrian railways, bahn.de and fahrplan.oebb.at. These two systems cover most European countries and include most private train operators (although some are missing from all systems).

Step 2: Finding out if you can buy one ticket for the trip

Unfortunately, it is often needed to buy separate tickets for the legs of the trip. This is especially true if private train operators are involved, or if the trip involves more than two countries. With one ticket from one ticket seller for the full trip, you have better passenger rights.

So how to find it out?

- Always start with the railway company of the country where your trip is starting (e.g. if you travel from Germany to Spain, then look at DB website first).
- If this railway company does not sell you the ticket for the full trip, try with the railway companies you will use during your journey. ATTENTION: Ensure that the ticket bought from another country is accepted in your departure country (e.g. this can be a problem in Italy or Poland on some trains!).

Step 3: Buying the ticket

If you can secure a ticket for the entire trip, it's still worth checking if purchasing separate tickets for each leg is more economical. Keep in mind that passenger rights are more limited with separate tickets, so we only recommend this option if the savings are significant and the connections are secure, avoiding tight transfer times.

Regardless, it's advisable to compare prices from different railway companies. For instance, German railways often offer cheaper tickets than French railways for routes between Germany and France.

Additionally, be aware that different tickets come with varying rules for changes and cancellations. The cheapest tickets with most railway companies typically cannot be changed or cancelled. Therefore, consider the risks before opting for this fare category.

ANNEX 3: TABLES WITH TRAIN AND FLIGHT CONNECTIONS

The full dataset can be found [online](#).

ANNEX 4: ESTIMATED TRAVEL TIMES FOR TRAIN SECTIONS CURRENTLY OUT OF USE

There is currently no passenger train traffic on these routes. Therefore, historical data was used for the estimation of potential train travel times:

Zagreb	Belgrade	6h15m	https://rail.cc/train/belgrade-to-zagreb
Belgrade	Sarajevo	6h	https://balkaninsight.com/2009/12/14/sarajevo-belgrade-train-back-on-track/
Zagreb	Sarajevo	5h40m	https://www.hiddeneurope.eu/the-magazine/issues/hidden-europe-47/slow-train-to-sarajevo/
Belgrade	Skopje	8h	https://rail.cc/night-train/belgrade-thessaloniki-b335/416
			https://www.seat61.com/Serbia.htm
Athens	Belgrade	15h30m	https://www.eurail.com/en/plan-your-trip/trip-ideas/train-s-europe/night-trains/hellas-express
Athens	Sofia	12h30m	https://rail.cc/train/athens-to-sofia
Belgrade	Sofia	11h30	https://rail.cc/serbia-train
Bucharest	Sofia	9h31m	https://www.raileurope.com/en/destinations/bucharest-sofia-train
Timișoara	Belgrad	4h	https://minoritynomad.com/how-to-get-from-timisoara-romania-to-belgrade-serbia-by-train/

Table 108: Historic travel times

ANNEX 5: FULL METHODOLOGY

- The 45 cities analysed for the report were chosen as follows:
 - a) The capital cities of all European countries, except island states (except the UK), the five tiniest states, Russia, Belarus and the Caucasus region (Armenia, Azerbaijan, Georgia). For Switzerland, Zurich was analysed instead of Bern.
 - b) all other cities with more than one million inhabitants in these countries (namely Barcelona, Birmingham, Cologne, Hamburg, Istanbul, Milan and Munich), except Kharkiv.
 - c) the second and third largest cities of the five most populated countries analysed, unless already included in b. (Edinburgh, Lyon, Marseille, Naples, Valencia)
 - d) Two more cities, Helsinki and Tirana, were excluded from all further analysis after an initial research, since both cities currently do not have potential train connections within 18 hours.

- Additionally, eight other important cities such as Geneva or Frankfurt/Main were analysed for their connectivity with the 45 other cities, and included in the national sections of the report only. These cities were not considered in the overall results and for the score of the other cities in the main part.
- The analysis only considers routes which can be travelled with an existing direct train OR which could be travelled with a (non-existing) direct train in not more than 18 hours on the existing track infrastructure. The 18 hours were chosen as the usual maximum travel time of night trains, though there are some night trains running longer than 18 hours.⁶² The assessment, if a route can be travelled within 18 hours, was made as follows:
 - a) For routes which currently can be travelled by train including at least one transfer: Total travel time with the quickest available⁶³ trains including seasonal trains MINUS transfer time(s), MINUS waiting times higher than 30 minutes for night trains.
 - b) For routes which currently cannot be travelled by train although usable tracks exist, historic travel times were used.
- The analysis also distinguishes between train journeys of less than 12 hours and between 12 and 18 hours. 12 hours is the usual maximum time for day trains, while trains over 12 hours are typically night trains.⁶⁴
- A route which is served with only one direct connection arriving or departing between 1:30 am and 5 am was not counted as a direct connection.⁶⁵
- The analysis was made during March and June 2024.
- The analysis is only including regular train and flight connections which run at least once a week in both directions. Charter trains and flights were not considered.
- Pure seasonal connections up to four months were not considered. Connections which are starting later in 2024 are included, if they appear in the corresponding timetable, and if they do not show seasonal characteristics.⁶⁶
- For London, Paris, Rome, Milan, Warsaw, Oslo and Stockholm, all airports “belonging” to one city were considered. Airport codes are not documented in the analysis. Also all railway stations “belonging” to one city were considered, including railway stations at airports even though they may be out of the city territory.

⁶² Such as Vienna–Kyiv, Sicily–Milan, Stockholm–Kiruna–Narvik

⁶³ There is no database available showing the quickest possible travel times. The researchers chose random days to look for the quickest possible connection. It is therefore possible that for a very few routes quicker connections on other days were missed out. The number of “potential direct train connections” could therefore be slightly higher, but not smaller.

⁶⁴ The same methodology was used for the 12-hour analysis as for the 18-hour analysis. The same caveat cannot be excluded here, with the consequence that some train connections may be counted in the ‘12-18h’ category, even though faster connections are possible.

⁶⁵ Example: the night train from Split to Vienna and Bratislava stops in Zagreb at 1:49 a.m. As there is no other direct train available, the routes from Zagreb to Vienna and Bratislava have not been included in the direct train statistics.

⁶⁶ For example, the direct flight from Lyon to Budapest starting in August and lasting until the end of the available flight schedule (End of October) was counted.

- Actual train connections and travel times were mainly obtained from fahrplan.oebb.at and bahn.de.
- Flight connections were obtained from airport websites, checkfelix.com and websites of large airlines.
- Flight passenger numbers were taken from the [EUROSTAT](#) database, data for the most recent full year available. For cities with more airports, the data was accumulated.
- All other sources are indicated in the respective sections.