

CASE STUDY FACT SHEET

29.11.2017

German Federal Transport Infrastructure Plan (FTIP) 2030

SECTOR: Transport

PARTY OF ORIGIN: Germany

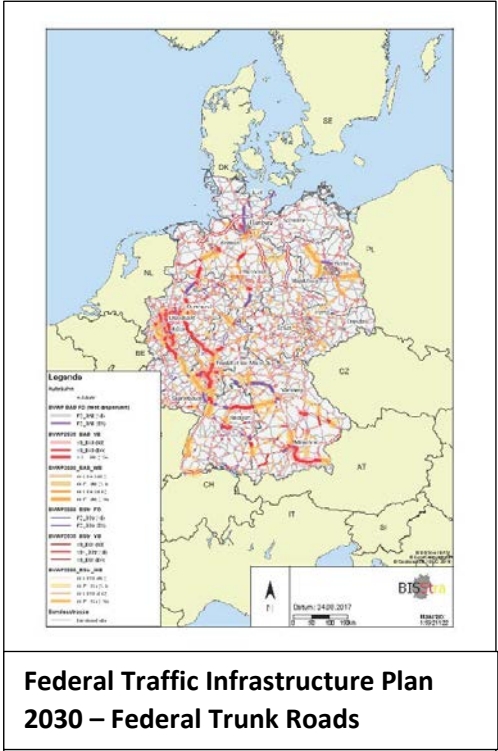
AFFECTED PARTIES: Austria, Belgium, Czech Republic, Denmark, France, Luxembourg, the Netherlands, Poland, Switzerland (notified)

SETTING FRAMEWORK FOR:

- motorways, express roads, railway lines (Annex 1 No 7 of SEA Protocol)
- inland waterways (Annex 1 no 9 of SEA Protocol)

COMPETENT AUTHORITY Federal Ministry of Transport and Digital Infrastructure (MoT)

TO BE ADOPTED BY Federal Government



1. BACKGROUND

Goal of the plan: The FTIP 2030 is a plan for high-capacity transport infrastructure of federal relevance. Its principal purpose is to establish a safe and secure transport network that meets current and future transport needs also with the aim to lay the foundations for an environmentally sustainable transport system.

Content of the plan: The Federal Government is responsible for the construction and structural maintenance of the federal railway infrastructure, federal waterways and federal trunk roads marked as to be of federal relevance. The FTIP 2030 covers the projects in which the Federal Government intends to invest over the period to 2030 (see Annex, Figure 1 – 3). The FTIP 2030 comprises over 1000 projects representing an investment volume of approximately 269.6 billion EUR, the roads accounting for around 49.3 percent, the railways for 41.6 percent and the waterways for 9.1 percent. About 69% of this budget is dedicated to structural maintenance.

The FTIP 2030 was adopted by the Federal Cabinet in August 2016. On this basis, separate Federal Upgrading Acts on trunk roads, railways and waterways, each including a list of projects were prepared and adopted by the Federal Parliament in December 2016.

2. SEA PROCEDURE (in accordance with SEA Protocol, quoted below)

Article 3: General provisions

- Relevant law and administrative orders
 - Federal Act on Environmental Impact Assessment (UVPG) of 27.06.2017*
 - Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (SEA Directive)
 - UNECE "Protocol on the Strategic Environmental Assessment" (SEA Protocol)

**the act regulates EIA and SEA*

Article 4: Field of application

It was mandatory to carry out the SEA for the FTIP (listed under no 1.1. "Traffic infrastructure plans at federal level", in annex 3 of the Federal EIA Act, which lists plan/programmes with mandatory SEA).

Article 5: Screening

As the SEA was mandatory, a screening procedure was not required.

Article 6: Scoping/Basic Approach

It was the first time that an SEA was carried out for a FTIP.

The methodology was developed in the frame of a "Basic Approach", taking into account and further developing the methodological approaches of former FTIPs. MoT published the final Basic Approach in April 2014. It formulated guiding principles and the general scope for the assessment of each project and the overall FTIP. The Approach had been developed since 2011 in a transparent process with the participation of environmental and health authorities such as the Federal Ministry of Environment (MoE), Federal Environment Authority, Federal Nature Protection Agency, and the respective authorities of the 16 German States (Länder). Within this process, the non-governmental organizations had the possibility to join meetings and to give their opinion on drafts, as defined in MoT's "Strategy for Public Participation in the Preparation of the FTIP" (June 2012, see Annex Figure 4). The general public participated actively: For example, MoT received 150 comments from individuals, citizens' action groups and individual municipalities/local transport authorities on the draft Basic Approach of February 2013 after MoT had invited the public - through a press release and on the MoT's website - to express their views.

A basic proposal for the scope of the SEA had been developed within a R&D Project (2007 – 2010), launched by the Federal Ministry of Transport (MoT), supervised by a board of experts of the Federal Ministries of Transport and the Environment Ministry, as well as further agencies under the auspices of these ministries, such as the Federal Environment Agency and the Federal Nature Protection Agency.

The formal scoping was initiated by MoT's "Proposal for the scope of the SEA of the FTIP" of 19.12.2014 (61 pages) sent to MoE, Ministry of Health and Ministry of Food and Agriculture (and all other Ministries), asking for comments until 04.02.2015. The final scope was issued by MoT in July 2015 and sent out to all involved stakeholders.

Article 7: Environmental Report

The framework of the environmental report (March 2016) had been developed on the basis of the scoping document of July 2015. The report (206 pages excl. annexes) on the draft FTIP (185 pages incl. annexes) was externally drafted for the MoT by a consortium of environmental experts. Supplementary information was available via the Project Information System (PRINS). Through PRINS, dossiers with detailed information on each FTIP project's appraisal have been available online on www.bvwp-projekte.de.

The report included a separate chapter on transboundary impacts (2 pages). Although all projects of the FTIP are located within the borders of Germany, transboundary impacts may be triggered by transport-related changes on the cross-border feeder routes. These effects were considered from a cross-border perspective as regards emissions of air pollutants.

Some projects in areas close to borders can also have direct transboundary environmental effects if the zone of impact of an individual project crosses a border. Most of the environmental effects of the planned projects are confined to direct land take and the area immediately surrounding the projects with possible adverse impacts caused by noise, air pollutants or visual impacts. The zone of impact for the indirect adverse impacts does not usually extend beyond a maximum of 500 m on either side of the newly planned alignment.

Hierarchic planning: In the subsequent levels of planning, the projects included in the FTIP are fleshed out project-by-project by the respective developers. Here, the projects go through decision-making procedures with integrated SEA (route and alignment determination) and EIA (plan approval) with the aim of development consent to be issued.

Alternatives

Reasonable alternatives have been considered during the phase for the nomination of project (e.g. alternative transport networks and alternative modes of transport) and on the level of the overall plan.

On project level, authorities of the 16 states (Länder), of federal level (only waterways) and the public (for the railway mode) have been invited to propose projects for the inclusion into the FTIP:

- **Road Mode:** During the phase for the nomination of roads states had to state for their proposals the extent to which "possible alternative solutions" had been considered. With regard to conflicts with nature and the environment, they had to describe whether alternative projects (for instance upgrading existing roads rather than new projects, occasionally also alternative modes of transport) had been considered.
- **Rail mode and waterways:** In rough studies on possible railway and possible waterway projects for the inclusion into the FTIP, a consideration of alternatives e.g. with regard to the pre-selection of projects was carried out, namely if there were various proposals for the solution of the same transport problem or on a different sizing of the individual projects.

On the overall plan level, alternatives were based on scenarios, each resting upon a list of a different projects (which had been nominated, as described above). Projects of different transport modes generally have different environmental effects. For instance, a trunk road on average results in higher noise and air emissions in relation to a railway project in terms of passenger kilometres or

tonne kilometres. The allocation of funding to the individual modes of transport (trunk roads, railways, waterways; see chapter 1) may thus influence the environmental impact of the overall plan considerably. Taking this into account, three alternative investment scenarios have been compared: Scenario 1: distribution of funding according to cost efficiency resulting in a focus on roads; Scenario 2: status quo - distribution of funding equally as in the last year of the former FTIP; scenario 3: distribution of funding with a shift in investment on railways and waterways as more environmentally friendly modes.

The intended funding of the FTIP 2030 has been based on the status quo scenario (distribution of funding equal as in the former FTIP-period) with a shift to the more environmentally friendly modes railway and waterway (scenario 3) to the extent that was deemed economically justifiable and practicable (see also [Table 1](#)).

Article 8: Public participation

The MoT consulted the general public on the draft FTIP and the environmental report, i.e. everybody interested could participate in the consultation. According to the EIA Act, only the consultation of the likely “affected public” is mandatory). However, a differentiation between “affected” and not affected public was scarcely possible, as the FTIP covers projects in all regions of Germany.

The documents have been displayed at 20 locations in Germany, at least in one (capital) town in each of the 16 states (Länder) and have been made publicly available via internet. Beforehand, the public had been informed by public notes (inter alia by official announcement in the federal bulletin and press release) and electronic media, where the documents were displayed and information on the modalities of participation was provided. Accordingly, comments could be sent in a written form within 6 weeks (minimum time frame according to Federal EIA Act: 4 weeks) to the MoT, by letter or using an online-template which was provided on MoT’s website. The public display of documents as well as the general participation period lasted from 21.03.2016 to 02.05.2016.

As a result, MoT received about 40.000 comments which were considered.

Transboundary participation of public: See under Article 10.

Article 9: Consultation with environmental and health authorities

The MoT consulted relevant German ministries and authorities at federal and at state (Länder) level, including those with responsibility on environmental and health issues, on the draft FTIP and the environmental report. Comments could likewise be sent in written form within 6 weeks (minimum time frame according to Federal EIA Act: 4 weeks) to the MoT, namely from 21.03.2016 to 02.05.2016.

Additional meetings have been held on invitation of MoT and on request of MoE in order to further discuss the comments and opinions on environmental issues.

Transboundary participation: See under Article 10.

Article 10. Transboundary consultations

- **Early information:** In October 2015, at an early stage when the draft FTIP and the environmental report were still in progress, MoT already informed the Espoo point of contacts (POC) of all nine neighbouring states (Austria, Belgium, Czech Republic, Denmark, France, Luxembourg, The Netherlands, Poland, Switzerland) on the possible content of the draft FTIP and of the environmental report and the SEA procedure (2 pages in English, for Poland in Polish) by e-mail in English language. Further attached was a list of approximately 2000 projects (in English, for Poland in Polish) which might be included in the FTIP as well as an excerpt focusing on those projects which might be realized in the border regions (see Annex, Figure 1-3). This was meant to give likely affected Parties an early possibility to get acquainted with the FTIP and make up their mind whether they consider one or more projects as relevant. This was done in the sense of a precautionary principle, as a rough appraisal by MoT showed that significant transboundary impacts of the FTIP are not likely to occur. MoT thus invited these Parties to express their interest to be notified officially. In addition, the Parties have been asked to indicate those FTIP projects from the list, for which they want to receive the project dossiers translated into their national language jointly with the formal notification (in addition to the draft FTIP and the environmental report). All Parties responded, seven of the nine Parties asked to be notified. Approximately 50 project dossiers have been translated in total.
- **Notification:** In April 2016 MoT notified seven Parties, asked to confirm the receipt immediately and to indicate whether they wish to participate in the SEA procedure. The notification contained the draft FTIP and the environmental report (full version in German and relevant excerpts of it in the national language of the respective Party) as well as relevant project dossiers (as identified beforehand by the respective Party) in the national language of the respective Party. The time frame for the affected Party (authorities) and for the general public of the affected Party to express their opinion was 6 weeks (minimum time frame according to Federal EIA Act: 4 weeks). Comments could be sent in the language of the affected Party or in German in a written form.
- **Confirmation of receipt:** All notified Parties immediately confirmed the receipt of the notification.
- **Confirmation of participation:** All notified Parties confirmed their wish to participate - most of them within the given time frame.
- **Participation of environmental and health authorities and the public of affected Parties:** After the distribution of the documents to environmental and health authorities and announcement and display of the documents for the public – carried out by the affected Parties -, public opinions were either sent directly to the German MoT or first collected by the affected Party and then forwarded to MoT. One affected Party (The Netherlands) required, by national law, that announcement for public participation on draft FTIP 2030/environmental report was to be published in regional newspapers on their territory to be organized and financed by the Party of Origin – German MoT behaved accordingly.
- **Opinions:** MoT received about 40 comments by authorities and the public of the consulted Parties. A vast amount of these comments originated from authorities rather than individual citizens. Some neighboring states refrained from involving the public.
- **High level consultation meetings** on environmental issues have not taken place.

Article 11: Decision

The FTIP 2030 was adopted by the Cabinet of the Federal Government on August 3, 2016. The final version was made publicly available on August 3, 2016 on the MoT website jointly with a summarizing statement pointing out how the environmental report and the opinions of the national and the transboundary participation process have been taken into account and the reasons for adopting the FTIP 2030 in the light of reasonable alternatives.

The following rules applied for the review of opinions:

- All opinions have been reviewed by MoT (with support by external consultants, assigned by MoT for this task) whether they are relevant to the overall plan. Comments relating to individual projects, however, were only relevant if they have – alone or in combination with opinions on a range of other projects - an influence to overall plan.
- Comments with identical contents that are submitted more than once have only been taken into account once.
- Given the high number of comments, they were not answered individually, but dealt with in a consolidated form in the report on the consultation exercise, which had been published and made available on the MoT Website.

As a result of national and transboundary consultation or other updated information, MoT undertook changes in around 460 of the projects in the final FTIP as compared to the draft FTIP, the vast majority of them in the road mode.

MoT informed all consulted Parties (PoC and other authorities involved in the transboundary process) by e-mail of August 12, 2016 on the decision and submitted the final FTIP 2030 and a summarizing statement (translated into the language of the respective Party).

Article 12 Monitoring

Monitoring of the overall FTIP 2030 shall be carried out in reference to the regular 5-year review of the need of projects, as listed in the annexes of the Federal Upgrading Acts on Trunk Roads, on Railways and on Waterways decided in December 2016.

For this purpose, the projects for which the construction work has started during the preceding 5 years, the impacts according to the environmental report of the project decision procedure will be compared with regard to SEA criteria whether they differ significantly (e.g. alignment, chosen option) from the project appraisal in the FTIP.

The monitoring results will be published in a report which summarizes the major findings.

3. SEA METHODOLOGY

In general, the impacts of the overall FTIP 2030 are mainly drawn on the base of an assessment of all projects to be included in the FTIP. The appraisal is based on the criteria as agreed in the scoping document/basic approach. For each project, a dossier was created which states the impacts of the individual project according to these criteria (documented in detail in the Project Information System PRINS). Table 1 presents the environmental results projects of the overall FTIP2030.

The methodology comprises four appraisal Modules, namely Module A: Benefit-cost analysis, Module B: Environmental and nature conservation appraisal, Module C: Spatial planning appraisal and Module D: Urban development appraisal. As for Module A, the monetized effects were captured in a benefit-cost analysis (BCA) which delivers a macroeconomic benefit-cost indicator that reflects the profitability of the funds committed. The BCA comprises beneficial effects such as reductions in freight transport costs, road safety effects, environmental effects (such as noise, CO2 emissions and emissions of air pollutants) and accessibility indicators (journey time gains). As a BCA cannot reflect all environmental effects, particularly with regard to the impact on high-quality areas (such as priority nature conservation areas, Natura 2000 sites, unfragmented core areas of the Federal Agency for Nature Conservation's habitat networks or floodplains), Module B used various criteria to examine whether, and if so to what extent, such areas will be or could be affected by the implementation of a construction/upgrading project as a result of land take, severance effects, reconnection of habitats or traffic passing through. These impacts were quantified and classified in appraisal categories, such as low, medium or high environmental impact. To be able to compare the various transport projects in terms of their environmental effects, a statement on the overall environmental impact of a project is made. A high environmental impact prevented a project to be classified in the highest priority category.[1]

[1] In addition, Module C, the spatial planning appraisal comprises the non-monetizable connectivity and accessibility qualities and Module D, the urban development appraisal of transport infrastructure projects reflects the objective of reducing traffic levels in built-up areas to improve living and working conditions, especially through road projects.

Table 1: Cross-modal description and appraisal of the environmental effects of the first priority projects (VB/VB-E)

Criteria		Impact variable		Assessment	
1. Monetized criteria					
1.1	Noise exposure in built-up areas				
	- Exposed to new or higher levels of noise	833,735	Residents	3,285	€ m
Criteria					
		Impact variable		Assessment	
	- Exposed to less noise	2,274,415	Residents		
1.2	Noise exposure outside built-up areas	9,069	m ² thousands	-2.049	€ m
1.3	CO ₂ emissions	-491.453	t/a	1,191	€ m
1.4	Emissions of noise pollutants	17,549	t/a	1,216	€ m
Total environment benefit (criteria 1.1 to 1.4)				3,644	€ m
2. Non-monetized criteria					
2.1	Encroachment/adverse impacts on priority nature conservation areas	3,344.1	Area [ha]	--	
2.2	Significant adverse impacts on Natura 2000 sites - Not ruled out - Probable	374.0	Number of sites	--	
		128.0	Number of sites		
2.3	Land take on unfragmented core areas of the Federal Agency for Nature Conservation's habitat networks	1,236.6	Area [ha]	-	
2.4	Severance of large unfragmented areas and arteries/corridors of the Federal Agency for Nature Conservation's habitat networks				
	2.4.1a) Large areas of wetland, dryland and woodland habitats	728.0	Length of severance [km]	-	
	2.4.1b) Large mammals' habitats	1,175.1	Length of severance [km]	-	
	2.4.1 c) Nationally important habitat arteries/corridors	73	Number	o	
	2.4.2) Reconnection of habitat networks in upgrading projects - "Defragmented" - Not "defragmented"	26 6	Number Number	+	
2.5	Land take	15,512.1	Area [ha]	-	
2.6	Traffic passing through floodplains	109.5	Length of severance [km]	-	
2.7	Traffic passing through water protection zones	80.2	Length of severance [km]	-	
2.8	Severance of unfragmented areas with a low density of traffic	85,293.2	Area [ha]	-	
2.9	Encroachment/adverse impacts on priority cultural heritage and landscape conservation areas	7,004.8	Area [ha]	-	

Annex

Figure 1:

Federal Transport Infrastructure Plan 2030 – Federal Trunk roads

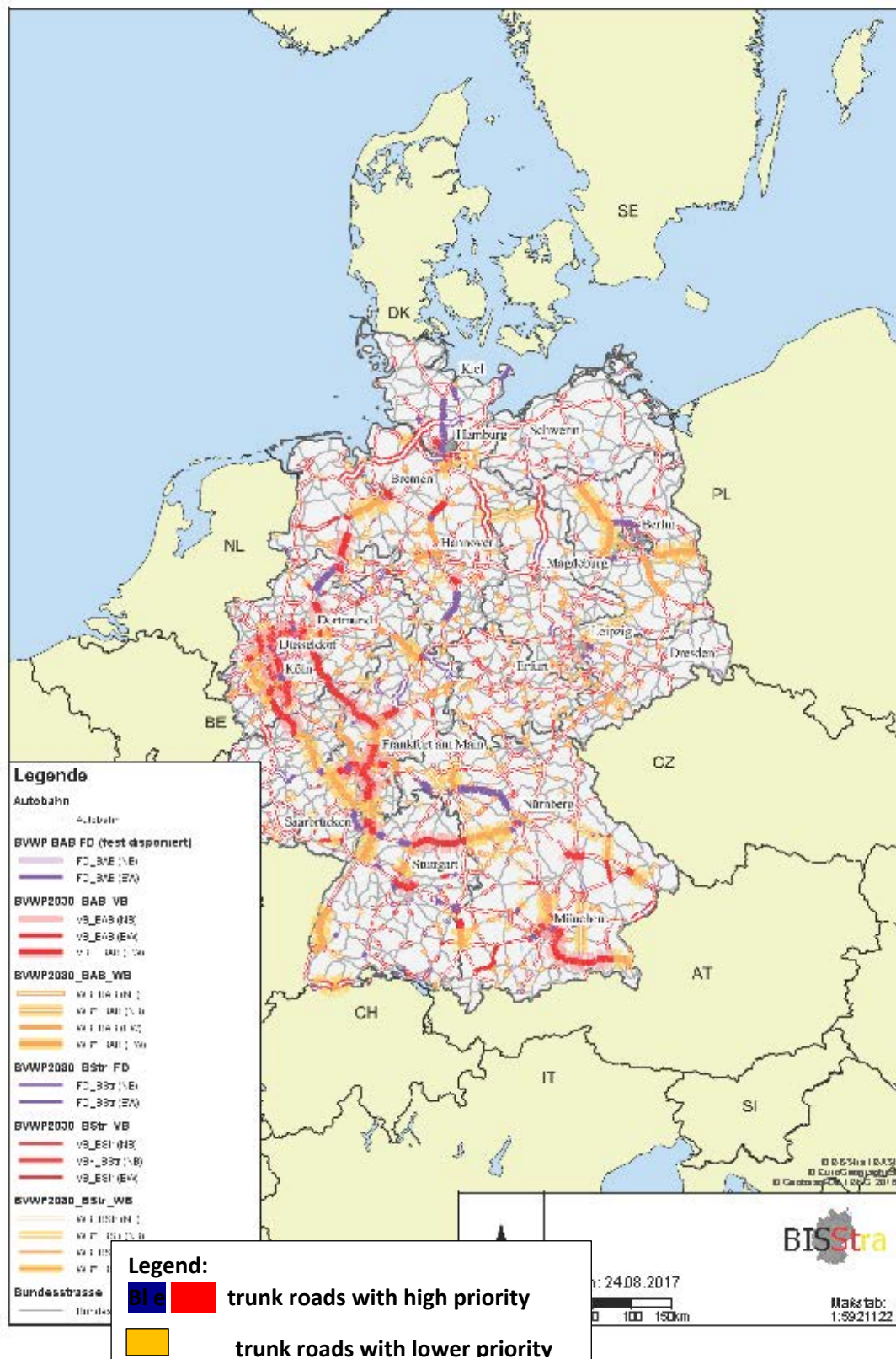


Figure 2:

Federal Transport Infrastructure Plan 2030 – Federal Railways (in preparation)

Figure 3:

Federal Transport Infrastructure Plan 2030 – Federal Waterways (in preparation)

Figure 4: Strategy for Public Participation in the Preparation of the Federal Transport Infrastructure Plan (FTIP) (Federal Ministry of Transport and Digital Infrastructure, June 2012)

