

GERMAN INFRASTRUCTURE BULLETIN

Briefing Note – Issue II

7 July 2020

1. SCOPE

Building on our well-received article '[German infrastructure – The Great Corona Reset](#)', and our [Briefing Note – Issue I](#), we're aiming to produce ad-hoc bulletins focusing on German infrastructure which will be either in article or briefing note form.

Our primary goal in this briefing note is to present a succinct and discriminating selection of developments in the *transportation, telecommunications, energy, and social infrastructure sectors* (and sub-sectors) as well as de-carbonisation initiatives that are of real potential interest to investors and asset owners/managers. Monitored developments will include political initiatives, changes to subsidy regimes, significant legal and regulatory changes, tender pipelines, and in the future possibly also noteworthy transactions. A particular bulletin issue will not necessarily include content on every sector/sub-sector nor content falling within each monitored development category and is in any event not intended to be exhaustive.

2. SUMMARY

This first issue includes content on rail, road, aviation, maritime, 5G, broadband, and de-carbonisation.

Major announcements, all taking place in June, have included:

- the €120bn stimulus package ([Konjunktur- und Zukunftspaket](#)) which includes a €50bn future investment package (the Stimulus /Future Package);
- the national hydrogen strategy ([Nationale Wasserstoffstrategie](#)) setting out actions aimed at the transition to a hydrogen economy (the Hydrogen Strategy); and
- the 'rail pact' ([Schienenpakt](#)) under which major rail stakeholders jointly endorse the targets of the rail master plan ([Masterplan Schienenverkehr](#)) (the Rail Pact).

In many respects these announcements represent a certain consolidation of pre-existing measures and the newly found political will for their enhanced and accelerated implementation. It can safely be assumed, that Germany will attempt to use its EU council presidency to bring some further momentum into this general direction of travel.

Other noteworthy developments highlighted in this first issue include:

- The imminent transposition into national law of the [Electronic Communications Code](#):
 - ↘ subject to the terms of its implementation (due by the end of 2020), a mandatory right of roaming access for competing telecoms companies could incentivise further unbundling and potential investment opportunities in mobile telecommunications (including 5G) infrastructure; and
 - ↘ in relation to broadband, the promotion of 'wholesale only' service providers such as network owners who would sell access could lead also to unbundling and enhanced investment opportunities.
- The European Court of Justice (ECJ) has scuppered the planned German motorway passenger car toll – the German government is likely to be found liable to pay the Kapsch and CTS Eventim consortium damages in the region of €560m;
- The new Autobahn GmbH will from 1 January 2021 be the sole and central body responsible for the tendering of German motorway PPP projects.

3. REPORT

3.1 Rail

3.1.1 Political Initiatives

The Rail Pact endorses the targets contained in the rail master plan ([Masterplan Schienenverkehr](#)):

- a doubling of rail passengers by 2030;
- increasing the market share of cargo transported by rail to 25% (primarily by shifting the modal distribution between road and rail);
- a '[Deutschlandtakt](#)' – a new German intercity train timetable targeting a 30-minute cycle between all major cities with better coordinated connections to regional rail;
- increase in rail capacity through significant line, corridor, and junction developments as well as through digitalization; and
- increased competition, more climate protection / reduction in noise pollution, and better motivated staff through better terms and working conditions.

The Hydrogen Strategy restates the relevance of the transport sector (in particular rail, HGVs and maritime) in the transition to a hydrogen economy. Funding will be made available to support investment in hydrogen powered trains under the existing National Innovation Programme Hydrogen and Fuel Cell Technology (*Nationales Innovationsprogramm Wasserstoff und Brennstoffzellentechnologie* - NIP) and the Energy and Climate Fund (*Energie- und Klimafonds* - EKF);

- the state owned Now GmbH (promoting Hydrogen and fuel cell technologies) has recently conducted a [market analysis](#) that demonstrates a high potential for alternative drive systems such as fuel cells in regional rail.

3.1.2 Subsidy Regime

(a) Stimulus / Future Package:

- a further €5bn equity injection into Deutsche Bahn (in addition to the €1bn annual equity injections between 2020 and 2030 provided by the Climate Protection Programme 2030) (*Klimaschutzprogramm 2030*) earmarked for modernization, development and electrification projects;
- €150m for deployment of GSM-R terminal equipment on all trains so as to improve mobile reception on trains including regional rail; and
- an additional €2.5bn earmarked for public transportation (busses, trams, and rail) spending in part to compensate the federal states (*Bundesländer*) and thereby public transport operators in respect of lost revenues resulting from the crisis.

(b) Rail Pact Funding:

- €86bn was made available over ten years for the operation and maintenance of the existing infrastructure; and
- discussions are being held to increase the €1.5bn annual figure available for new development and improvement projects to an annual figure of €4bn.

3.1.3 Legal Regulatory Framework

The German parliament (*Bundestag*) has enacted legislation increasing funding and implementing streamlining measures for rail projects including in relation to electrification and capacity increases:

(a) Streamlining planning procedures:

- the Measures Preparation Act 2020 (*Maßnahmenvorbereitungsgesetz*) establishes a framework allowing for accelerated planning approval for eight large earmarked rail projects allowing specifically enacted State (*Bundesland*) laws which in respect of certain projects limiting the otherwise available administrative court protections available to claimants that have often

been blamed for causing excessive delays to vital projects;

- the Transport Sector Additional Acceleration of Planning and Approvals Procedures Act 2020 ([Gesetz zur weiteren Beschleunigung von Planungs- und Genehmigungsverfahren im Verkehrsbereich](#)) further accelerates planning procedures for obtaining planning permission for the modernisation or replacement of hard infrastructure (tracks, level crossings, platforms, stations, maintenance facilities, bridge, tunnels etc.) and provides additional financial support for the relevant regional authority.

(b) Increased public funding for regional rail:

- further amendment of the Municipal Transport Financing Act of 1971 ([Gemeindeverkehrsfinanzierungsgesetz](#)) through the Third Amendment Act to the Municipal Transport Financing Act 2020 ([Drittes Gesetz zur Änderung des Gemeindeverkehrsfinanzierungsgesetzes](#)) providing additional federal funding of €665m in 2020 for the expansion, modernization, and new construction of stations and stops for regional rail; €1bn each in 2021-2024; and €2bn in 2025;
- further amendment of the Regionalisation Act 1993 ([Regionalisierungsgesetz](#)) through the Fifth Amendment Act to the Regionalisation Act 2020 ([Fünftes Gesetz zur Änderung der Regionalisierungsgesetzes](#)) providing total additional federal funding of €1.2bn between 2020 – 2023 to the States (*Bundesländer*) with significant further increases from 2024 until 2031.

3.1.4 Tender / PPP Pipeline

- [Upcoming tender](#), following agreement on the basic tender structure, Berlin/Brandenburg have resumed preparations for a large tender for regional rail in the wider Berlin S-Bahn network (15-year concession) and provided further details. The PTAs have indicated that the tender will include: (i) the provision of new rolling stock (up to 327 half-trains) including its maintenance and availability; (ii) the operation of the train service.
- [Upcoming tender](#), for Regional Rail (15-year concession) Dresden-Leipzig.
- [Upcoming tender](#), information Event in Leipzig on 22 July 2020 for potential bidders regarding an upcoming regional rail tender (12-year concession) for the Middle German S-Bahn Network (*Mitteldeutsches S-Bahn-Netz* - MDSB).
- [Upcoming tender](#), for transnational regional rail (12-year concession) Network North-South 2 (*Netz Nord-Süd 2* - NOS2). PTAs have indicated that: (i) the provision of a 'reusage guarantee' is planned for the rolling stock; and (ii) that criteria

in the evaluation of the bids will include measures for the reduction of the level of carbon, pollution, and noise emissions.

- Upcoming tender, following determination of the basic tender structure for regional rail (13 – 15 year concession) Bridging Baltic Coast Network Parts I and II (*Überbrückung Teilnetz Ostseeküste I auf II*).

3.2 Roads

3.2.1 Political Initiatives

A proposed amendment to the Passenger Transport Act 1961 (*Personenbeförderungsgesetz*), on or around 15 June 2020, the Federal Cabinet has agreed to reform the law aiming at:

- establishing a legal framework for online platform-based mobility services thus enabling efficient and sustainable shared mobility concepts for urban areas. At the same time creating oversight options for local authorities;
- making transport services in rural areas more flexible / demand responsive, strengthening on-demand services, e.g. innovative pooling models, and removing regulatory barriers; and
- maintaining a fair balance between the different means of transportation whilst maintaining the functionality and competitiveness of public transport.

3.2.2 Subsidy Regime

Stimulus / Future Package, €2.5bn for:

- expansion on charging infrastructure
- e-mobility generally:
 - ↳ bus and HGV modernization programme available to both private operators and local authorities for the alternative power systems. Further subsidies specifically for electric busses and charging infrastructure increased for a limited period;
 - ↳ new vehicles the road tax (*Kfz-Steuer*) will predominantly be weighted to CO² emissions and will be subject to staggered increases over 95g CO²/km – no road tax for fully electric vehicles until the end of 2030;
 - ↳ the existing ‘environment bonus’ (*Umweltprämie*) will be doubled by the new ‘innovation bonus’ (*Innovationsprämie*) – subsidy for new electric vehicle costing;
 - ↳ €40,000 (ex VAT) increases from €3000 to €6000;
 - ↳ short term new fleet exchange programme for ride sharing platforms to increase e-mobility in cities (until the end of 2021); and
- R&D in battery cell production.

3.2.3 Legal Regulatory Framework

- Establishment of the *Autobahn GmbH*, a new federal motorways company:
 - ↳ on 1 January 2021, the *Autobahn GmbH*, will take over responsibility for the planning, construction, operation, maintenance, financing and asset management of all motorways from the federal states (*Bundesländer*);
 - it will also manage all future motorway PPP projects (each capped at motorway segments of up to 100 kilometers);
 - ↳ one of the most significant infrastructure policy reforms in recent decades bundling administrative and budgetary responsibility with the federal government aiming at speeding up planning processes, allowing direct federal funding, and achieving cost-savings and other efficiency gains.
 - Motorway passenger car toll in violation of European law:
 - ↳ on 18 June 2019, the ECJ ruled, in a case brought by Austria, that the planned passenger car toll (*Infrastrukturabgabe*) violates European law. The intention had been to introduce a passenger car toll for all national motorways with German residents uniquely (and un- fairly) eligible to receive a full credit to set off against their annual vehicle tax;
 - ↳ despite the ongoing proceedings before the ECJ, on 30 December 2018 the Federal Ministry of Transport (*Bundesministerium für Verkehr und digitale Infrastruktur - BMVI*) went ahead and awarded the €2bn tender for the construction and implementation of the toll system to the Kapsch and CTS Eventim consortium. On the same day of the ECJ ruling, the BMVI terminated the contract;
 - ↳ the Kapsch and CTS Eventim consortium has brought a case against the Federal Government claiming lost profits, this triggered the establishment of a parliamentary select committee charged with conducting a forensic inquiry into the tender process;
- ### 3.2.4 Tender/ PPP Pipeline
- Upcoming tender, A1 Motorway: six-lane expansion between AS Münster-Nord and AK Lotte/Osnabrück, tender to start end of 2020.
 - Upcoming tender, A 61 Motorway: six-lane expansion between the Rhineland-Palatinate/Baden-Württemberg state border and the Frankenthal motorway junction.

3.3 Aviation/ Maritime

3.3.1 Subsidy Regime

Stimulus / Future Package, the modernisation and digitalization of shipping:

- quayside and shoreline redevelopments, modernization of locks, replacement procurement of ships and digital field tests;
- the existing innovation subsidy, maritime research programme (*Maritime Forschungsprogramm*), subsidy programme Landstrom (*Förderprogramm Landstrom*) as well as the new to be established subsidy programme LNG-tanker ships (*Förderprogramm LNG-Betankungsschiffe*) as well as the fleet replacement program for patrol vessels (*Flottenerneuerungsprogramm Behördenschiffe*) and the immediate programme clean ships (*Sofort-Program Saubere Schiffe*) will receive an extra €1bn for measures that commence by 2021; and
- there will also be €1bn made available for replacement of aircraft fleets with those emitting significantly less carbon and noise.

3.3.2 Legal Regulatory Framework

- Bailouts related to the collapse in traffic are still subject to European State Aid Rules:
 - ↳ as the full State Aid implications of public assistance provided to preserve the viability of some demand-based assets such as ports and airports seemed uncertain, the European Commission has published memoranda clarifying the State Aid Rules applicable to the aviation and maritime sectors ([Aviation/ Maritime](#)). These set out in which circumstances public bodies may: (i) provide additional support to compensate ports and airports for the provision of public service obligations; and (ii) grant financial aid that is compatible with the internal market. As a consequence, where significant financial contributions are received, these will most likely require a notification to the European Commission.

3.4 5G

3.4.1 Political Initiatives

The first 5G frequencies (2 GHz, 3.4-3.8 GHz) were auctioned in June 2019 and generated revenues of €6.6 billion.

→ Frequencies won:

	Total costs	2 GHz Band		3,6 GHz Band	
1&1	€1.070bn	2x10 MHz	€335m	50 MHz	€0.735bn
Telekom	€2.175bn	4x10 MHz	€852m	90 MHz	€1.323bn
Telefónica	€1.425bn	2x10 MHz	€381m	70 MHz	€1.044bn
Vodafone	€1.880bn	4x10 MHz	€807m	90 MHz	€1.073bn
Total	€6.550bn				

Challenges:

- The auction has been heavily criticized for stifling competition and diverting funds that could better have been used for telecoms infrastructure investments especially in rural areas, thereby ultimately leading to a slowing of the 5G rollout.
- The 5G rollout rate is also substantially dependent on the existing 4G-Networks because the technical solution on the table is “non-standalone” (5G NSA). While new access networks that use the 5G standards are established, those networks still rely on the 4G back- bone network which they access via a fiber connection.
- The political debate both on a national and EU level on how these challenges can be overcome has been in full swing for some time. The Stimulus/ Future Package measures are positive development, much now will also depend on precisely how the Electronic Communications Code is transposed into national law (see Subsidy Regime, Legal Regulatory Framework below).

3.4.2 Subsidy Regime

Stimulus / Future Package:

- targeted funding for businesses that develop software-controlled network technologies including market entry;
- government will consider regulatory measures on a national and EU basis that could support the interoperability of network components. Speedy finalization and implementation of open standards (openRAN) on a European level;
- massively accelerate 5G rollout to achieve blanket coverage by 2025. To this end the newly established mobile communications infrastructure company ([Mobilfunkinfrastrukturgesellschaft](#)) will be funded to the tune of €5bn. As soon as the major telecommunications operators have defined in which geographic areas they will perform their

rollout obligations, the remaining network gaps will be patched using these funds; and

- the smart city programme (*Programm "Smart City"*) will be provided with an additional €500m funding to provide an opportunity for subsidy to projects in towns and cities that have not as yet been able to access funds.
- Some federal states (*Bundesländer*), in compliance with the European Commission's broad-band guidelines, also offer their own subsidies to support 5G rollout to rural areas.

3.4.3 Legal Regulatory Framework

The establishment of pure infrastructure service companies are being touted as a possible solution to increase competition and accelerate the expansion of 5G networks. The European Electronic Communications Code (*Directive (EU) 2018/1972*) lays the necessary foundations and is due to be transposed into national law by the end of 2020. However, some commentators are expecting the transposition into national law to be delayed as so far no draft legislation has been introduced:

- if the ultimate implementation obliges the regulator, BNetzA, to enforce a real roaming access obligation, this could incentivise unbundling of the network infrastructure from the service provision creating new investment opportunities.

3.5 Broadband

3.5.1 Political Initiatives

- On figures from April 2020 around 4.75 million households in Germany have direct access to fiber optic internet (fiber to the home, FTTH, or fiber to the building, FTTB), amounting to a coverage of only 11%. In comparison, VDSL (fiber to the curb, FTTC) is already available to around 80 percent of German households.
- An ongoing debate is raging as to how the necessary broadband rollout to small towns and uneconomical rural areas can be accelerated.

3.5.2 Subsidy Regime

Stimulus / Future Package:

- to accelerate broadband rollout in uneconomic areas the existing subsidy programmes will be streamlined and expanded.

3.5.3 Legal Regulatory Framework

The Electronic Communications Code provides important impetus by promoting so called "wholesale only" service providers, i.e. network owners whose business model is limited to the provision of wholesale services to others. Such broadband network owners will be subjected to less regulation and will be beneficial to the creation of a thriving wholesale

infrastructure access market with potentially positive effects on downstream competition:

- enhanced investment opportunities.

3.6 De-carbonisation/ Hydrogen

3.6.1 Political Initiatives

- The *Hydrogen Strategy* is an attempt to bundle measures from different sectors and value chain levels. It contains 38 identified action points required for a successful transition to a hydrogen-based economy. These action points are in the areas of production, transportation, industry, heat, infrastructure and supply, research, education, and innovation, international hydrogen market and foreign partnerships, and action on a European level.
- Two-phase target:
 - ↳ phase 1: creating and ramping up a functioning market by 2023; and
 - ↳ phase 2: strengthening, expanding, and internationalizing the market by 2030.
- Underlying the action plan is the assumption that additional German on- and off-shore generation of 5GW will be required to meet a demand increase from the current 55 TWh to 90 – 110 TWh by 2030.
- Governance, establishment of:
 - ↳ a State Secretary Committee for Hydrogen (*Staatssekretärsausschuss für Wasserstoff*) state secretaries of the interested government departments will monitor and if necessary, instigate in coordination with the federal cabinet corrective measures; and
 - ↳ a National Hydrogen Council (*Nationaler Wasserstoffrat*) comprised of experts from science, business, and civil society with an ongoing advisory and support function.
- A selection of action points include:
 - ↳ an in-depth market research and consultation process on the efficient development of hydrogen infrastructure;
 - ↳ the rolling out of hydrogen refueling infrastructure will be rolled out;
 - ↳ the de-carbonisation of industry through green hydrogen; and
 - ↳ creation and expansion of hydrogen grids inter alia by modernising and reusing disused and existing gas pipelines / transmission infrastructure.
- The Hydrogen Strategy will be subjected to a full detailed review in 3 years.

3.6.2 Subsidy Regime

- A swathe of new measures and enhancements to existing subsidy programmes have/will be implemented, including:
 - ↳ carbon pricing;
 - ↳ exempting the producers of green hydrogen from certain electricity related taxes and levies including the Renewable Energy Levy ([EEG Umlage](#)) ordinarily paid by all electricity consumers;
 - ↳ public funds will be available for R&D, development, construction, and operation of electrolysers potentially also allocated through public tender processes; and
 - ↳ further de-carbonisation subsidies are included in the previous rail, road, aviation, and maritime sections.
- Stimulus / Future Package:
 - ↳ expanding renewable energy production:
 - by lifting the GW cap of 98GW for PV;
 - increasing the GW cap up to 2030 for offshore production by 5GW from 15 to 20GW;
 - acceptance of onshore wind to be increased by allowing local residents greater participation in the profits generated; and
- building renovation subsidy programme increased by €1bn to €2.5bn for 2020 and 2021.

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