

## Deutsche Bahn AG

**Primary Credit Analyst:**

Beata Sperling-Tyler, London (44) 20-7176-3687; beata.sperling-tyler@spglobal.com

**Secondary Contact:**

Juliana C Gallo, London (44) 20-7176-3612; juliana.gallo@spglobal.com

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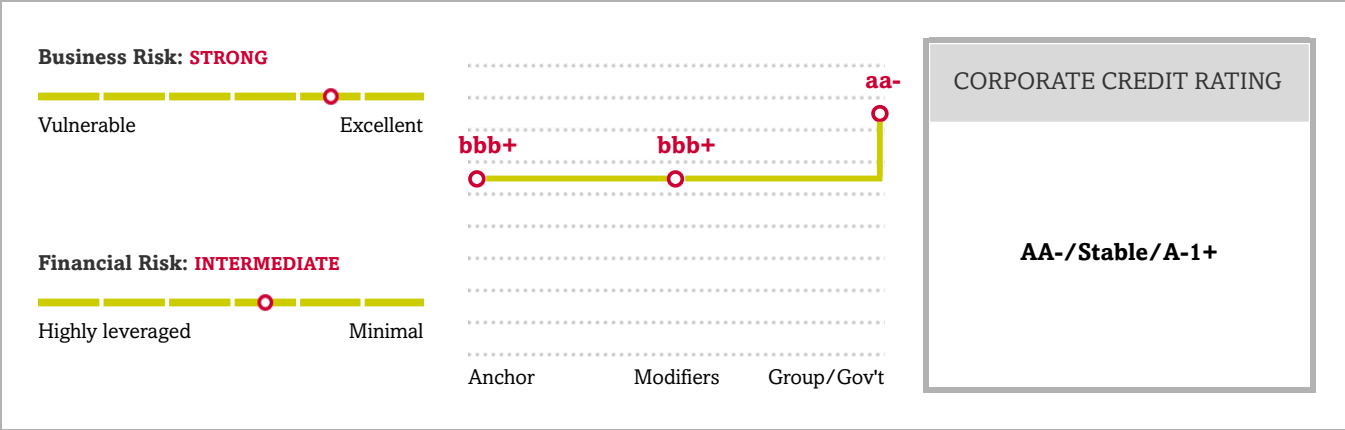
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Related Criteria

Related Research

# Deutsche Bahn AG



## Rationale

Business Risk: Strong	Financial Risk: Intermediate
<ul style="list-style-type: none"> <li>• Integrated operator, sole owner, and manager of Germany's rail infrastructure and provider of passenger and freight transportation services.</li> <li>• Dominant provider of passenger and freight services in Germany, albeit with a gradually shrinking market share in regional transportation services due to intense competition. DB grows earnings strongly supported by DB Arriva's European rail, bus, and light rail services, DB Schenker's global freight forwarding and logistics operations. In Europe, DB is the largest company in regional rail passenger transport, and a market leader in rail freight and land transport.</li> <li>• Below-average profitability compared to other transportation infrastructure companies, constrained by high competition in both rail passenger and rail freight transport, and high costs, particularly personnel and energy, which outpace the company's ability to increase prices.</li> <li>• Operations in a stable and supportive legal environment, based on the constitutional obligation by the German government to finance rail infrastructure capital expenditure (capex).</li> </ul>	<ul style="list-style-type: none"> <li>• High debt levels and negative reported discretionary cash flows until at least FY2019 resulting from large capex needs required to improve service quality.</li> <li>• Continued support from the German government in the form of ongoing financing of infrastructure capex and most recently a support package involving a €1 billion capital increase in FY2017 and dividend reductions totaling more than €2.7 billion over FY2017-FY2021.</li> <li>• Our view of the very high likelihood that the German government would provide sufficient and timely extraordinary support to DB in the event of financial distress.</li> </ul>

**Outlook: Stable**

The stable outlook reflects our expectation that while the credit metrics will gradually improve as a result of structural improvements implemented by the management and the government's support package totaling more than €2.7 billion over 2017-2021, we expect DB's adjusted FFO to debt will be limited to about 15%-18% over 2017-2019 due to substantial capex required to improve service quality and ensure the company's growth.

**Downside scenario**

We could lower the rating to 'A+' if we expect DB's weighted-average FFO to debt to drop below 13%. This could occur if, despite substantial investments, the company failed to improve its competitiveness and attract more passengers, if management was unsuccessful in improving the company's profitability, or if growth in earnings took longer to materialize than we expect.

We could also lower the rating if the company's corporate structure changed such that infrastructure or passenger transport was no longer part of DB's operations.

A lowering of Germany's rating or the likelihood of the state providing extraordinary support becoming less likely could also lead us to downgrade DB.

**Upside scenario**

We could raise the long-term rating on DB to 'AA' if its FFO-to-debt ratio improves above 20% and we believe that this improvement is sustainable, assuming that the likelihood of extraordinary state support remains the same. We expect credit metrics to strengthen, in particular thanks to improved operational performance as a result of the implementation of the "Railway for the Future" program.

**Our Base-Case Scenario**

In our base-case scenario, we forecast that DB's credit metrics will remain constrained by the company's sizable capex program. However, we expect gradually improving operational performance as a result of the investments, and company's restructuring and initiatives aimed at improving service quality under the management's Railway of the Future program. In FY2016, the focus was on increasing reliability (punctuality), passenger satisfaction (free Wi-Fi, cleanliness), and efficiency. In FY2017-FY2020 the company plans to implement structural process improvements and develop technical innovations.

Assumptions	Key Metrics			
<ul style="list-style-type: none"> <li>Annual revenue growth of 2%-4% in FY2017-FY2021, supported by GDP and consumer price index increases, service improvements, and new services in long-distance rail transport, DB Arriva contract wins, and volume growth of DB Schenker.</li> <li>A gradual increase in S&amp;P Global Ratings-adjusted EBITDA margin to 14%-15% from 13.6% in FY2016 mainly thanks to volume growth on the back of improved service quality, in particular in long distance where costs are largely fixed; and cost savings thanks to groupwide streamlining of cost structure. However, profitability growth will remain constrained by a high level of competition among others imposed by low cost airlines and long distance buses, and personnel cost increases as a result of collective bargaining agreements with trade unions.</li> <li>We exclude from our forecasts the U.K. train operating companies (TOCs), their contribution to DB AG's revenues and EBITDA, and their investment plans, as their earnings and cash are not freely available to the parent company (please see the "Reconciliation" section below).</li> </ul>	<b>2016</b>	<b>2017f</b>	<b>2018f</b>	
	FFO to debt (%)	14.1	15.0-16.0	16.0-17.0
	FFO to cash interest coverage (x)	8.2	6.5-7.5	7.0-8.0
	Debt to EBITDA (x)	5.5	4.8-5.3	4.5-5.0
	<p>*S&amp;P Global Ratings-adjusted FFO to debt. Adjustments include deconsolidation of U.K. TOCS. f--Forecast.</p>			

## Company Description

Deutsche Bahn AG (DB) is Germany's integrated rail group. It owns and manages Germany's rail network and is the country's dominant rail passenger and freight operator. Although DB operates as an integrated company, its railway transport services and infrastructure companies are operationally separate in line with the fourth European Railway Package.

While rail business in Germany accounts for about 70% of DB's EBITDA, the company has also significant asset-light international operations that it uses to strengthen its overall market position, given a gradually shrinking market share in regional and rail freight transportation services in Germany, but primarily to strengthen the Group's financial position. The platform for operating passenger transport outside Germany is DB Arriva, one of the largest transport service operators in Europe providing services in 14 countries. Of its EBITDA, more than 50% is generated in the U.K. Global freight forwarding and logistics operations are conducted through DB Schenker.

With about €41 billion revenues and €4.5 billion reported EBITDA (in FY2016) it is one of the largest rail and logistics companies in the world, operating in over 130 countries.

## Business Risk: Strong

Our assessment of the company's business risk profile as strong reflects the fact that it derives nearly 90% (DB without DB Schenker) of its EBITDA from its low-risk transportation infrastructure operation in a large and wealthy area. The vertical integration combines infrastructure management (which contributes about 40% EBITDA) and transportation services, and gives DB bigger scale, and more earnings operating stability compared to pure rail operators that are largely exposed to customer demand risk.

DB is the dominant transportation services provider in Germany. In FY2016 it had about 67% of the domestic regional rail passenger market and about 60% of the rail freight transport market. However, it has been losing market share at a rate of 1%-2% points per year, in particular in the regional transportation services, where contracts are mostly relatively long and capital intensive, and in rail freight, which involves lower margins. DB competes with a large number of companies, which have a share of about 30% of the total train-path demand. We expect DB's market share in regional transportation to decrease further to about 60% by 2021. Only in the capital intensive long distance service, which requires investment in fleet, does DB hold almost 100% of its domestic market.

Most of the company's business is concentrated in Germany, earnings growth is strongly supported by DB Arriva's international rail, bus, and light rail services, and DB Schenker's freight forwarding and logistics operations. In Europe, DB is the largest regional rail passenger transport group and second after SNCF Mobilités in long distance rail passenger transport, both based on revenues. It is also a market leader in rail freight transport and logistics and in land transport.

Exposure to intense price competition and competition from long distance buses and low cost airlines (which have recently benefited from low oil prices), combined with a relatively high level of fixed costs, in particular personnel (about half of total operating costs) and energy expenses, constrain DB's profitability. We consider its S&P-adjusted EBITDA margin of 13.6% to be below average for the transportation infrastructure industry, despite being comparatively higher than that of pure train operators.

DB operates in a stable and supportive legal environment, based on the constitutional obligation by the German government to finance infrastructure capex (Art. 87e of the German constitution). In addition, regional governments provide funds for financing of local public transport services according to the German regionalization act. Additionally, in December 2016, following the postponement of the proposed partial privatizations of DB Arriva and DB Schenker, the government announced a package to support DB's financial stability totaling more than €2.7 billion over 2017-2021.

### Peer comparison

We consider Italy-based Rail Company Ferrovie dello Stato Italiane (FSI) as the closest peer to DB in terms of business mix, as both are the owners and managers of the national rail network, as well as rail operators. This gives them an advantage of more stability and relatively higher profitability compared to pure operators. While DB is much bigger and diversified both in terms of geographical coverage and scope of services, it faces much higher competition than FSI in its domestic market. Despite the Italian market being fully liberalized, competition is limited.

In terms of scale and diversity of operations, the most similar company is France-based rail operator SNCF Mobilités. It holds a virtually monopolistic position in the passenger rail transport services in France and a dominant share of the rail freight market. However, SNCF Mobilités' profitability, as the pure operator, is lower and further constrained by continued increases in track access fees and high labor costs, which are subject to harmonized labor and social standards negotiations. SNCF Mobilités' ambition to increase the low cost offering on domestic high-speed trains and overall double its low-cost offering by 2020 could put additional constraints on profitability.

**Table 1**

<b>Deutsche Bahn AG -- Peer Comparison</b>			
<b>Industry Sector: Infrastructure</b>			
	<b>Deutsche Bahn AG</b>	<b>Ferrovie dello Stato Italiane</b>	<b>SNCF Mobilités</b>
Rating as of July 29, 2017	AA-/Stable/A-1+	BBB-/Stable/--	AA-/Stable/A-1+
CICRA	Low Risk	Intermediate Risk	Low Risk
Competitive Position	Strong	Strong	Satisfactory
Business Risk Profile	Strong	Strong	Satisfactory
Cash flow and Leverage	Intermediate	Intermediate	Intermediate
Anchor	bbb+	bbb+	bbb
Modifiers (active)	none	Comparable ratings analysis (-1 notch)	Comparable ratings analysis (-1 notch)
Stand alone credit profile (SACP)	bbb+	bbb	bbb-
Government/Group support	Yes (+4 notches)	Yes (-1 notch)	Yes (+6 notches)
Likelihood of state support	Very High	Extremely High	Extremely High
- Role	Very important	Very important	Very important
- Link	Very strong	Integral	Integral
Sovereign Rating	AAA/Stable/A-1+	BBB-/Stable/A-2	AA/Negative/A-1+
<b>--Average of past three fiscal years--</b>			
<b>(Mil. €)</b>			
Revenues	38,624.8	8,512.7	29,018.7
EBITDA	5,364.7	2,418.5	2,906.8
Funds from operations (FFO)	4,185.2	2,095.6	2,255.0
Interest Expense	1,099.8	344.0	695.8
Net income from cont. oper.	112.0	499.3	(377.0)
Cash flow from operations	4,256.2	1,749.8	1,995.0
Capital expenditures	3,446.9	5,211.7	2,391.0
Free operating cash flow	809.3	(3,461.9)	(396.0)
Dividends paid	593.7	15.3	148.7
Discretionary cash flow	215.7	(3,477.2)	(544.7)
Cash and short-term investments	4,041.7	1,650.0	4,672.3
Debt	27,517.8	11,632.9	14,569.6
Equity	12,580.7	36,945.9	5,300.0
Debt and equity	40,098.4	48,578.9	19,869.6
<b>Adjusted ratios</b>			
Compound annual revenue growth (%)	0.6	0.9	(1.8)
EBITDA margin (%)	13.9	28.4	10.0

Table 1

Deutsche Bahn AG -- Peer Comparison (cont.)			
Industry Sector: Infrastructure			
	Deutsche Bahn AG	Ferrovie dello Stato Italiane	SNCF Mobilites
Return on capital (%)	2.6	2.2	7.5
EBITDA interest coverage (x)	4.9	7.0	4.2
FFO cash int. cov. (X)	8.1	13.8	9.9
Debt/EBITDA (x)	5.1	4.8	5.0
FFO/debt (%)	15.2	18.0	15.5
Cash flow from operations/debt (%)	15.5	15.0	13.7
Free operating cash flow/debt (%)	2.9	(29.8)	(2.7)
Discretionary cash flow/debt (%)	0.8	(29.9)	(3.7)
Net cash flow / capex (%)	104.2	39.9	88.1
Return on common equity (%)	0.6	1.3	(6.8)

N.M.--Not meaningful.

## Financial Risk: Intermediate

Following the postponement of the partial privatizations of DB Arriva and DB Schenker, we expect the group's ability to deleverage over the short to medium term will continue to be hampered by DB's large capex required to improve service quality. Net capex will reach about €21 billion over 2017-2021, excluding the government's investment grants totaling about €38 billion over the period. Reported discretionary cash flow will be negative until at least FY2019.

However, thanks to the government's support package agreed in December 2016, involving a €1 billion capital increase in FY2017 and dividend reduction by €350 million per year, we envisage DB will start slowly regaining control over its leverage.

Under our base case, adjusted FFO/debt will start improving from its lowest level of 14.1% in FY2016, to 15%-16% in FY2017 and 16%-17% going forward, benefiting from the low interest rate environment. Debt to EBITDA will gradually decrease from 5.5x in FY2016 to 4.8x-5.3x in FY2017 and 4.5x-5.0x thereafter, as a moderate increase in adjusted debt every year until FY2019 will be compensated for by growth in earnings.

### Our Base-Case Cash Flow And Capital Structure Scenario

- Net capex of about €20 billion in 2017-2021, mostly for rolling-stock upgrades (ICE4). Most of investment in infrastructure is not reflected in our forecast due to being funded by non-refundable government investment grants mostly under the five-year (2015-2019) performance and financing agreement (LuFV) II between the Federal Republic of Germany and DB.
- Dividends of €600 million in 2017, €450 million in 2018, and €650 million per year in 2019-2021, then returned to DB via capex subsidies for investment in rail infrastructure.
- €1 billion capital increase by the Federal Government in 2017.
- Debt issuance of €2 billion per year to fund capex and upcoming maturities.



## Financial summary

Table 2

Deutsche Bahn AG -- Financial Summary					
Industry Sector: Infrastructure					
	--Fiscal year ended Dec. 31--				
	2016	2015	2014	2013	2012
Rating history	AA-/Stable/A-1+	AA/Negative/A-1+	AA/Stable/A-1+	AA/Stable/A-1+	AA/Stable/A-1+
<b>(Mil. €)</b>					
Revenues	38,605.0	38,875.0	38,394.5	37,903.1	38,190.7
EBITDA	5,231.5	5,167.8	5,694.9	6,073.3	6,887.5
Funds from operations (FFO)	4,076.4	3,999.9	4,479.3	4,799.3	5,540.5
Interest Expense	1,050.5	1,090.7	1,158.0	1,183.9	1,259.4
Net income from continuing operations	695.0	(1,325)	966.0	657.0	1,471.0
Cash flow from operations	4,166.5	4,091.8	4,510.4	4,476.1	4,919.5
Capital expenditures	2,693.7	3,942.4	3,704.6	3,765.0	3,413.0
Free operating cash flow	1,472.8	149.4	805.8	711.1	1,506.5
Dividends paid	863.0	710.0	208.0	531.0	539.0
Discretionary cash flow	609.8	(560.6)	597.8	180.1	967.5
Cash and short-term investments	4,086.5	4,253.3	3,785.3	2,861.0	2,175.0
Debt	28,828.9	27,143.9	26,580.5	25,344.5	23,838.3
Equity	11,009.0	12,871.0	13,862.0	14,514.0	14,616.0
Debt and equity	39,837.9	40,014.9	40,442.5	39,858.5	38,454.3
<b>Adjusted ratios</b>					
Annual revenue growth (%)	(0.7)	1.3	1.3	(0.8)	0.6
EBITDA margin (%)	13.6	13.3	14.8	16.0	18.0
EBITDA interest coverage (x)	5.0	4.7	4.9	5.1	5.5
FFO cash int. cov. (x)	8.2	7.7	8.4	9.4	9.9
Debt/EBITDA (x)	5.5	5.3	4.7	4.2	3.5
FFO/debt (%)	14.1	14.7	16.9	18.9	23.2
Cash flow from operations/debt (%)	14.5	15.1	17.0	17.7	20.6
Free operating cash flow/debt (%)	5.1	0.6	3.0	2.8	6.3
Discretionary cash flow/debt (%)	2.1	(2.1)	2.2	0.7	4.1
Net Cash Flow / Capex (%)	119.3	83.4	115.3	113.4	146.5
Return on capital (%)	3.6	(0.2)	4.3	5.1	7.0
Return on common equity (%)	5.1	(9.9)	6.5	4.3	9.6

## Liquidity: Adequate

The short-term rating is 'A-1+'. We assess DB's liquidity as adequate, reflecting our view that liquidity sources will cover uses by more than 1.2x in the 12 months to June 30, 2018. Our liquidity assessment continues to be supported by DB's high standing in the capital markets, sound relationship with banks, and generally prudent risk management, ensuring the maintenance of adequate liquidity.

Principal Liquidity Sources	Principal Liquidity Uses
<p>We estimate liquidity sources over 12 months to June 30, 2018, to be about €10.8 billion including:</p> <ul style="list-style-type: none"> <li>• Unrestricted cash of about €1.9 billion as of June 30, 2017;</li> <li>• Availability of about €2 billion committed credit facilities expiring beyond June 2018;</li> <li>• Unadjusted FFO of about €5.4 billion;</li> <li>• €1 billion capital injection from the government, committed in the federal budget and expected to be received by DB in Q3 2017; and</li> <li>• Debt issued in July 2017 including £300 million 1.375% note due 2025 and SEK530 million 2.2% private placement due 2032.</li> </ul>	<p>We estimate DB's liquidity needs over the same period to be about €8.7 billion, comprising:</p> <ul style="list-style-type: none"> <li>• Debt maturities of €3.6 billion;</li> <li>• Working capital outflow of about €300 million;</li> <li>• Net (of subsidies) capex of €4.2 billion; and</li> <li>• Dividend payments of €450 million-€600 million.</li> </ul>

#### Debt maturities(as of Dec. 31 according to annual report 2016)

- 2017: €2.4 billion
- 2018: €2.2 billion
- 2019: €2.2 billion
- 2020: €2.4 billion
- 2021: €2.2 billion
- Thereafter: €11.1 billion

## Covenant Analysis

We understand that DB's loan agreements and bond documentation do not have any financial covenants.

## Other Modifiers

There are no active modifiers that alter the company's anchor.

## Group Influence

We treat Deutsche Bahn Finance B.V. as a subsidiary created for the sole purpose of carrying out certain financial activities on behalf of its parent company, as core to the group. It is wholly owned by DB, shares the same corporate name, and issues debt on capital markets on behalf of the group. As a result, our senior unsecured debt issue rating on debt issued by Deutsche Bahn Finance B.V. is equalized with that issued by DB.

## Government Influence

We view DB as a government-related entity. It is 100% government owned, although as private joint stock company (Aktiengesellschaft) it is an independent legal entity with its own rights and obligations, and is subject to the same bankruptcy regime as any other limited liability company in Germany.

Our 'AA-' long-term corporate credit rating on DB incorporates four notches of uplift from the stand-alone credit profile of 'bbb+', to reflect our view that there is a very high likelihood that the German government would provide sufficient and timely extraordinary support to DB if needed.

This assessment is based on our view of DB's:

- Very important role fulfilling one of the key objectives of the government: building, maintaining, and operating the rail network. Nevertheless, despite DB's strategic, socioeconomic, and political importance as the country's leading provider of passenger rail services, as well as its position as the dominant rail-freight and logistics operator, DB does not benefit from any explicit and timely guarantee of its liabilities by the government.
- Very strong link to the government, reflecting a constitutional requirement that the state remains the owner of the country's rail infrastructure with responsibility for providing a functional rail network. Given this constitutional requirement that and a lack of a political will to even partially privatize DB, we expect that the group will remain in full government ownership in the future.

## Ratings Score Snapshot

### Corporate Credit Rating

AA-/Stable/A-1+

### Business risk: Strong

- **Country risk:** Low
- **Industry risk:** Low
- **Competitive position:** Strong

### Financial risk: Intermediate

- **Cash flow/Leverage:** Intermediate

Anchor: bbb+

### Modifiers

- **Diversification/Portfolio effect:** Neutral (no impact)
- **Capital structure:** Neutral (no impact)
- **Financial policy:** Neutral (no impact)
- **Liquidity:** Adequate (no impact)
- **Management and governance:** Satisfactory (no impact)

- **Comparable rating analysis:** Neutral (no impact)

Stand-alone credit profile : bbb+

- **Related government rating:** AAA
- **Likelihood of government support:** Very high (+4 notches from SACP)

## Reconciliation

**Table 3**

Reconciliation Of Deutsche Bahn AG Reported Amounts With S&P Global Ratings Adjusted Amounts (Mil. €)									
--Fiscal year ended Dec. 31, 2016--									
<b>Deutsche Bahn AG reported amounts</b>									
	Debt	Shareholders' equity	Revenues	EBITDA	Operating income	Interest expense	EBITDA	Cash flow from operations	Capital expenditures
Reported	22,481.0	12,560.0	40,557.0	4,478.0	1,461.0	672.0	4,478.0	3,648.0	2,925.0
<b>S&amp;P Global Ratings adjustments</b>									
Interest expense (reported)	--	--	--	--	--	--	(672.0)	--	--
Interest income (reported)	--	--	--	--	--	--	28.0	--	--
Current tax expense (reported)	--	--	--	--	--	--	(157.0)	--	--
Operating leases	3,374.8	--	--	1,085.0	241.1	241.1	843.9	843.9	--
Postretirement benefit obligations/deferred compensation	6,069.0	(1,735.0)	--	(84.0)	(84.0)	79.0	(163.0)	(104.0)	--
Surplus cash	(3,531.7)	--	--	--	--	--	--	--	--
Capitalized interest	--	--	--	--	--	34.0	(34.0)	(34.0)	(34.0)
Capitalized development costs	--	--	--	(155.0)	(148.0)	--	(155.0)	(155.0)	(155.0)
Dividends received from equity investments	--	--	--	17.0	--	--	17.0	--	--
Deconsolidation / consolidation	(95.8)	--	(1,952.0)	(25.5)	(7.9)	(0.6)	(12.2)	(32.4)	(42.3)
Asset retirement obligations	531.7	--	--	--	--	25.0	(25.0)	--	--
Non-operating income (expense)	--	--	--	--	63.0	--	--	--	--
Non-controlling Interest/Minority interest	--	184.0	--	--	--	--	--	--	--
Debt - Accrued interest not included in reported debt	273.0	--	--	--	--	--	--	--	--
Debt - Foreign currency hedges	(273.0)	--	--	--	--	--	--	--	--

**Table 3**

<b>Reconciliation Of Deutsche Bahn AG Reported Amounts With S&amp;P Global Ratings Adjusted Amounts (Mil. €) (cont.)</b>									
EBITDA - Gain/(Loss) on disposals of PP&E	--	--	--	(89.0)	(89.0)	--	(89.0)	--	--
EBITDA - Other	--	--	--	5.0	5.0	--	5.0	--	--
FFO - Other	--	--	--	--	--	--	11.7	--	--
Working capital - Other	--	--	--	--	--	--	--	(20.0)	--
OCF - Other	--	--	--	--	--	--	--	20.0	--
Total adjustments	6,347.9	(1,551.0)	(1,952.0)	753.5	(19.8)	378.5	(401.6)	518.5	(231.3)
<b>S&amp;P Global Ratings adjusted amounts</b>									
	<b>Debt</b>	<b>Equity</b>	<b>Revenues</b>	<b>EBITDA</b>	<b>EBIT</b>	<b>Interest expense</b>	<b>Funds from operations</b>	<b>Cash flow from operations</b>	<b>Capital expenditures</b>
Adjusted	28,828.9	11,009.0	38,605.0	5,231.5	1,441.2	1,050.5	4,076.4	4,166.5	2,693.7

Our main analytical adjustments to reported financials are described below.

- We deconsolidate DB's U.K. rail operations (The Chiltern Railway Company Ltd, Arriva Train Wales, Arriva Rail North Ltd, Arriva Rail London Ltd, XC Trains Ltd) because UK Train operating companies (TOCs) are insulated from DB. They are ring-fenced business, which earnings and cash are not freely available to their parent company. Moreover, the U.K. Department for Transport and Transport Scotland (for ScotRail) provide effective oversight of the financial performance of these entities against predetermined financial ratios and their franchise agreements include lock-up and default covenants that, in the event of circumstances such as limited liquidity, can restrict dividend payments and even lead to termination of the contract. Therefore, in our opinion, treating U.K. TOCs as investments better reflects the economic and contractual relationship that exists between them and their parent. The deconsolidation reduces reported revenue by about €2.0 billion; reported EBITDA by €25.5million; reported debt by €95.8 million and capex by €42.3 million.

We increase the reported EBITDA by:

- The interest and depreciation expense related to operating leases (€1.1 billion), and
- €17 million dividends received from equity investments (mainly EUROFIMA).

We lower the reported EBITDA by:

- Capitalized development costs (€155 million);
- The pension current service cost (€84 million), which we treat as operating costs (we view the interest expense of €79 million as a finance charge and add it to interest costs);
- Income and losses from the disposal of property, plant and equipment, and intangible losses (€273 million income and €184 million losses); and
- Income and expenses from the disposal of noncurrent financial instruments (€1 million income and €6 million expenses).

We add to reported debt:

- The NPV of minimum non-cancellable operating lease commitments was €3.4 billion.

- Commitments related to postretirement benefits (€6.1 billion).
- The tax-affected value of DB's provision for the closure, decommissioning, and disposal of Neckarwestheim Nuclear Power Station (€531.7 million). The provision is set by the operator, Energie Baden-Württemberg. (As a result of its shareholding in the Neckar joint power plant, DB AG will have a payment obligation of €389 million).
- Accrued interest which is not included in reported debt (€273 million).
- Almost all debt is hedged to lock in repayment currency and the company applies cash flow hedge accounting. We adjust the reported amount of foreign currency denominated debt by deducting €273 million to reflect the net amount required for payment as a result of the hedge.
- We deduct from reported debt surplus cash of about €3.5 billion.
- The interest-free loans (€1,127 million at year-end 2016) do not meet all the conditions listed in our new criteria for noncommon equity financing, hence are treated as debt. These loans are attributable to financing provided by the state for capex in expanding and replacing track.

## Related Criteria

- General Criteria: Rating Government-Related Entities: Methodology And Assumptions, March 25, 2015
- Criteria - Corporates - General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Criteria - Corporates - Industrials: Key Credit Factors For The Transportation Infrastructure Industry, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Criteria - Corporates - General: Corporate Methodology: Ratios And Adjustments, Nov. 19, 2013
- Criteria - Corporates - General: Corporate Methodology, Nov. 19, 2013
- General Criteria: Group Rating Methodology, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Methodology For Linking Short-Term And Long-Term Ratings For Corporate, Insurance, And Sovereign Issuers, May 7, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities And Insurers, Nov. 13, 2012
- General Criteria: Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009
- Criteria - Corporates - General: 2008 Corporate Criteria: Rating Each Issue, April 15, 2008

## Related Research

- German Rail Operator Deutsche Bahn Ratings Affirmed At 'AA-' Despite IPO Being Put On Hold; Outlook Stable, Jan. 18, 2017
- Credit FAQ: The Impact Of U.K. Rail Franchise Reforms And Our Analytical Treatment Of Train Operating Companies, Oct. 16, 2012

## Business And Financial Risk Matrix

Business Risk Profile	Financial Risk Profile					
	Minimal	Modest	Intermediate	Significant	Aggressive	Highly leveraged
Excellent	aaa/aa+	aa	a+/a	a-	bbb	bbb-/bb+
<b>Strong</b>	aa/aa-	a+/a	<b>a-/bbb+</b>	bbb	bb+	bb
Satisfactory	a/a-	bbb+	bbb/bbb-	bbb-/bb+	bb	b+
Fair	bbb/bbb-	bbb-	bb+	bb	bb-	b
Weak	bb+	bb+	bb	bb-	b+	b/b-
Vulnerable	bb-	bb-	bb-/b+	b+	b	b-

## Ratings Detail (As Of August 30, 2017)

### Deutsche Bahn AG

Corporate Credit Rating

AA-/Stable/A-1+

### Corporate Credit Ratings History

15-Jul-2016

AA-/Stable/A-1+

28-Aug-2015

AA/Negative/A-1+

17-Jan-2012

AA/Stable/A-1+

### Related Entities

#### Deutsche Bahn Finance B.V.

Senior Unsecured

AA-

\*Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings' credit ratings on the global scale are comparable across countries. S&P Global Ratings' credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.

### Additional Contact:

Industrial Ratings Europe; Corporate\_Admin\_London@spglobal.com

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