



Which are the core aspects of rail business where performance needs to be improved? How to create right incentives?

Florence Rail Forum

Status Quo

Embracing Measures

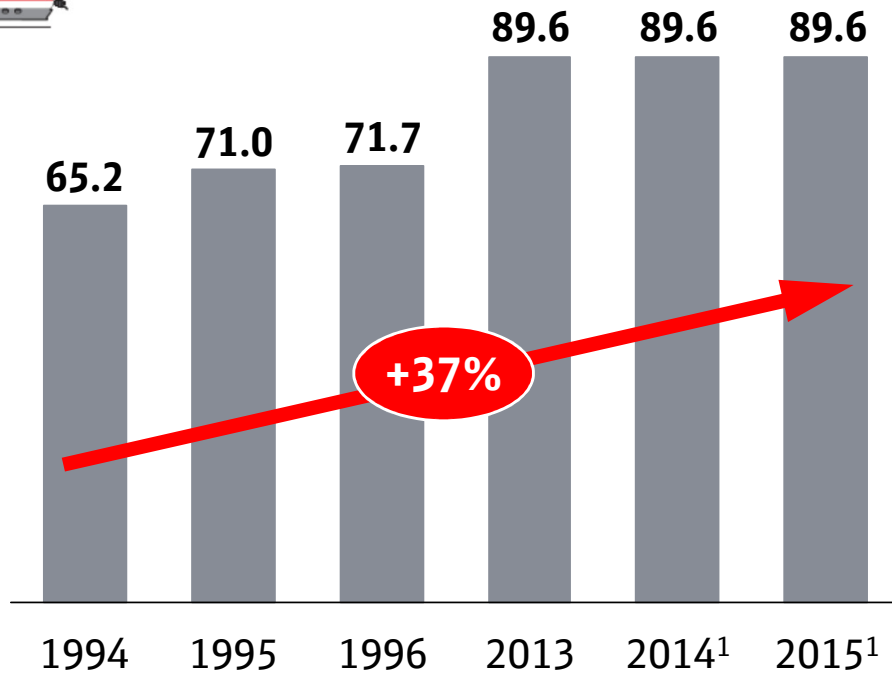
Existing Incentives

1994 Rail Reform has made it possible to sustainably strengthen rail transport in Germany



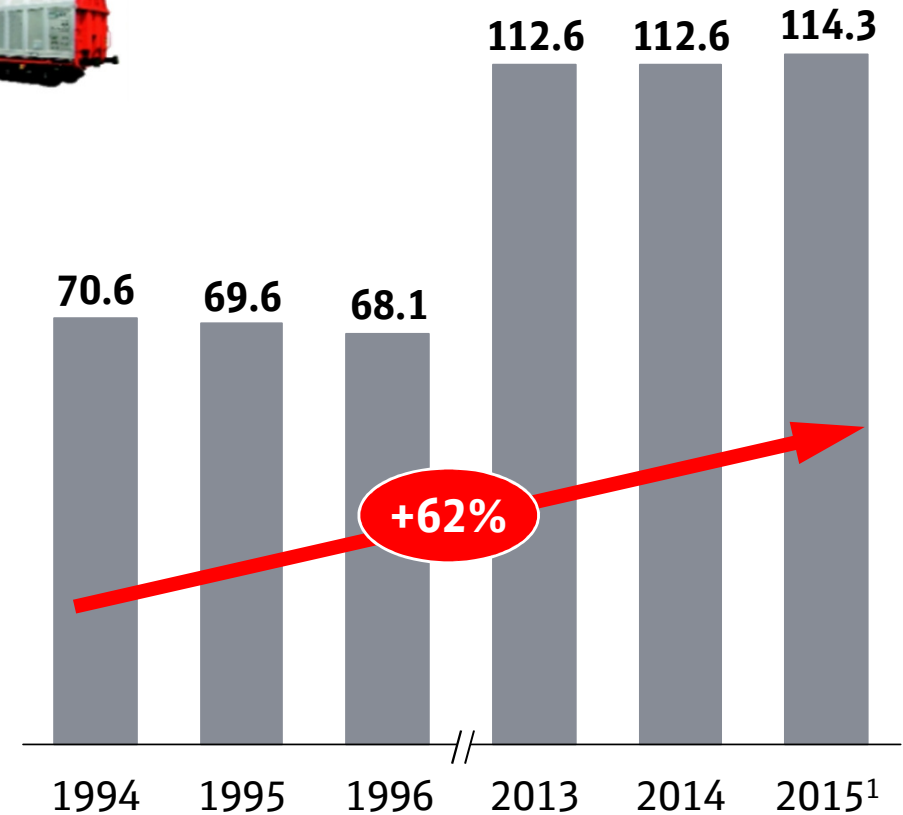
Volumes sold rail passenger transport

Germany, in bn passenger kilometers



Volumes sold rail freight transport

Germany, in bn tonne kilometer



¹ Own estimation, as of March 2016, 16
Deutsche Bahn AG | May 2016

Strikes and storms put considerable pressure on DB's rail business in 2015, but saver fare tickets boosted long-distance volumes



Rail performance in 2015

Long distance
(in billions of pkm)



36,1 37,0



2014 2015

Regional rail¹

(in billions of pkm)



43,7 42,7



2014 2015

Rail freight

(in billions of tkm)



103 98



2014 2015

Infrastructure²

(in millions of train-path km)



1,044 1,054



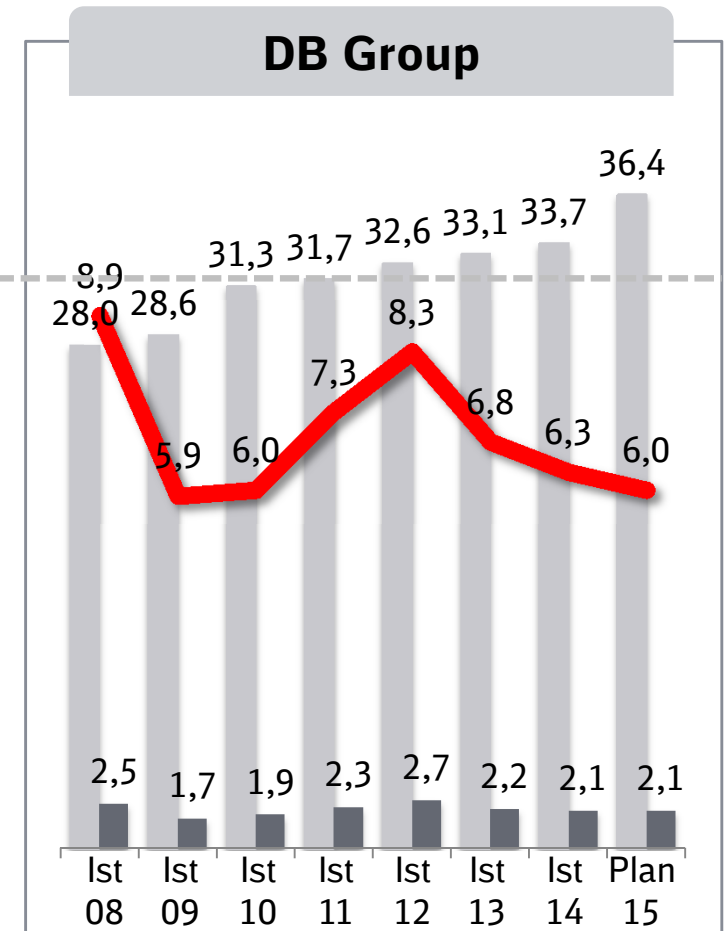
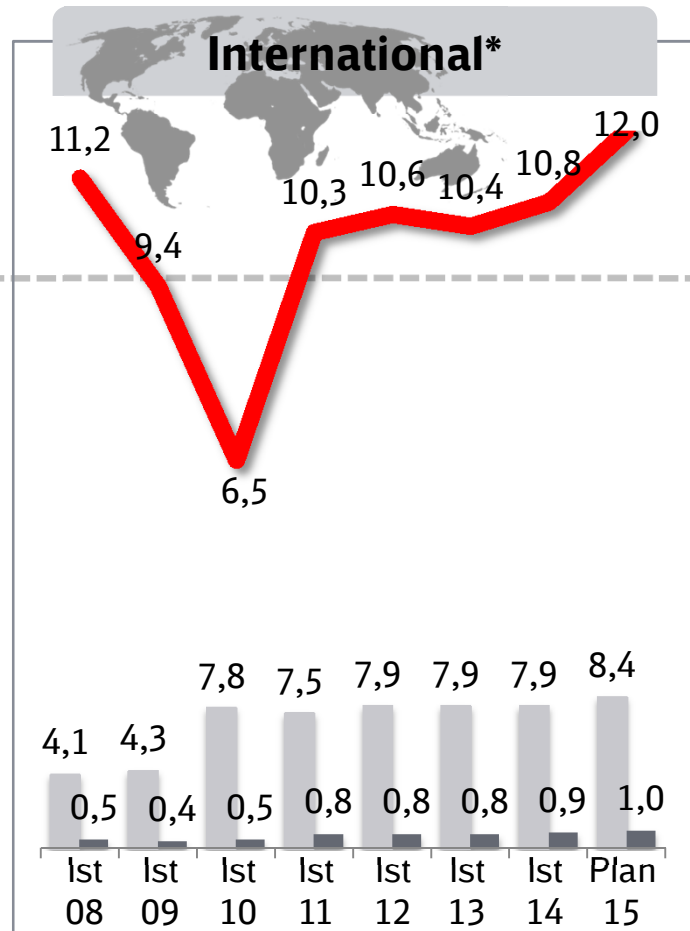
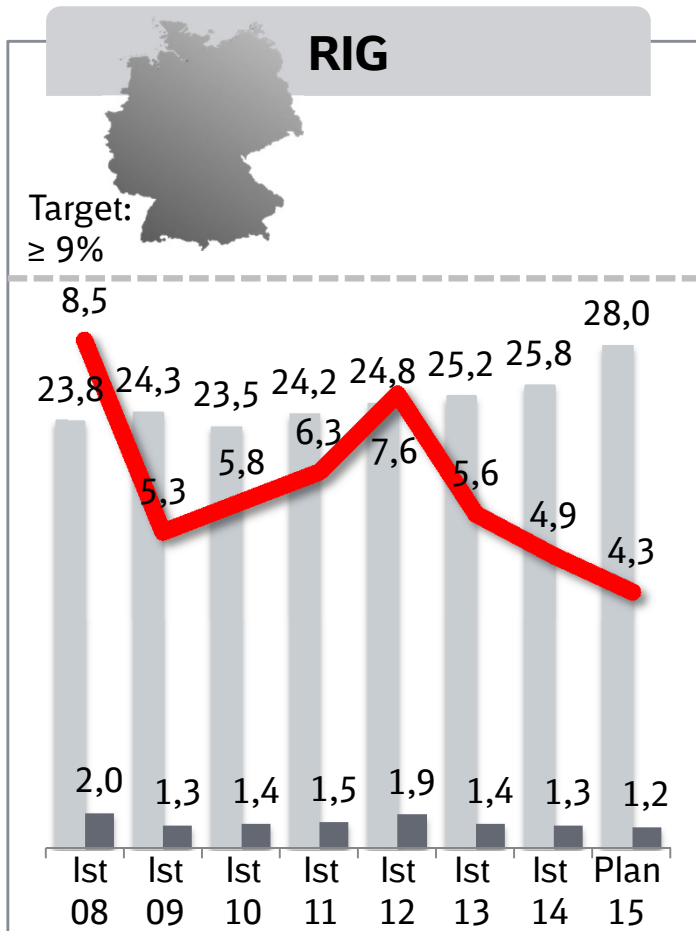
2014 2015

1 Excluding DB Arriva; including Usedomer Bäderbahn; 2 Including Usedomer Bäderbahn
Deutsche Bahn AG | May 2016

Financial track record and evidence 2015: “Railway in Germany” with rising capital employed and decreasing EBIT



ROCE „Railway in Germany“ (RiG)



Capital Employed (Bil. €)
 EBIT (Bill.€)
 ROCE (%) = EBIT/Capital Employed

*) Acquisition of Arriva in 2010 (consolidation per 01.09.)
 effects on data in 2010
 - Capital Employed: 3.239 Mio.€
 - EBIT: 52 Mio.€

Railway in Germany (RiG) 2015, characterised by high capital employed, and underproportional profit contribution



Key figures 2015 (€ mn)

	DB Group	RiG ¹⁾	Share (%) of DB Group	EIU ²⁾	Share (%) of DB Group	DB Netz AG	Share (%) of EIU
Revenues	40,468	17,788	44.0	8,860	21.9	4,867	-
EBITDA adjusted	4,778	3,279	68.6	1,982	41.5	1,465	73.9
Depreciation	-3,019	-2,327	77.1	-1,118	37.0	-913	81.7
EBIT adjusted	1,759	952	54.1	864	49.1	552	63.9
Net operating interest income	-759	-624	82.2	-328	43.2	-272	82.9
Operating profit after interest	1,000	329	32.9	536	53.6	280	52.2
Other income parts	-1,932	-985	51.0	-199	10.3	-170	85.4
Profit before taxes on income (EBT)	-932	-656	70.4	337	-	110	32.6
Taxes on income	-379	-271	71.5	-	-	-	-
Profit after taxes of income / net profit	-1,311	-927	70.7	337	-	110	32.6
Profit and loss transfer ³⁾	-	-	-	-335	-	-81	24.2
Gross capital expenditures	9,344	8,221	88.0	6,516	69.7	5,817	89.3
Investment grants	5,478	5,464	99.7	5,453	99.5	4,909	90.0
Net capital expenditures	3,866	2,757	50.3	1,063	27.5	908	85.4
Intangible assets / property, plant and equipment	42,821	38,999	91.1	25,050	58.5	20,775	82.9
Capital employed	33,459	25,809	77.1	21,854	65.3	18,107	82.9
Equity	13,445	13,068	97.2	9,424	70.1	7,366	78.2
Net financial debt	17,491	14,846	84.9	12,284	70.2	10,731	87.4
Adjusted net financial debt	21,699	16,570	76.4	12,543	57.8	10,744	85.7
Return on capital employed (ROCE) (%)	5.3	3.7	-	4.0	-	3.0	-
Operating cash flow	4,019	2,655	66.1	1,653	40.9	1,194	72.2
Gearing (%)	130	114	-	130	-	146	-
Redemption coverage (%)	18.5	16.0	-	13.2	-	11.1	-
Net financial debt / EBITDA (multiple)	3.7	4.5	-	6.2	-	7.3	-

Possible differences are due to rounding.

¹⁾ Railway in Germany.

²⁾ Rail infrastructure.

³⁾ Before taxes (because of single tax entity for income tax purposes at the DB AG level) and excluding group charges for corporate functions. Based on German GAAP.

DB faces a range of challenges, particularly in rail operations in Germany



Insufficient **product quality**



Competitive pressure on rail freight transport



Rising personnel and energy **costs**



Fragmentation of the regional transport market



New competitors in the long-distance sector



Greater **regulatory risks**



Economic top-targets are not reached

Development of the top targets



Top targets economic	2014	2015	2020
Customer satisfaction - passengers (SI)	76.1	76.4	≥79
Customer satisfaction - freight transport and logistics (SI) ¹⁾	-	67.5	≥73
Product quality - punctuality of DB Group (rail) in Germany (%)	94.3	93.6	>95
Market position - revenues (€ billion)	39.7	40.5	>50
Profitability - ROCE (%)	6.3	5.3	≥9.0
Financial stability - redemption coverage (%)	20.9	18.5	≥30


¹⁾ Survey every two years.

- › Differentiated developments in customer satisfaction.
- › Deteriorating punctuality.
- › Weak performance of financial figures.







Status Quo

Embracing Measures

Existing Incentives

DB is restructuring the Group and launching digitalization initiatives  to restore the DB2020 balance, with a focus on quality, customers and profitability







Challenges in the economic dimension

Economic	Social	Environmental
		
		
	Top 10	Top 1

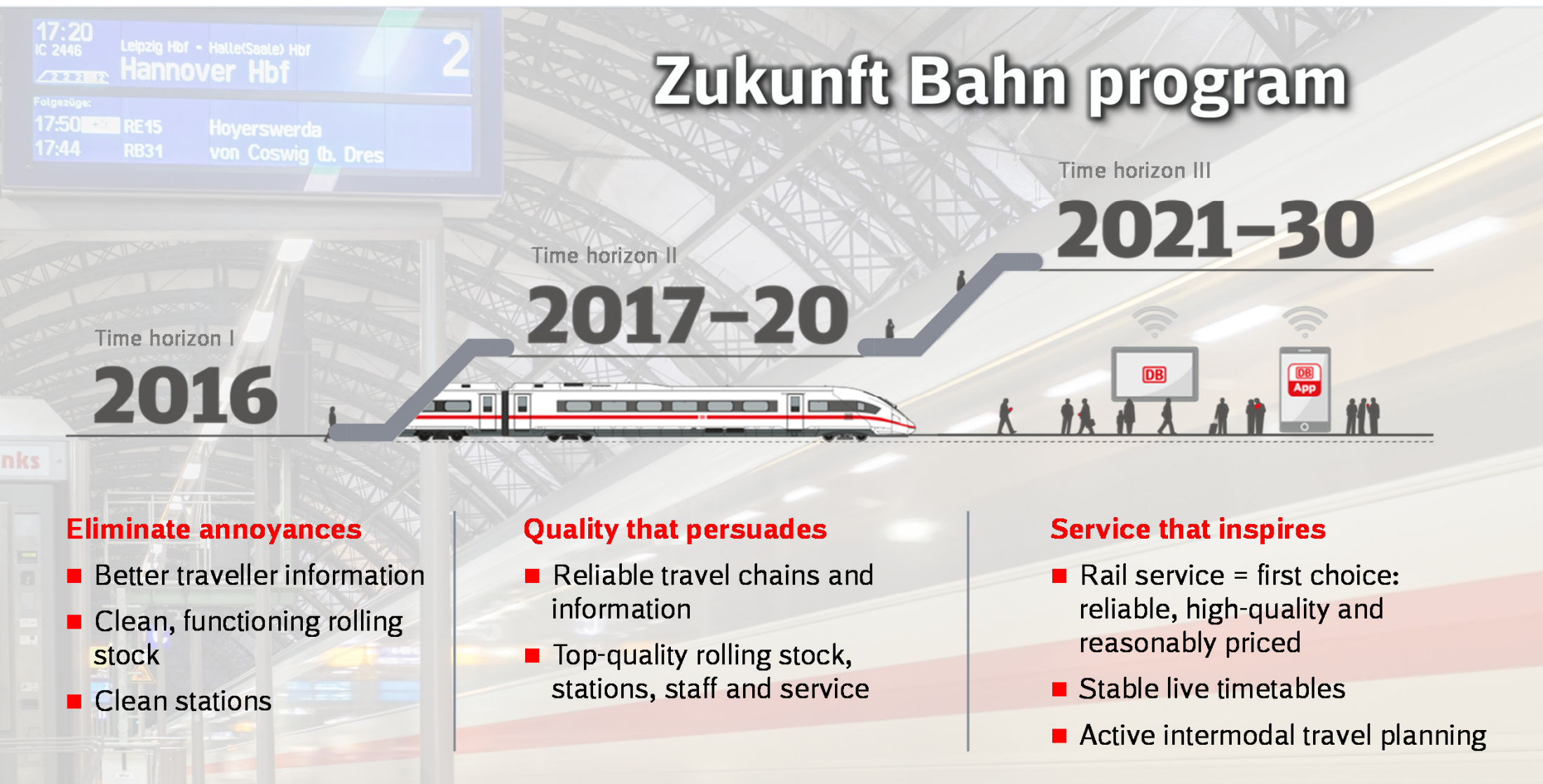
Restructuring

- Leaner
- Faster
- More efficient
- More customer focused

Digitalization initiatives

 Mobility 4.0	 Production 4.0	 Working Environments 4.0	 IT 4.0
 Logistics 4.0			
 Infrastructure 4.0			

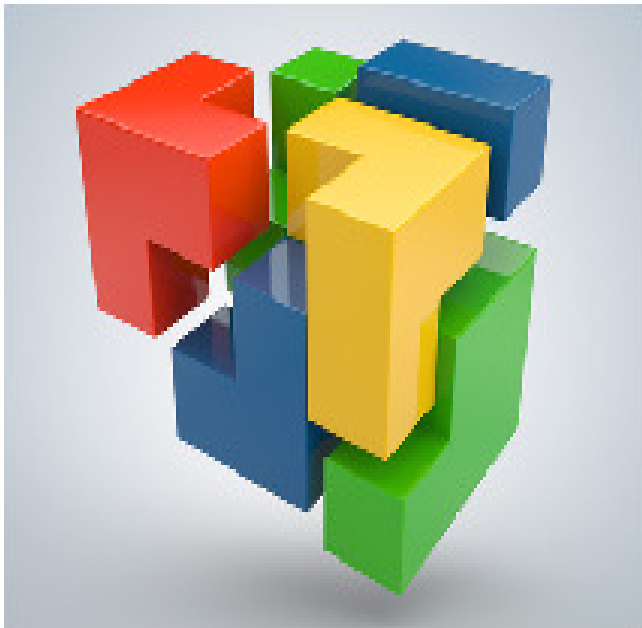
Zukunft Bahn is our map for the future of rail transport in Germany



Zukunft Bahn embraces work packages in all relevant business segments of DB

Zukunft Bahn

Together for better quality, more customers, more success



Overview of work packages

Embracing elements

Punctuality

Traveller information

WLAN@DB

Maintenance-availability spare parts

Maintenance-steering

Maintenance-sites

Segmentspecific elements

DB Cargo

DB Netz

DB Station & Service

DB Regio

DB Fernverkehr


DB Vertrieb

Supporting Cross-Topics

HR

Cultural transformation

Communication

Starting this year, the focus will be on raising punctuality, providing reliable information to passengers and making time spent on trains and at stations more enjoyable 

Zukunft Bahn program

Starting in late 2016

ICE Portal Content

- Free infotainment at stations and on all DB long-distance and regional trains equipped with the technology
- Additional movie library with pay-per-view options

Starting in 2016

Smart elevators and escalators

- Sensors to report problems in real time
- Prompt repairs on weekdays and weekends

By 2017

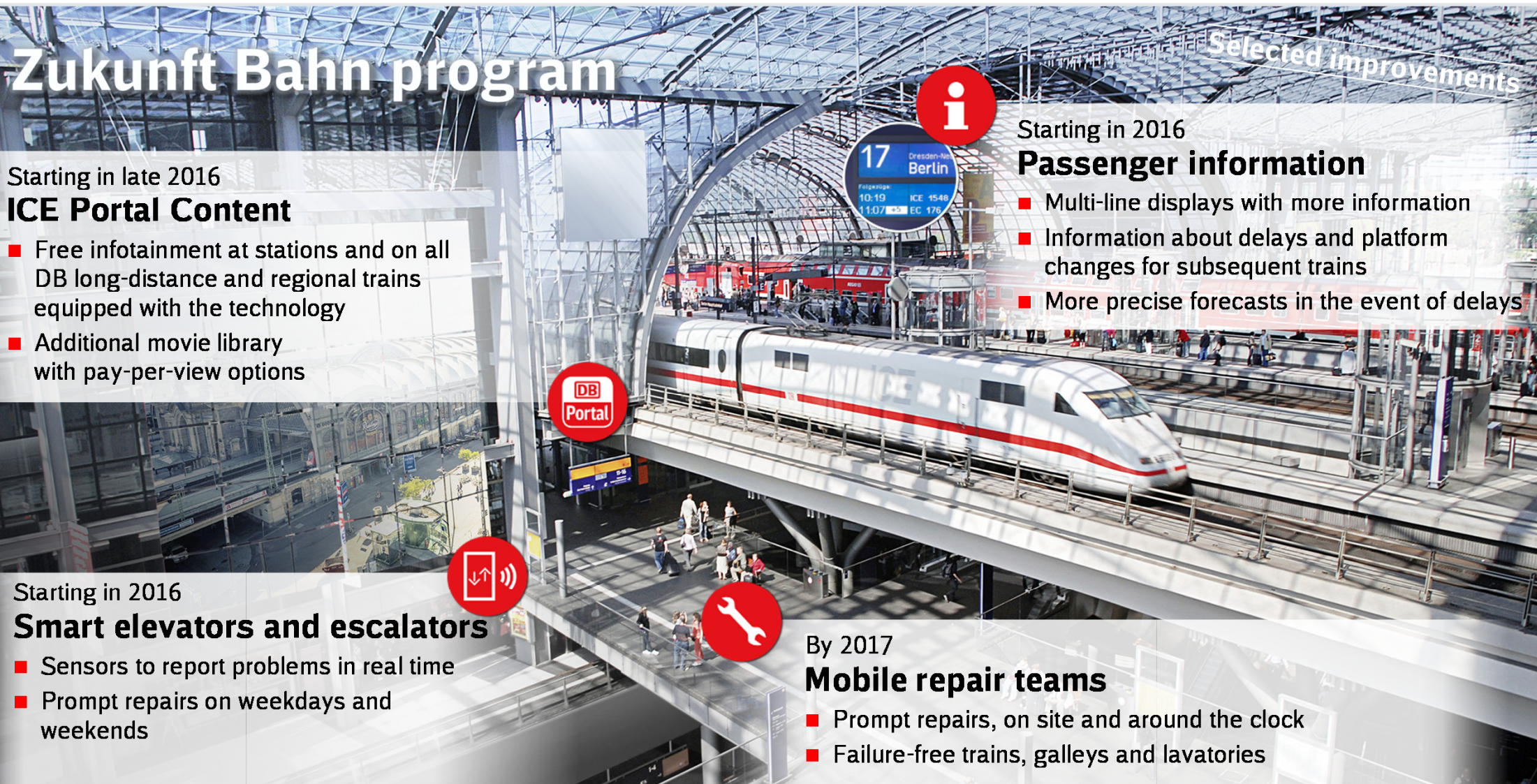
Mobile repair teams

- Prompt repairs, on site and around the clock
- Failure-free trains, galleys and lavatories

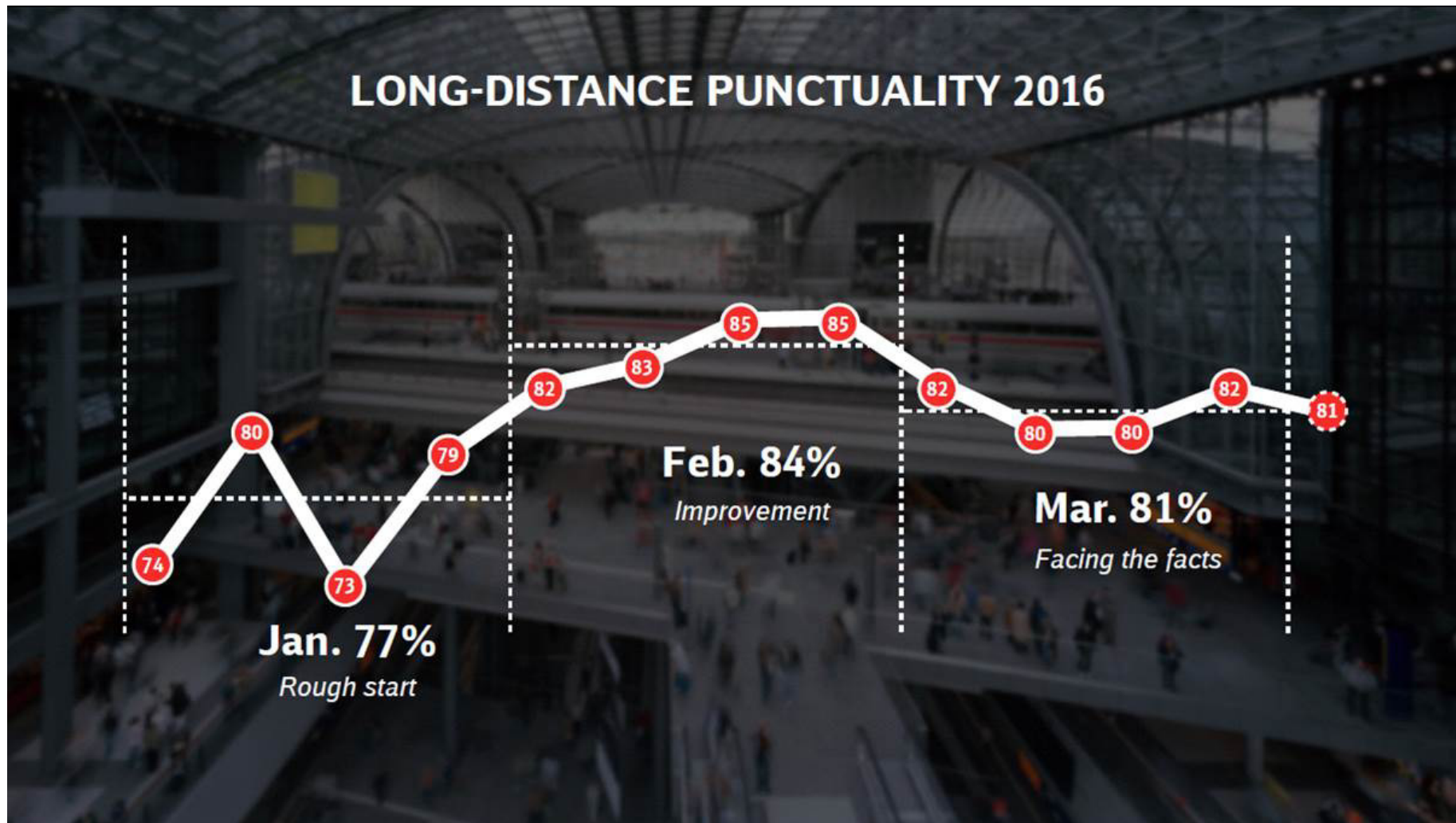
Starting in 2016

Passenger information

- Multi-line displays with more information
- Information about delays and platform changes for subsequent trains
- More precise forecasts in the event of delays



DB is addressing quality problems - e.g. long-distance punctuality



Status Quo

Embracing Measures

Existing Incentives

Today, there already are several incentives to improve efficiency and quality

Major incentive schemes



**Entrepreneurial targets –
DB/ customers/
shareholder**



**Price-cap regulation – DB/
BNetzA**



**Multiannual contract (LuFV)
– IMs/ Fed. Gov't**



**Performance regime –
TOCs/ IMs**



**Penalties in PSO contracts
– TOCs/ franchise bodies**

Challenges

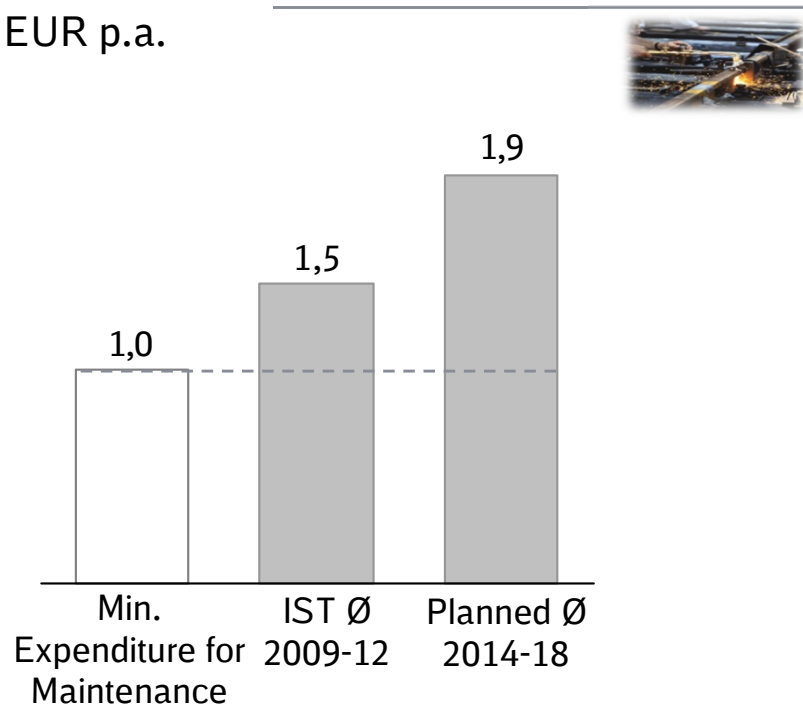
- Incentives to lower costs
- Incentives to improve quality
- Incentives to invest
- Consistency
- Fair distribution of burdens

Increasing building and engineering works causes extra burdens and an open debate in the industry

Rising maintenance and re-investment works deriving from multiannual contract (LuFV II)

Maintenance

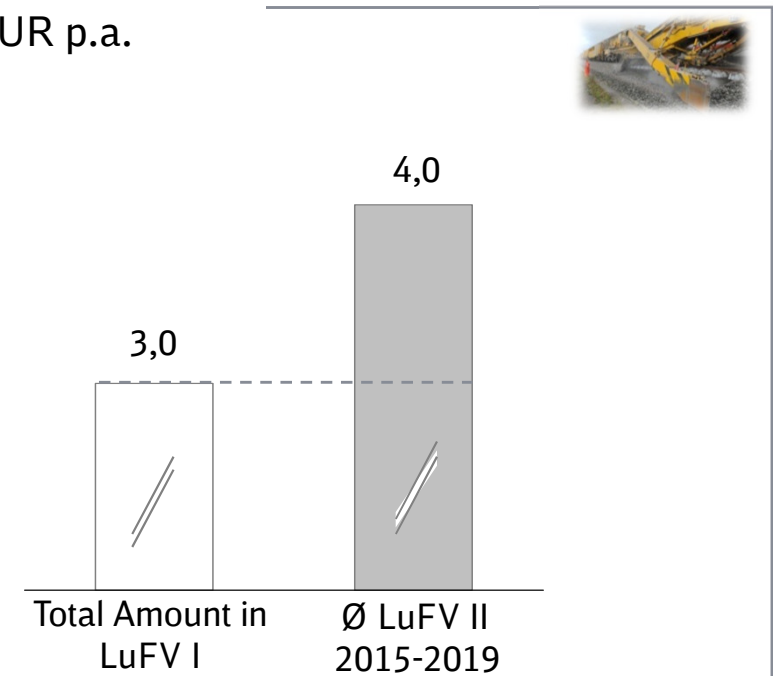
In Billion EUR p.a.



- **Significant Increase in maintenance**
- Direct effects in operational and economic dimension

Replacement

In Billion EUR p.a.



- **Increase in Replacement**
- Due to catching up process

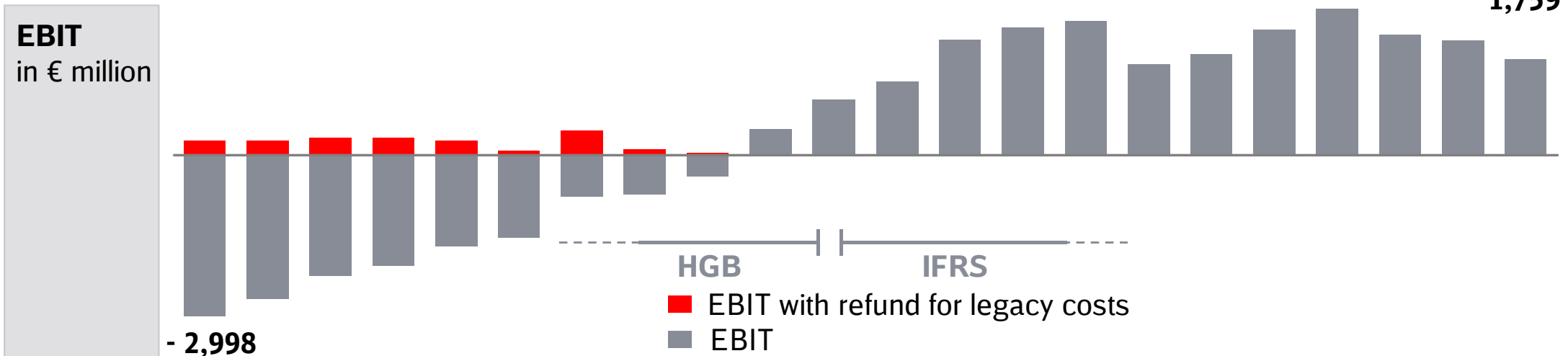
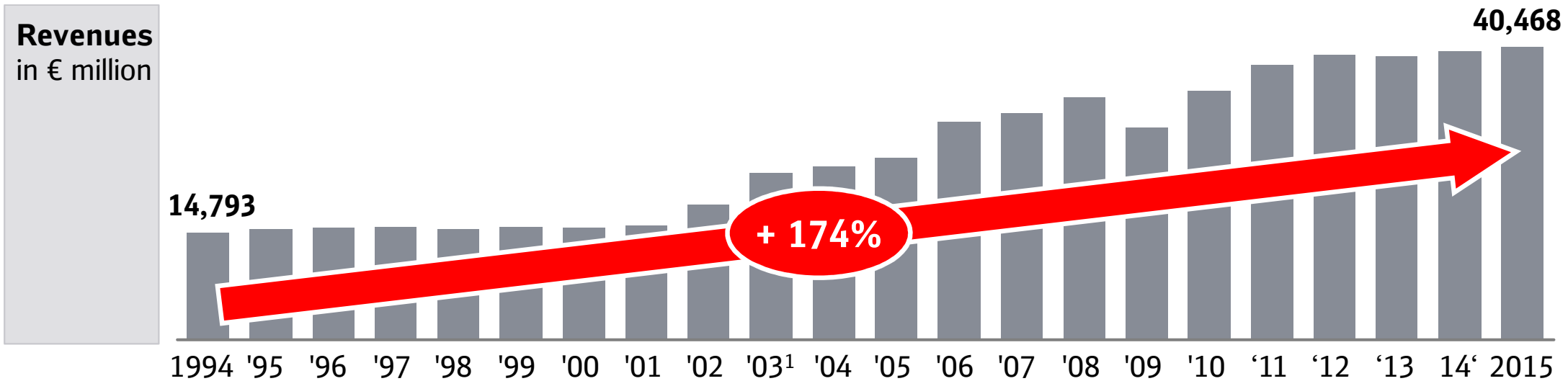
Summary

- Railways are faced with massive challenges – financial performance and quality are closely linked
 - DB is working proactively on „Zukunft Bahn“-measures to reach major quality improvements
 - Entrepreneurial success vis a vis the customer is the major spur
 - External incentive-mechanisms should be consistently designed and in line with entrepreneurial measures – there is no need for extra red tape
 - Increase in maintenance and replacement gives rise to new industry debates
-



Thank you for your Attention!

Since 1994 DB notably increased both its revenues and earnings, thereby easing the Federal Government's budget requirements

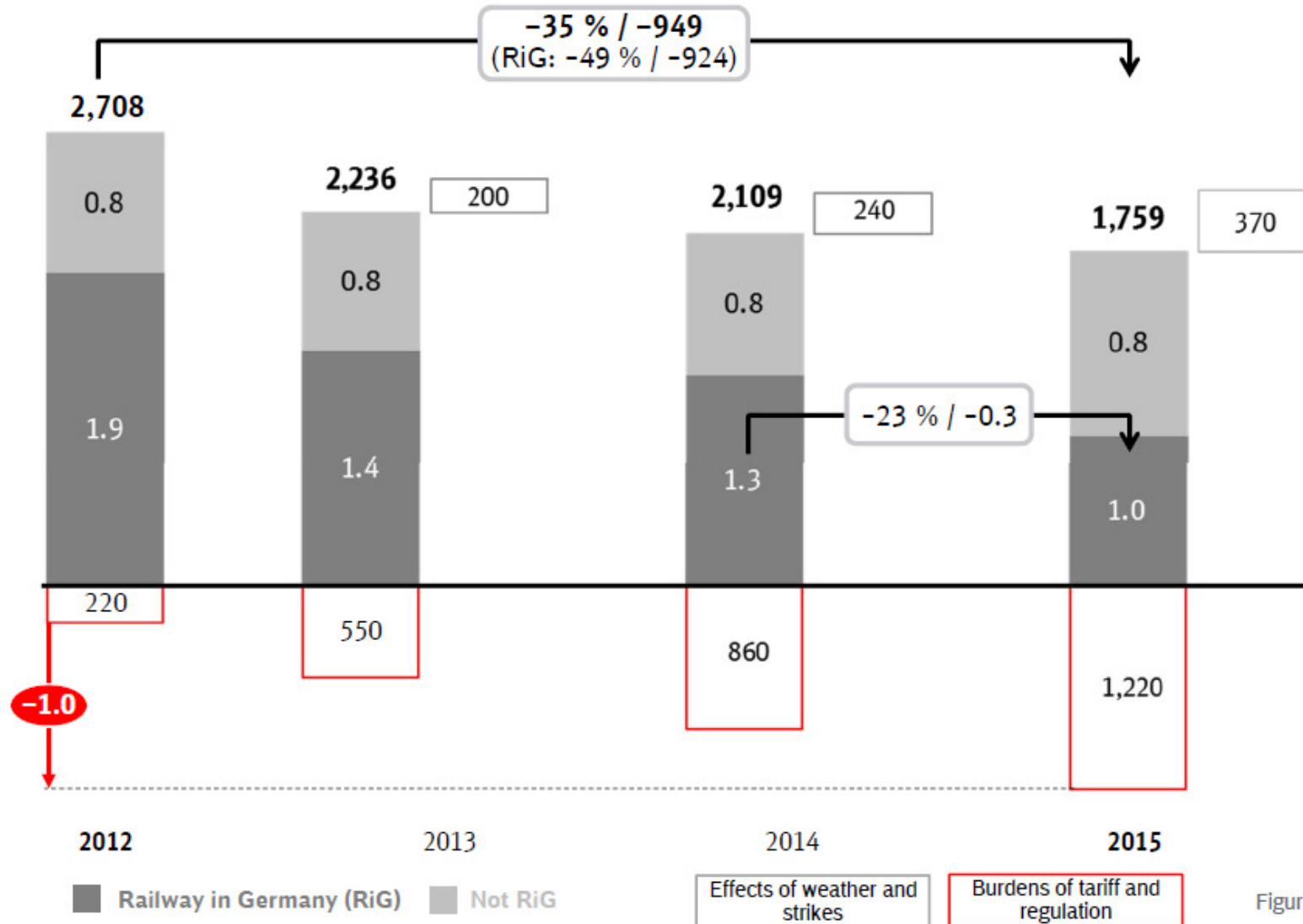


As of December 31, 2015; 1 Revenues adjusted for special items from sale of Stinnes

Railway in Germany: Profits decrease since 2012



EBIT development (€ mn / € bn)



Die Qualitätskennzahlen der LuFV I wurden um ausgewählte QKZ weiterentwickelt

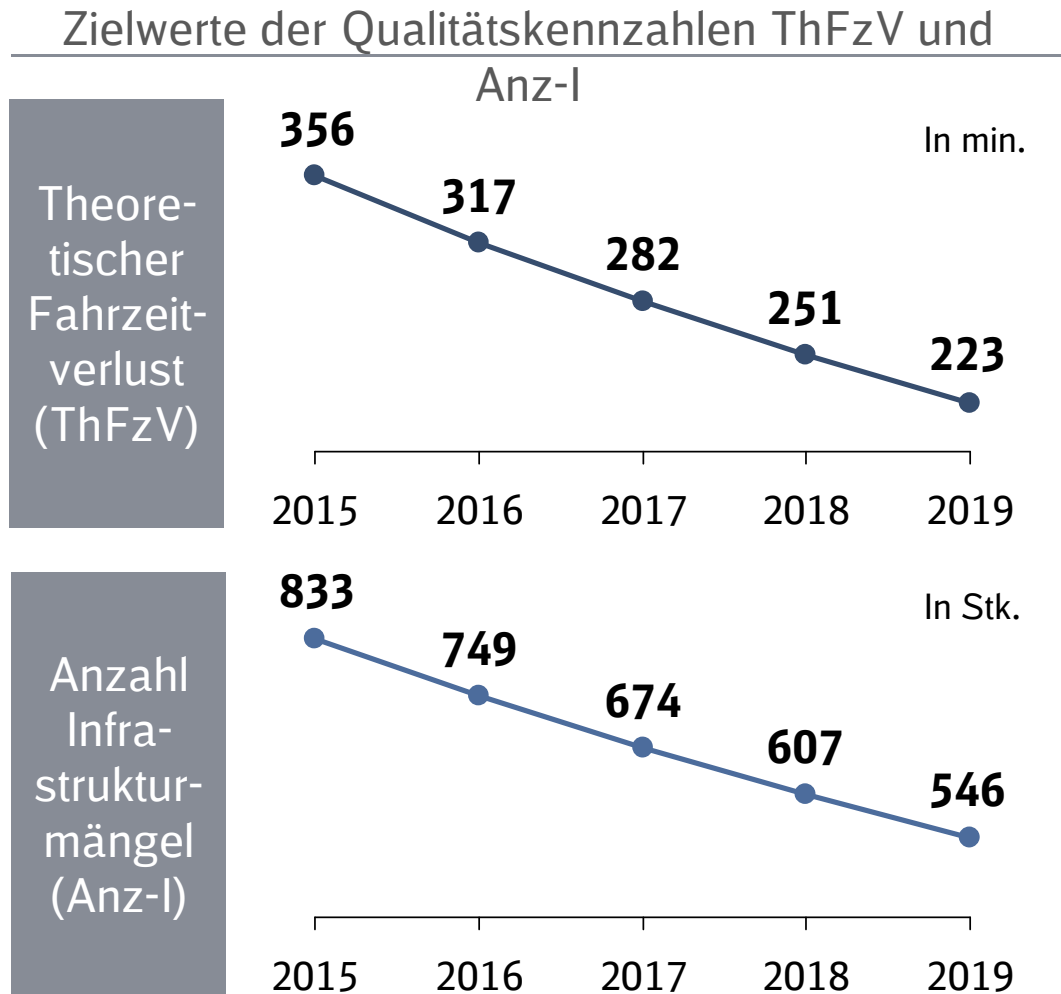
Übersicht der für die LuFV ausgewählten Qualitätskennzahlen (QKZ)

	QKZ	LuFV I	LuFV II	Bemerkung
Alt	Anzahl Infrastrukturmängel (Anz-I)	✓	✓	■ Anpassung Berechnungsbasis und Zielwerte auf 100 Tage
	Theoretischer Fahrzeitverlust (ThFzV)	✓	✓	■ Anpassung Berechnungsbasis und Zielwerte auf 100 Tage
	Funktionalität Bahnsteige RNI	✓	✓	■ Ist-Messung bei Stufenfreiheit und Wetterschutz (WS), Wegfall Warteräume als WS (Haus-Bstg), neue Faktoren
	Bewertung Anlagenqualität RNI	✓	✓	■ Neue Faktoren bei den Reisenden-cluster gem. RNI Verkehrsstationsstruktur, Beleuchtung als neue Objektklasse
	Funktionalität Bahnsteige DB S&S	✓	✓	■ Messung Stufenfreiheit auch an Stationen < 1000 Reisende und Wetterschutz auch an Stationen < 100 Reisende
	Bewertung Anlagenqualität DB S&S	✓	✓	■ Entfall des 15%igen Optik-Anteils; höhere Gewichtung kleiner Stationen
	Versorgungssicherheit Bahnenergie	✓	✓	■ Bleibt unverändert
Neu	Zustand Brücken (ZuB)	✗	✓	■ Neu entwickelte Kennzahl, Anzahl voll- und teilerneuerter Brücken iVm. Verbesserung d. Zustandskategorie
	Sonderpönale Brücken	✗	✓	■ Sonderpönale bei Brückensperrungen die auf mangelhafte Unterhaltung bzw. IH zurückgehen
	Pönalisierung Datenqualität	✗	✓	■ Verbesserung der Datenqualität im Infrastrukturkataster
	Zustand Oberbau	✗	✓	■ Prüfauftrag für LuFV II (Basis für Entwicklung der QKZ sind Messfahrten des Bundes), ggf. Einführung ab 2016

✓ Bestandteil
 ✓ Vsl. Bestandteil ab 2016
 ✗ Kein Bestandteil

In der LuFV II werden vom Bund ambitioniertere Qualitätszielwerte gefordert

Verlauf Qualitätsanforderungen für ausgewählte Kennzahlen über die Jahre 2015 - 2019



Folge

- Reduktion der Zielwerte für die beiden Kennzahlen ThFzV und Anz-I um rund 9% p.a. (rund 35% über den LuFV II-Zeitraum)
- Zusätzlich steigen die Pönalesätze der einzelnen Kennzahlen im LuFV II-Zeitraum über die Jahre stark an
- Fazit:
 - Starke Anspannung durch verschärfte Qualitätsziele und steigende Pönalen
 - Um diese Zielwerte erreichen zu können, plant die DB eine Mengensteigerung der Gewerke um Ø 8,5% p.a.¹
 - Zusätzlich wird das IH-Volumen um Ø 4% p.a. erhöht

¹ Bezieht sich auf die vier maßgebenden Gewerke Brücken, Stellwerke, Gleise und Weichen, die am LuFV-Investitionsvolumen der DB Netz AG 70% ausmachen (IST 2013)
Deutsche Bahn AG | April 2016