



BMF

**FEDERAL MINISTRY
OF FINANCE**

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Strategic Planning and Financing of longterm infrastructure in Austria

place/date:

- **The Austrian Case**
- **Strategic Objectives – Where do you want your infrastructure to be in 20 years?**
- **Calculating the costs – Which factors influence the price of infrastructure?**
- **Ensuring financing – possibilities and impossibilities at financing infrastructure**

- **Define the level of infrastructure to be provided:**
 - **Traffic volume and density (frequency, hubs, etc.)**
 - **Service Quality (call time, timeliness, etc.)**
 - **Coverage of connections**

- **Required Information:**
 - **Forecast of traffic development**
 - **Resources available for operating the system**
 - **Traffic policy on aggregated level (environment, connection between cities, etc.)**

The Austrian Case

- **The main traffic infrastructure is planned, financed and operated by state owned enterprises:**

- **Railways: Federal Railways (ÖBB)**

- Investments in 2010: 1.981 million €
- Workforce: 42.893
- Passengers carried: 447 million per year
- Rail network: 5.702 km
- Tunnels: 277
- Bridges: 6.586



- **Highways: Federal Highway Company**

- Investment in 2010: 811 mio. €
- Workforce: 2.700
- Highway Network: 2.175 km
- Tunnels: 145
- Bridges: 5.020



Strategic Objective in Austria

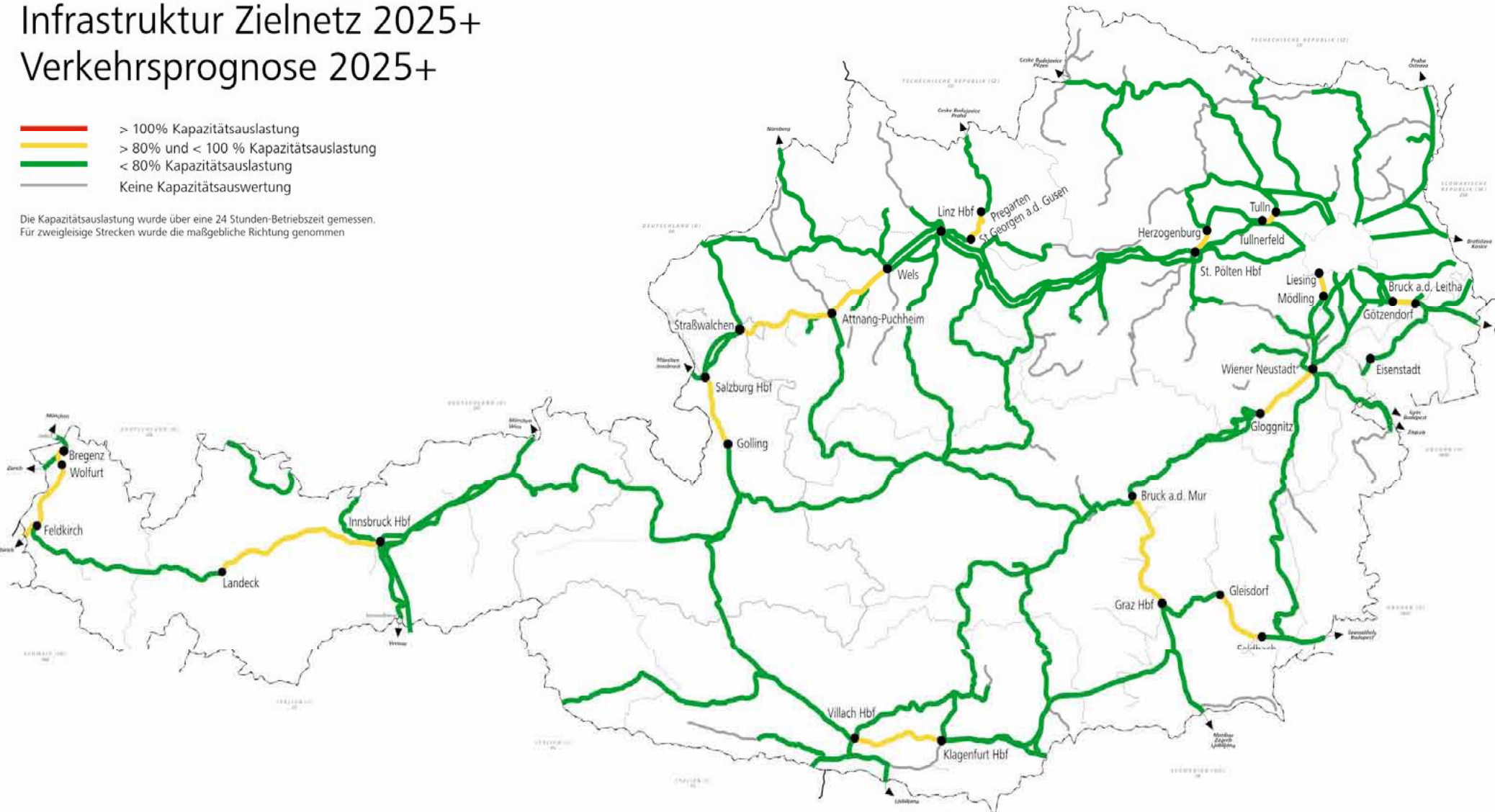
- Objective target for railway and highway infrastructure (2025+) – government decision (onetime)
- Broken down to midterm investment programmes (e.g. 2011-2016, 2012-2017) – rolling government decisions (annual basis)
- Annual investment programm planned and operated by state owned-enterprise

Strategic Objective for the Austrian railway system 2025+, capacity utilisation

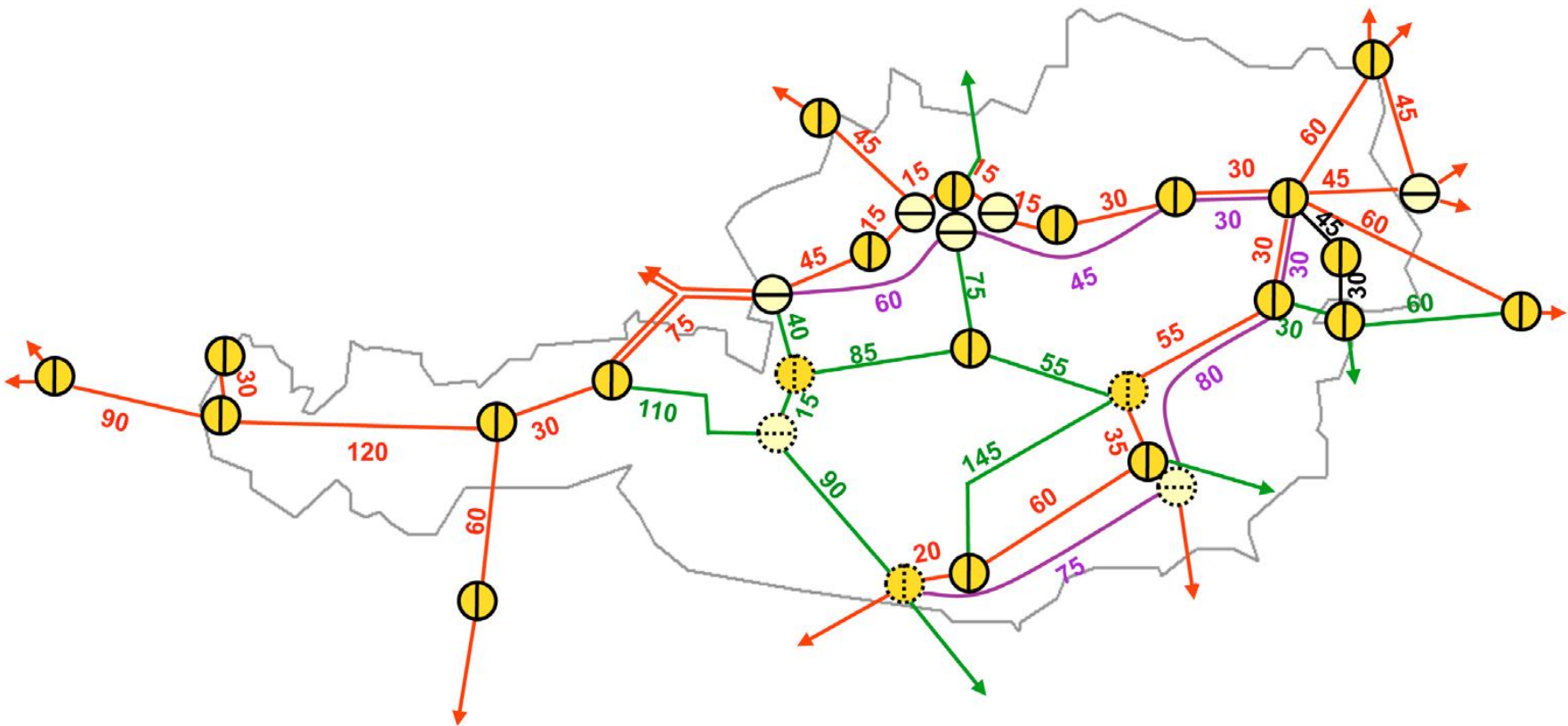
Kapazitätsauslastung
 Infrastruktur Zielnetz 2025+
 Verkehrsprognose 2025+

- > 100% Kapazitätsauslastung
- > 80% und < 100 % Kapazitätsauslastung
- < 80% Kapazitätsauslastung
- Keine Kapazitätsauswertung

Die Kapazitätsauslastung wurde über eine 24 Stunden-Betriebszeit gemessen.
 Für zweigleisige Strecken wurde die maßgebliche Richtung genommen



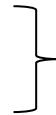
Strategic Objective: Duration between hubs, timeliness, in minutes



Calculating the costs

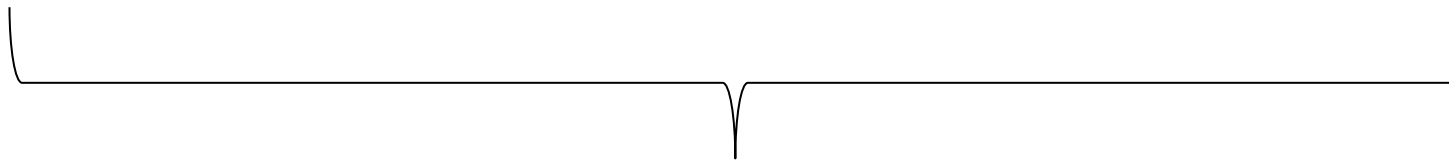
- **Factors influencing the costs of infrastructure:**

- Level of Interest
- Currency risk



Costs of Capital

- Level of Competition on the relevant markets
- Level of traffic safety
- Level of environment safety
- Topography (level of tunnels and bridges necessary)



Costs of Investment

- **Level of Interest:**

- Not really controlable, defined by the international financial markets (OR financed by Worldbank, IMF)
- Interest of longterm financing might come up to 30% of total costs

- **Currency Risk:**

- Financing in national currency
- Currency Risk Swap

- **Level of Competition:**

- Strict tendering rules
- Functional tendering

- **Level of traffic and environment safety**

- Depends on international and national law

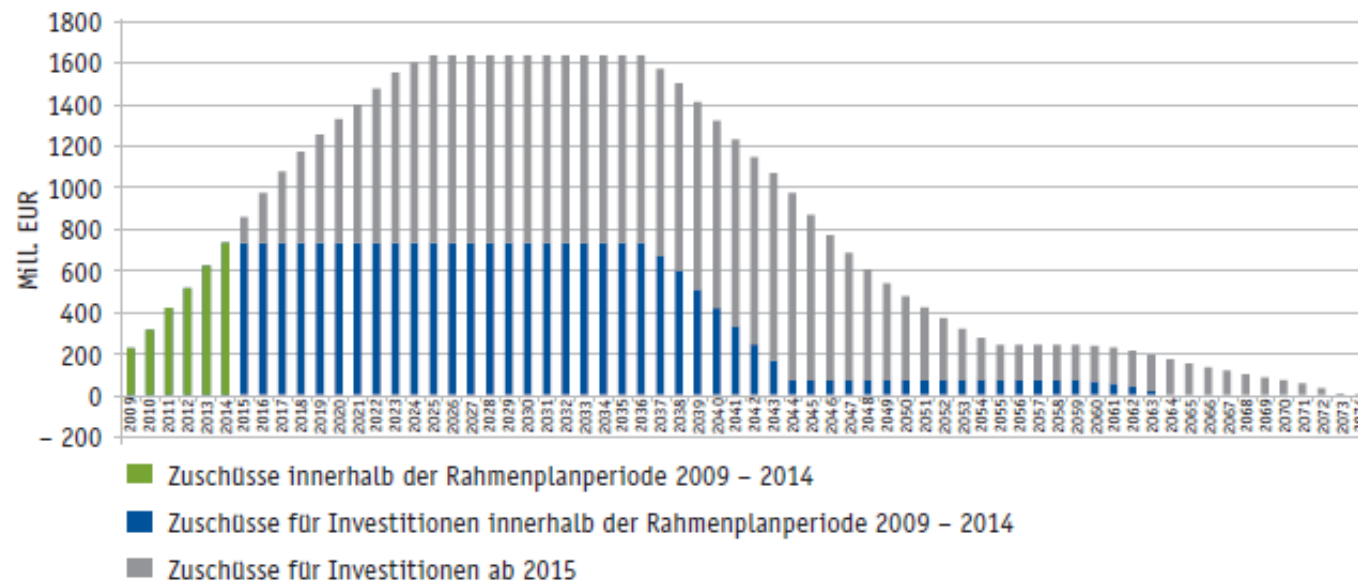
- **Matching Maturities:** Austrian infrastructure investments are financed via bonds issued by state owned enterprises managing infrastructure investments and operation (federal railways, federal highways).
- Using **fixed interest rates** (reducing the risk)
- **Austrian Case:** Duration of bonds between 10 – 30 years, fixed interest (75%) about 3-4% interest

- **Repayment of the issued bonds**
 - **Highway System:** Tolls – no budget connection
 - **Railway System:** about 25% through operating profits of the Federal Railway Company, about 75% through the Federal Budget via 30 year annuities (fictious example below)

In Mio. €	2011	2012	2013	2014	2015	2016
<i>75% of Investment in period</i>	<i>1.000</i>	<i>1.000</i>	<i>1.000</i>	<i>800</i>	<i>800</i>	<i>600</i>
Annuity 2011 (inkl. Interest)	50	50	50	50	50	50
Annuity 2012 (inkl. Interest)		50	50	50	50	50
Annuity 2013 (inkl. Interest)			50	50	50	50
Annuity 2014 (inkl. Interest)				40	40	40
Annuity 2015 (inkl. Interest)					40	40
Annuity 2016 (inkl. Interest)						30
Repayment from Federal Budget	50	100	150	190	230	260

- **Annuity model leads to longterm financial liabilities**

Abbildung 14: Zuschüsse des Bundes ab 2009 für Infrastrukturinvestitionen



- Even with long maturities the financing of infrastructure investments covers several political (election) periods.
- **Danger of inconsistency:** infrastructure objectives would have to be more long term oriented as political decisions usually are.
- Due to these mismatched timelines and the annuity model, political commitment is necessary over several periods.

- Strategic Planning of infrastructure investment is highly developed.
- Cost Evaluation is sound (no big surprises)
- Financing is ensured **BUT** Political commitment is necessary over several election periods (difficult)