



What 5G can do for rail

Dr. Karsten Kemeter, CTO Mobile Communication at Deutsche Bahn

Session on “What can 5G bring to each mode of transport?” @Digital Transport Days 2019

OPPORTUNITY FOR RAIL TO FOSTER INNOVATION AND SPEED UP 5G DEPLOYMENT



EUROPEAN UNION IS SUPPORTING RAILWAYS AS A KEY FUTURE TRANSPORT MODE

Intention of EU commission and framework

- Connecting Europe Facilities 2 (CEF2 Digital) 2021 - 2027
- Funding app. 3 Billion EUR; Rail up to 1 Billion EUR
- Objectives
 - 5G deployment
 - Market defect areas, e.g. X-border rail corridors



Importance of railways for 5G

- 5G as enabler for connectivity
- Railway transportation addresses most of the EU funding targets



Climate friendly



High passenger through-put



Economy promoter

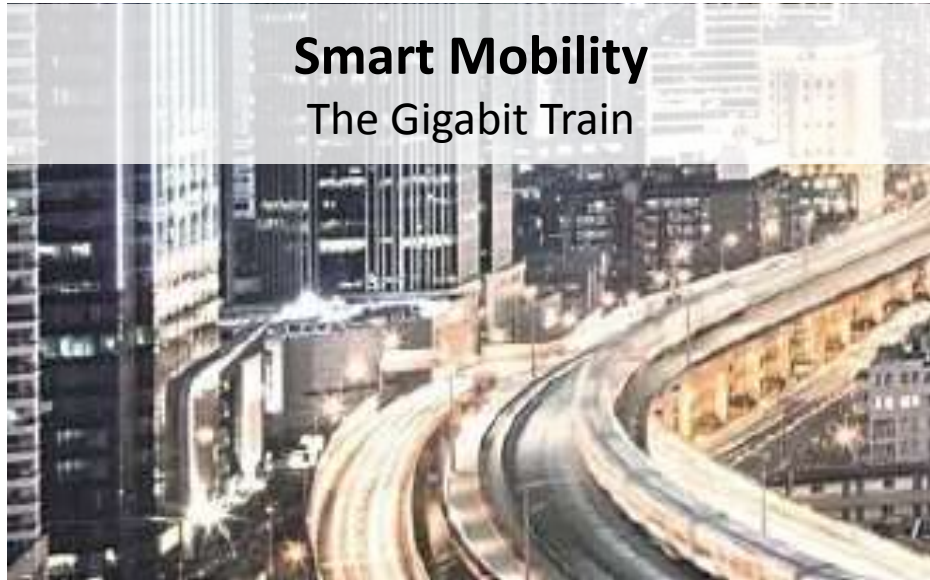
Opportunities for railways

- Define strategy and focus of an EU-wide interoperable 5G deployment for rail
- Opportunities for 5G cross-border corridor deployments and pre-research projects
- Establish EU wide industry co-operations
- Advantage of vast EU funding (e.g. 60%)

5G DEPLOYMENT WILL IMPROVE PASSENGER EXPERIENCE AND RAIL OPERATIONS



TWO KEY REQUIREMENT SETS DEFINED



Objectives

Gigabit Train –
Ensuring passenger connectivity like @Home or @Work across borders

5G rail operations critical infrastructure cross-border including network sharing opportunities

