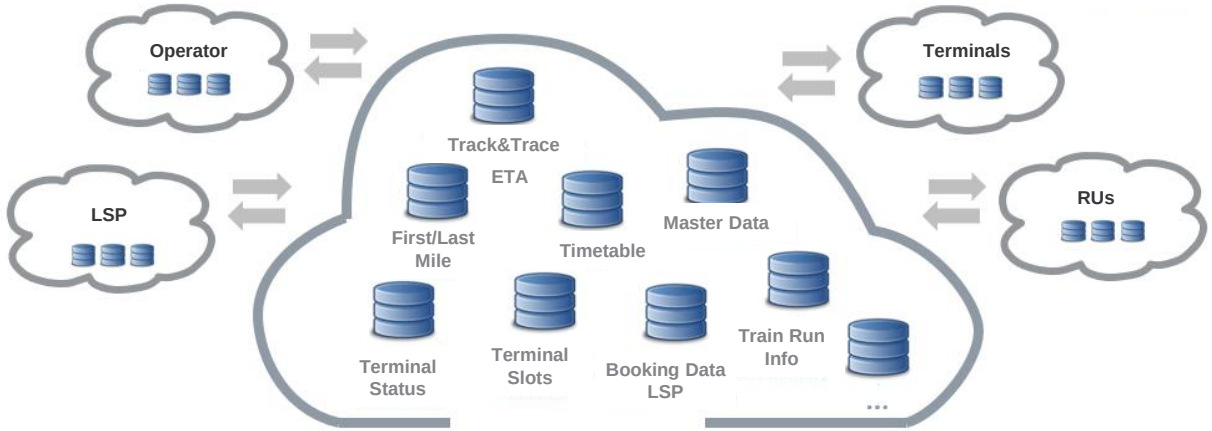
Digitization of intermodal supply chain (KV4.0)

Bundesministerium
für Verkehr und
digitale Infrastruktur

mFUND
Das Startkapital für die Mobilität 4.0

Objective

- The aim KV4.0 Project is to build an **integrated data hub in order to increase transparency across the entire intermodal transport chain**, including: Logistics Service Provider, Intermodal Operator, Terminal Operator, Rail-Road Terminal, Rail-Road-Inland Waterway Terminal, Rail-Maritime Port Terminal, Railway Undertaking
- All participating partners will provide the **relevant and transport-related data**, starting from the first (electronic) booking with the intermodal operator, to the train run information until the collection of the loading unit at the arrival terminal



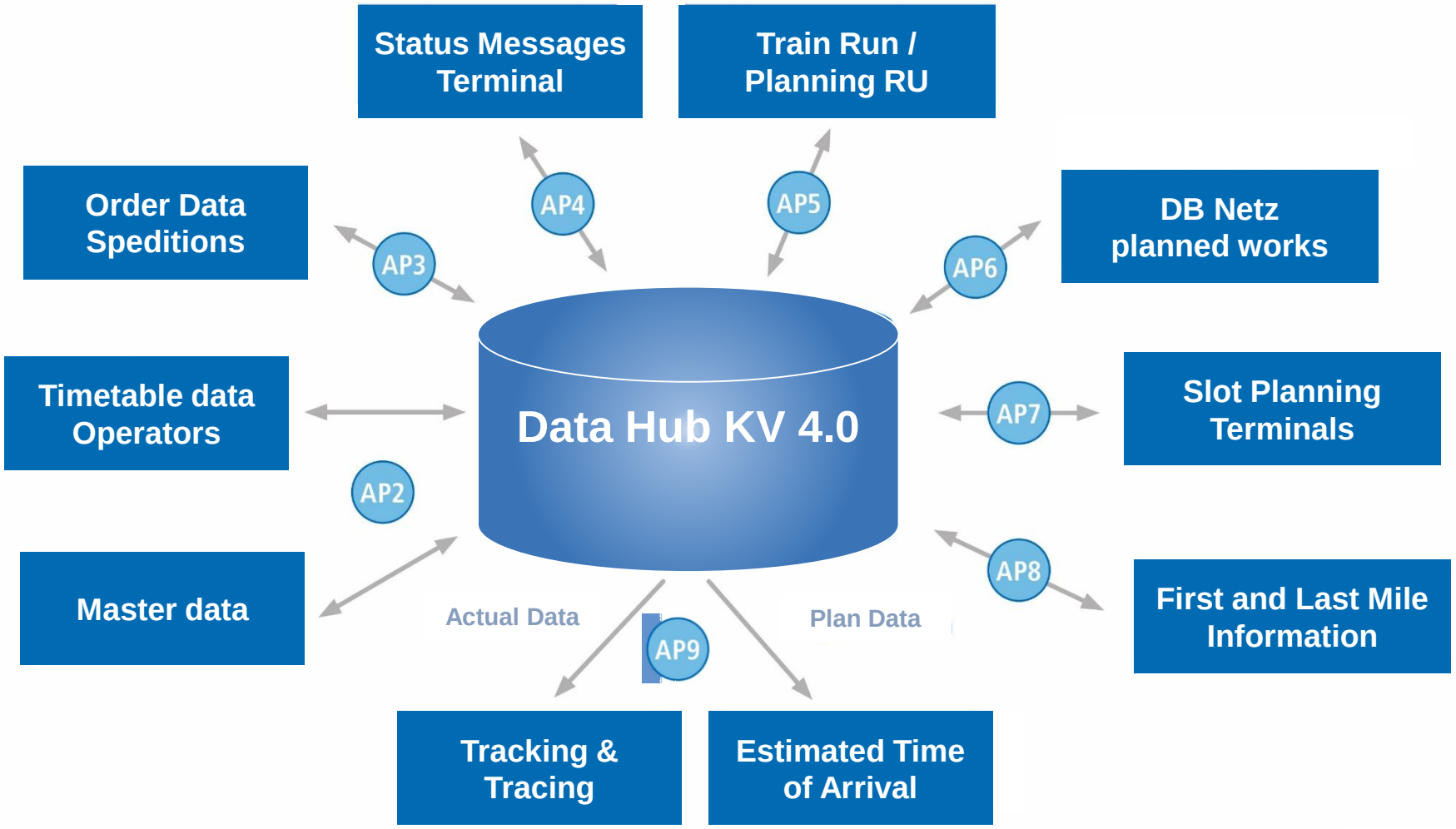
Project partners

Logistics Service Providers	Hoyer GmbH, Hamburg	Paneuropa GmbH, Vechta
	Bertschi AG, Dürrenäsch	
Intermodal Operators	Kombiverkehr KG, Frankfurt	Hupac Intermodal SA, Chiasso
Railway Undertakings	DB Cargo AG, Mainz	SBB Cargo Deutschland GmbH, Duisburg
	Lokomotion Gesellschaft für Schienentraktion mbH, München	
Intermodal Terminals	KTL Kombi-Terminal Ludwigshafen – STARK im Kombinierten Verkehr	Hupac Transport GmbH, Singen
	Hupac SpA, Busto	

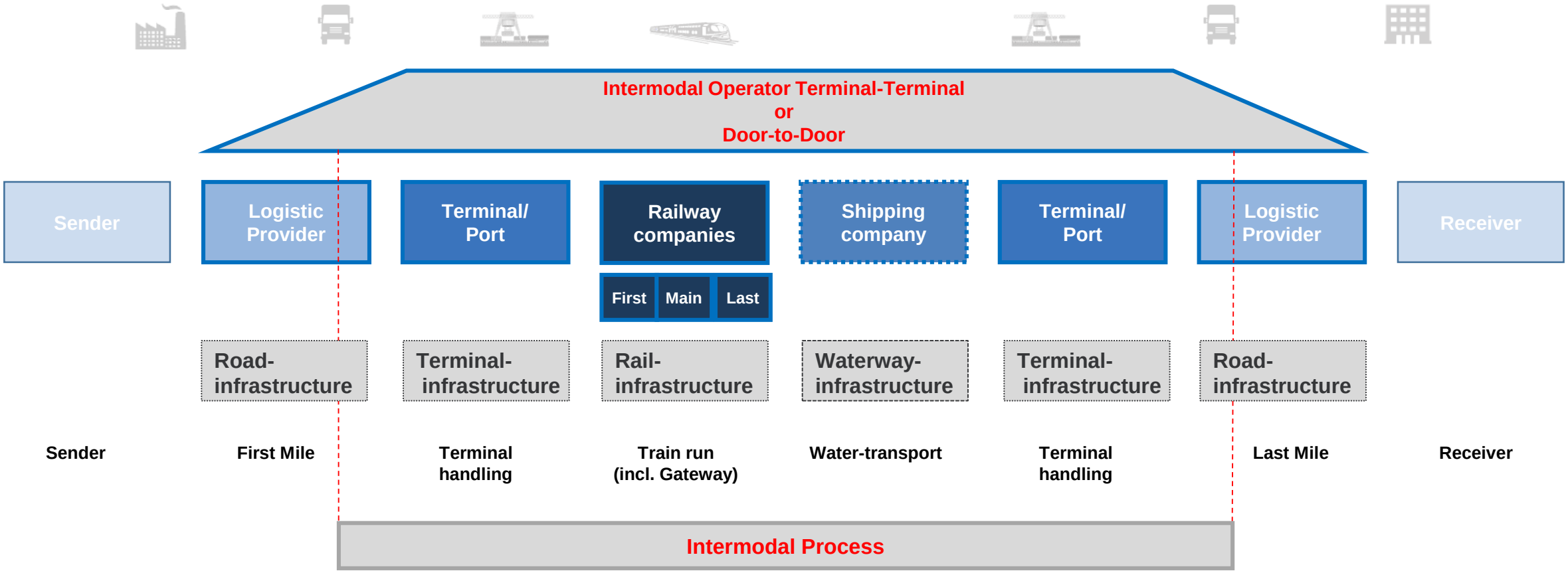
Key data "Digitalization of intermodal supply chains"

- Duration: 3.5 years (01.09.2017 – 31.03.2021)
- Planned budget: 5.87 million EURO Total cost, requested funding 2.29 million EURO
- Project partners: 11 companies from Germany, Italy and Switzerland
- Project objectives: use, exchange and processing of existing electronic data (train run information, order information, status information terminal/truck)
- Work packages: Timetable, Booking, Master Data, Train Run Data, Terminal Slot Planning, First/Last Mile, ETA (Estimated Time or Arrival) / ETP (Estimated Time of Pickup) forecasts

Overall concept

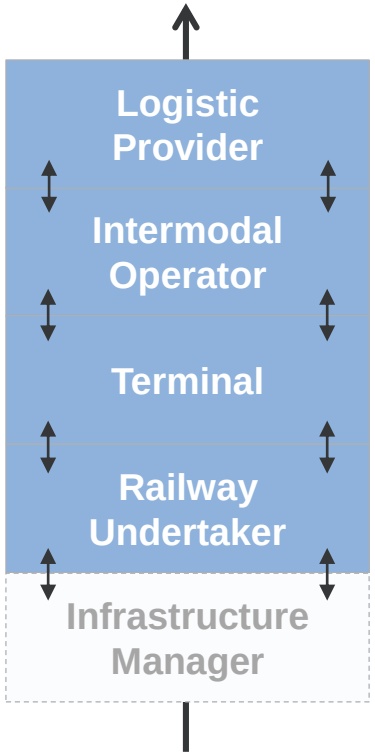


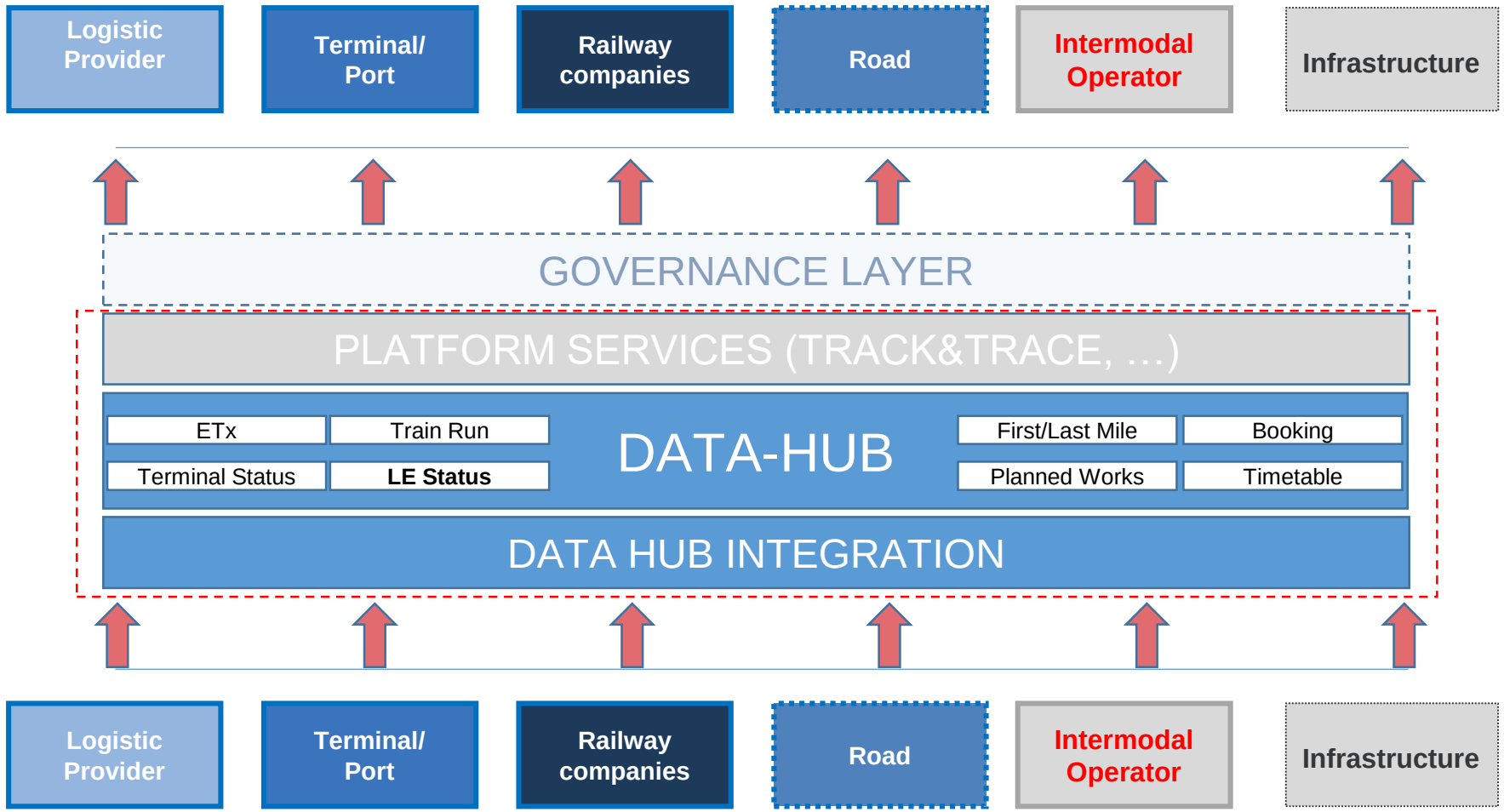
Standard intermodal process



Data hub roles

- Each level of the chain provide and receive real time services and data
  - Forwarder = Logistics Service Provider – LSP
  - Intermodal Operator - IO
  - Terminal Operator - TO
    - Rail-Road Terminal
    - Rail-Road-Inland Waterway Terminal
    - Rail-Maritime Port Terminal
  - Railway Undertaking – RU
  - Infrastructure Manager – IM



- "Network effect" very important to simplify the business processes of each partner and create a Win-Win situation

Overall Data Hub – components & architecture