FERRMED

Promotion du Grand Axe Ferroviaire de marchandises Scandinavie-Rhin-Rhône-Méditerranée Occidentale A.S.B.L

wyg Consortium

Technical, Socio-economic and Supply/Demand study regarding the transport of the FERRMED Great Rail Network (Scandinavia-Rhine-Rhône-Western Mediterranean)

Introduction and Overview

Presented by Gordon Lamond & Yanni Papapanagiotou - WYG

The WYG Consortium

Consortium

Consortium Leader

WYG International part of the WYG group

creative minds safe hands

White Young Green Hellas

Partners and subcontractors

SENER

INEXIA

Dorsch Gruppe DC Transport Infrastructure

CENIT CENTRE D'INNOVACIÓ DEL TRANSPORT

geste engineering

progtrans

STRATEC

WSP

RINA INDUSTRY

Strategic Development & Consulting NTU

significance quantitative research

Study Area

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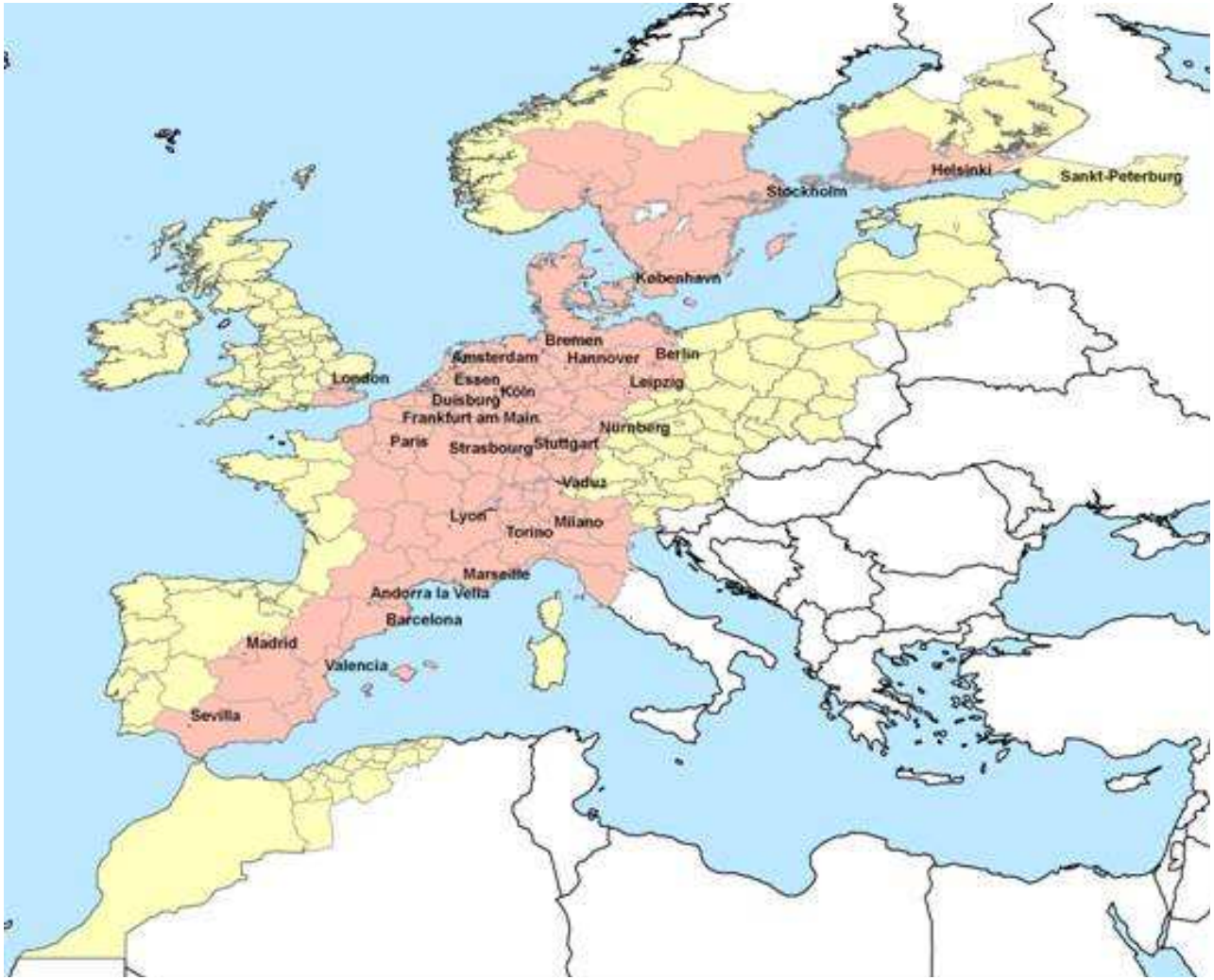
- Belgium
- Denmark
- Finland
- France
- Germany
- Italy
- Luxembourg
- Netherlands
- Spain
- Sweden
- United Kingdom
- Norway
- Switzerland



FERRMED Great Axis Rail Network definition

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- FERRMED Great Axis Rail Network (2007)

FERRMED Great Axis Rail Network definition

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- FERRMED Great Axis Rail Network (2009)

The FERRMED "Global" Study

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- Strategic Transport Planning pre-feasibility project, including:
  - Railway infrastructure (new or upgrading of existing)
  - Necessary investment (including Freight Terminals)
  - Operational issues
  - Legal and administrative framework
  - Environmental concerns
  - Economic profitability
  - Financing options
  - Market opinion (and Market Analysis)

- Four (4) main modules:
  - Supply/ Demand analysis
  - Technical analysis
  - Cost-Benefit analysis
  - Legal and administrative issues

Interactions between modules

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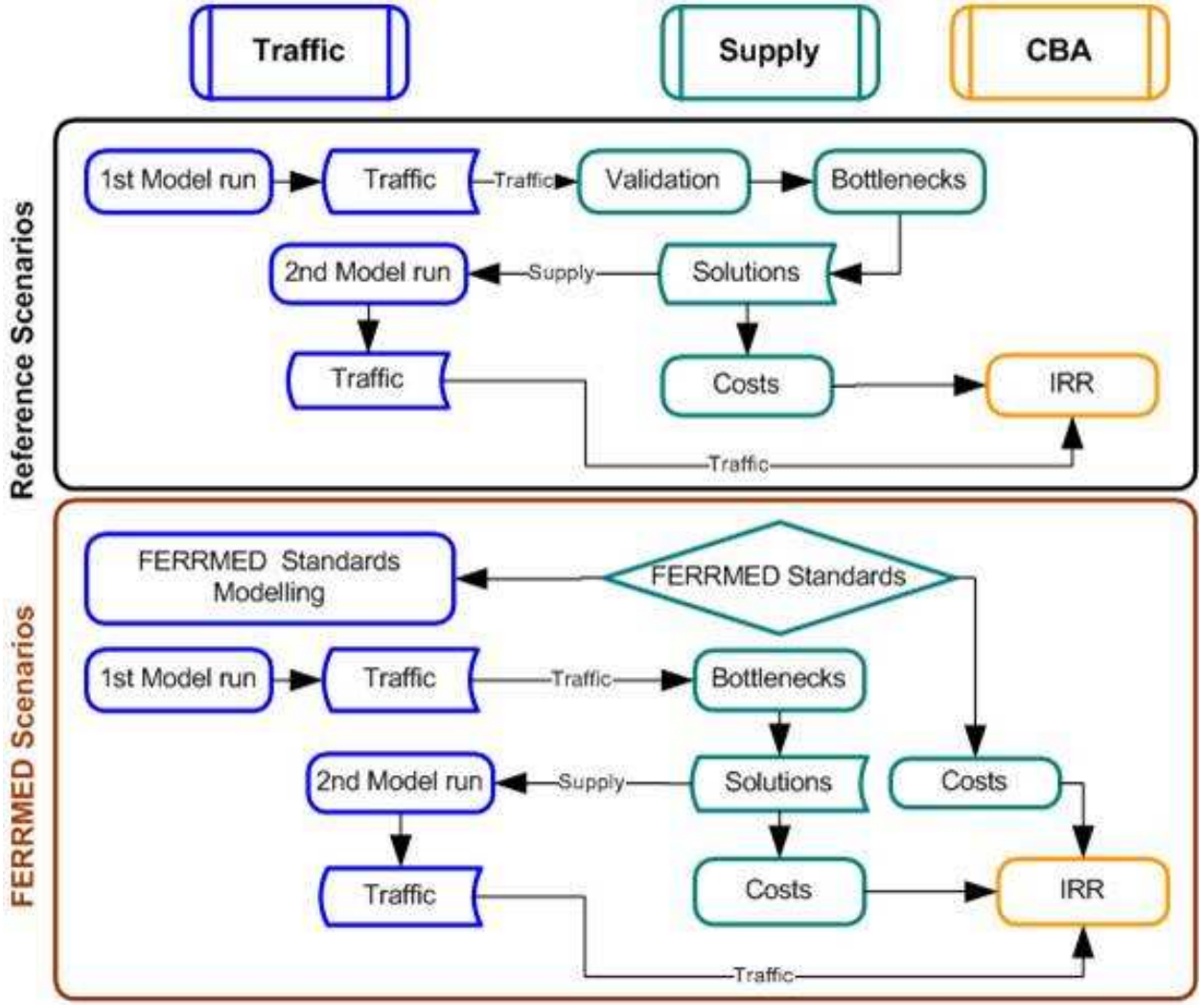

Medium FERRMED Scenario

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- The **Medium FERRMED Scenario** is defined as the scenario which involves
  - all the basic infrastructural investments as described and implemented in the reference scenario,
  - infrastructural and operational measures in order to implement "FERRMED standards" on a medium level,
  - the implementation and maintenance of infrastructure investments in order to solve bottlenecks (determined by the Supply/Demand and the Technical Analysis) in the Medium FERRMED network.

Full FERRMED Scenario

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- The **Full FERRMED Scenario** is defined as the scenario which involves
  - all the basic infrastructural investments as described and implemented in the reference scenario,
  - infrastructural and operational measures in order to implement "FERRMED standards" on a high level,
  - the implementation and maintenance of infrastructure investments in order to solve bottlenecks (determined by the Supply/Demand and the Technical Analysis) in the FULL FERRMED network.

Full+ FERRMED Scenario

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- The **Full+ FERRMED Scenario** is defined as the scenario which involves
  - all the basic infrastructural investments as described and implemented in the reference scenario,
  - infrastructural and operational measures in order to implement all "FERRMED standards",
  - the implementation and maintenance of infrastructure investments in order to solve bottlenecks (determined by the Supply/Demand and the Technical Analysis) in the Full+ FERRMED network.

Additional scenarios

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- **2025 Ports Scenario 65%-35%**

  Modal share of Southern ports increased from 27% to 35%.

  The share Northern ports' share decreased from 73% to 65%.

- **2025 "Objective Achieved": RAIL 35% (>500Km)**

  Rail freight share reaches 35% of total inland long distance freight (greater than 500 km) transport.

Summary of Modelling Scenarios Definition (1/3)

Consortium

Year	Name	Demand	Transport Costs	Supply	FERRMED Standards
2005	1. Base year	2005 Trans-Tools + Calculated	Reference 2005	Existing 2005	-
2020	2. Reference 1st run	Freight: 2020 calculated including inland and Maritime. Passengers: 2020 Trans-Tools	Reference 2020	Planned 2020	-
2020	3. Reference 2nd run Bottlenecks solution			Planned 2020 + Infrastructural Solutions	-
2020	4. MEDIUM FERRMED 1st run		Reference 2020 + MEDIUM	Planned 2020 +MEDIUM	MEDIUM
2020	5. MEDIUM FERRMED 2nd run Bottlenecks solution			Planned 2020 +MEDIUM+ Infrastructural Solutions	MEDIUM

Summary of Modelling Scenarios Definition (2/3)

Consortium

Year	Name	Demand	Transport Costs	Supply	FERRMED Standards
2025	6. Reference 1st run	Freight: 2025 calculated including inland and Maritime. Passengers: 2025 Trans-Tools	Reference 2025	Planned 2025	-
2025	7. Reference 2nd run Bottlenecks solution			Planned 2025 + Infrastructural Solutions	-
2025	8. MEDIUM FERRMED 1st run		Reference 2025 + MEDIUM	Planned 2025 + MEDIUM	MEDIUM
2025	9. MEDIUM FERRMED 2nd run Bottlenecks solution			Planned 2025 + MEDIUM + Infrastructural Solutions	MEDIUM
2025	10. FULL FERRMED 1st run		Reference 2025 + FULL	Planned 2025 + FULL	FULL
2025	11. FULL FERRMED 2nd run - Bottlenecks solution			Planned 2025 + FULL + Infrastructural Solutions	FULL

Summary of Modelling Scenarios Definition (3/3)

Consortium

Year	Name	Demand	Transport Costs	Supply	FERRMED Standards
2025	12. Southern ports enhancement 27% to 35%	Sea share North-South forced	Reference 2025 + FULL	Planned 2025 + FULL	FULL
2025	13. FERRMED Objective achieved	Long Distance (>500Km) Rail share forced 35%	Reference 2025 + FULL	Planned 2025 + FULL	FULL
2025	14. FERRMED FULL+	2025 Forecasts	Reference 2025 + FULL	Planned 2025 & FULL+	FULL+