

AIM

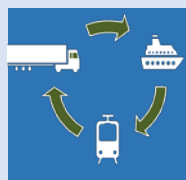
Evaluate the feasibility to run an Autopista Ferroviaria (AF) with Iberian track gauge from a technical and operational point of view in order to analyse an optimal business model



KEY WORD

AF: combined transport in which semitrailers are transported by train in a shuttle service

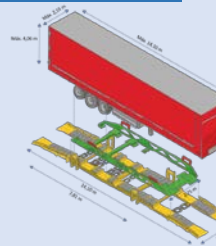
OPERATIONAL FEASIBILITY



Reachstaker operating



Cargobeamer System



Nikrasa 2.0 Platform System



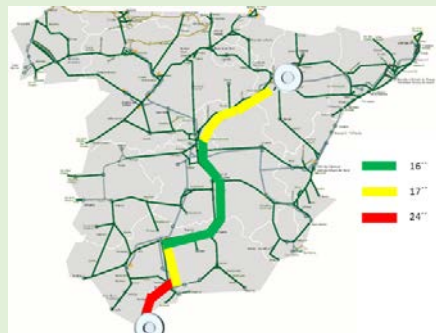
Modhalar System

Locomotive Gross Tons Towed	16"	17"	24"
253	1.180	1.130	860
253 DT* (special draw hook)	2.130	2.040	1.550
EURO 4000 (335) Diesel	1.490	1.410	1.060
EURO 4000 (335) Diesel DT	2.680	2.540	1.910

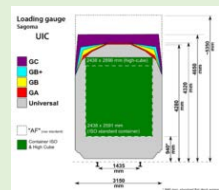
Number of Vagons	Composition (mix ST + container)	Length (m)	Weight (Tm)
12	1 tractor + 8 wagons SR + 4 wagons UTI	429,3	1229,8
13	1 tractor + 8 wagons SR + 4 wagons UTI	467,62	1447,2
	1 tractor + 8 wagons SR + 4 wagons UTI	490,64	1570,9
14	1 tractor + 8 wagons SR + 4 wagons UTI	501,82	1550,06
	1 tractor + 8 wagons SR + 4 wagons UTI	525,84	1673,76
15	1 tractor + 8 wagons SR + 4 wagons UTI	536,02	1652,92
	1 tractor + 8 wagons SR + 4 wagons UTI	550,8	1703,22

Length and train compositions

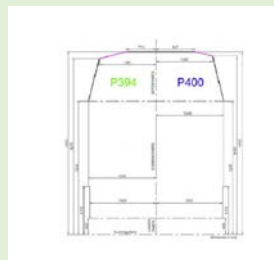
TECHNICAL FEASIBILITY



Maximum Slopes



Clearance gauge



Current Terminals



Minimum Siding Length (550 m.)

Technical Characteristics and its Implications

Features	Limiting Factor	Operational Influence	Economic Influence
Gauge	No	Yes	Yes
Platforms	No	No	No
Catenary	No	No	No
maximum Slope	No	Yes	Yes
minimum Axle-load	No	No	Yes
Siding length	No	Yes	Yes

Operational Characteristics and its Implications

Features	Limiting Factor	Operational Influence	Economical Influence
Special Wagons	No	Yes	Yes
Operational System	No	No	No
Special semi-trailer	No	No	No
Semi-trailer height	Could be	Yes	Yes
Intermodal Terminals Adaptation	Yes	Yes	Yes

Future Research

Evaluation of determining technical and operational factors in order to validate and optimize the final solution