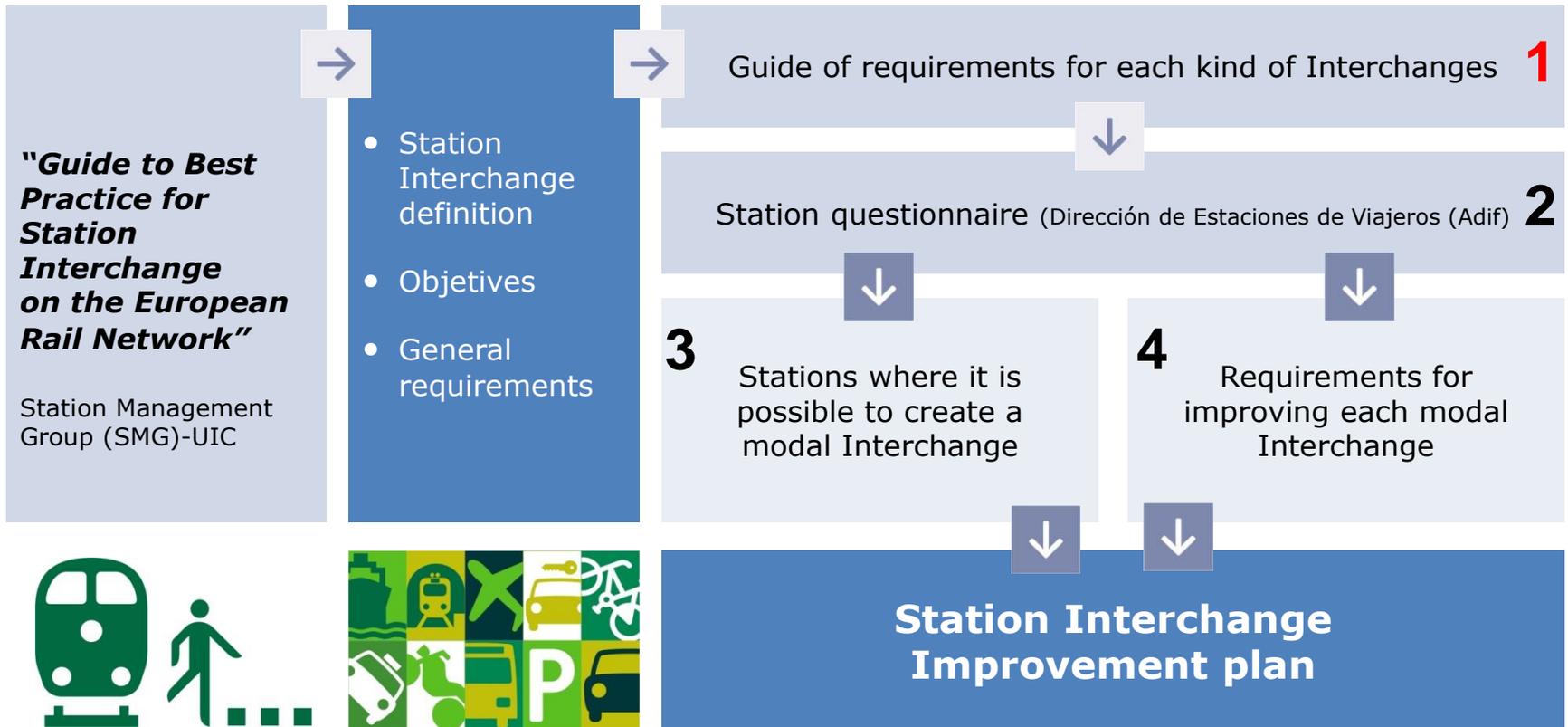


Station Interchange Improvements Plan Description of the proposals

Armando BRIGOS

Director Logistic Services and Passenger
Stations Region North-East. ADIF

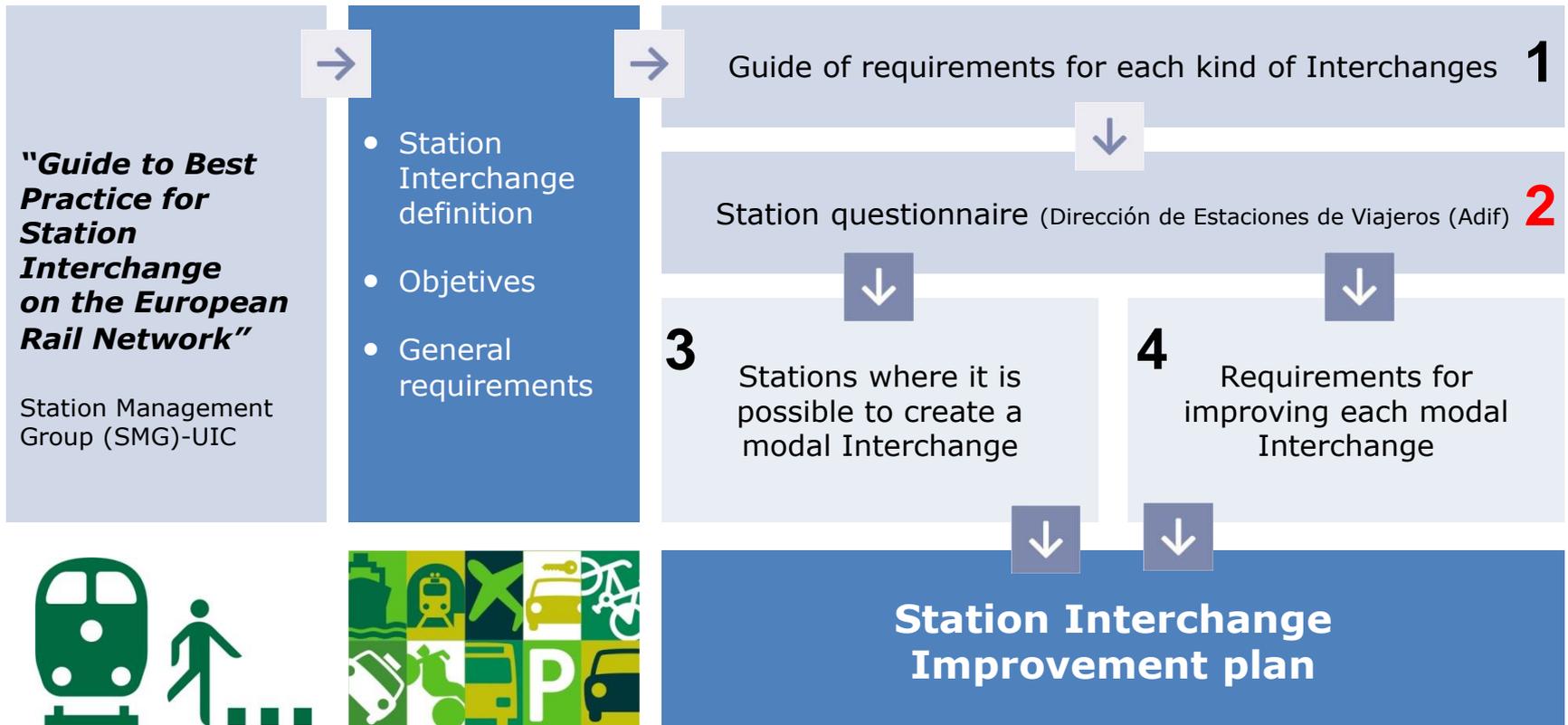
Diagram



Guide of requirements

			
  			
Interchange Train-Parking <input type="checkbox"/> Essential <input type="checkbox"/> Desirable 			
Structurals	Facilities	Basic services	Comercial services
Short walking, covered, provide shelter and well lit routes, with no distances further than 400 mts walking between each part.	Good directional signage in access to park.	Security	ATM machines. Cash and card payment available.
Acording current accesibility regulations. PMR compliant access.	Signage including the number of spaces available.	Cleaning	Fares and hours of opening noticeboard.
Car and motorbike comercial spaces available.	Multi mode interchange information available at key points.	Maintenance	Priced attractively to incentive additional usage.
	In multi levels case, fast and large elevators with capacity for several people and baggage trolleys.		Vehicle repair shop. (Minor repairs and maintenances)
	Well lit, including access.		Car wash integrated.
	Distress call points in key locations. (SOS)		Vending machines.
	Multi mode timetable information available.		
	Specific signage and location for motorbikes.		
	Enough and suitable locations for baggage trolley parks.		

Diagram



Current situation

Structural requirements

Basic - Commercial Services

Facilities

Station questionnaire

Date:

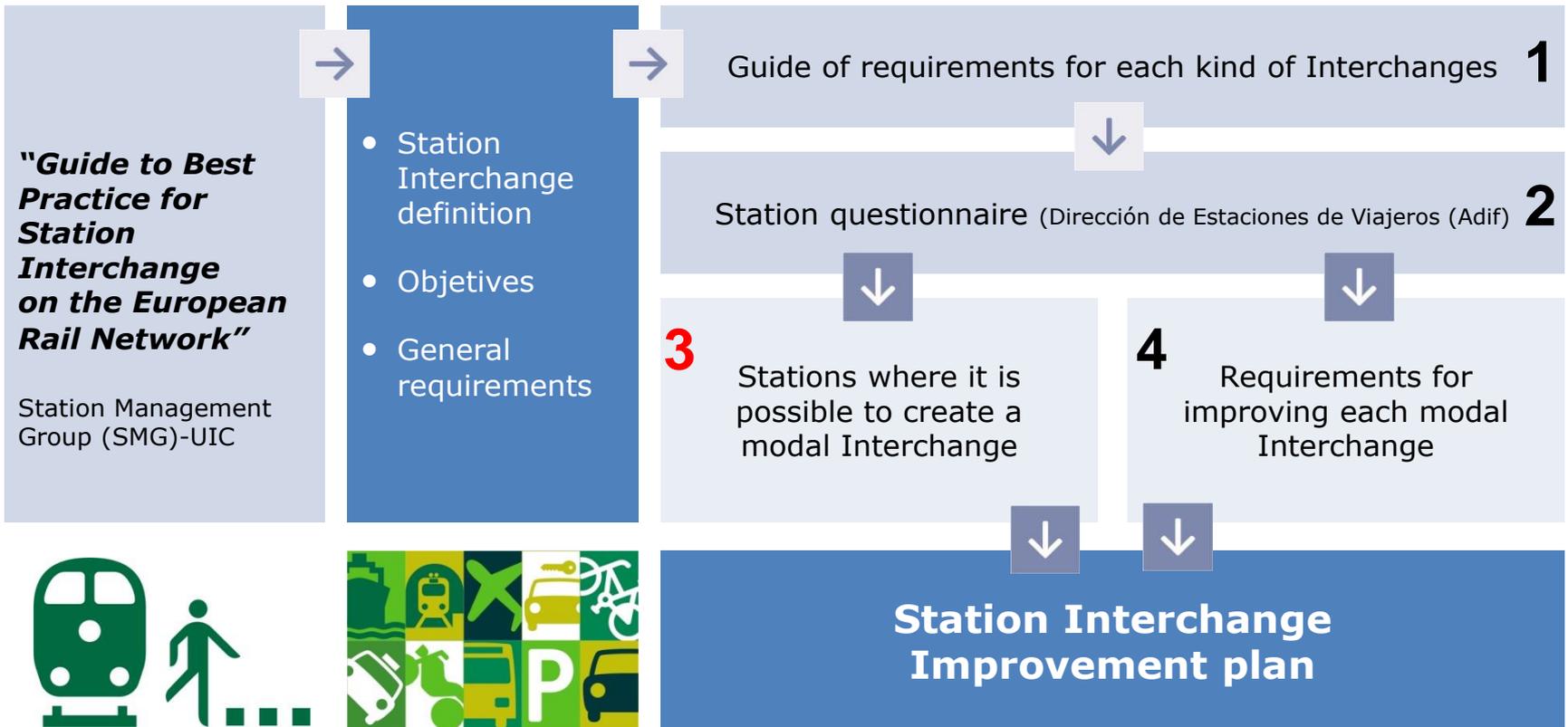
Station:

Bus	Taxi	Bike	Metro	Motorbike	Parking	Ferry	Airport	Car	Rental car

Structural requirements

	Is there a modal interchange already?									
	Do you have enough space at the station to allow interchange development in the future?									
Walking distances	Is the interchange part of the station building?									
	Is the distance < 50m?									
	Is the distance < 75m?									
	Is the distance < 100m?									
	Is the distance < 200m?									
	Is the distance < 400m?									
Route width	Is the route wide enough to enable passengers to change safely?									
Light	Is there natural light?									
	Is the light level > 100 lux?									
Shelter	Are there mechanical ramps and escalators on all routes?	Yes								
	Are there flat surfaces?									
Accessible	Are the routes accessible to everyone?									
Secure	Can routes be improved to avoid blind corners?									
Well organised	Can routes be arranged for maximum flows in both directions?									
	Is there space to provide transfers to buses in case of emergencies?									

Diagram



Results analysis

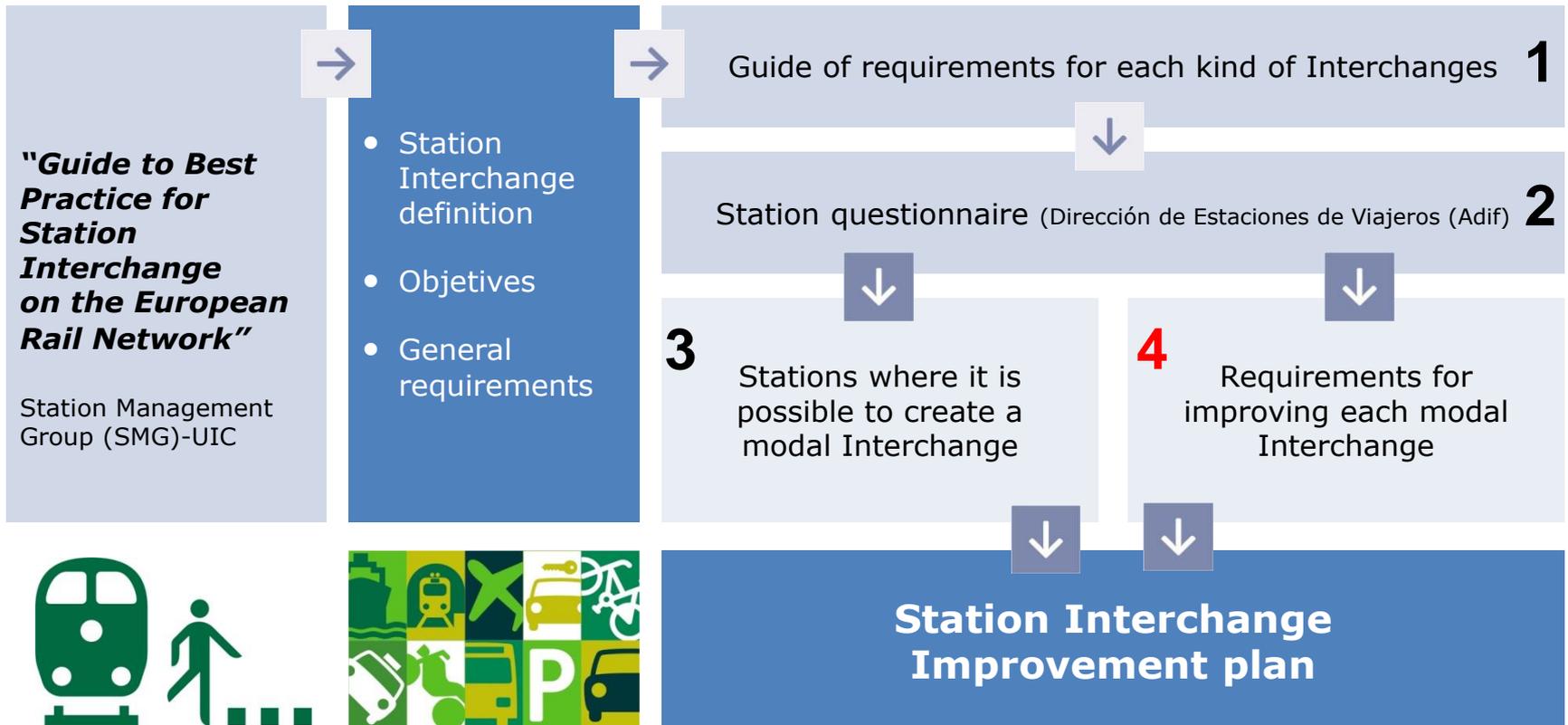
N° Stations ... 89

Stations that have
enough space to
develop each
interchange

(1) Stations that need involve
institutional competence

Bus		10	11,2 %
Taxi		3	3,4 %
Bike		29	32,58 %
Metro		(1)	
Motorbike		41	46,07 %
Parking		8	8,99 %
Ferry		(1)	
Airport		(1)	
Kiss and ride		13	14,60 %
Rental car		11	12,35 %

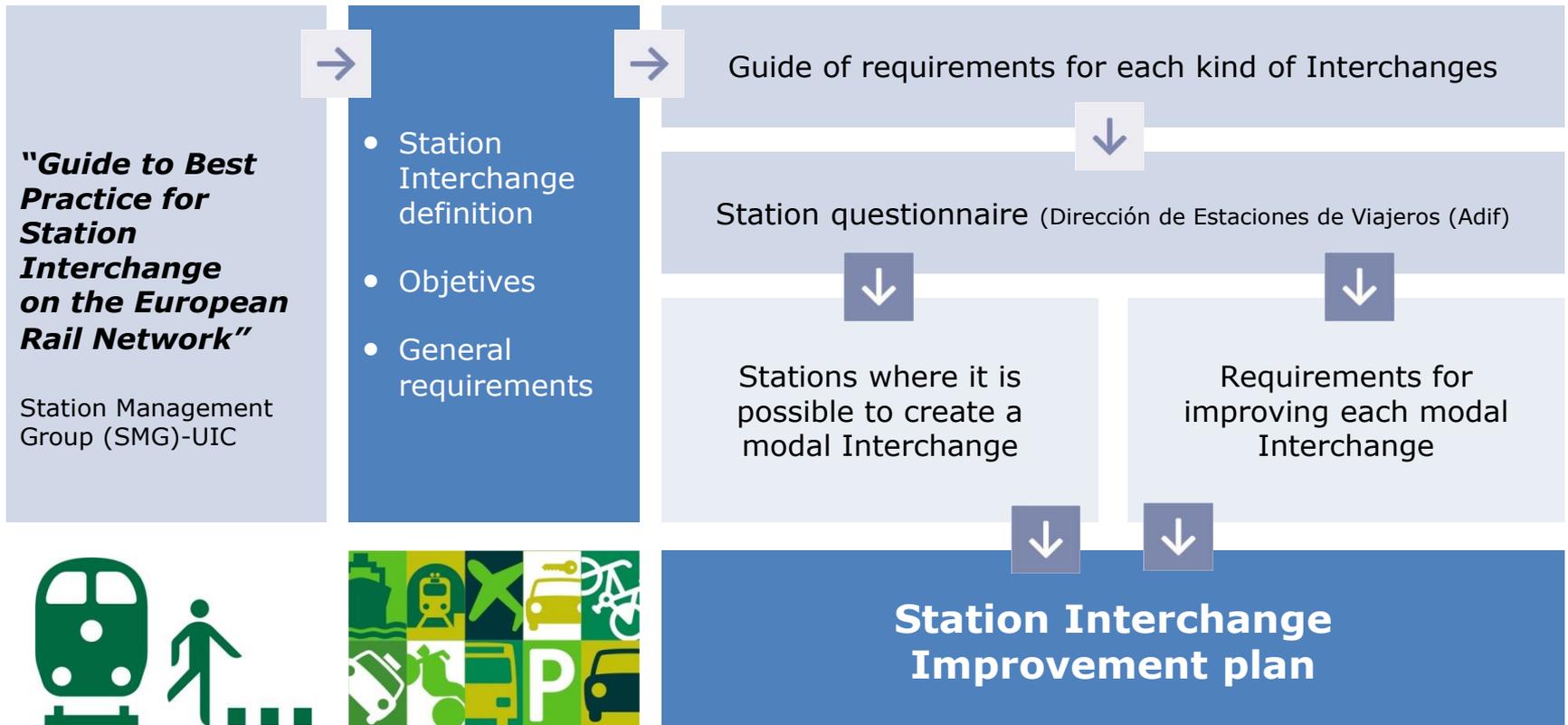
Diagram

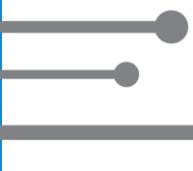


Requirements interchange

	Signage	Lighting > 100 lux	Accessible	Transfer to bus in case of emergency	Intermodal map	SOS Push button	Cleaning services	Maintenance services													
	Bus	Car	Bicycle	Train	Moped	P	Ship	Plane	Car	Bus	Car	Bicycle	Train	Moped	P	Ship	Plane	Car	Bus	Car	
Barcelona Sants																					
Madrid Chamartín																					
Bcn Passeig de Gràcia																					
València Nord																					
Madrid Puerta de Atocha																					
Bilbao																					
Málaga María Zambrano																					
Oviedo																					
Córdoba																					
Zaragoza																					
Alicante																					
San Sebastián																					
Girona																					
Castelló																					
Valladolid																					
Tarragona																					
Murcia																					
Jerez de la Frontera																					
Santiago																					
Ciudad Real																					
Irún																					
Lleida Pirineus																					
Toledo																					
Figueras																					
A Coruña																					
València Cabanyal																					
Cádiz																					
Vigo																					
Santander																					
Estació de França																					
Reus																					
León																					
Ávila																					
Palencia																					
Pontevedra																					
Puertollano																					
Salamanca																					
Pamplona																					
Segovia Guiomar																					
Torredembarra																					
Camp de Tarragona																					
Granada																					
Salou																					
Vitoria																					
Lorca Sutullena																					
Vilagarcía de Arousa																					
Sils																					
Alcázar de San Juan																					
Caldes de Malavella																					
Flaçà																					
Medina del Campo																					
Tortosa																					
Ourense																					
Burgos																					
Almería																					
Tudela																					
Cambrils																					
L'Aldea Amposta																					
Miranda de Ebro																					
Jaén																					
Cartagena																					
Calatayud																					
Villena																					
Gijón																					
Algeciras																					
Linares																					
Mérida																					
Cáceres																					
Llançà																					
Portbou																					
Vinarós																					
Ronda																					
Huesca																					
Benicarló																					
Ponferrada																					
Antequera Santa Ana																					
Ripoll																					
Segovia																					
Badajoz																					
Puente Genil																					
Monforte de Lemos																					
Torelló																					
Guadalajara Yebes																					
Teruel																					
Ferrol																					
Bobadilla																					
Zamora																					
Lugo																					
Soria																					

Diagram





nextstation

BRUSSELS 2011

March 17-18

