

# barcelona

## EPF CONFERENCE 2011

**Workshop: How the cross-border services could be improved. The case between France and Spain**

AAFCB, 11 de març de 2011

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## 1 Cross-border rail links in Spain

### With France

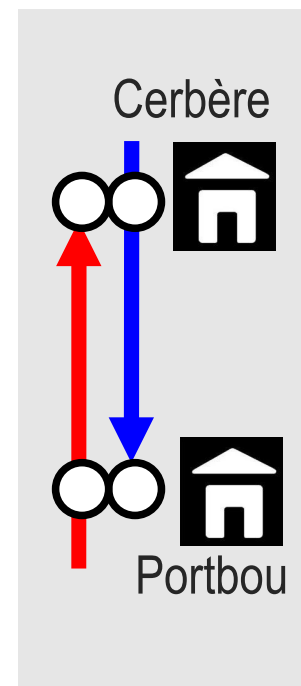
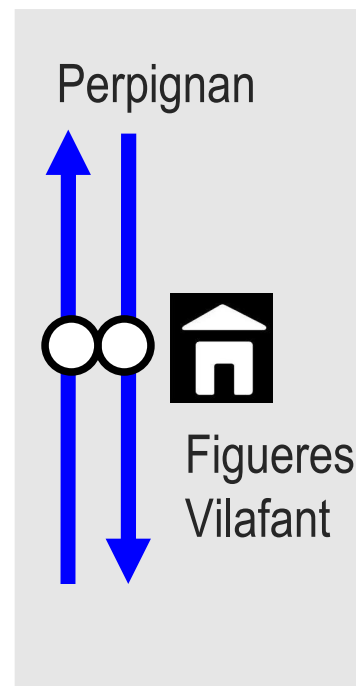
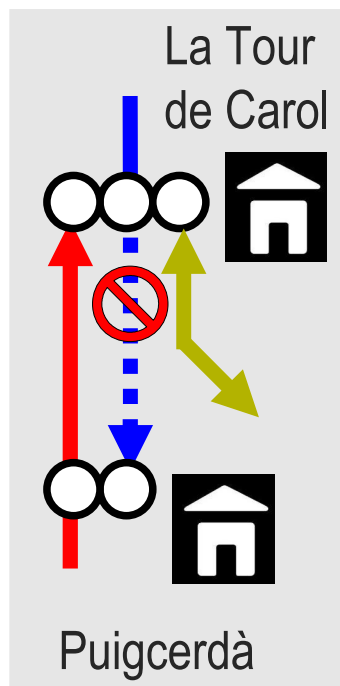
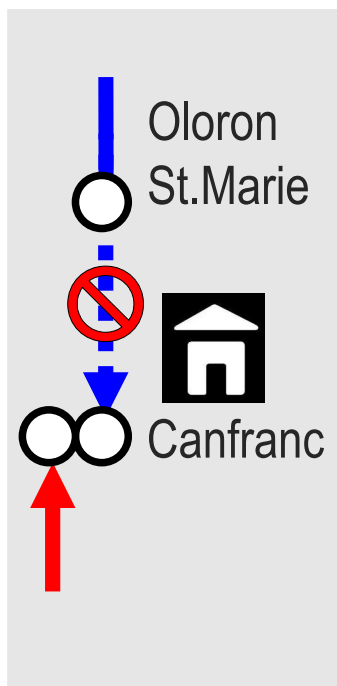
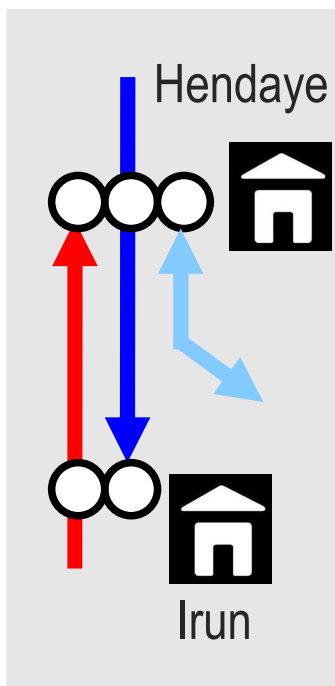
<b>In service</b>	<b>Portbou - Cerbère</b> <b>Vilafant – le Soler (HSL partially inaugurated)</b> <b>Puigcerdà – Latour de Carol</b> <b>Irun – Hendaie (x2)</b>
<b>Out of service</b>	<b>Canfranc – Pau (replaced with a bus)</b>
<b>Never completed</b>	<b>La Pobla de Segur – Saint Giron</b>

### With Portugal

<b>In service</b>	<b>Tui – Valença do Minho</b> <b>Fuentes de Oñoro – Vilar formoso</b> <b>Valencia de Alcántara – Beira Marvao</b> <b>Badajoz - Elvas</b>
<b>Out of service</b>	<b>Fuente de San Esteban - Pocinho</b>
<b>Never completed</b>	<b>Ayamonte – Vilareal de Santo António</b>

# 1 Cross-border rail links in Spain

## A strange reciprocity at border stations



— Iberian Gauge  
— UIC Gauge

— Metric Gauge (Train Jaune SNCF)  
— Metric Gauge (Topo. EuskoTren)

# 1 Cross-border rail links in Spain

## LA TOUR DE CAROL



# 1 Cross-border rail links in Spain

## CANFRANC



# 1 Cross-border rail links in Spain

## CANFRANC



# 1 Cross-border rail links in Spain

## HENDAIA



# 1 Cross-border rail links in Spain

A strange reciprocity at border stations





# 1 Cross-border rail links in Spain

A strange reciprocity at border stations





FRANCE

PORTUGAL

are Nostrum

## 2 Timetables for HSL line between Barcelona and Perpignan




Horaris *Horaires*

Paris <> Figueres Vilafant <> Barcelona

	TGV	ALV.	TGV	ALV.
	DIARI	DIARI	DIARI	DIARI
<b>Paris-Lyon</b>	07:20	-	15:20	-
<b>Perpignan</b>	12:24	-	20:25	-
<b>Figueres Vilafant</b>	12:47	13:03	20:48	21:03
<b>Girona</b>	-	13:32	-	21:33
<b>Barcelona-Sants</b>	-	14:46	-	22:45

	ALV.	TGV	ALV.	TGV
	DIARI	DIARI	DIARI	DIARI
<b>Barcelona-Sants</b>	09:00	-	13:00	-
<b>Girona</b>	10:12	-	14:10	-
<b>Figueres Vilafant</b>	10:42	11:06	14:40	15:02
<b>Perpignan</b>	-	11:35	-	15:31
<b>Paris-Lyon</b>	-	16:41	-	20:41

Alv. Alvia. Fast Train. Renfe  
 Arc. Arco. Renfe  
 Diu. Diurno. Renfe.  
 Est. Estrella. Night Train. Renfe  
 Lun. Lunéa. Night Train. SNCF  
 R3 Commuter Train. Renfe

TER Regional Train. SNCF  
 TGV High Speed Train. SNCF  
 TH Talgo Trainhotel. Renfe + SNCF  
 Cross-border direct train  
  Transfer possibilities

### 3 Timetables between Portbou and Cerbère

Horaris  
Horaires

Montpellier > Cerbère / Portbou > Barcelona  
De dilluns a divendres feiners // Du lundi au vendredi

	TH	R	TER	NZ	TER	R	NZ	Talgo	TER	R	TER	MD	R	TGV	ALV.	TER	MD	TER	R	R	TER	R	TER	TER	R	TER	Est.	TER	MD	TGV	ALV.	TER		
	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV		
Paris	20:34	-	-	21:56	-	-	Strasb.	-	-	-	-	-	-	07:20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Montpellier		-	-		-	-	06:27	07:27	-	-	-	-	-	10:43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Narbonne		-	-	06:14	-	-	07:38	08:20	08:55	-	09:38	-	-	11:44	-	11:30	-	-	-	-	-	-	-	16:16	-	-	-	-	-	-	-	-		
Perpignan		-	06:23	07:20	07:45	-	08:25	08:56	09:38	-	10:25	-	-	12:24	-	12:15	-	13:46	-	-	-	-	15:40	-	17:00	17:55	-	18:32	-	19:26	-	20:25	-	22:10
Cerbère		-	07:00	08:12	08:19	-	09:14	09:31	10:14	-	11:02	-	-		-	12:54	-	14:23	-	-	-	16:17	-	17:35	18:32	-	19:07	-	20:07	-		-	22:45	
Portbou		06:59	-	08:21	-	08:29	09:23	09:52	-	10:29	-	11:26	12:29		-	12:58	13:26	14:27	14:29	15:59	16:21	17:27	-	18:36	18:59	-	19:40	20:11	20:27		-	-		
Figueres-Vilafant			-	-	-		-		-		-			12:47	13:03	-		-			-		-	-		-		-		-	20:48	21:03	-	
Figueres	06:25	07:24	-	-	-	08:54	-	10:13	-	10:54	-	11:47	12:54	-		-		-	14:54	16:24	-	17:52	-	-	19:24	-	20:05	-	20:49	-		-		
Girona	06:55	08:02	-	-	-	09:32	-	10:42	-	11:32	-	12:17	13:32	-	13:32	-		-	15:32	17:02	-	18:30	-	-	20:02	-	20:42	-	21:19	-	21:33	-		
Estació de França	08:24		-	-	-		-		-		-			-		-		-			-		-	-		-		-		-		-		
Passeig de Gràcia	-	09:34	-	-	-	11:05	-		-	13:04	-	13:34	15:04	-		-	15:34	-	17:05	18:35	-	20:05	-	-	21:35	-		-	22:34	-		-		
Barcelona-Sants	-	09:39	-	-	-	11:09	-	11:48	-	13:09	-	13:39	15:09	-	14:46	-	15:39	-	17:09	18:39	-	20:09	-	-	21:39	-	22:06	-	22:39	-	22:45	-		

Madrid

- Alv. Alvia. Fast Train. Renfe
- Arc. Arco. Renfe
- Diu. Diurno. Renfe.
- Est. Estrella. Night Train. Renfe
- Lun. Lunéa. Night Train. SNCF
- R3 Commuter Train. Renfe

TER  
TGV  
TH



- Regional Train. SNCF
- High Speed Train. SNCF
- Talgo Trainhotel. Renfe + SNCF
- Cross-border direct train
- Transfer possibilities

### 3 Timetables between Portbou and Cerbère

Horaris  
Horaires

Montpellier > Cerbère / Portbou > Barcelona

Dissabtes, diumenges i festius // *Samedis, dimanches et jours fériés*

	TH	R	NZ	R	NZ	Talgo	TER	R	TER	MD	TGV	ALV.	R	TER	MD	TER	R	MD	R	TER	R	MD	TER	MD	TER	R	TER	R	Est.	TGV	ALV.	TER	R	TER		
	S+D	S	S+D	S+D	S+D	S+D	S	S+D	S+D	S+D	S+D	S+D	S+D	S+D	S+D	S+D	S+D	S+D	S+D	D	S	S	S+D	S+D	D	S+D	D	S	S+D	S+D	S+D	S+D	S+D	S+D	S+D	
Paris	20:34	-	21:56	-	Strasb.	-	-	-	-	-	07:20	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Montpellier		-		-	06:27	07:27	-	-	-	-	10:43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Narbonne		-	06:14	-	07:38	08:20	08:55	-	09:38	-	11:44	-	-	11:30	-	-	-	-	-	-	-	-	16:16	-	-	-	-	-	-	-	-	-	-	-	-	21:32
Perpignan		-	07:20	-	08:25	08:56	09:38	-	10:25	-	12:24	-	-	12:15	-	13:46	-	-	-	-	15:40	-	17:00	-	17:55	-	18:32	-	-	20:25	-	19:26	-	22:10		
Cerbère		-	08:12	-	09:14	09:31	10:14	-	11:02	-		-	-	12:54	-	14:23	-	-	-	16:17	-	-	17:35	-	18:32	-	19:07	-	-		-	20:07	-	22:45		
Portbou		06:59	08:21	08:29	09:23	09:52	-	10:29	-	11:26		-	12:29	12:58	13:26	14:27	14:29	15:26	15:59	16:21	16:29	17:26	-	17:56	18:36	18:39	-	19:31	19:40		-	20:11	20:30	-		
Figueres-Vilafant			-		-		-		-		12:47	13:03		-		-				-			-		-							20:48	21:03	-	-	
Figueres	06:25	07:24	-	08:54	-	10:13	-	10:54	-	11:47	-		12:54	-	13:47	-	14:54	15:47	16:24	-	16:54	17:47	-	18:17	-	19:04	-	19:56	20:05	-		-	20:52	-		
Girona	06:55	08:02	-	09:32	-	10:42	-	11:32	-	12:17	-	13:32	13:32	-	14:17	-	15:32	16:17	17:02	-	17:32	18:17	-	18:47	-	19:42	-	20:34	20:42	-	21:33	-	21:22	-		
Estació de França	08:24		-		-		-		-		-			-		-				-			-		-		-			-		-		-		
Passeig de Gràcia	-	09:34	-	11:05	-		-	13:04	-	13:34	-		15:04	-	15:34	-	17:05	17:34	18:35	-	19:05	19:34	-	20:04	-	21:04	-	22:09		-		-	22:46	-		
Barcelona-Sants	-	09:39	-	11:09	-	11:48	-	13:09	-	13:39	-	14:46	15:09	-	15:39	-	17:09	17:39	18:39	-	19:09	19:39	-	20:09	-	21:09	-	22:13	22:06	-	22:45	-	22:50	-		

Madrid

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	TER	TER	TER	TEOZ	R	R	MD	Est.	TER	ALV.	TGV	R	TER	MD	R	TER	TER	TER	ALV.	TGV	R	TER	TER	R	TER	Talgo	R	NZ	MD	NZ	R	TH	
	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	LMXJV	
	Madrid																Lorca - Sutillena																
Barcelona-Sants	-	-	-	-	06:16	07:16	08:16		-	09:00	-	09:16	-	10:16	11:16	-	-	-	13:00	-	13:16	-	-	15:16	-	16:42	17:16	-	17:46	-	19:16	-	
Passeig de Gràcia	-	-	-	-	06:20	07:20	08:21		-		-	09:20	-	10:21	11:20	-	-	-		-	13:20	-	-	15:20	-		17:20	-	17:51	-	19:20	-	
Estació de França	-	-	-	-					-		-		-			-	-	-		-		-		-				-		-		21:05	
Girona	-	-	-	-	07:50	09:00	09:36	09:25	-	10:12	-	10:50	-	11:36	12:50	-	-	-	14:10	-	14:50	-	-	16:50	-	17:48	18:50	-	19:06	-	20:52	22:17	
Figueres	-	-	-	-	08:30	09:39	10:09	09:58	-		-	11:29	-	12:09	13:30	-	-	-		-	15:30	-	-	17:29	-	18:15	19:30	-	19:39	-	21:36	22:47	
Figueres-Vilafant	-	-	-	-					-	10:42	11:06		-			-	-	-	14:40	15:02		-		-				-		-			
Portbou	-	-	-	-	08:55	10:05	10:30	10:30	-	-		11:55	-	12:30	13:55	-	-	-	-		15:55	-	-	17:55	-	18:42	19:55	-	20:00	-	22:02		
Cerbère	05:40	06:41	07:18	07:50	09:00	10:10	-	10:35	10:35	-		12:00	12:26	-	14:00	14:13	15:01	15:41	-		16:00	16:46	17:18	18:00	18:25	19:07	20:00	20:43	-	21:21	-		
Perpignan	06:20	07:19	08:04	08:42	-	-	-	-	11:16	-	11:29	-	13:02	-	-	14:50	15:37	16:27	-	15:25	-	17:25	18:04	-	19:02	19:37	-	21:34	-	22:10	-		
Narbonne	07:05	08:01	08:44	09:38	-	-	-	-	12:10	-	12:08	-	-	-	-	15:32	-	17:05	-	16:07	-	-	18:52	-	19:45	20:18	-	22:15	-	23:04	-		
Montpellier	-	-	-		-	-	-	-	-	-	13:12	-	-	-	-	-	-	-	-	17:07	-	-	-	-	-	21:09	-	23:21	-	-	-		
Paris	-	-	-	17:41	-	-	-	-	-	-	-	16:41	-	-	-	-	-	-	-	20:41	-	-	-	-	-	-	-	-	Strasb.	-	07:27	-	09:01

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Horaris  
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Barcelona > Portbou / Cerbère > Montpellier

Dissabtes, diumenges i festius // *Samedis, dimanches et jours fériés*

	TER	TER	TER	TEOZ	R	Est.	MD	TER	R	ALV.	TGV	MD	TER	R	MD	TER	R	TER	ALV.	TGV	MD	MD	MD	TER	TER	R	TER	Talgo	R	NZ	NZ	R	TH	
	S+D	S	S+D	S+D	S	S+D	S+D	S+D	S+D	S+D	S+D	S+D	S+D	S+D	S+D	S+D	S+D	S+D	S+D	S+D	S+D	D	S	D	D	S+D	S+D	LMXJV	S+D	S+D	S+D	S+D	S+D	LMXJV
	Madrid																Lorca - Sutullena																	
Barcelona-Sants	-	-	-	-	06:46		07:46	-	08:46	09:00	-	09:46	-	10:46	11:46	-	12:46	-	13:00	-	13:46	14:16	14:46	-	-	15:16	-	16:42	17:16	-	-	19:16	-	
Passeig de Gràcia	-	-	-	-	06:50		07:51	-	08:50		-	09:51	-	10:50	11:51	-	12:50	-		-	13:51	14:21	14:51	-	-	15:20	-		17:20	-	-	19:20	-	
Estació de França	-	-	-	-				-			-		-			-		-		-				-	-		-			-	-		21:05	
Girona	-	-	-	-	08:20	09:25	09:06	-	10:23	10:12	-	11:06	-	12:20	13:06	-	14:20	-	14:10	-	15:06	15:36	16:06	-	-	16:50	-	17:48	18:50	-	-	20:52	22:17	
Figueres	-	-	-	-	08:59	09:58	09:39	-	11:02		-	11:39	-	12:59	13:39	-	14:59	-		-	15:39	16:09	16:39	-	-	17:29	-	18:15	19:29	-	-	21:36	22:47	
Figueres-Vilafant	-	-	-	-			-			10:42	11:06		-			-		-	14:40	15:02				-	-		-			-	-			
Portbou	-	-	-	-	09:25	10:30	10:00	-	11:28	-		12:00	-	13:25	14:00	-	15:25	-		-	16:00	16:30	17:00	-	-	17:55	-	18:42	19:55	-	-	22:02		
Cerbère	05:40	06:41	07:18	07:50	09:30	10:35	-	10:35	11:33	-		-	12:26	13:30	-	14:13	15:30	15:41	-		-	-	-	17:18	17:38	18:00	18:25	19:07	20:00	20:43	21:21	-		
Perpignan	06:18	07:19	08:04	08:42	-	-	-	11:16	-	-	11:29	-	13:02	-	-	14:50	-	16:27	-	15:25	-	-	-	18:04	18:16	-	19:02	19:37	-	21:34	22:10	-		
Narbonne	07:02	08:01	08:44	09:38	-	-	-	12:11	-	-	12:08	-	-	-	-	15:32	-	17:05	-	16:07	-	-	-	18:52	19:13	-	19:45	20:18	-	22:15	23:04	-		
Montpellier	-	-	-		-	-	-	-	-	-	13:12	-	-	-	-	-	-	-	-	-	17:07	-	-	-	-	-	-	21:09	-	23:21		-		
Paris	-	-	-	17:41	-	-	-	-	-	-	16:41	-	-	-	-	-	-	-	-	-	20:41	-	-	-	-	-	-	-	-	-	Strasb.	07:27	-	09:01

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## 4 Timetables between Puigcerdà and la Tour de Carol

Horaris *Horaires*

Barcelona > La Tor de Querol > Toulouse / Vilefranche

	TER	TER	TER	TER	R3	R3	TER	R3	TER	CAR	TER	R3	TER	R3	LUN	R3	R3
	LMXJV-	DIARI	DIARI	S + D	DIARI	DIARI	DIARI	DIARI	DIARI	LMXJV-	DIARI	DIARI	DIARI	DIARI	DIARI	LMXJV-	DIARI
<b>Barcelona-Sants</b>	-	-	-	-	07:00	09:36	-	12:06	-	-	-	15:16	-	17:06	-	18:27	18:57
<b>Barcelona-Pl. Catalunya</b>	-	-	-	-	07:05	09:41	-	12:11	-	-	-	15:21	-	17:11	-	18:32	19:02
<b>Vic</b>	-	-	-	-	08:20	10:46	-	13:20	-	-	-	16:25	-	18:22	-	19:36	20:22
<b>Puigcerdà</b>	-	-	-	-	09:56	12:28	-	14:52	-	-	-	18:05	-	20:03	-	20:56	21:53
<b>La Tor de Querol-Enveitg</b>	05:21	07:21	08:27	09:21	10:02	12:34	13:21	14:58	15:05	15:30	17:21	18:11	19:21	-	20:20	-	-
<b>Foix</b>	07:05	09:07		11:07	-	-	15:07	-		17:20	19:07	-	21:07	-	22:35	-	-
<b>Toulouse-Matabiau</b>	08:18	10:16		12:15	-	-	16:16	-		-	20:16	-	22:15	-		-	-
<b>Vilefranche-Vernet-les-Bains</b>	-	-	11:27	-	-	-	-	-	18:03	-	-	-	-	-		-	-
<b>Paris</b>	-	-	-	-	-	-	-	-	-	-	-	-	-	-	06:57	-	-

Alv. Alvia. Fast Train. Renfe  
 Arc. Arco. Renfe  
 Diu. Diurno. Renfe.  
 Est. Estrella. Night Train. Renfe  
 Lun. Lunéa. Night Train. SNCF  
 R3 Commuter Train. Renfe

TER  
 TGV  
 TH






Regional Train. SNCF  
 High Speed Train. SNCF  
 Talgo Trainhotel. Renfe + SNCF  
 Cross-border direct train  
 Transfer possibilities



## 4 Timetables between Puigcerdà and la Tour de Carol

Horaris Horaires		Toulouse / Vilefranche > La Tor de Querol > Barcelona															
		R3	R3	LUN	R3	TER	R3	TER	TER	R3	TER	R3	TER	R3	TER	TER	TER
		LMXJV--	DIARI	DIARI	DIARI	DIARI	DIARI	DIARI	DIARI	DIARI	DIARI	DIARI	DIARI	DIARI	DIARI	DIARI	DIARI
Paris	✓	-	-	21:56	-	-	-	-	-	-	-	-	-	-	-	-	-
Vilefranche-Vernet-les-Bains	✓	-	-		-	-	-	08:50	-	-	-	-	-	-	-	18:27	-
Toulouse-Matabiau	✓	-	-		-	06:50	-		08:50	-	10:50	-	14:50	-	16:50		18:50
Foix	✓	-	-	05:58	-	08:01	-		10:01	-	12:01	-	16:01	-	18:01		20:01
La Tor de Querol-Enveitg	✓	-	-	07:51	08:46	09:52	11:20	11:51	11:52	13:43	13:52	16:57	17:52	18:55	19:52	21:14	21:52
Puigcerdà	✓	06:20	06:53	-	08:52	-	11:26	-	-	13:49	-	17:03	-	19:01	-	-	-
Vic	✓	07:43	08:24	-	10:22	-	12:59	-	-	15:17	-	18:37	-	20:38	-	-	-
Barcelona-Pl. Catalunya	✓	08:50	09:35	-	11:32	-	14:02	-	-	16:32	-	19:44	-	21:50	-	-	-
Barcelona-Sants	✓	08:55	09:40	-	11:37	-	14:07	-	-	16:37	-	19:49	-	21:55	-	-	-

**Alv.** Alvia. Fast Train. Renfe  
**Arc.** Arco. Renfe  
**Diu.** Diurno. Renfe.  
**Est.** Estrella. Night Train. Renfe  
**Lun.** Lunéa. Night Train. SNCF  
**R3** Commuter Train. Renfe

**TER** Regional Train. SNCF  
**TGV** High Speed Train. SNCF  
**TH** Talgo Trainhotel. Renfe + SNCF  
 Cross-border direct train  
  Transfer possibilities

# 5 Timetables between Irun and Hendaye




Horaris *Horaires*

Lisboa / Madrid / Barcelona > Irun/Hendaia > Bordeaux / Paris

	TH	TER	TER	TH	TER	TGV	TER	TGV	TER	ALV.	ALV.	TGV	TER	DIU	TGV	TER	TER	TER	ARC.	ALV.	ALV.	LUN
	..X.JVSD	LMX.JV	LMX.JV	DIARI	LMX.JVS	DIARI	LMX.JV	DIARI	DIARI	DIARI	DIARI	DIARI	LMX.J	DIARI	DIARI	LMX.JVS	LMX.JV	DIARI	DIARI	DIARI	DIARI	DIARI
<b>Lisboa</b>	-	-	-	16:30	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Barcelona</b>	-	-	-		-	-	-	-	-	07:35	-	-	-	-	-	-	-	-	-	-	15:35	-
<b>Madrid</b>	19:00	-	-		-	-	-	-	-		08:00	-	-	Salam.	-	-	-	-	Coruña		16:15	-
<b>Donostia-S. Sebastián</b>		-	-	06:36	-	-	-	-	-	13:02	13:20	-	-	16:35	-	-	-	-	20:09	21:10	21:38	-
<b>Irun</b>		-	-	06:59	-	-	-	-	-	13:25	13:47	-	-	16:57	-	-	-	-	20:32	21:32	22:00	-
<b>Hendaia</b>		05:17	06:32	07:10	07:25	08:00	09:05	10:26	12:15	-	13:51	14:03	16:35	17:06	17:23	17:31	18:35	19:15	20:40	-	22:05	22:09
<b>Baiona</b>		05:58	07:10	-	08:03	08:36	09:40	11:06	12:55	-	-	14:47	17:15	-	18:01	18:10	19:13	19:53	-	-	-	22:57
<b>Bordeaux</b>		08:03	09:06	-	-	10:22	-	12:45	-	-	-	16:27	-	-	19:48	-	-	22:00	-	-	-	
<b>Paris</b>	08:32	-	-	-	-	13:50	-	16:00	-	-	-	19:50	-	-	23:20	-	-	-	-	-	-	07:13

Service Donostia-Irun every 30 min.

Alv. Alvia. Fast Train. Renfe  
 Arc. Arco. Renfe  
 Diu. Diurno. Renfe.  
 Est. Estrella. Night Train. Renfe  
 Lun. Lunéa. Night Train. SNCF  
 R3 Commuter Train. Renfe

TER Regional Train. SNCF  
 TGV High Speed Train. SNCF  
 TH Talgo Trainhotel. Renfe + SNCF  
 Cross-border direct train  
  Transfer possibilities

# 5 Timetables between Irun and Hendaye

## Horaris Horaires

## Lisboa / Madrid / Barcelona > Irun/Hendaia > Bordeaux / Paris

	TH	ALV.	LUN	TER	TER	TER	ALV.	ARC.	TER	TER	TGV	DIU	TER	TGV	ALV.	ALV.	TER	TGV	TER	TER	TER	TER	TGV	TH	TER	TGV	
	L-JVSD	DIARI	DIARI	LMXJV-	LMXJV-	LMXJV-	DIARI	DIARI	LMXJV-	DIARI	DIARI	DIARI	LMXJV-	DIARI	DIARI	DIARI	LMXJV-	LMXJVS	LMXJV-	LMXJV-	DIARI	LMXJVS	LMXJV-	DIARI	DIARI	LMXJV-D	LMXJV-D
Paris	19:45	-	23:11	-	-	-	-	-	-	-	07:15	-	-	10:10	-	-	-	11:50	-	-	-	-	15:50	-	-	18:25	
Bordeaux		-		-	-	-	-	-	06:27	-	10:23	-	-	13:15	-	-	14:27	15:32	-	-	16:35	-	17:49	19:04	-	-	21:31
Baiona		-	06:39	07:03	07:31	07:53	-	-	08:28	12:01	12:20	-	14:15	14:59	-	-	16:20	17:00	16:46	17:13	18:32	19:10	19:54	20:49	-	22:58	23:08
Hendaia		-	07:25	07:36	08:06	08:27	-	-	09:02	12:35	12:59	-	14:56	15:37	-	-	16:55	17:50	18:10	18:37	19:08	19:50	20:31	21:29	-	23:31	23:43
Irun		07:30	07:36	-	-	-	08:25	08:45	-	-	13:13	13:20	-	15:43	15:55	16:20	-	-	-	-	-	-	-	21:35	22:20	-	-
Donostia-S. Sebastián		07:48	-	-	-	-	08:42	09:02	-	-	-	13:37	-	-	16:13	16:39	-	-	-	-	-	-	-	-	22:39	-	-
Madrid	09:10		-	-	-	-	14:00	Coruña	-	-	-	Salam.	-	-		22:00	-	-	-	-	-	-	-	-		-	-
Barcelona	-	13:40	-	-	-	-	-	-	-	-	-	-	-	-	21:58	-	-	-	-	-	-	-	-	-		-	-
Lisboa	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10:31	-	-

Service Donostia-Irun every 30 min.

- Alv. Alvia. Fast Train. Renfe
- Arc. Arco. Renfe
- Diu. Diurno. Renfe.
- Est. Estrella. Night Train. Renfe
- Lun. Lunéa. Night Train. SNCF
- R3 Commuter Train. Renfe

- TER
- TGV
- TH



- Regional Train. SNCF
- High Speed Train. SNCF
- Talgo Trainhotel. Renfe + SNCF
- Cross-border direct train
- Transfer possibilities

## 7 Problems to solve

Ticketing

Information

Confort

Connections



## 7 Problems to solve

Ticketing

Information

Confort

Connections



Reiseauskunft - Fahrkarten

von:

nach:

Datum: 06.10.09  Abfahrt  Ankunft

Uhrzeit: 01:08

Suche   English | Français

→ **Reisen mit der Bahn**

Egal, ob Sie nur ab und zu mal verreisen oder ständig unterwegs sind: Die Bahn ist immer der richtige Partner für Sie.

Themenwahl Reisen ▼

→ **Transport und Logistik**

Der DB-Konzern bietet Transport- und Logistikkompetenz auf der Schiene, im Landverkehr, in der Luft- und Seefracht, in der Kontraktlogistik und im Kombinierten Verkehr.

Themenwahl Logistik ▼

→ **Geschäfte mit der Bahn**

Zusätzlich zur Kernkompetenz im Personen- und Schienenverkehr haben Sie eine große Palette von Dienstleistungen zur Auswahl.

Themenwahl Geschäfte ▼

→ **Das Unternehmen DB**

Im Unternehmensportal finden Sie alle wichtigen Informationen rund um den DB-Konzern.

Themenwahl Unternehmen ▼

# 7 Problems to solve

Ticketing

Information

Confort

Connections

Reiseauskunft - Fahrkarten

von:

nach:

Datum:  Abfahrt

Uhrzeit:  Ankunft

**DB BAHN** Contacto | Ayuda | Sitemap a a+ a++ español

[Home](#) | [Ofertas](#) | [Horarios y compra](#) | [Servicios](#) | [BahnCard](#) | [Vacaciones](#) Mi Bahn

Búsqueda  Selección  Billeto&Reserva  Pago  Reserva  Confirmación

Opciones de búsqueda ampliada

Viaje sencillo  Viaje de ida y de vuelta

Salida\*

Destino\*

Vía: (1)   Estancia

[-> Añadir otra parada intermedia](#)

Viaje de ida\*      Salida  Llegada

Medio de transporte  Todos  Todos sin ICE  sólo transporte de cercanías [-> Selección ampliada de medios de transporte](#)

Datos sobre el enlace

preferir enlaces rápidos

Transporte de bicicleta

Pasajeros

adultos  niños 6-14 años  niños 0-5 años

1 adulto

Viajar en 2ª clase  Viajar en 1ª clase

1

2

3

4

5

6

# 7 Problems to solve

Ticketing

**Information**

Confort

Connections

DB BAHN - Enlaces - Su horario p...

Modificar configuraciones

ferrocarril/automóvil/Avión **Modificar configuraciones**

opciones de visualización: Gráficas: Consumo de energía, Dióxido de carbono y Partículas finas **Visualizar**

Consumo de energía o emisiones por viaje

**Consumo de los recursos energéticos**  
consumo de materias primas/energía primaria convertido a litros de gasolina por persona y viaje

Modo	Consumo (litros de gasolina)
ferrocarril	1,5
automóvil	6,4

Incluida la pérdida de producción de combustible y de corriente eléctrica

**Dióxido de carbono**  
Gas de efecto invernadero, cambio climático in kg por persona y viaje

Modo	Emisiones (kg)
ferrocarril	2,1
automóvil	13,8

Incluida la producción de combustible y de corriente eléctrica

**Partículas finas**  
Daños a la salud in g por persona y viaje

Modo	Emisiones (g)
ferrocarril	0,77
automóvil	4,3

de la combustión, Incluida la producción de combustible y de corriente eléctrica

componente	unidad por persona y viaje	ferrocarril	automóvil
Consumo de los recursos energéticos	convertido a litros de gasolina	1,5	6,4
Dióxido de carbono	kg	2,1	13,8
Partículas finas	g	0,77	4,3

Fuente: IFEU 2008.

Informaciones de fondo sobre el Control Ambiental de Movilidad

-> Comparación ambiental objetiva Significado de los datos ambientales



## 7 Problems to solve

Ticketing

Information

**Confort**

Connections



SNCF



RENFE. Commuter train.



## 7 Problems to solve

Ticketing

Information

Confort

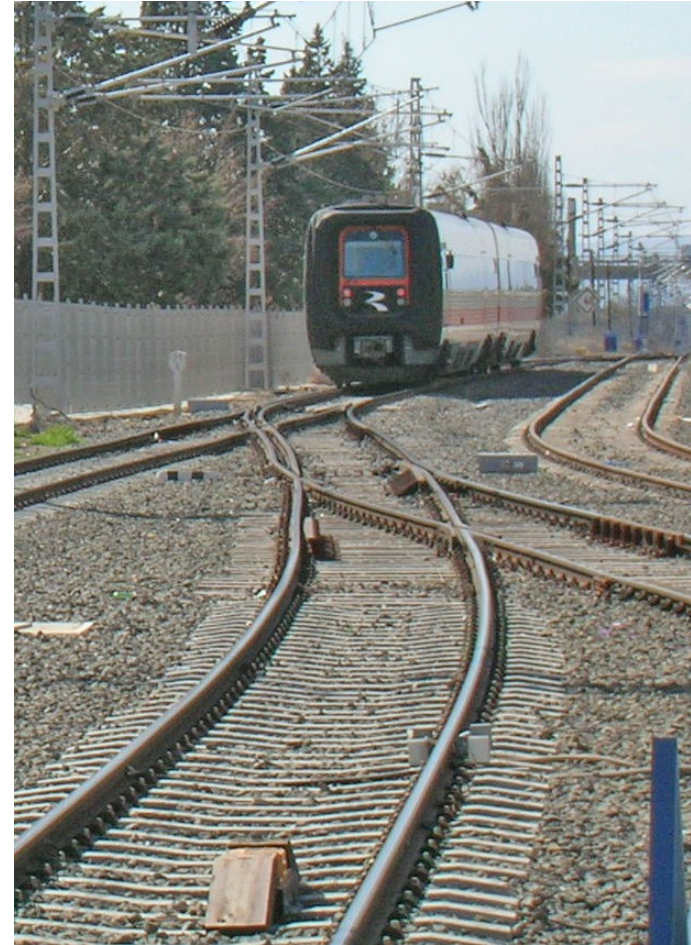
Connections

- Lots of trains could cross borders but they don't do it. Adding only one more station, with current timetables, more transfers could be guaranteed
- Too much timetables exceptions in SNCF. It difficult the coordination between Renfe and SNCF.
- We need more direct trains, without transfers

## 8 Technology against frontiers



## 8 Technology against frontiers



## 8 Technology against frontiers



In front of absence of infrastructure, two countries are able to connect their railways by ferry...

Why can't we ensure more direct connections when the rail infrastructure is continuous?



# barcelona

EPF CONFERENCE 2011

**Workshop: How the cross-border services could be improved. The case between France and Spain**

AAFCEB, 11 de març de 2011

**Josep Maria Olivé, Ricard Riol, Francesc Xandri**