



Fixed Link Performance Regime summary 2017

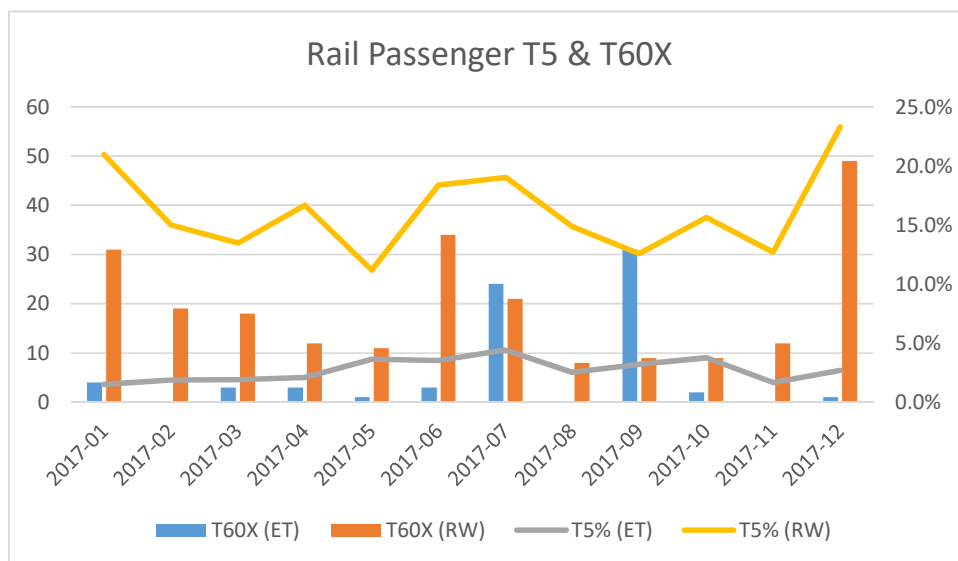
(Document de Référence du Réseau/Network Statement par.7)

29/5/2018

Channel Fixed Link: an integrated road & rail transport system, financed & built by private Concessionnaires

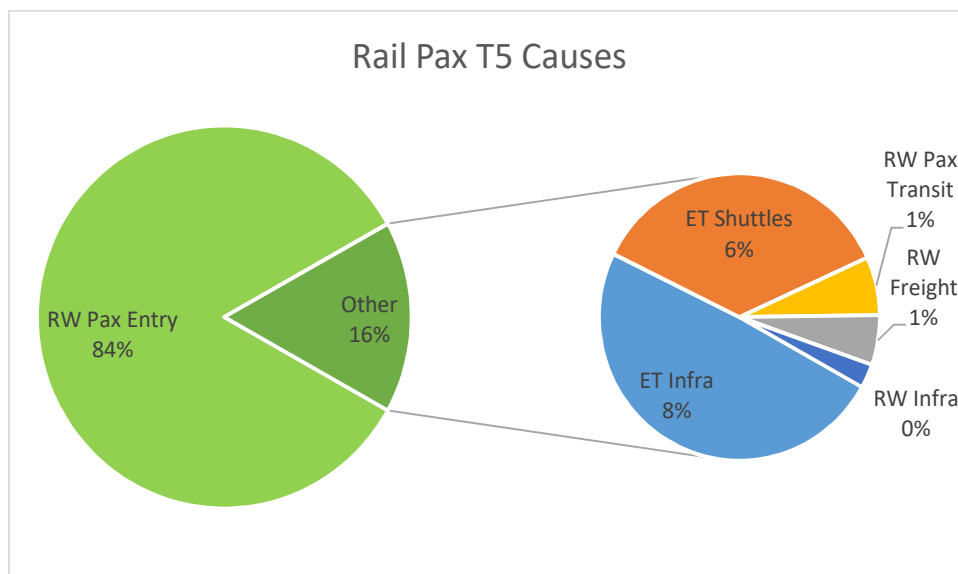
Fixed Link Performance Regime

Rail Passenger Performance 2017



R.Pax incurred	2017	2016
T5% (ET)	2.8%	3.3%
T5% (RW)	16.2%	16.8%
T60X (ET)	72	71
T60X (RW)	233	304

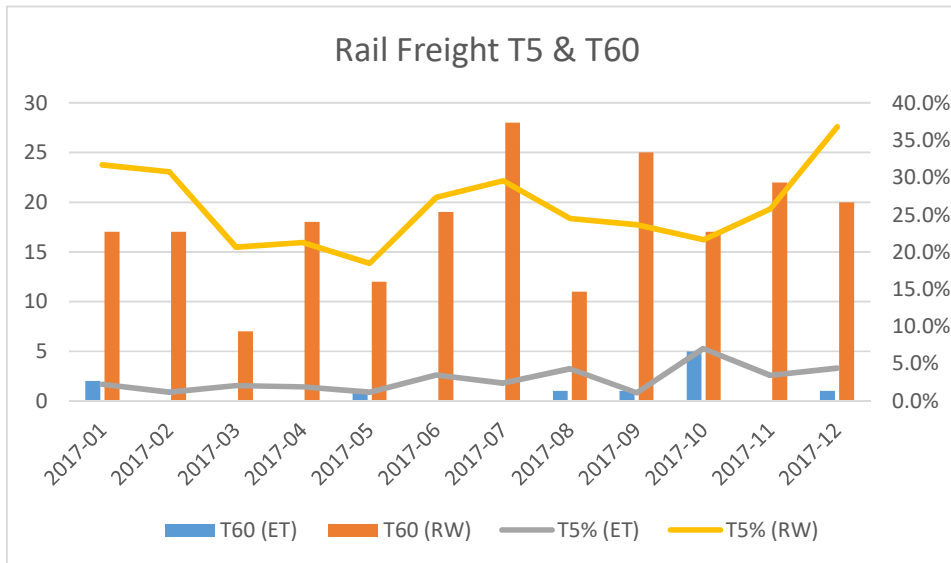
Tx = delay over x minutes at Fixed Link exit (incl. entry+transit)
 Tx(ET) = delay for all Eurotunnel causes (incl. infrastructure & shuttles)
 Tx(RW) = delay for all railway causes (incl. upstream IMs, stations, operator)
 RW.Pax Transit = delay for R.Pax causes (operator) within Fixed Link



R.Pax caused	2017	2016
T5% Shuttles	1.0%	1.4%
T5% R.Freight	0.5%	0.9%
T60X Shuttles	84	116
T60 R.Freight	3	3

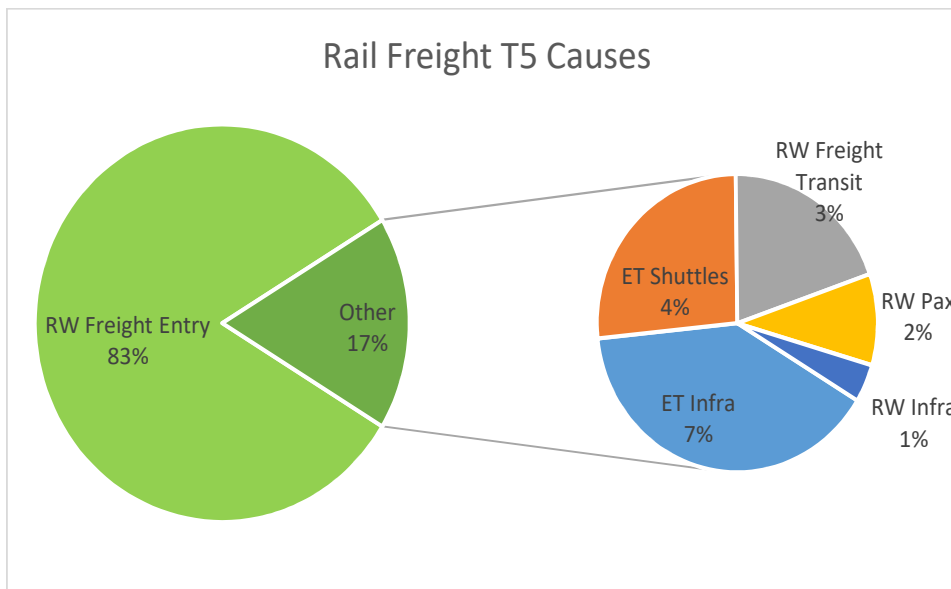
Fixed Link Performance Regime

Rail Freight Performance 2017



R.Frt incurred	2017	2016
T5% (ET)	2.8%	3.1%
T5% (RW)	25.8%	32.5%
T60 (ET)	11	12
T60 (RW)	213	209

Tx = delay over x minutes at Fixed Link exit (incl. entry+transit)
 Tx(ET) = delay for all Eurotunnel causes (incl. infrastructure & shuttles)
 Tx(RW) = delay for all railway causes (incl. upstream IMs, yards, operator)
 RW.Freight Transit = delay for R.Freight causes (operator) within Fixed Link



R.Frt caused	2017	2016
T5% Shuttles	0.9%	0.6%
T5% R.Pax	0.2%	0.2%
T60X Shuttles	147	9
T60 R.Pax	0	1

Fixed Link Performance Regime

Main Delays & Perf. Improvements 2017

■ Major T60 incidents in 2017

- 14/7: Catenary power supply fault int.4 (20 RPax)
- 29/9: Signalling fault on UK CML (29 Rpax)

■ Other T60 incidents in 2017

- 17/1: Shuttle 6509 DWD int.3 (4 RP)
- 8/3: Shuttle 7429 loco brake (3 RP)
- 8/4: Shuttle loco TVM/SVC (3 RP)
- 12/7: Catenary fault int.3 (4 RP)
- 24/1: RFreight 4427 DWD int.1 (41 Sh)
- 19/4: RFreight 4431 loco (20 Sh)
- 20/12: RFreight 4360 loco (23 Sh)
- 25/4: RP 9140 alarm (20 Sh)
- 18/12: RP 9008 traction/SVC (28 Sh)

■ Top causes of ET Infra T5 delays

- Catenary & Power supply (37%)
- Signalling (34%)
- Works train & speed restrictions (11%)

■ Main performance improvement initiatives in progress

- Catenary reinforcement prog. [2015-19]
- Balancer/SVC e320 interference:
 - software patch [2016-2017]
 - renewal [2016-2019]
- Signalling renewal studies [2017~2025]
- Tunnel measurement & control train
- Works train tunnel cleaning module
- Works train shunter renewal
- Security Command Centre (Coquelles)
- Rail Freight Scanner (Fréthun) [2017-18]