

Fiber Optics in Trains

Project References



April 2013 | FO in Trains - Project References

Australia



H) HUBER+SUHNER



Railcorp fleet for Sydney suburb built by Downer EDI Rail

78 trains - 624 vehicles - New built

1st train in service: July 2011

Intercar jumper type: rectangular Harting



Scope of Supply: Fiber optics backbone for on board video surveillance system.

- Coach Harnesses
- Intervehicle (Jumper) cables

Czech Republik



H) HUBER+SUHNER



RegioJet

40 vehicles - Retrofit

1st retro train in service: expected 2013

Intercar Jumper type: circular Souriau MIL-DTL-38999 *Elio*

Scope of Supply: Fiber optics backbone for on board video surveillance system.

- Coach Harnesses
- Intervehicle (Jumper) cables

Norway



H HUBER+SUHNER





Flytoget Airport Express Oslo 16 trains – 64 vehicles – Retrofit 1st retro train in service: planned summer 2013 Intercar jumper type: feed-through with ODC fan-outs

Scope of Supply: Fiber optics backbone for on board video surveillance system.

- Coach Harnesses
- Intervehicle (Jumper) cables

Poland



SIEMENS

Metro of Warsaw Line 2 35 trains – 210 vehicles – New built 1st train in service: expected Q3/13 Intercar jumper type: rectangular Harting

{H} HUBER+SUHNER

Scope of Supply: Fiber optics backbone for passenger information and entertainment system

- Intervehicle jumpers
- Vehicle harnesses

Sweden



BOMBARDIER



HUBER+SUHNER

Bombardier X55 high speed trains for Swedish state railway, SJ AB

20 trains - 80 vehicles - New built

1st train service: Feb 2012

Intercar jumper type: feed-through with Q-ODC fan-outs

Scope of Supply: Fiber optics backbone for in- train internet, infotainment system (video on demand) and video surveillance.

- Coach Harnesses
- Intervehicle (Jumper) cables

Spain



H) HUBER+SUHNER





CAF 900 Series. New fleet for Spanish operator EUSKOTREN

30 trains - 120 vehicles - New built

1st train in service: Feb 2011

Intercar jumper type: feed-through with Q-ODC fan-outs

Scope of Supply: Fiber optics backbone for in- train Passenger Information and video surveillance systems

- Coach Harnesses
- Intervehicle (Jumper) cables

Spain





Metro of Recife (Brazil) 15 trains – 60 vehicles – New built 1st train in service: 2012 Intercar jumper type: feed-through with Q-ODC fan-outs

H) HUBER+SUHNER

Scope of Supply: Fiber optics backbone for passenger information and entertainment system

- Intervehicle jumpers
- Vehicle harnesses

Switzerland



BOMBARDIER ALSTOM

ICN trains for Swiss operator SBB

44 trains – 308 vehicles – New built

HUBER+SUHNER

1st train in service: 1999

Intercar jumper type: circular Souriau 8038-series

Scope of Supply: Fiber optics cables for MVB network

- Intervehicle cables
- Vehicle cables

UK





Heathrow Express

14 trains - 61 vehicles - Retrofit

1st retro train in service: June '12

Intercar jumper type: feed-through with Q-ODC fan-outs

Scope of Supply: Fiber optics backbone for passenger information and entertainment system

- Intervehicle jumpers
- Vehicle harnesses



UK



H) HUBER+SUHNER



London Underground

191 trains – 1395 vehicles – New built & retrofit

1st train in service with new ATC: expected 2017

Intercar jumper type: circular Souriau MIL-DTL-38999 *Elio*

Scope of Supply: Fiber optics backbone for CBTC (train control system) train bus

BOMBARDIER

- Intervehicle jumpers
- Vehicle harnesses

South Africa



TRANSNE

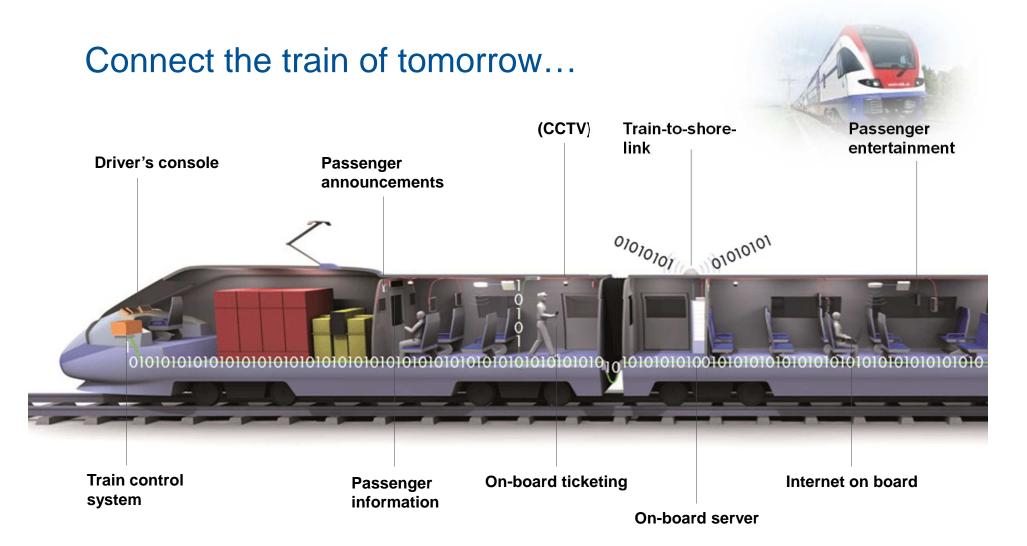
Phelophepa «Health Care Train» 1 train – 18 vehicles – Retrofit Retro train in service since 2012 Intercar jumper type: rectangular Harting

Scope of Supply: Fiber optics backbone for medical equipment and devices

- Vehicle harnesses
- Intervehicle jumpers







Thank you for your attention



April 2013 | FO in Trains - Project References