Welcome to the Workshop on ENERGY EFFICIENCY OF FUTURE TRAINS

4 October 2017
Roma, Italy
Agenda

**Moderators:** Chloé Lima-Vanzeler, SNCF & Raimondo Orsini, SusDeF

**11:30 Welcome** Harald Jony, ÖBB – Chair UIC Energy Network

**11:35 Alternative Fuel Technologies**
- Hybrid traction (Ph. Clément & F. Dégardin, SNCF)
- Natural gas traction (B. Ivanov, RZD)
- Biogas train in Sweden (B. Carlson, Tekniska Verken)
- Perspective and challenges for biofuel (V. Aneris, Transport & Environment)

**12:40 Infrastructure for energy efficiency**
- Li-ion trackside energy storage solution (P. Prenleloup, SAFT)
- Reversible substations for conventional lines (G. Castaños, RENFE)
- Innovation technologies towards energy efficiency (C. Spalvieri, RFI)

**13:20 Lunch**

**14:15 State of the Art of Innovative Energy Efficient Rolling Stock**
- UNIFE: Energy efficient innovation (H. Voelker, BT/Roll2Rail)
- Rolling Stock Manufacturers
  - F. Belmonte, ALSTOM
  - S. Ferrarini, WABTEC
- Procuring Energy Efficient rolling stock (M. Montefiori, EUROFIMA)

**15:30 Next Generation Trains**
- Hydrogen Trains (E. Geensen, ALSTOM)
- NGT Next Generation Train (H. Dittus, DLR)
- Hyperloop (P.-E. Gautier, SYSTRA)
- Shift2Rail perspectives (G. Travaini, Shift2Rail)
- UIC Research and innovation Roadmap (A. Gougelet, UIC)

**16:50 Conclusions and next steps**

**17:00 End of the day**