



The automation of existing urban rail lines and the development of fully unattended metro operation (no staff on board) are booming and represent tomorrow's challenges in this sector. Millions of passengers use urban public transport every day (in Europe, 31,6 million daily passengers in 45 cities only for metro), and the European Union's modal shift objective means more people using public transport.

**As urban or suburban rail operators, manufacturers, contracting authorities and their official representatives, we express our need to deploy and operate Communications-Based Train Control systems (CBTC) with protected frequency channels.** Through Automatic Train Operation and Supervision, CBTC allows achieving very high performance and safety of urban rail systems, making it ready for answering tomorrow's mobility needs.

Several European operators had already obtained reserved frequencies in the 5.9 GHz band for CBTC application from their national authority. The systems proved successful and have been operating for many years. Exclusive or prioritized protected use of this bandwidth is of paramount importance because safety and reliability of train operation is at stake. CBTC allows for metro trains to run with headways as short as 80 seconds and even below. This generates high line throughput (80,000-100,000 passengers per hour on a single line in both directions). With such demanding operating conditions, it is easy to understand that competitive access, interference and deny of service absolutely have to be avoided to guarantee safe and reliable operation.

However, the development of new technologies such as ITS (Intelligent Transport Systems) will generate new needs for broadband communication and frequency bandwidth, and they apply for the same 5.9 GHz band.

European bodies in charge of standardization and frequency regulation are doing substantial work in order to mitigate the risks of sharing a common band between CBTC and ITS. DG CONNECT (Spectrum) confirmed to UITP that "It is clear that whichever solution will be identified for urban rail applications (in particular driverless metros) it will need to guarantee a proper level of safety."

**We emphasize the need to guarantee at European level the highest priority for rail safety-related applications even if the channels are shared with other modes like ITS.**

The return on investment in rail infrastructure is in the medium/long term and regulatory framework stability is a pre-condition for allowing new developments as well as refurbishments. Then Europe can also become an example followed in other parts of the world.

Alstom – International Railway manufacturer  
BKV - Urban railway operator in Budapest  
Bombardier – International Railway manufacturer  
DPP – Urban railway operator in Prague  
FGC – Urban railway operator in Barcelona  
Keolis – International Urban railway operator  
MTR - International Urban railway operator  
RATP - International Urban railway operator  
RET - Urban railway operator in Rotterdam  
Siemens - International Railway manufacturer  
Société du Grand Paris - Contracting authority in Paris  
Sporveien – Urban railway operator in Oslo  
Stasy - Urban railway operator in Athens  
STIB – MIVB - Urban railway operator in Brussels  
TMB - Urban railway operator in Barcelona  
Transdev - International Urban railway operator  
UITP – International organization for public transport authorities and operators, policy decision-makers, scientific institutes and the public transport supply and service industry  
Underground (LUL) - Urban railway operator in London  
Unife - Official representative of the European rail manufacturing industry  
UTP - Official representative of French public transport operators  
VDV – Official representative of German public transport