

Wednesday, 17 June 2020

Manager, Spectrum Licensing Policy
Australian Communications and Media Authority
PO Box 13112 Law Courts,
Melbourne Vic 8010

Arrangements for jamming devices and radiocommunications device exemptions - Consultation number IFC 15/2020

Step Global is making a submission in response to the consultation paper - Radiocommunications (Prohibited Device) (RNSS Jamming Devices) Declaration 2014.

Step Global is a reseller and systems integrator of GNSS signal distribution products that includes amplifiers, splitters, repeater kits, and other related equipment.

An example of the benefits of being able to bring live GNSS signals into an area is with a large public transport hub consisting of an undercover bus depot and train station. The bus operations, specifically ticketing, dispatch, tracking and security are all based on time and location. When the buses enter the depot, they would lose the GNSS signals and therefore could no longer be tracked, plus they could no longer obtain accurate time synchronisation and that had a negative impact on the ticketing system. The other issue caused by loss of GNSS signal reception was the fact that when they left the depot, it would take a significant amount of time to re-establish a GNSS position lock due to the canyoning by the tall buildings in the surrounding streets. The canyoning blocked direct line of sight to enough satellites in order to get a quick and reliable 3D position fix. By having the bus GPS receivers being able to receive live signals whilst they were in the depot meant that the receivers ephemeris and almanac were current and therefore even with satellite signals impacted by canyoning and multipath, the receivers could more quickly reacquire direct satellite signals and provide a accurate position report.

Controlling the coverage area of a radiating GNSS repeater is a key requirement of any installation. Step Global would emphasise in the planning phase of an installation the addressing of those factors that could cause harmful interference.

If GNSS re-radiators are being considered for an exemption in road tunnels, then we believe that the exemption should cover all indoor and undercover applications as long as the system used can meet similar requirements as set by the USA NTIA (National Telecommunications and Information Administration). In addition, many applications that use a repeater or simulator, do not use a passive antenna to distribute the signal, they use splitters and coax cable to connect from the amplifier to the equipment under test, this type of application should be clearly exempt.

If you have any other concerns or questions, please don't hesitate to contact me.

Yours truly,
David Lloyd
Managing Director