Draft Principles for a National Approach to Co-operative Intelligent Transport Systems (C-ITS) in Australia

Co-operative Intelligent Transport Systems (C-ITS) are interconnected systems of technologies that allow road vehicles to communicate with other vehicles, road infrastructure and data services, and with vulnerable road users such as pedestrians and cyclists. C-ITS has the potential to deliver improved outcomes in road safety, road productivity, traffic congestion, journey times and environmental sustainability – including in the areas of public transport, shared mobility and freight – by enabling improved decision-making based on shared information. In the future, C-ITS also has the potential to improve the performance of automated vehicles on the transport network.

The following sets out proposed principles for a national approach to C-ITS in Australia to enable governments and industry to move forward with no-regrets investment and planning, for consideration by senior officials and infrastructure and transport ministers:

- Australian governments will work together, and with industry, towards a nationally consistent C-ITS environment with the aim of supporting a seamless experience for road users as they travel across states and territories.
 - a. Individual jurisdictions should continue to decide the pace and scale of their respective investments but should commit to national consistency.
- 2. **Maximising the benefits of C-ITS** requires an environment where:
 - a. all C-ITS enabled vehicles can communicate with each other, and with C-ITS enabled equipment (including devices used by pedestrians, cyclists, and other road users) and infrastructure, irrespective of make/model;
 - b. information is able to be transmitted to all C-ITS enabled vehicles, equipment and infrastructure from trusted sources; and
 - c. all road network agencies will be able to collect and share data with the objective of supporting C-ITS optimisation across Australian jurisdictions.
- 3. **Cooperation is key** and this work should be agreed by governments in consultation with industry, and include participation by community and research stakeholders.
- 4. Harmonising with international approaches, including in relation to spectrum for C-ITS use, helps maximise consumer choice and vehicle availability. As Australia currently bases vehicle safety regulations upon the United Nations Economic Commission for Europe (UNECE) World Forum for the Harmonisation of Vehicle Regulations (Working Party 29) model law¹, it should look to harmonise with European approaches in C-ITS.
- 5. The focus on uptake of C-ITS in Australia should be on **improving road safety, transport productivity, sustainability and reducing emissions**, including to support the development of new transport technologies including connected and automated vehicles.
- 6. Given the cybersecurity and privacy issues in sharing road and vehicle data, Australia must ensure it has effective and timely solutions to managing the **security of systems and messaging and privacy of data** in C-ITS.

¹ As C-ITS moves from Day 1 driver advisory services, to Day 2+ where data will flow to the vehicle itself for action, it is likely that some C-ITS use cases will intersect with vehicle safety regulation as part of emerging connected and automated applications.