Agenda & discussion

1. Introduction to the NTC
2. What is the problem we’re solving?
3. What are the options?
4. What does Local Government think?

Test AV vehicle in Michigan, USA
"develop, monitor and maintain uniform or nationally consistent regulatory and operational reforms relating to road transport, rail transport and intermodal transport"
“Improve transport productivity, efficiency, safety and environmental performance and regulatory efficiency in a uniform or nationally consistent manner”
# NTC - Achieving national consistency

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<th>Model Law</th>
<th>Commonwealth Law</th>
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<td>Australian Road Rules</td>
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<td>Heavy Vehicle National Law</td>
<td>Assessing fitness to drive</td>
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<td>Rail Safety National Law</td>
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What’s the problem we’re solving?
An ‘all abilities’ future

- Accessible transport is top of mind
- Partnerships and funding to advance physical access and public transportation for people with disabilities are evident from West Coast to East Coast
- Olli Stop (first of its kind) – fully connected driverless shuttle and interactive bus stop platform – trialed in SA
- Strong university partnerships
- Competition between universities seem less so in this part of the world
Crowd-sourced & customised

- Design a vehicle or device with your neighbourhood
- At a micro factory near you
- Print it in carbon fibre mixed with recycled plastic
- Put it together in 44 hours
- Drive, ride, scoot or hover it onto the road network
- Role of regulation to protect society’s goals and values

‘Local Motors hopes to disrupt the auto industry with a US$53,000 3D-printed car’
Washington Financial Post 2016
People priorities and regional vision

- PPPs for people priorities
- Detroit – public trials
- Planetm – incubator
An evolution of mobility

- Evolve - Electric skateboard
- Onewheel
- Segway Drift W1 e-Skates
- YikeBike
Freedom of mobility and safety
What did we learn?
Personal mobility devices

- PMDs growing in popularity: demand for comprehensive ecosystem of transport alternatives. Use is illegal in many jurisdictions.
- Risk of conflict between different road users due to the increased use.
- ARRs are outdated and predate newer PMD technology.
- Jurisdictions under pressure to regulate PMDs – no national consistency.
- Are PMDs suitable for the Australian road network? Research to inform best practice regulation is limited, but beginning to emerge.
- Lack of national consistency could create confusion for industry/community.
- Limited understanding of the safety risks associated with use of devices.
Motorised mobility devices

- The ARRs do not provide for the legal use of many devices that are available today.
- Current motorised mobility device classifications in the Australian Road Rules are not clear.
- Some motorised mobility devices may not be compatible with public spaces and transport infrastructure.
- Limited understanding of the safety risks associated with motorised mobility device use.
What are the options?
PMD regulatory framework

- has 1 or more wheels
- is propelled by an electric motor
- is designed for use by a single person only
- has an effective stopping system controlled by using brakes, gears or motor control
- when propelled only by the motor, can not reach a speed greater than 25km/h on level ground
- is not more than –
  - 1250mm in length x 700mm in width x 1350mm in height
  - 60kg when not carrying a person or other load
- is not equipped with –
  - any object or fitting not technically essential to the device that protrudes from any part of the vehicle so that it likely increases the risk of bodily injury to any person
  - any object or fitting that, because it is pointed or has a sharp edge, likely increases the risk of bodily injury to any person.
PMD regulatory framework

Road and path access:
- Footpaths
- Shared paths
- Separated paths (bicycle side)
- Bicycle paths
- Low speed roads e.g. less than 50km/h
- Higher speed roads e.g. greater than 50km/h

Speed
- 10km/h, 15km/h or 25km/h across the various infrastructure
- Variable and fixed speed approaches

Safety risks to PMDs increase in line with greater access to infrastructure and exposure to motor vehicles at greater speeds.
Options and speed approaches

Options

- **Option 1**: Status quo, no change to ARRs
- **Option 2**: pedestrian infrastructure and bicycle paths
- **Option 3**: pedestrian infrastructure, bicycle paths and local roads (less than 50km/h)
- **Option 4**: pedestrian infrastructure, bicycle infrastructure and roads (more than 50km/h)
- **Option 5**: bicycle infrastructure and roads (no access to pedestrian infrastructure)

Speed (options two, three & four):

- **Speed approach 1**: 10km/h on footpath or shared path; 25km/h on bicycle infrastructure and roads
- **Speed approach 2**: 15km/h on all permitted infrastructure
- **Speed approach 3**: 25km/h on all permitted infrastructure
Motorised mobility devices

Draft ARR amendment recommendations – to be endorsed

1. Align the unladen mass requirements for motorised wheelchairs with the limits set out in the Australian Technical Specification:
   - Motorised wheelchair: no unladen mass
   - Mobility scooter: maximum unladen mass of 170kg

2. Recognise motorised wheelchairs and mobility scooters as separate devices

3. Incorporate the terminology of ‘motorised mobility device’, with mobility scooters and motorised wheelchairs being subcategories.

4. That all motorised mobility device operators are treated as pedestrians.

5. That terms ‘operator’ and ‘operating’ are used when referring to the use of a motorised mobility device.
What does local government think?
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