

# How On-Road and In-Vehicle Mass Systems Are Interdependent Part A – The Issues

Philip Lloyd

*General Manager Implementation  
Transport Certification Australia*

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# Key Concept



*Thanks to my old friend, Wikipedia ...*

**Inter-dependency:** a mutual reliance between cooperative, autonomous participants to achieve common goals that are more difficult to achieve independently, through sharing of information, financial reserves, equipment or other resources.



WIKIPEDIA  
The Free Encyclopedia

# What Are The Common Goals?



To enable valuable public and private policy outcomes, through the provision of on-road vehicle mass data that is:

- Accurate – consistently correct for its required purpose
- Accessible – readily and conveniently retrievable
- Available – with minimal service gaps or outages
- Reliable – complete, trustworthy and unaltered
- Confidential – with security and privacy assured
- Cost-effective – justifiable and affordable
- Scalable – sufficient capability, capacity and throughput
- Interoperable – compatible and able to be correlated

# Independent Characteristics



On-road WIM and in-vehicle OBM systems each have strengths, weaknesses, benefits and limitations, related to factors such as:

- Physical environment (temperature, moisture, humidity, shock, vibration, EMR, site/vehicle suitability, etc)
- Vehicle configuration, maintenance and adjustment
- Sensor accuracy, maintenance and calibration
- Data accessibility, timeliness and correlation
- Susceptibility to malfunction or tampering
- Legislative provisions for data use, admissibility
- System cost, operational lifetime and ROI

# Part A – Exploring the Issues



Small-group workshop format to explore these issues collaboratively:

- Break into 3-4 working groups
- Nominate a scribe to record key points
- 25 minutes to explore the assigned problem space
  - Think as divergently as possible
  - Consider multiple stakeholder perspectives
  - Consider needs that remain unmet
  - Resist urge to propose solutions
- Rank or prioritise issues and limitations
- Present key points to whole assembly (3 mins each)

# Part A – Exploring the Issues



Small-group workshop format to explore these issues collaboratively:

- Problem spaces to be considered:
  1. **Policy** – business needs that remain unfulfilled
  2. **Technical** – challenges and limitations of technology
  3. **Operational** – constraints and inefficiencies of use
  4. **Commercial** – investment and sustainability
- Prompting questions:
  - *Why is mass important? Where could it be applied?*
  - *What is currently inhibiting that, and why?*
  - *What benefits are currently underutilised, and why?*

# Part A – Presenting the Issues



Small-group workshop format to explore these issues collaboratively:

- Presentation of key points by each working group
- Opportunity overnight to contemplate, discuss, analyse and begin to brainstorm options and opportunities
- And tomorrow, Part B awaits ...

**Thank You!**



**Philip Lloyd**  
*General Manager Implementation*  
*Transport Certification Australia*  
[philipl@tca.gov.au](mailto:philipl@tca.gov.au)  
0472 828 989



# How On-Road and In-Vehicle Mass Systems Are Interdependent Part B – The Options

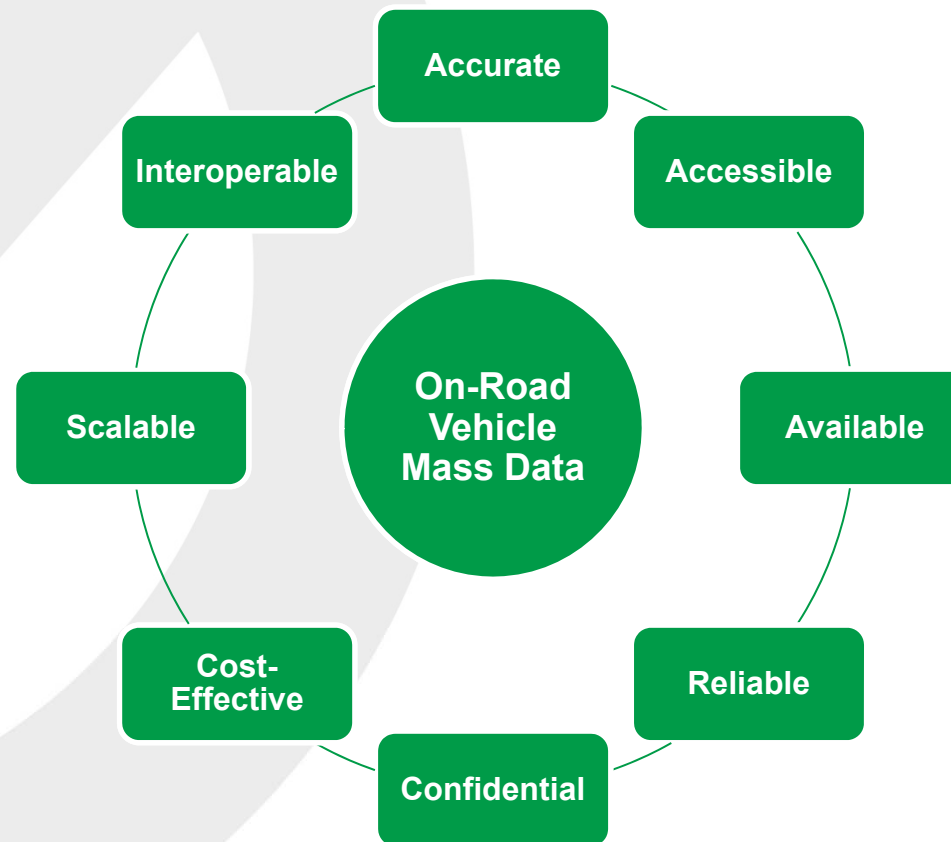
Philip Lloyd

*General Manager Implementation  
Transport Certification Australia*

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# The Common Goals

To enable valuable public and private policy outcomes, through the provision of on-road vehicle mass data that is:



# Interdependent Opportunities



On-road WIM and in-vehicle OBM systems have the potential to complement each other to:

- Be used in concert, with strengths and benefits of one used to mitigate weaknesses and limitations of the other
- Allow correlation and comparison of data, to identify potential malfunction or misbehaviour in either
- For the whole to be greater than the sum of the parts, to unlock options and solutions not possible independently
- To be further integrated with other on-road or in-vehicle systems to unlock capabilities beyond those currently contemplated

## Part B – Exploring the Options



Small-group workshop format to explore the options:

- What options and solutions exist to address the issues identified and prioritised yesterday ...
  - Independently?
  - Interdependently?
  - Through even broader cooperation and integration?
- How could we collectively respond – through policy, technical, operational or commercial innovation – to bring about the best of these opportunities?
- What else is needed to unlock the benefits?

## Part B – Exploring the Options



Small-group workshop format to explore these opportunities collaboratively:

- Break into 3-4 working groups
- Nominate a scribe to record key points
- 35 minutes to explore the assigned solution space
  - Think as convergently as possible
  - Consider multiple stakeholder perspectives
  - Look for cooperative and complementary solutions
  - Build on solutions collectively
- Rank or prioritise options and solutions
- Present key points to whole assembly (5 mins each)

## Part B – Presenting the Options



Small-group workshop format to explore these opportunities collaboratively:

- Presentation of key points by each working group
- TCA will collect and produce a report of all key points, options and opportunities, for circulation
- Opportunities for (joint) work programs will be identified and communicated to potential beneficiaries and other sponsors

**Thank You!**



**Philip Lloyd**  
*General Manager Implementation*  
*Transport Certification Australia*  
[philipl@tca.gov.au](mailto:philipl@tca.gov.au)  
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