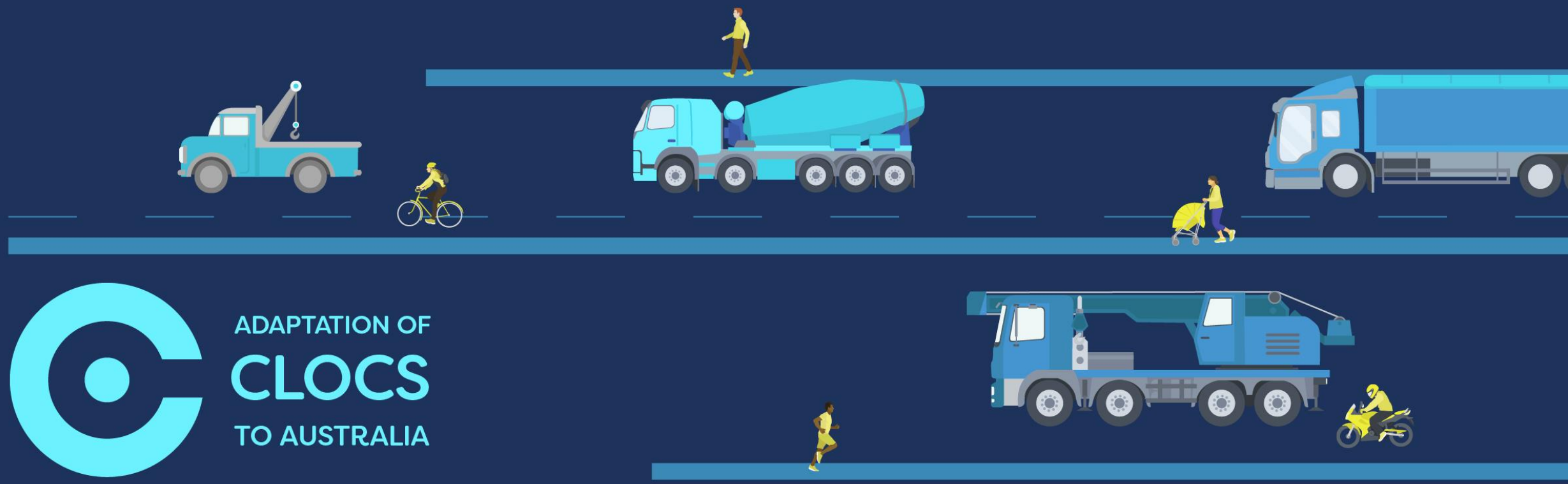


ADAPTATION OF CLOCS TO AUSTRALIA

National Consolidation Workshop

A partnership between:

MONASH University ACCIDENT RESEARCH CENTRE | NRSPP NATIONAL ROAD SAFETY PARTNERSHIP PROGRAM

Agenda

1. Welcome
2. CLOCS-A Mission and Goals
3. Project Recap and objectives for today
4. TG1: Heavy Vehicle Safety Standard
5. TG2: Driver Safety Standard
6. TG3: Logistics and Planning
7. Break
8. TG4: Communications and Planning
9. Auditing and Certification
10. Governance, Sustainability and Membership
11. Other Items
12. Next steps and close

Supporting material – Draft CLOCS-A Standard – V1

CLOCS-A Standard - Purpose and Scope

Mission

Ensuring the safest construction vehicle journeys

Goals

CLOCS-A is a national construction industry standard developed to ensure the safest, leanest, and greenest construction vehicle journeys.

The primary goals are:

1. *Zero collisions between construction vehicles and the community*
2. *Increased productivity and efficiency*
3. *Fewer vehicle journeys*
4. *Better planning of construction logistics*
5. *Build community confidence and reduce reputational risk*
6. *Improved air quality and reduced emissions*

Scope and Application

The CLOCS-A Standard shall be applied by stakeholders involved in the procurement and delivery of construction projects that are publicly funded.

The CLOCS-A Standard – Development timeline

February 22

- Technical Groups 1-4 workshop and draft requirements
- Consolidation Group develop structure and incorporate requirements
- Audit / self-assessment process development

November 22 (Today)

- Technical requirements consolidated in first draft CLOCS-A Standard
- Draft Audit / self-assessment process drafted
- Draft Sustainability and Governance
- Supporting tools

March 23

- CLOCS-A Standard final draft
- Audit / self-assessment process final draft

June 23

- Finalisation of CLOCS-A Standard and Audit / self-assessment process

CLOCS-A Project Objectives

The objectives in this project over 18 months following the signing of the contract include:

1. Establish a national voluntary standard that draws on adapting United Kingdom (UK)'s world's best-practice Construction Logistics and Community Safety (CLOCS) program to Australia.
2. Establishing the minimum requirements for the CLOCS-A standard which is developed consultatively through its expert technical groups.

CLOCS-A Deliverables

1. CLOCS Governance Body which will include:
    1. Memorandum of Understanding which will highlight CLOCS-A Champions (Developed)
    2. Program Charter
    3. Preferred Host of CLOCS-A (Under development)
2. Establishment of Technical Groups 1-5 (Established)
3. CLOCS-A Standard (Draft)
4. Engagement and awareness campaign of CLOCS-A (Under Development)
5. Ten CLOCS-A related case studies (Template and under development)

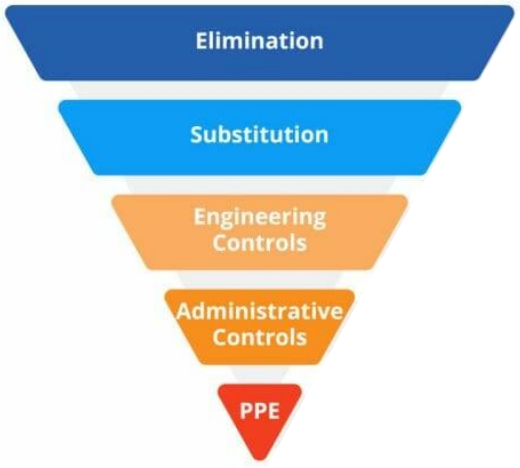
Timeline of Key CLOCS-A Milestones

CLOCS-A Standards - *The big picture*

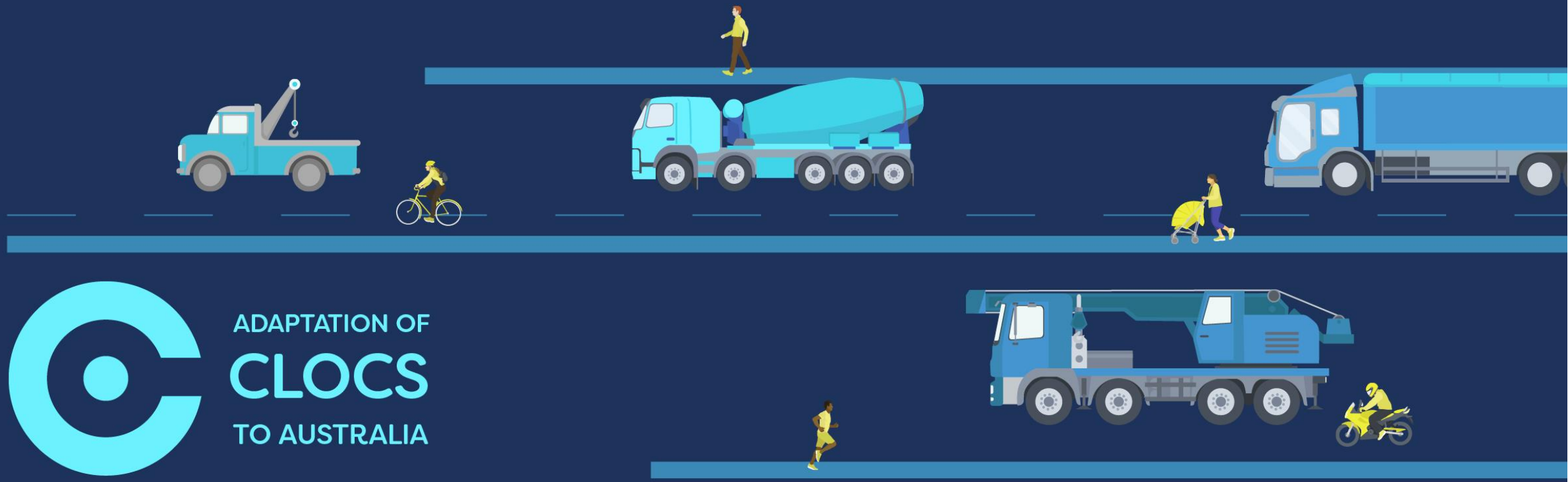
WHY ? To reduce the risk of road trauma associated with construction projects by improving safety for Vulnerable Road Users (VRUs) around heavy vehicles (HVs)

= "Hazard Management"

Hierarchy of Controls



1. Never have HVs and VRUs in the same place at the same time — TG3 - Logistics
2. Ultra-vigilant, trained & focused drivers — TG2 - Driver training
3. Use of the most suitable HVs that serve to minimise chances of an incident involving VRUs — TG1 - HV Standards
4. All stakeholders involved having a sound understanding of CLOCS-A & HV safety — TG4 - Communication



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#4: CLOCS-A - Technical Group 1

Heavy Vehicle Standards

Merv Rowlands – Construction Vehicle Consulting - Nov 2022
Michael Chan (Chair), Chris Loose (Deputy) , Greg Dikranian (Deputy)

A partnership between:
MONASH University ACCIDENT RESEARCH CENTRE
NRSPP NATIONAL ROAD SAFETY PARTNERSHIP PROGRAM

Heavy Vehicle Standards - *Items*

1. TG1 Tasks
2. Australia vs UK
3. Rationale for standards
4. The standards
5. Summary by level

Heavy Vehicle Standards - *TG1 Tasks*

In addition to setting out a series vehicle standards that we would like to see implemented …….

- Every standard must provide a clear safety benefit and be practical / doable
- Separating the standards into 3 different levels
- Which vehicles must comply, and which may be exempt
- Accreditation procedures & entry audits
- Follow-up checks and policing
- Prescribe minimum vehicle maintenance standards
- Make it all simple / user friendly
- Minimise duplication of existing systems and processes
- Make it work for everyone and every size of transport operator

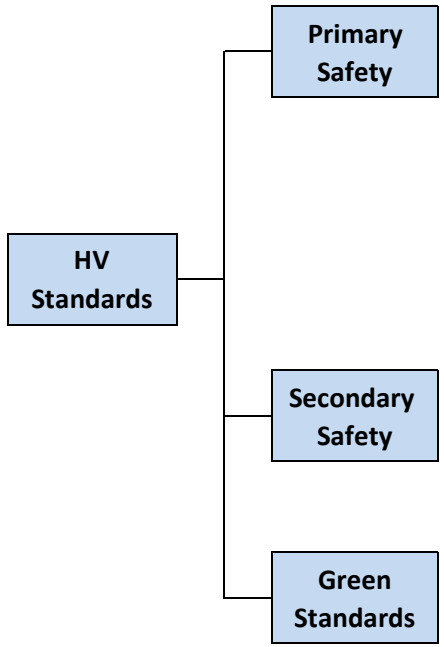
Heavy Vehicle Standards - *Australia vs UK*

Some significant differences between the UK and Australia affect the measures we need to take here

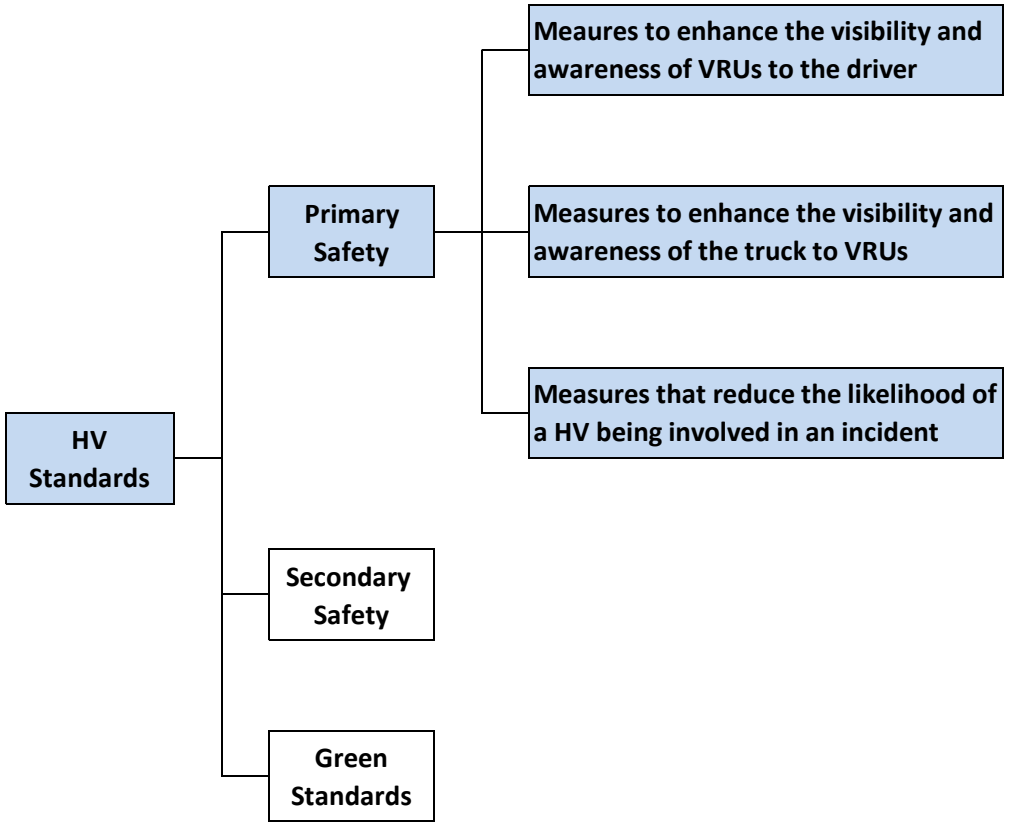
United Kingdom	Australia
Almost all cab-over trucks	Mixture of bonneted and cab-over
Few large road-train type trucks	Plenty of either ex-road train or pseudo road train type trucks operating in the city and suburbs
Far more advanced HV design regulations	ADRs lagging Europe by a decade (or more)

Plus, a somewhat different culture in Australia around what trucks looks like

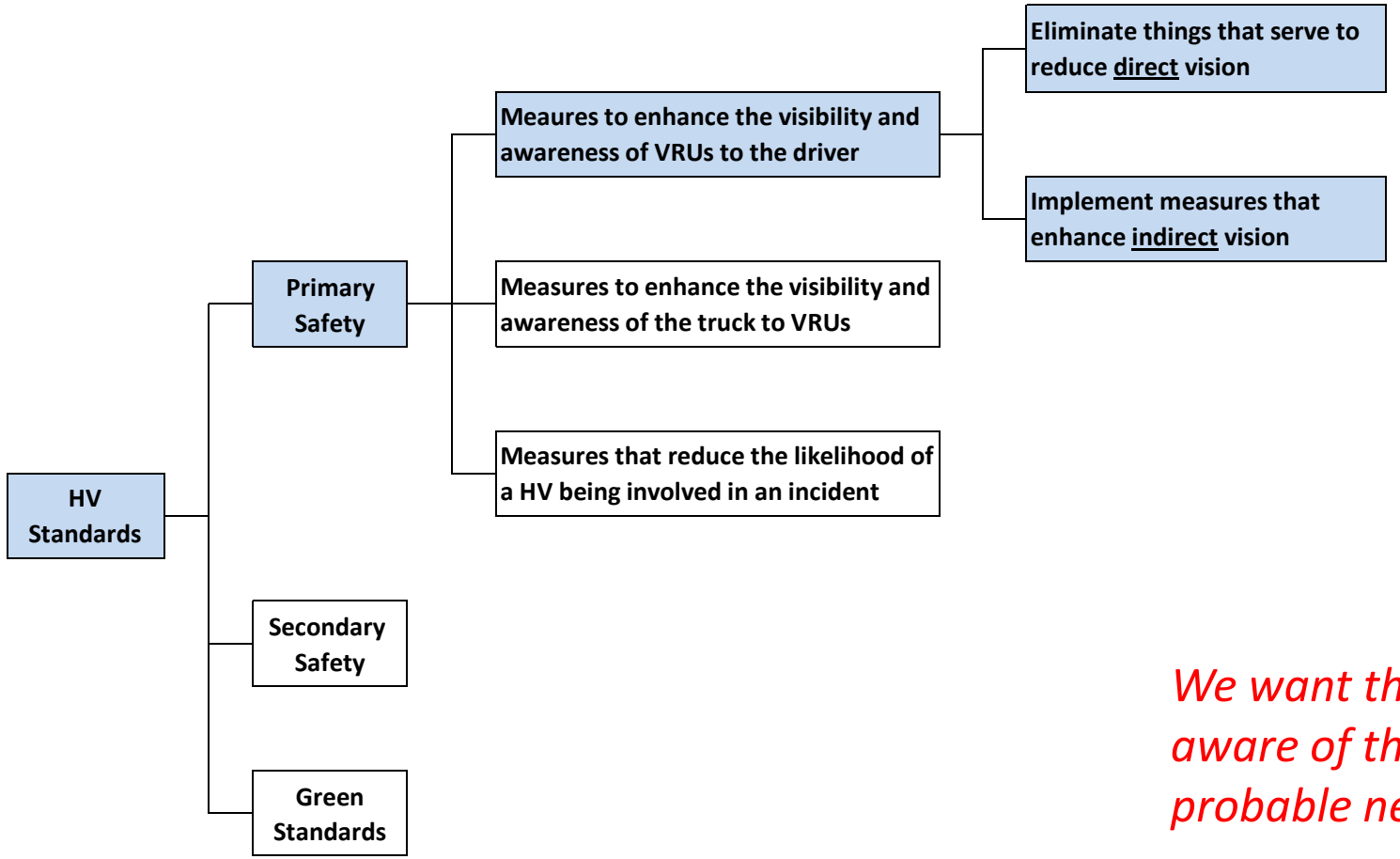
Heavy Vehicle Standards - *Rationale*



Heavy Vehicle Standards - *Rationale*



Heavy Vehicle Standards - *Rationale*



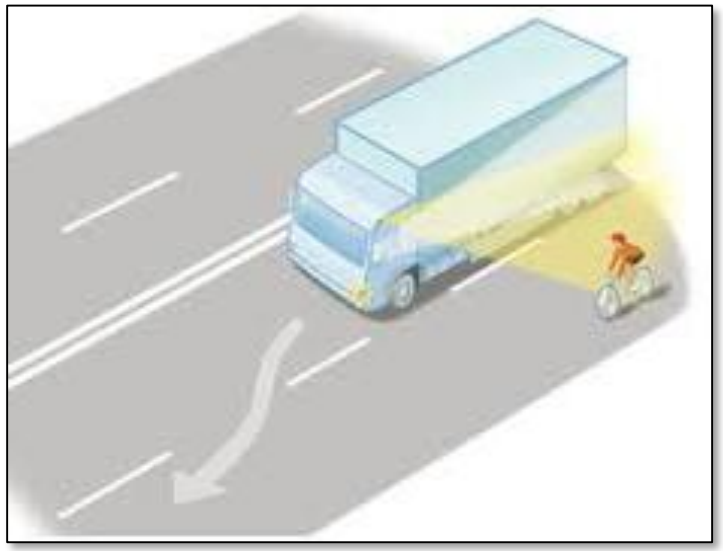
We want the truck driver to be acutely aware of the presence, location and probable next movement of the VRU

Heavy Vehicle Standards - *Rationale*

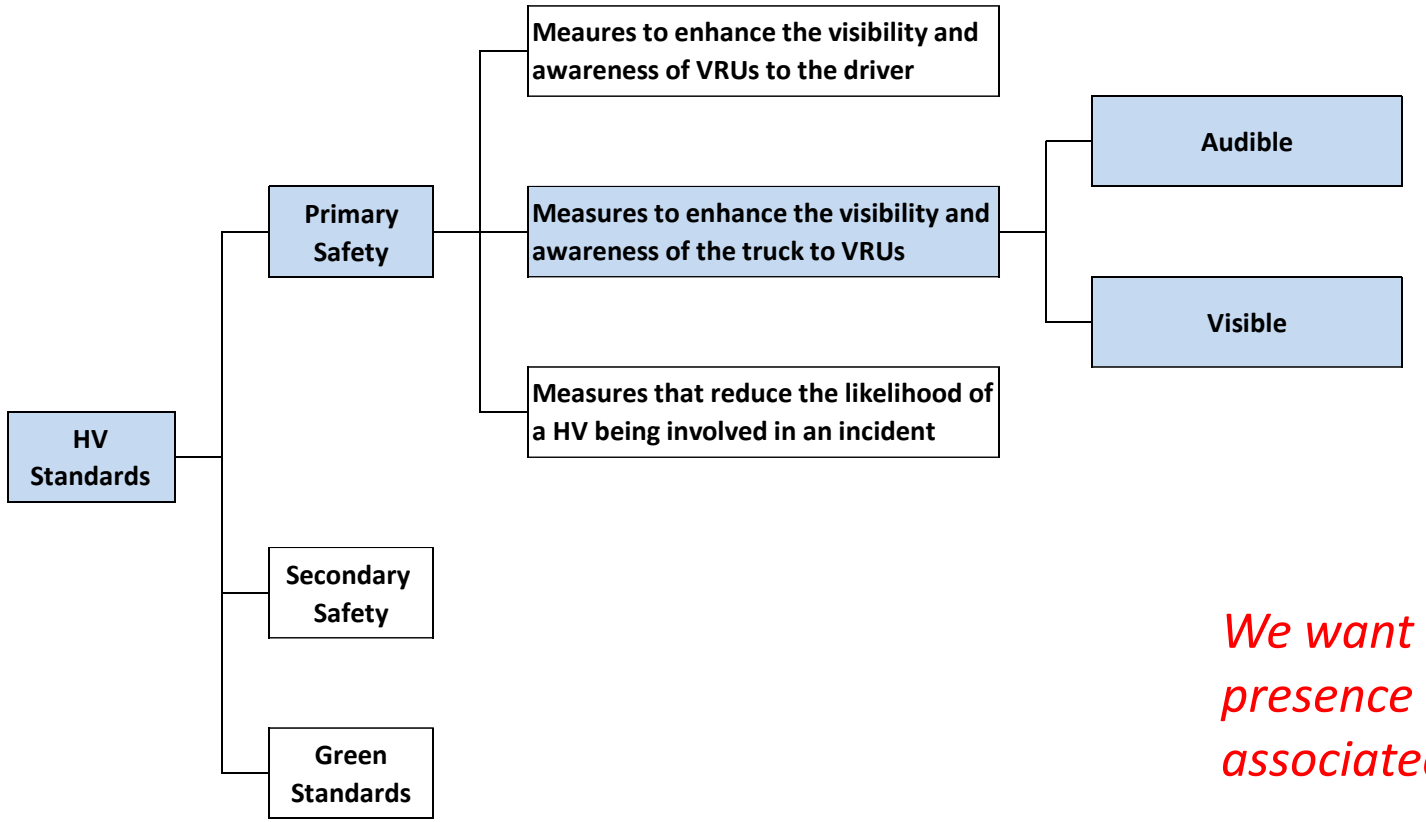
- **HV Standards**
  - **Primary Safety**
    - Meaures to enhance the visibility and awareness of VRUs to the driver
      - Eliminate things that serve to reduce direct vision
        - Bug defelectors (B)
        - Air intakes (B)
        - Bull bars (B)
        - Sunvisors (B)
        - Windscreen decals (B)
        - Window tinting (B)
        - Cab accessories (B)
      - Implement measures that enhance indirect vision
    - Measures to enhance the visibility and awareness of the truck to VRUs
    - Measures that reduce the likelihood of a HV being involved in an incident
  - **Secondary Safety**
  - **Green Standards**

Heavy Vehicle Standards - *Rationale*

- **HV Standards**
  - **Primary Safety**
    - **Meaures to enhance the visibility and awareness of VRUs to the driver**
      - **Eliminate things that serve to reduce direct vision**
      - **Implement measures that enhance indirect vision**
        - Class V and VI mirrors — 1
        - Frensel lens — 1
        - Reversing cameras — 1
        - Reversing sensors OR — 1
        - Left-side blind spot cameras — 2
        - Left-side proximity sensors OR — 2
    - **Measures to enhance the visibility and awareness of the truck to VRUs**
    - **Measures that reduce the likelihood of a HV being involved in an incident**
  - **Secondary Safety**
  - **Green Standards**



Heavy Vehicle Standards - *Rationale*



We want the VRU to be aware of the presence of the HV, the dangers associated with it and its likely next move

Heavy Vehicle Standards - *Rationale*

- **HV Standards**
  - **Primary Safety**
    - Meaures to enhance the visibility and awareness of VRUs to the driver
    - **Measures to enhance the visibility and awareness of the truck to VRUs**
      - **Audible**
        - Reverse beepers (1)
        - Left turn audible warning (2)
      - **Visible**
        - Amber beacons (1)
        - Day run lights (2)
        - Conspicuity marking (1)
        - Drawbar colour (1)
        - Warning signage (1)
    - Measures that reduce the likelihood of a HV being involved in an incident
  - Secondary Safety
  - Green Standards

Heavy Vehicle Standards - *Rationale*

- **HV Standards**
  - **Primary Safety**
    - Meaures to enhance the visibility and awareness of VRUs to the driver
    - Measures to enhance the visibility and awareness of the truck to VRUs
    - Measures that reduce the likelihood of a HV being involved in an incident
      - Wheel-nut indicators (B)
      - ABS - for trucks (S)
      - ABS - for trailers (S)
      - Telematics (G)
      - Electronic Stability Control (Trucks) (G)
      - Roll Stability Control (Trailers) (G)
      - Advanced Emergency Braking (G)
      - Lane Departure Warning (G)
      - Autonomous Reverse Braking (G)
  - **Secondary Safety**
  - **Green Standards**

Heavy Vehicle Standards - *Rationale*

- **HV Standards**
  - **Primary Safety**
    - Meaures to enhance the visibility and awareness of VRUs to the driver
    - Measures to enhance the visibility and awareness of the truck to VRUs
    - Measures that reduce the likelihood of a HV being involved in an incident
  - **Secondary Safety**
    - Measures that help to reduce the severity of incidents if they occur
      - Front Underrun Protection (S)
      - Side Underrun Protection - Trucks (S)
      - Side Underrun Protection - Trailers (S)
      - Rear Underrun Protection (S)
  - **Green Standards**

Heavy Vehicle Standards - *Rationale*

- **HV Standards**
  - **Primary Safety**
    - Meaures to enhance the visibility and awareness of VRUs to the driver
    - Measures to enhance the visibility and awareness of the truck to VRUs
    - Measures that reduce the likelihood of a HV being involved in an incident
  - **Secondary Safety**
    - Measures that help to reduce the severity of incidents if they occur
  - **Green Standards**
    - Measures that help to reduce the production of harmful emissions
      - Euro V Emission Standard (S)
      - Euro VI Emission Standard (G)
      - OR
      - Zero Emission Vehicle (G)

Heavy Vehicle Standards - *Summary*

Bronze — *Must haves*

	CLOCS-A	CLOCS - UK
	Bug defelectors	✗
	Air intakes	✗
	Bull bars	✗
	Sunvisors	✗
	Windscreen decals	✗
	Window tinting	✗
	Cab accessories	✗
	Class V and VI mirrors	✓
	Frensel lens	✗
	Reversing cameras	✓
OR	Reversing sensors	✗
	Reverse beepers	✓
	Amber beacons	✗
	Conspicuity marking	✗
	Drawbar colour	✗
	Warning signage	✓
	Wheel-nut indicators	✗

Silver — *Should haves*

	CLOCS-A	CLOCS - UK	
	Left-side blind spot cameras	✓	
OR	Left-side proximity sensors	✓	
	Left turn audible warning	✓	
	Day run lights	✗	European law
	Front Underrun Protection	✗	European law
	Side Underrun Protection - Trucks	✓	European law
	Side Underrun Protection - Trailers	✓	European law
	Rear Underrun Protection	✗	European law
	Euro V Emission Standard	✗	European law
	ABS - for trucks	✗	European law
	ABS - for trailers	✗	European law

Gold — *Nice to haves*

Telematics plus 4 of the remaining standards

	Telematics	✗	
	Roll Stability Control (Trailers)	✗	European law
	Electronic Stability Control (Trucks)	✗	European law
	Advanced Emergency Braking	✗	European law
	Lane Departure Warning	✗	European law
	Autonomous Reverse Braking	✗	
	Euro VI Emission Standard	✓	European law
OR	Zero Emission Vehicle	✗	

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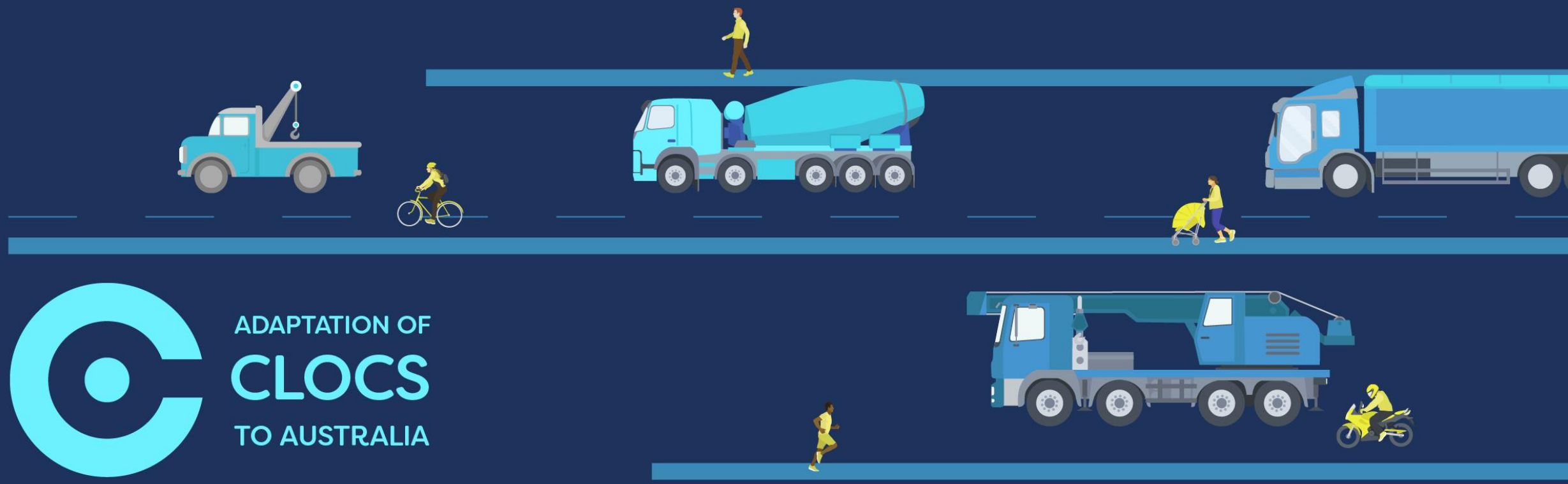
Heavy Vehicle Standards - *End*

ADAPTATION OF CLOCS TO AUSTRALIA

TG1 Acknowledgements

Michael Chan - DoT Victoria – Chair	
Chris Loose – TIC - Deputy Chair	
Greg Dikranian – Transport for NSW - Deputy Chair	
Andrew King - 3M	Mark Mills – Sutherland Shire Council
Anthony Germanchev / Tia Gaffney - ARRB	Olivia Dobson – MUARC
Bastien Wallace - BikeNSW/Lime	Merv Rowlnds – Construction Vehicle Consulting
Brent McCorkell - Blacktown City	Rachel Carisle – DoT Victoria
Edward Wallis / Greg Brown - MaxiTrans	Rachel Nash - NHVR
Geoff Elks - Boral	Ryan Noble – Grasshopper
Glenn Brown - Paccar	Scott McPherson sgesco.com.au



ADAPTATION OF CLOCS TO AUSTRALIA

#4: TG2 Driver Safety Standard

A partnership between:

MONASH University ACCIDENT RESEARCH CENTRE

NRSPP NATIONAL ROAD SAFETY PARTNERSHIP PROGRAM

Driver Safety Standards

Purpose

The CLOCS-A Technical Group 2: Driver Safety has been established specifically to develop the:

- Overarching training and competency standards which provide heavy vehicle drivers with the knowledge, skills, and motivation to operate heavy vehicles safely in diverse road environments and share the road safely with vulnerable road users and develop empathy for them; and

- Minimum standards for ensuring driver fitness for duty and safe driving behaviours in the construction industry.

Driver Safety Standards

Technical Group membership:

- Amelia Cavanagh – Amy Gillett Foundation
- Michael Holmes – Sydney Metro
- Patrick Trowse – Bicycle Queensland
- Craig Weigh – Hanson
- Kayla McNeil – NSW Centre for Road Safety / Transport for NSW
- Jeff Hui – Grasshopper Environmental
- Jim Sarkis – Bingo Industries
- Shadi Faraj – Bingo Industries
- Mike Wilson – Bingo Industries
- John Naoum – CPB Contractors
- Mark Williams – Boral
- Robert Thompson – CPB Contractors
- Dr Tana Tan – Safe Systems Solutions
- Dr Sharon Newnan – MUARC/ QUT
- Adam Cordukes – Sydney Metro
- Olivia Dobson – MUARC

Driver Safety Standards

Deliverables

- Development of Driver Safety Requirements component of the CLOCS-A Standard
- Identification of existing training courses and/ or units of competency which meet the training and competency standards proposed
- Share existing units or competency standards and share with TG for review and comparison
- Development of supporting tools to assist industry communicate hazards and risks (i.e. toolbox talks, induction slides)

Driver Safety Standards

Tasks

1. Initial Terms of Reference agreed between group and formalize deliverables

2. Consultation paper drafted summarizing key issues/ themes for analysis and discussion within group

3. Established sub-groups to have focused workshops discuss issues and themes and identify areas for consideration for Standard

4. Collation of sub-group outputs for wider Technical Group review and consultation

5. Consult with group members on each proposed requirement with a focus on industry application and “achievability”

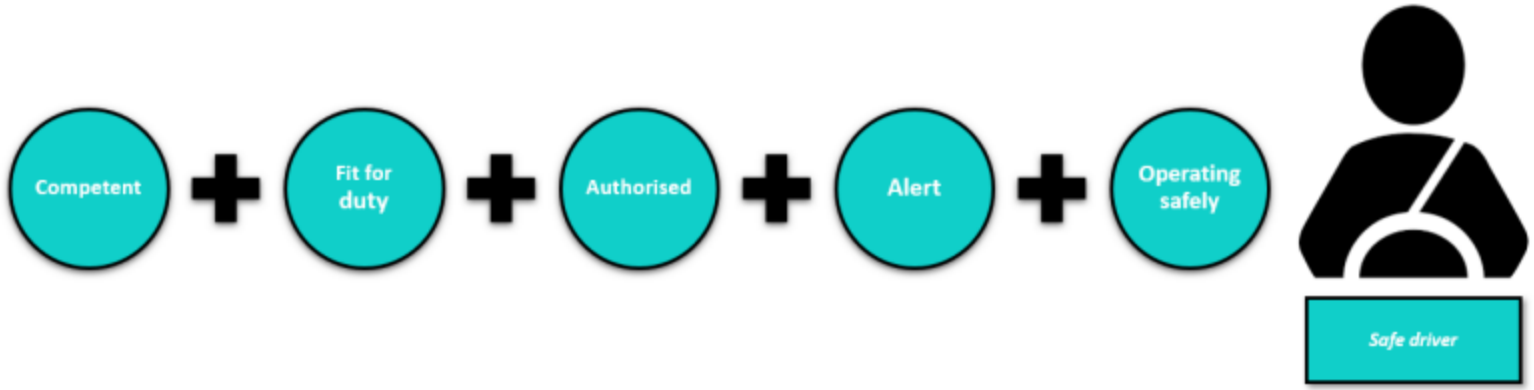
6. Draft requirements for CLOCS-A Standard

Driver Safety Standards

2.1.2 Safe driver

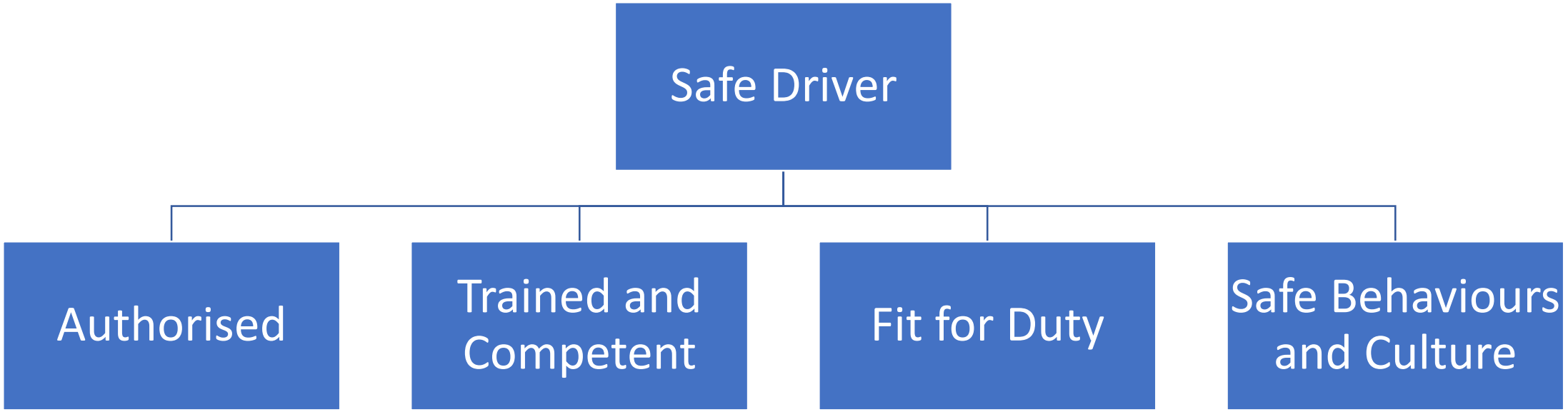
Fundamentally, a safe driver is a driver who is **competent**, **fit for duty**, **authorised**, **alert** and **operating safely** (see Figure 4).

Figure 4. Factors that make up a safe driver

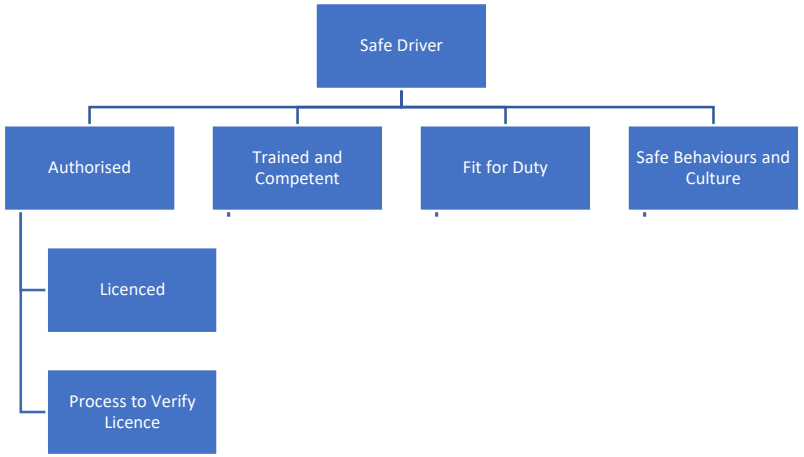


Reference: NTC (2019) Safe people and practices issues paper. Heavy Vehicle National Law Review.

Driver Safety Standards



Driver Safety Standards



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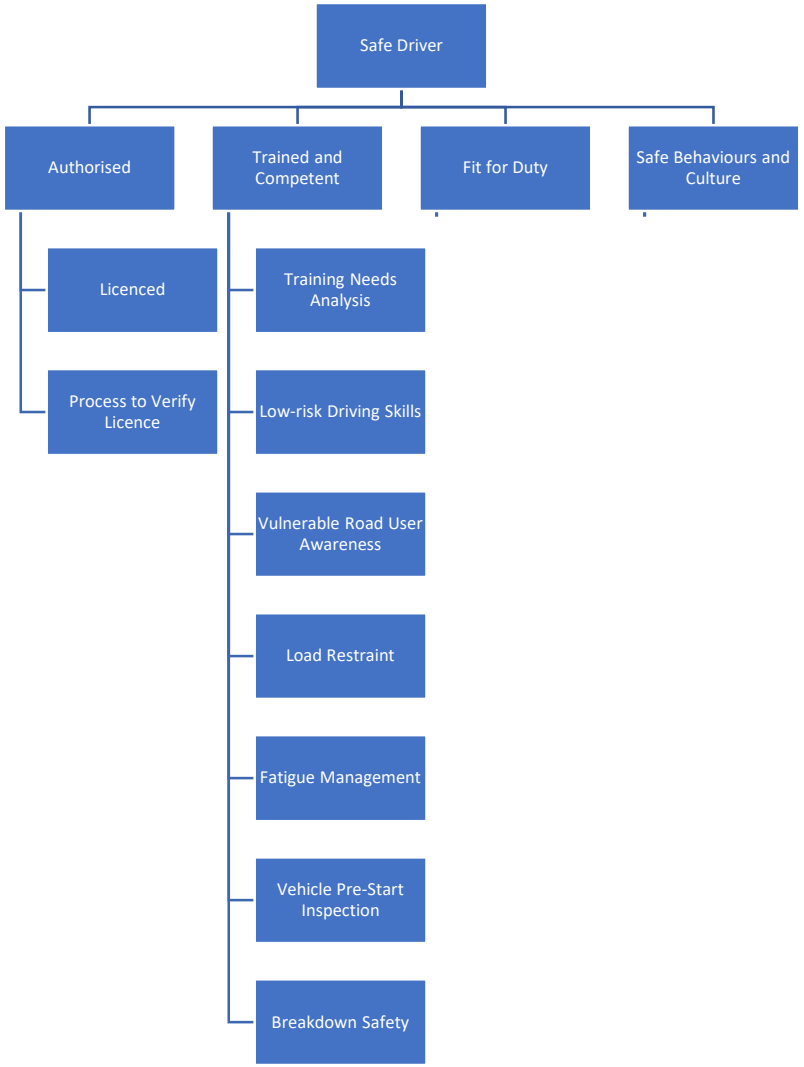

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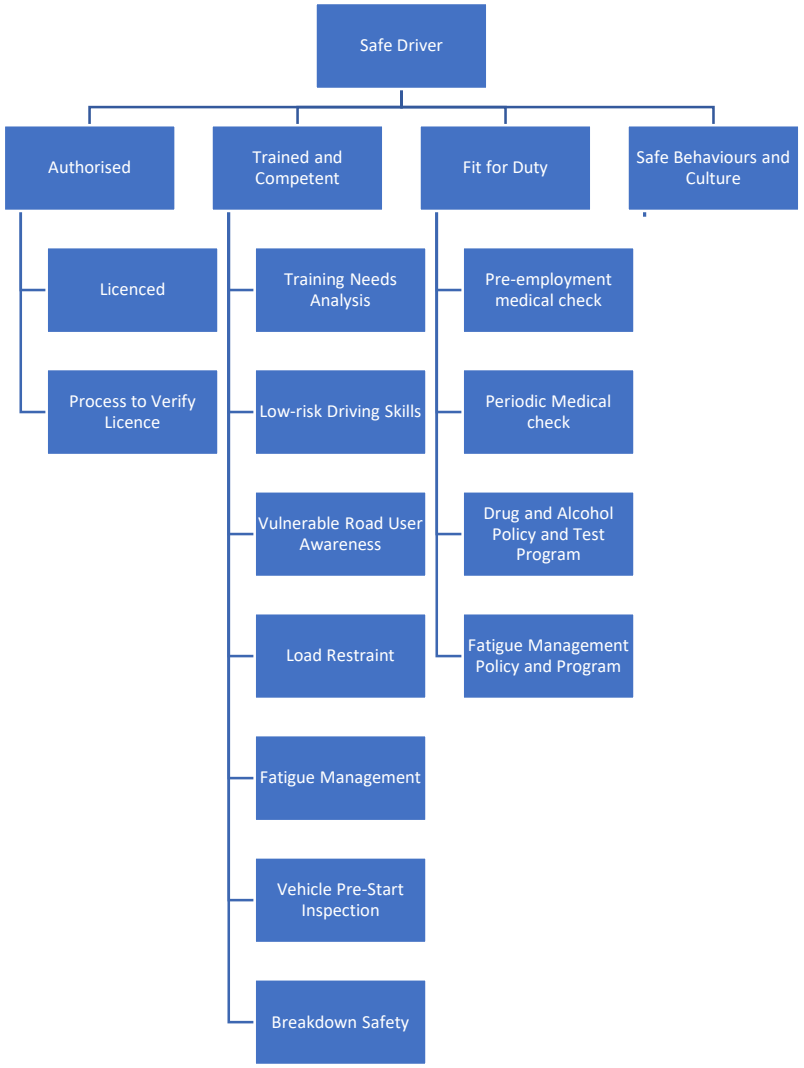

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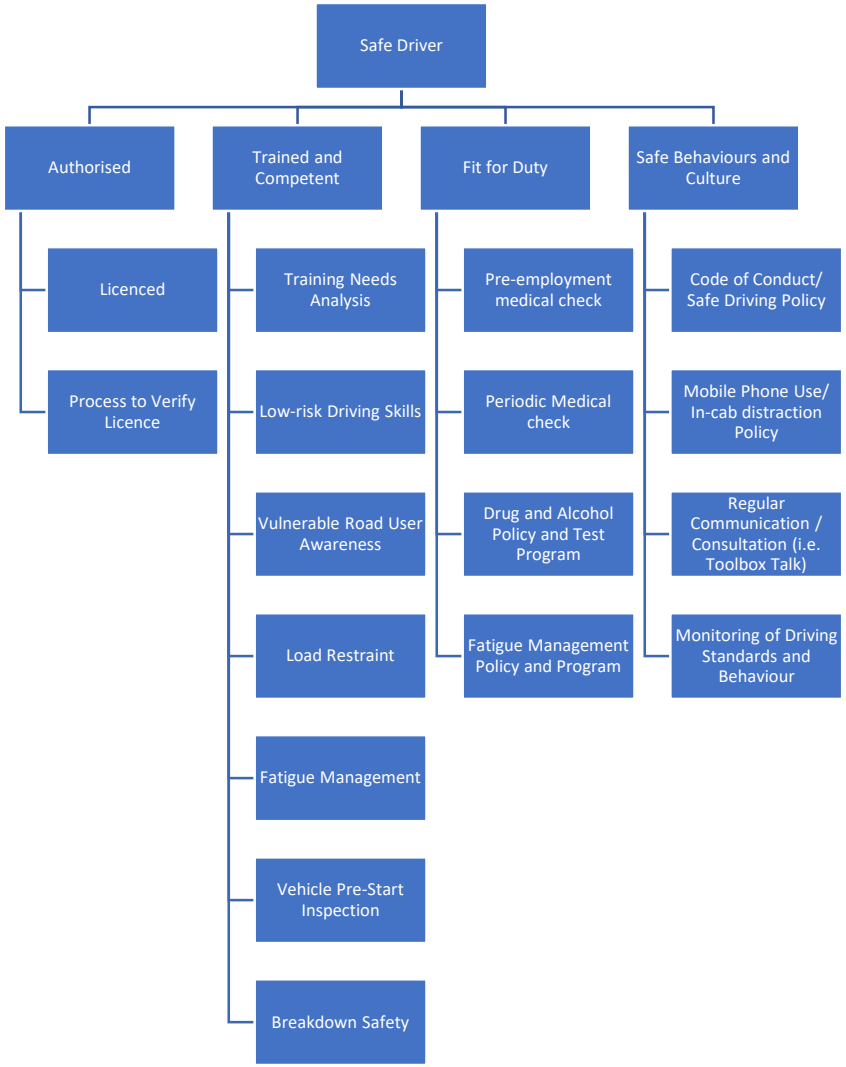

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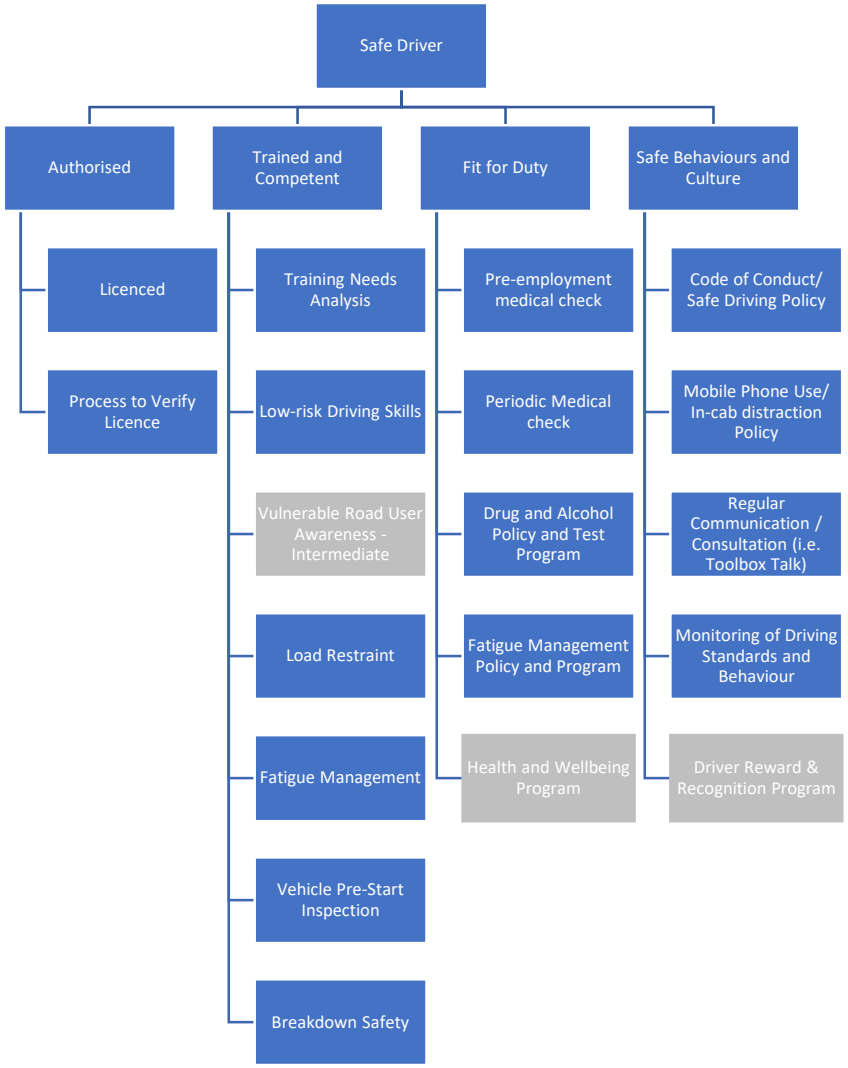
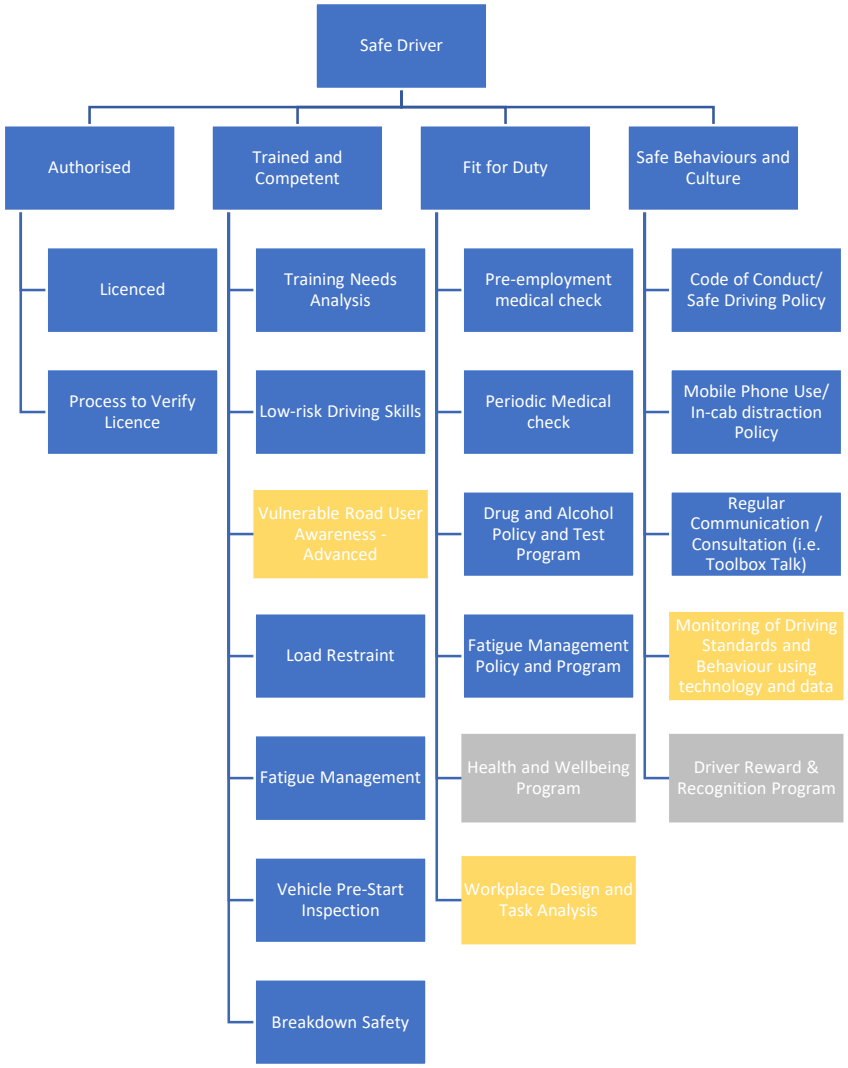


Driver Safety Standards

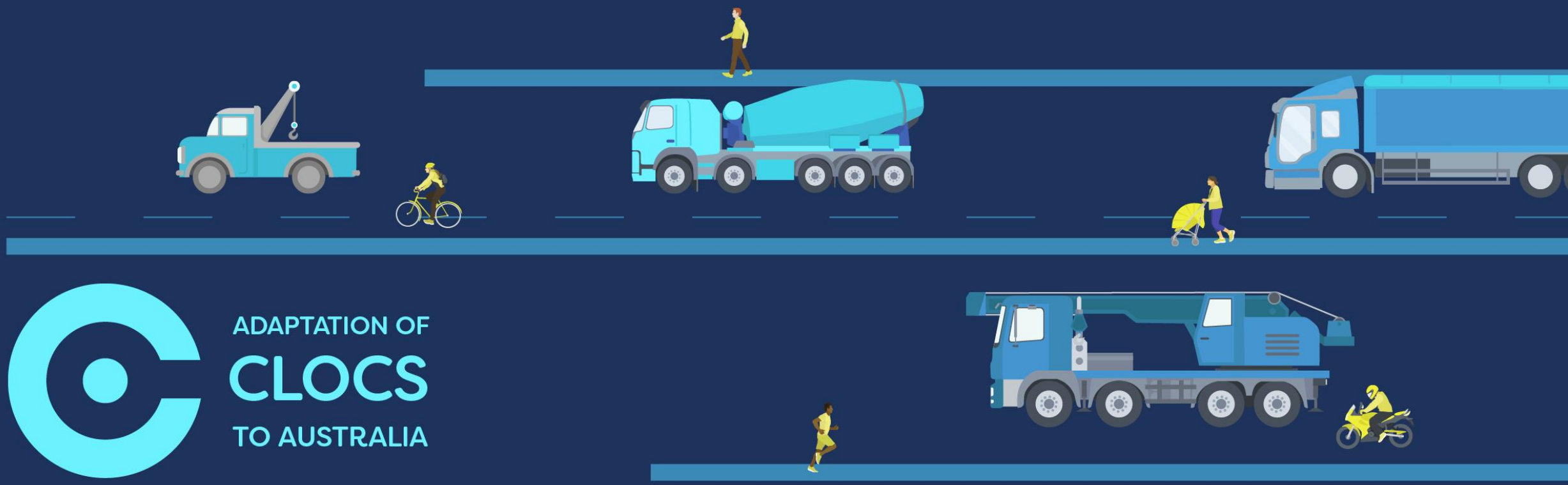


Vulnerable Road User Awareness Training

Accreditation Level	Training Requirement	Knowledge / Content (TBD)	Acceptable Delivery Methods
Bronze	Vulnerable Road User Awareness Training - Basic	To understand, • Growing population and construction • Introduction to the safe system • Introduction to different road user types, with reference to vulnerable road users and associated risks • Overview of driving techniques, skills, and vehicle safety features designed to reduce risks	• In-house facilitation using handout/ PowerPoint-style • eLearning-style module • Individual assessment (multipole choice and short answer) required
Silver	Vulnerable Road User Awareness Training - Intermediate	To explore how changing roads, driver behaviour and vehicle equipment influence vulnerable road user safety Introducing a shared language to explore VRU concepts in a supportive environment. Understanding of route planning, and impacts to road safety Overview of driving techniques, skills, and vehicle safety features designed to reduce risks	• In-house facilitation using handout/ PowerPoint-style • eLearning-style module • Additional assessment requirements including group activities and individual assessment
Gold	Vulnerable Road User Awareness Training - Advanced	As per Silver requirements. In addition, to provide drivers opportunity to understand limitations to existing infrastructure and construction impacts on traffic and road environments in practical setting. Drivers can explore first-hand vulnerable road user perspective. Improve health through increased active transport.	• In-house facilitation using handout/ PowerPoint-style • eLearning-style module • Additional assessment required, including group activities and individual assessment • Practical site visit involving walking tour of project haulage routes, or on-bike tour and experience

Driver Safety Standards – Next Steps

- Consultation with wider CLOCS-A Community
- Vulnerable Road User Training Course
  - Draft Minimum Knowledge and Skills Criteria
  - Development of Bronze eLearning Module
- Supporting tools and guidance (in consultation with Technical Group 4)



ADAPTATION OF CLOCS TO AUSTRALIA

#6: TG3 Logistics and Planning

A partnership between:

MONASH University ACCIDENT RESEARCH CENTRE

NRSPP NATIONAL ROAD SAFETY PARTNERSHIP PROGRAM

Evolution of Technical Group 3 (TG3) Working Group Logistics and Planning

May 2022 Initial briefing of consultants,
Chair Kim Hassall, Ian McLeod (MYIA) Deputy Chair, Drew Gaynor Project Manager, David Fitzgerald (McConnell Dowell), Olivia Dobson MUARC, David and Sally Wilson Consultants

Meetings monthly May – October 2022

Tasked with developing a literature review and consultation with CLOCS stakeholders to feed the future CLOCS-A Logistics Standard

TG3 overall aim to develop and industry guide and standard

Evolution of TG3 Working Group

June 2022 UK ZOOM meeting with Andy Brooks CLOCS Board UK and Transport for London

- **2011 London Olympics and construction related cycling fatalities caused Transport for London to initiate Construction Logistics and Cycling Safety.**
- **Jerome Carslake chaired the virtual meeting with Michael Holmes from Sydney Metro.**
- **Discussions on Freight Operator Recognition Scheme (FORS) and Considerate Constructor Scheme (CCS) in UK.**
- **There were 350 paying (£350 annually) champion companies that had 3 working group meetings a year. They formed a Strategy Standards Governance Board (SSG). This has been working for about 4 years in the UK. There is an annual CLOCS conference.**
- **The idea of a Construction Logistics Plan (CLP) formed a golden thread for constructions projects to improve safety and minimize harm to Vulnerable Road Users (VRUs)**

Evolution of TG3 Working Group

TG3 working group met monthly chaired by Kim Hassall, Chartered Institute of Logistics and Transport Australia (CILTA) with deputy chair Ian McLeod from Victoria's MTIA. Drew Gaynor project managed the working group and provided minutes of the meetings.

Key research areas	
Construction Logistics Plans	Use of other transport modes, rail, water
Traffic Management Planning	Scalable logistics plans from small to large construction projects
Route Assessment Planning	Management of unplanned events, partial route closures
Over dimensioned vehicles and heavy haulage loads	Economies of scale for multi-site projects
Location of assembly/ waiting areas	Emerging technologies and use of IT
Community interface	

Evolution of TG3 Working Group

Interviews with 17 stakeholders in the TG3 Working Group

Job Role	Organization
Safety management	State Govt
Traffic and Transport Engineering	Tier 1 Construction company
Logistics Superintendant	Tier 1 Construction company
Operations Health and Safety	Tier 1 Construction company
Policy advisor	Crane Industry Council
Delivery safety, incident analysis	State Govt
Road User Policy Analyst	State Govt
Project Manager Logistics	Tier 1 Construction company
Safety officer	Local Govt
Field Services - sales	Technology company
Road safety manager	State Govt
Planning and control manager	Tier 1 Construction company
Researcher and Evaluator	Traffic Management
Fleet Operations	Tier 1 Construction company
Project Manager Logistics	Construction Company
General Manager	Rail Company
General Manager Supply Chain and Logistics	Tier 1 Materials Supplier

Evolution of TG3 Working Group

132 articles were reviewed and summarised using key word's themes and findings

An additional 3 key work areas were identified from the literature. These are:

- **Causes and effects of construction site related accidents**
- **Reverse Logistics, deconstruction, salvage materials**
- **Contract Safety insertions**

Evolution of TG3 Working Group

In generating the major elements in the Construction Logistics Plan

The focus was on

- **route planning,**
- **focus on Vulnerable Road Users, and**
- **obtaining access approvals with the various governmental levels.**

The standard depends on the specific documentary streams in order support the audit trail

As such

The document requirements need to be built into the contracts.

What goes into the CLOCS-A TG3 Logistics Framework?

A construction operator's Logistics processes that will be evaluated for assessment in a CLOCS-A standard are:

The elements integral to the Construction Logistics Plan
This entails:

Having an appointed/nominated person (or persons) that will compile the data and documentation (often relying on several areas of the organization)

The core element for the Logistics Stream is the implementation of to/from site transport 'safety measures'

Evolution of TG3 Working Group

These safety measurers focus on all of the overall logistics planning elements that Impact on safety:

Firstly knowing the overall size of the potential road and other modal requirements for the construction project . This knowledge

Access approvals may be required for the vehicle types used:
This impacts on

- **route planning, time of day, day of week approvals**

The routes approved and their frequency of use will often be for several vehicle types, cranes,concrete agitators, low loaders, truck & dogs and semi trailers. (<u>This needs to be documented</u>)

Evolution of TG3 Working Group

The drivers need to be made aware of the safety and hazard issues with moving to/from the construction site. Their hazard/VRU awareness needs to be emphasized. (Awareness and information briefings should be documented)

Safety also emerges from other elements in the logistics plan (the CLP)

An outcome from the company's productivity measures may also deliver a safety outcome.

Evolution of TG3 Working Group

Productivity will often deliver a safety benefit , especially when road trips are saved…(nsurance data shows major crashes are kilometre related)

- **Trucks delivering to site that can obtain partial backhauls save kilometres**
- **The occasional use of barges or a regional train to near the site can save kilometres**
- **Utilizing a truck to service two construction sites saves kilometres**
- **The use of high productivity construction trucks is now a common practice.**

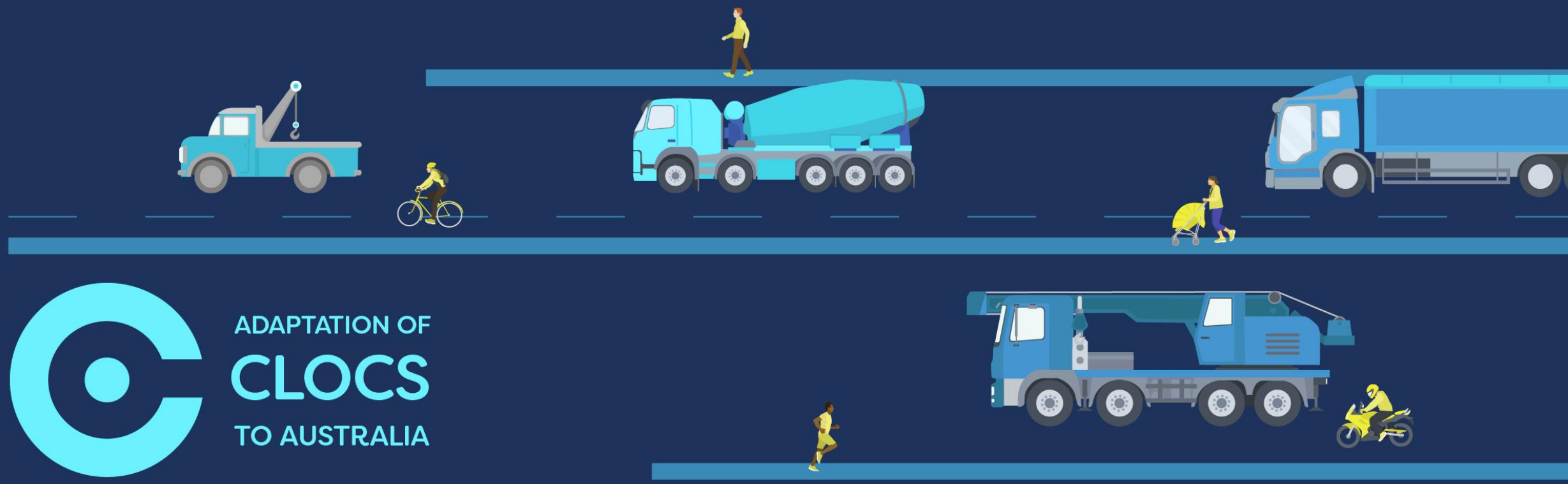
Estimated productivity benefits can be documented and be considered as a logistics productivity initiative with a CLOCS-A auditor (again documentation needed)

Evolution of TG3 Working Group

All the preceding elements and initiatives need to be documented: an auditor will be the purveyor of the tick or the cross but their life is easier if good working documentation is routinely kept by the appointed company CLOCS-A officer.

The documentation may be relatively routinely generated if appropriated clauses are already in the tender contracts. Certainly safety, and operational movements (an environmental angle) may already be in contracts.

However, ongoing reporting of key safety, operations and even productivity measurers will you very close to attaining the CLOCS-A standard.



ADAPTATION OF CLOCS TO AUSTRALIA

#7: TG4 Communications and Advocacy

Jerome Carslake (Chair), Martin Toomey (Deputy), Ruby Athanas (Support)

A partnership between:

MONASH University ACCIDENT RESEARCH CENTRE

NRSPP NATIONAL ROAD SAFETY PARTNERSHIP PROGRAM

TG4 Approach

Stream 1: Community Engagement - awareness beyond major projects
Stream 2: Advocacy - making the business case for CLOCS-A

Development Process

1. Map the stakeholders
2. Define problem / issue
3. Scan of existing content / material
4. Consultation with Supporting Partners and Steering Group
5. Agreement of CLOCS-A content and supporting tools/deliverables
6. Implementation
7. Monitoring and Evaluation

Mapping stakeholders and understanding their interest

CLOCS-A Stakeholder Groups

Government + Regulators	Developers + Project Providers	Primary Contractors	Vehicle + Transport Operators	Community + Local Government	Industry Groups
State and federal government bodies involved in forming regulations for vehicle and road safety and construction.	Organisations who fund and manage the development of new infrastructure.	Organisations that take on a lead role in the construction and delivery of infrastructure projects.	Construction companies operating vehicles and transportation companies working on construction sites.	Local governments and members of the public who have an interest or stake in the safe operation of vehicles operating in the community.	Groups and organisations representing various sectors of the construction and transport sector.

CLOCS-A Stakeholder Breakdown

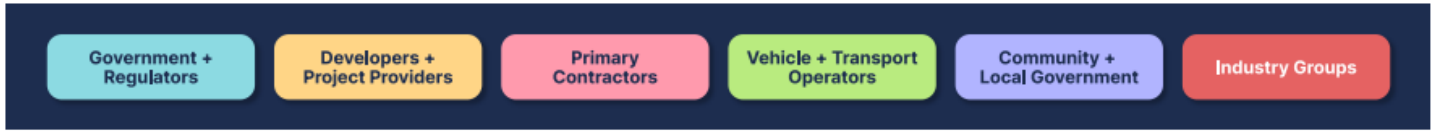


Table 1: Johnson and Scholes Model

		Interest: Low	Interest: High
Power	Low	Minimal Effort	Keep Informed
Power	High	Keep Satisfied	Key Players

Table 2: Stakeholder Engagement Assessment Matrix. [C = Current Position, D = Desired Position]

Company	Unaware	Resistant	Neutral	Supportive	Leading
Stakeholder 1	C			D	
Stakeholder 2		C	D		
Stakeholder 3			C		D

CLOCS-A TG4 Draft Standard

No.	Communication Focus	Item	Tools and deliverables	CLOCS-A Tiers		Responsible Stakeholder						
				Small Projects (Basic - Bronze) (Risk based TBD)	Medium-Large Projects Silver/gold (Advanced) (Risk Based TBD)	Government + Regulators	Developers + Project Providers	Primary Contractors	Vehicle + Transport Operators	Commnunity	Local Govt	Industry Groups
1	**Contract Clauses**	Add communications enagement clause into contract requirements	Appropriate clauses included as per the CLOCS-A Standard	**All CLOCS-A Sites**	**All Clocs-A Sites**							
2	**CLOCS-A Member**	As a CLOCS-A Member will act as a champion for the program to those it operates/interacts with		**CLOCS-A Memerbship logo and act as a champion.**	CLOCS-A Memerbship logo and act as a champion.							
3	**Community Engagement Communications & Activities**	CLOCS-A Tier Membership Insignigia	CLOCS-A Branding - there are three tiers	All Site Entrances	All Site Entrances							
4		Contractor Safety Branding	CLOCS-A Branding and guidance	All Site Entrances	All Site Entrances and surround fences (Depdending upon govt requirements and conditions)							
5		Allocate and maintain primary contact's details	Simple guidance document	Yes	Yes							
6		CLOCS-A Community engagement process	Methodology for engaging the community - process from before anything happens, through the life of the project and frequency	Start and life of project	Start and life of project							
7		Community engagement along logistics routes and local communities (Communication activation campaign in a local area)	Branded content, packages for how to deliver and case studies on success	As per CLOCS-A guidelines	As per CLOCS-A guidelines							
8		CLOCS-A safety messaging at locations of higher risk or conflict points	Consistent messaging on CLOCS-A branding	As per CLOCS-A guidelines	As per CLOCS-A guidelines							
9		CLOCS-A community road safety activations, engagement and awareness activities (swapping seats, Truck Aware, Ride Along etc.)	Packages for how to deliver, evidence of these being done through case studies, CLOCS-A reporting on these being conducted	**Safety Communication Campaign:** Digital, print and social media engagement	**Safety Communication Campaign:** Digtial, print, social media and in-person activations							
10		CLOCS-A Case Study and Learnings (As per Template)	Template (Example currently exists which would be updated to the brand)	One per project	Three per project							
11		Some form of monitoring of community complaints over time	Process for recording public complaints and reporting by sites/area	Monthly	Monthly							

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CLOCS-A TG4 Draft Standard Continued

Note: Communications Standards are applicable to all CLOCS-A accredited projects regardless of otherwise specified tier requirements.

No.	Communication Focus	Item	Tools and deliverables	CLOCS-A Tiers		Responsible Stakeholder						
				Small Projects (Basic - Bronze) (Risk based TBD)	Medium-Large Projects Silver/gold (Advanced) (Risk Based TBD)	Government + Regulators	Developers + Project Providers	Primary Contractors	Vehicle + Transport Operators	Commnunity	Local Govt	Industry Groups
12	Vehicle Branding & Communications	CLOCS-A Tier Membership Insignigia	CLOCS-A Branding Next to where NHVAS	All Vehicles CLOCS-A Sticker next to NHVAS location or in its place	All Vehicles CLOCS-A Sticker next to NHVAS location or in its place							
13		CLOCS-A Be Truck Aware example or similar campaign (Voluntary)	CLOCS-A Banding for a truck that can demonstrate CLOCS-A Standard compliant	optional	optional							
14		CLOCS-A Cyclists aware branding	CLOCS-A Banding adapt or similar to be truck aware	All Vehicles	All Vehicles							
15		CLOCS-A Case Study (As per Template)	Template (Example currently exists which would be updated to the brand)	One per project	Three per project							
16		Vehicle Activation Partner (e.g. Ride Along)	Guidance pack for how to operate, booklet, video capture, plan for how to use	N/A	Provide trucks and drivers for in-person activations as needed							
17		Truck maintained clean and presentable	Research fact sheet on why this matters	All trucks	All trucks							

Supporting Outputs

Case Studies

- HIRA Tool
- Turning Audible Alarm
- SUPS
- Be Truck Aware
- Conspicuity markings
- VRU Trainging

Ride Along

Toolbox Talks

1. Blind Spots
2. Cyclist
3. Pedestrians
4. Urban Driving
5. Vision Perceptions

CLOCS-A Branding

1. Program
2. Tiers
3. Templates
4. Posters / Guidance
5. Website

TG4 Acknowledgements

Alex Metric	Baw Baw Shire Council
Brendan Dwyer	Office of Road Safety
Fiona Lehn	Transurban
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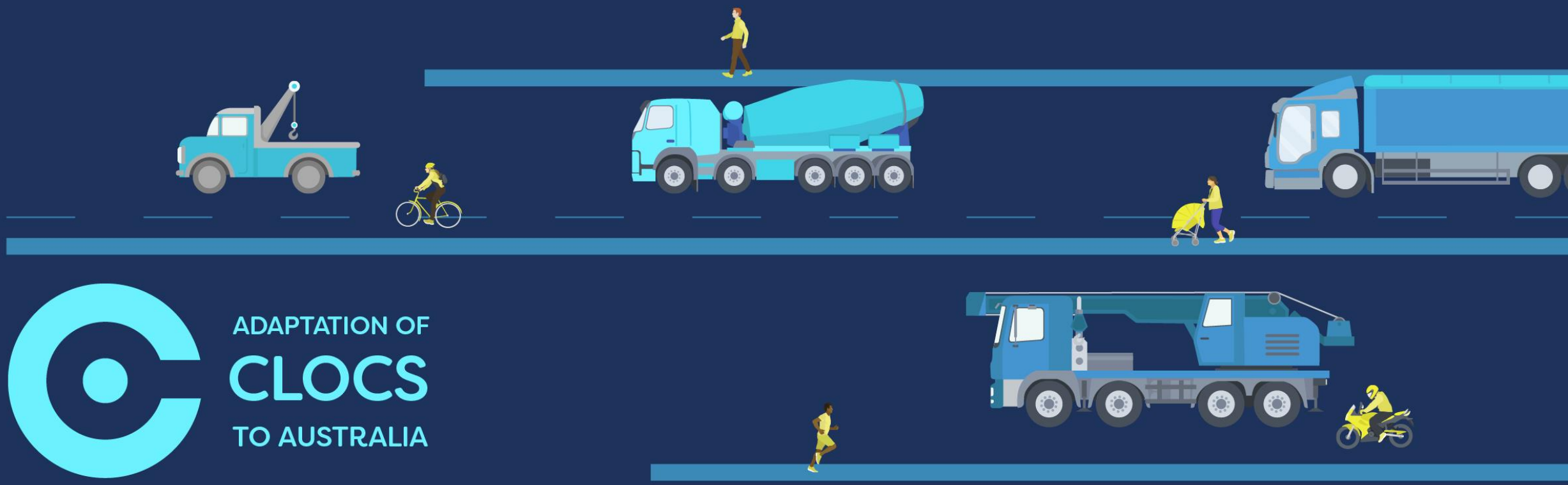
Kathy Doukouris	Safe Systems Solutions
Liz Waller	Transurban
Mark Noble	Holcim
Martin Toomey	ARTSA-i
Molly McGuane	Transurban
Olivia Dobson	MUARC
Owen Corey	HSC Global
Rachel Carlisle	Vic DoT
Rad Waterus	MCD
Ruby Athanas	Swinburne
Shivani Tyagi	Swinburne University
Tonia Bergmanis	Office of Road Safety



ADAPTATION OF CLOCS TO AUSTRALIA

#8: Audit and Accreditation

A partnership between:

MONASH University ACCIDENT RESEARCH CENTRE

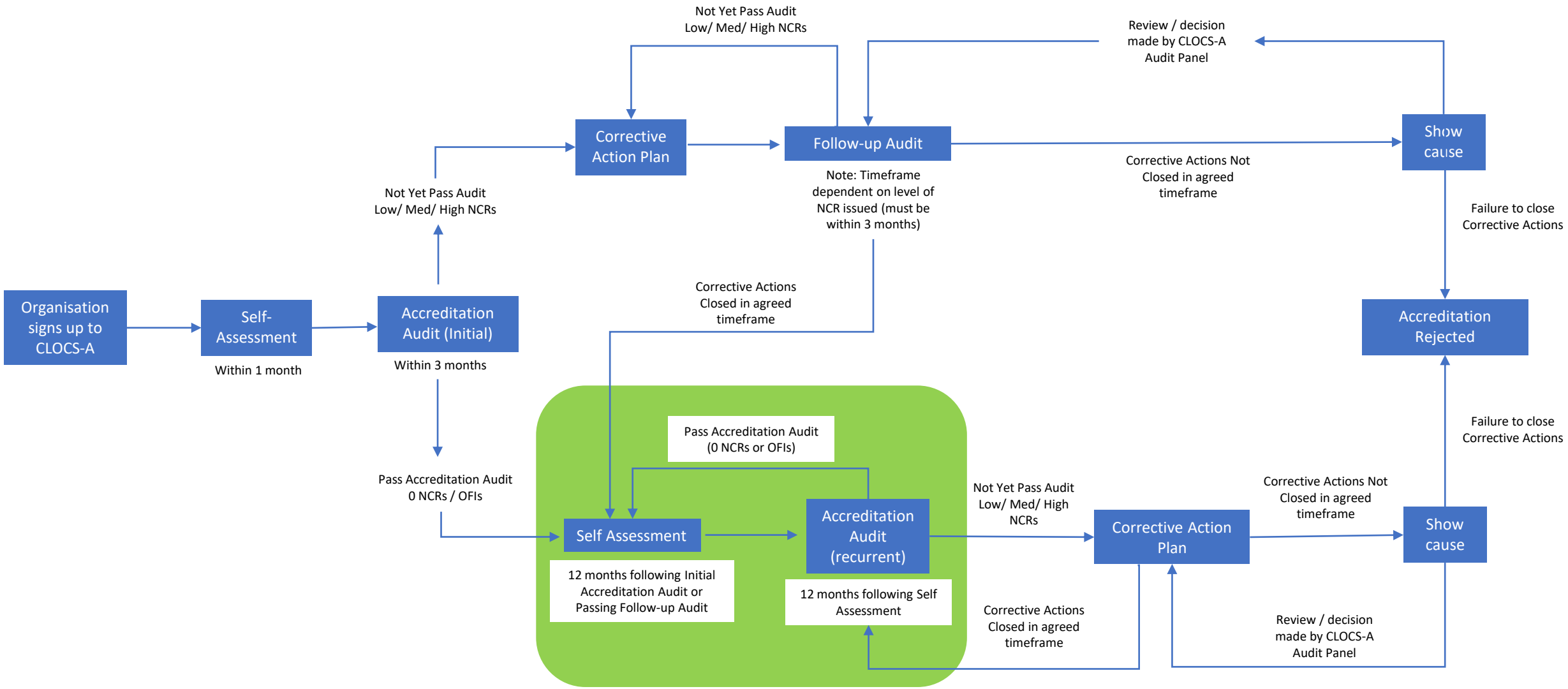
NRSPP NATIONAL ROAD SAFETY PARTNERSHIP PROGRAM

CLOCS-A Audit Framework Considerations

- Conformance to the CLOCS-A Standard needs to be verified – i.e. to ensure the organisation signing up to CLOCS-A meets the relevant CLOCS-A Standard requirements
- Different stakeholder responsibilities exist within the standard (e.g. Client vs Principal Contractor vs Transport Operator's responsibilities) – this will influence the audit type and auditor's level of experience and competency
- Audits proposed to consist of desktop review of documentation and records, followed by physical sampling to verify implementation.
  - At a minimum, physical/ site sampling would cover at least 20% of the organisation's operational sites and vehicles (consistent with requirements of CLOCS UK Standard)
- Proposal is for accreditation to be issued following passing of an audit with the option for a self-assessment in the following year in line with CLOCS UK approach following zero/ OFI findings
- Follow-up audit frequency will reflect the nature and level of findings
- Auditors will need to be independent to organisation being audited and proposal is that the CLOCS-A Managing Body will appoint auditors

CLOCS-A is inspired by the UK's Standard of the same name

Proposed CLOCS-A Audit Process



ADAPTATION OF CLOCS TO AUSTRALIA

Proposed CLOCS-A Audit Process Considerations

Proposal for audit process

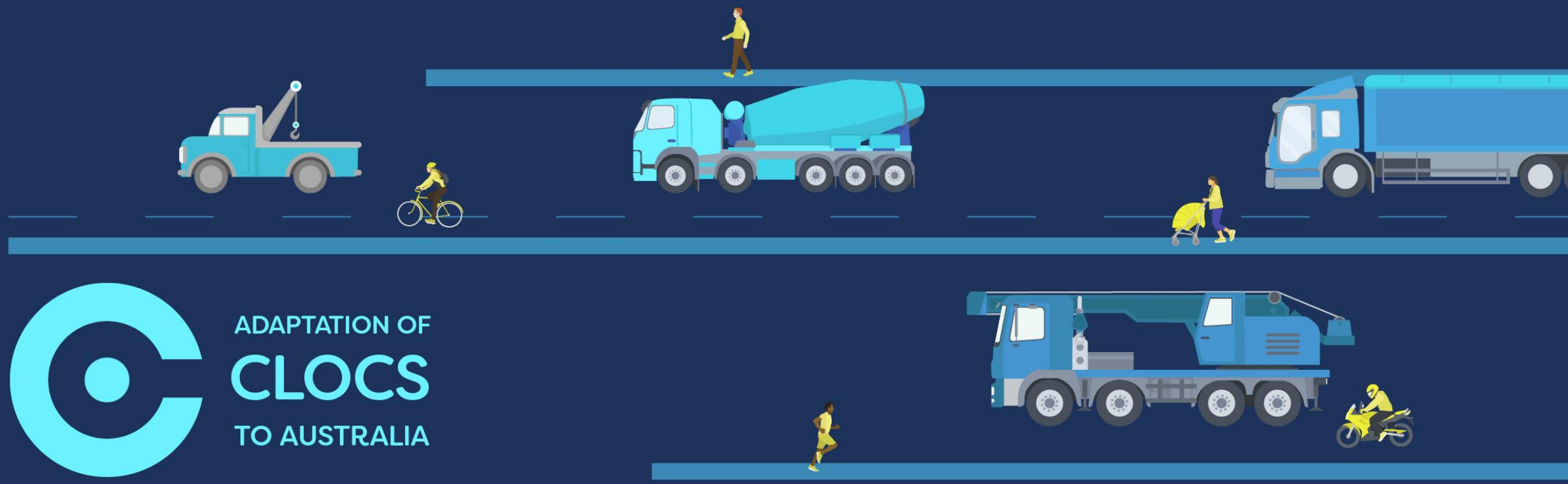
- Self-assessment by organisation to be conducted within the first 1 month of signing up to CLOCS-A Standard
- Conformance against CLOCS-A Standard to be verified by independent auditor appointed by CLOCS-A within 3 months following receipt of self-assessment
- Audits with low-high level NCRs would generate a follow-up audit to verify closure of actions within risk-based agreed timeframe
- Audits with 0 NCRs and/or OFIs would result in organisation being able to complete self-assessment in next 12 months
- Accreditation Audits against the CLOCS-A Standard would be required every second year, where a self-assessment would be completed at 12 months in between each Accreditation Audit
- Where corrective actions have not been closed out by the auditee, auditee will be required to 'show cause'. Review will be undertaken by Audit Panel and decision made whether to accept (corrective action plan issued) or reject organisations CLOCS-A Accreditation

Auditors

- Prequalification process for auditors approved for CLOCS-A auditing
- Auditors would be qualified in Lead Auditor for safety management systems with transport and logistics and construction experience
- Assigned by CLOCS-A Managing Body and Endorsed by Steering Group
- Auditor experience/ competency requirements must be commensurate to level of audit complexity required

CLOCS-A Audit Process Next Steps

- Audit framework and process to be refined by CLOCS-A Audit Working Group
- CLOCS-A Audit and Accreditation Business Rules and Standards to be developed by May 2023
- Self Assessment and Audit Tool to be developed in parallel with Standard



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#9: Governance / Sustainability / Membership

A partnership between:

MONASH University ACCIDENT RESEARCH CENTRE

NRSPP NATIONAL ROAD SAFETY PARTNERSHIP PROGRAM

A. Governance Model - ability to evolve

B. CLOCS-A Structure and Technical Group

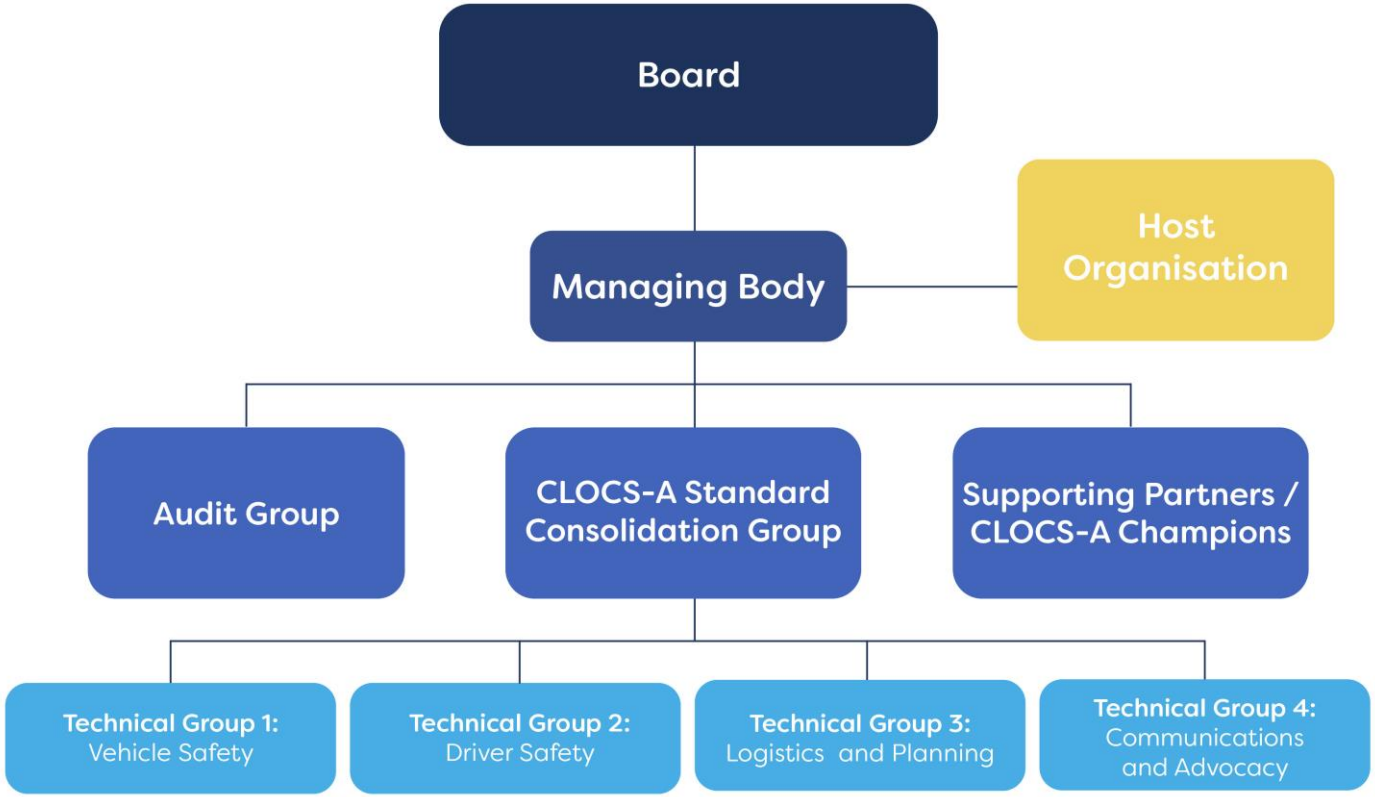


Figure: Current governance structure for the CLOCS-A Program.

C. Board Structure

Item	Detail	Notes
1. Positions	Chair	
	Secretary	
	Treasurer	
2. Board Structure		
Membership	All financial and current members	Board positions are voluntary and unpaid
1	NHVR	Permanent, representative change every 3 years
2*	State and Territory - 2 of Qld, Vic, NSW, Tas SA, WA ACT and NT	3 years
3*		
4#	Major contractors/infrastructure builders	3 years
5#		
6#	Truck Operators	3 years
7#		
8#	Interested/Relevant Associates/organisations ^	3 years
9#		
3. Membership of Board		All members must be a supporting partner
*	Agreed by DoT heads of each of the States & Territories	
#	As voted by membership proportional to their audited motor vehicles via first past the post approach	
^	Suggestions include but not limited to - Truck - ARTSA, CVIAA, HVIA, TIC. - Specialists - ALC, ATA, CCAA, CILIT-A - VRU groups - Bikes, Amy Gillet, - Councils	
4. Meeting quorum	5 of 9 physical members + any proxies	
5. Voting	2/3 majority or equivalent to a minimum of 6 votes including proxies	
6. Reporting	CLOCS-A CEO/MD reports to the Board with all correspondence/communication through them	

D. Membership Fees

Seed Funding / Founding Member – Conflict of Interest Risk and need to be impartial

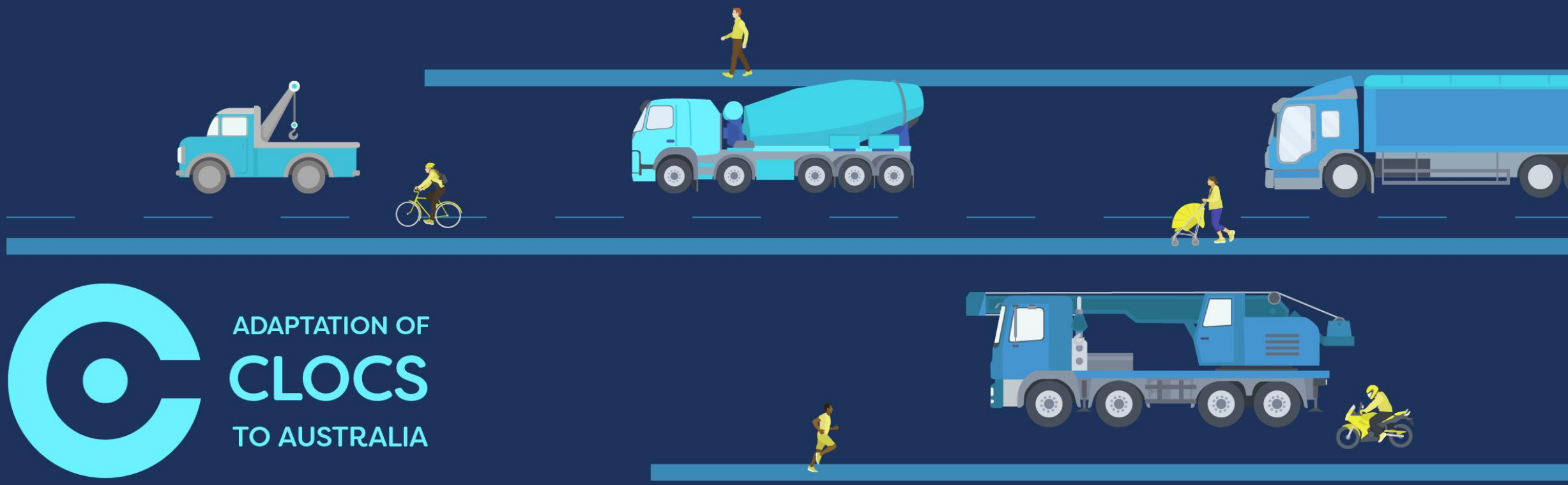
For CLOCS-A the following membership model is proposed:

1. Operating Companies
    1. Tier 1
    2. Tier 2
    3. Non-operating partner
2. Transport Companies
    1. Australian Turnover
    2. Australian Turnover
    3. Australian Turnover
3. Audit and Certification
    1. Truck
    2. Site
4. Training VRU
5. Government
    1. Commonwealth
    2. State
    3. Local
6. Vested interest
7. Philanthropy

E. Host Selection Process

The key steps in the Expression of Interest (EoI) process include:

1. Establish selection panel
2. Confirm potential seed funding for initial with letters of intent
3. Develop EoI and key selection criteria, confirm YYY as proposed channel.
4. Invitation for EoI issued on XXX by YYY
5. Prospective Hosts invited to confirm interest with YYY
6. Chair and Deputy Chairs available for discussions up to XXX.
7. EoI closes XXXX and provided by YYY to the assessment panel which consists of representatives from the Steering Group.
8. The selection process for new host commences X-X of XX. Preferred Host contacted XXX.
9. Final negotiation will be undertaken with the preferred Host for a maximum period of two weeks.
10. Preferred Host confirmed with NHVR.
11. Letter of agreement issued XXXX once Hosting arrangements finalised with any public announcement and transfer timelines confirmed with the new host.



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#10: Other

A partnership between:

MONASH University ACCIDENT RESEARCH CENTRE

NRSPP NATIONAL ROAD SAFETY PARTNERSHIP PROGRAM

CLOCS-A Draft Standard Feedback

- Following the workshop we will circulate the ppt and draft standard
- Comments invited for 6 weeks (23 December)
  - Standard will be sent to peak associations for comment
- Feedback will all be logged, tagged as to provided by who and when, what it was and how it has been addressed.
- Next Workshop will finalise all elements

Timeline of Key CLOCS-A Milestones

Steering Group Acknowledgements

Chris Loose	Truck Industry Council (TIC)
Drew Gaynor	Gaynor Associates
John Dalton	McConnel Dowell
Greg Dikranian	NSW Dept of Transport
Ian McLeod	Major Transport Infrastructure Authority
Jerome Carslake	NRSPP (Chair)
Karyn Welsh	CILT-A
Kim Hassall	CILT-A
Martin Toomey	ARTSA-I
Matthew Moon	Acciona
Michael Chan	Vic Department of Transport
Michael Holmes	Sydney Metro
Paul Caus	TIC
Ray Hassall	NHVR
Owen Corey	HSE Global

Supporting Partner Acknowledgements

Next steps

- Following workshop circulate ppt and draft standard
- Comments invited for 6 weeks
- Standard sent to peak associations for comment
- Feedback will all be logged, tagged as to provided by who and when, what it was and how it has been addressed.

Thank-you