

Ethical Use of Artificial Intelligence

Purpose

This policy outlines the principles that govern the design, development and implementation of artificial intelligence (AI) by the National Heavy Vehicle Regulator (NHVR) to better understand and monitor the heavy vehicle industry.

It further outlines the NHVR's obligation to applying AI in an appropriate and ethical manner in order to address the greatest safety risks and achieve the NHVR's strategic objectives.

This policy aligns with the NHVR's Ethical Use of Data Policy, *Australia's Artificial Intelligence Ethics Framework 2019*, the *Information Privacy Principles* (schedule 3 of the *Information Privacy Act 2009 (Qld)*), the *Right to Information Act 2009 (QLD)* and the NHVR's Right to Information Policy and Information Privacy Policy.

Artificial Intelligence ("AI")	The NHVR defines AI as intelligent technology, programs and the use of intelligent computing algorithmic models that assist in identifying meaningful trends and patterns in data.
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Scope

This policy applies to all NHVR employees (and contractors) who design, develop, or use AI tools to perform regulatory functions to support the intent of the Heavy Vehicle National Law (HVNL).

Note:	<p>The NHVR also develops and implements algorithmic models that use historical data sets and other information to identify trends and potential risks across the heavy vehicle industry. These algorithmic models are not currently machine learning tools and are not considered to be AI.</p> <p>The principles guiding the use of non-AI algorithmic tools are outlined in the NHVR's <i>Ethical Use of Data Policy</i> and the NHVR's <i>Regulatory Intervention Strategy</i>.</p>
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Policy statement

The NHVR commits to designing, developing and implementing AI in a risk-based, evidence-informed and transparent manner to meet the organisation's safety, productivity, sustainability and regulatory capability

objectives under the HVNL, as well as any and all legal obligations under relevant legislation.

AI gives the NHVR the capacity to quickly process large amounts of data to provide evidence-informed insights and risk analysis. This in turn supports the NHVR to more efficiently identify risks, develop robust policy options, and perform its functions under the HVNL.

The NHVR seeks to strengthen its knowledge and understanding of the heavy vehicle industry by harnessing AI to identify trends from existing and emerging data sets. In doing so, the NHVR can more effectively and efficiently allocate resources towards the greatest safety risk.

The NHVR is also committed to harnessing AI to assist NHVR staff in delivering more consistent and effective decision-making (including statutory decisions under the HVNL) in order to reduce the regulatory burden on industry where possible through efficient monitoring and targeting.

The NHVR will design, develop and implement AI in a human-centric manner, whereby insights from AI will be subject to consistent and rigorous human oversight before the application of any regulatory intervention.

The NHVR will use AI in line with the NHVR's Ethical Use of Data Policy, *Australia's Artificial Intelligence Ethics Framework 2019*, the *Privacy Act 2009 (QLD)*, the *Information Privacy Principles* (schedule 3 of the *Information Privacy Act 2009 (Qld)*) as well as the NHVR's Right to Information and Privacy Policy and the NHVR's Regulatory Intervention Strategy.

AI and decision-making	AI is a tool to support the NHVR's regulatory decision-making. It does not, and should not, make automated decisions on behalf of the regulator in relation to enforcement and/or punitive regulatory intervention. AI may be used to identify risks and insights, or support compliance monitoring, but must always be subject to human oversight and supported by other data or evidence.
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Principles

The application of this policy will be consistent with the following principles, as well as the principles outlined in the NHVR's Ethical Use of Data Policy:

Generate benefits

1. The NHVR will design, develop and implement AI to inform the allocation of regulatory efforts towards the greatest safety risk, and to improve the efficiency and effectiveness of the NHVR's regulatory activities.
2. The NHVR will ensure that AI is used only when it is considered the most appropriate solution for a policy problem or service delivery mechanism. It should always be considered against other available analysis and policy tools and provide maximum benefit to the regulator, the heavy vehicle industry, as well as the wider Australian community.

Human-centric and fair

3. The NHVR will design, develop and implement AI in line with the principles of natural justice, human rights and democratic values. Use of AI must protect the dignity, diversity, and autonomy of individuals.
4. The NHVR will keep the individual at the centre of all AI design and delivery activities to ensure that implementation is fair and ethical, and does not result in unfair discrimination against individuals, communities or groups.

Value privacy protection and security

5. The NHVR will use AI in line with Queensland privacy laws and other jurisdictional privacy and data protection laws where relevant and/or applicable.
6. The NHVR will not use AI tools and systems in any manner other than for their intended and documented purpose without appropriate review and consultation.
7. The NHVR will be transparent with the Australian public about the methodologies, algorithmic models and codes used by the NHVR.

Reliable and rigorous

8. The NHVR will apply an evidence-informed approach to the design, development and implementation of AI. AI tools and systems will be trialled appropriately and continuously

validated to ensure that they are operating reliably in accordance with their intended purpose.

Transparent and understandable

9. The NHVR will commit to transparency and responsible public disclosure regarding the use of AI tools and systems. Information on the use of AI will be made available and accessible to the heavy vehicle industry, road managers, other road users and the Australian public to support a better understanding of when AI is engaged and how decisions are made (noting that decisions will be made by NHVR officers and not by the system itself).

Accountable

10. The NHVR is accountable for the proper functioning of its AI tools and systems, including their impact on individuals. Human oversight will be imbedded into all AI tools and systems, and all decision-making (including statutory decisions under the HVNL) from any AI insights will be undertaken by human NHVR officers in a risk-based, evidence-informed and transparent manner.

Contestable

11. When an AI tool or system significantly impacts a person, community or group as designated under the NHVR's Risk and Assurance Framework, the NHVR will allow a timely process to allow people to challenge the use or outcomes of the tool.
12. The NHVR will regularly monitor and audit AI tools and systems as appropriate to ensure that they are being used solely for their intended purpose and are not resulting in adverse or unintended outcomes.
13. The NHVR will notify affected stakeholders in a timely manner where it is deemed that adverse or unintended outcomes have occurred, and seek to rectify the issue immediately.

Responsibilities

The following role types are responsible for implementing this policy:

Position	Responsibilities
Information Owner (CEO, NHVR)	<ul style="list-style-type: none"> Ensures data and information (including AI tools and systems) are managed as a strategic asset across the organisation in compliance with laws, regulation and standards.
Information Custodian	<ul style="list-style-type: none"> Ensures data and information are managed across their life cycle to increase their utility for a specific regulatory activity in line with this policy, as well as the NHVR's Data Governance Framework.
Information Steward	<ul style="list-style-type: none"> Ensures data and information are appropriately defined and have an associated level of quality.
Data and Information Professional	<ul style="list-style-type: none"> Provides support to the Information Steward in the execution of their responsibilities. This may involve technical or architectural assistance, through to support with data quality analysis.
Data and Information Stakeholder	<ul style="list-style-type: none"> Provides knowledge and information in relation to their business interest in the data and information.
Information Participant	<ul style="list-style-type: none"> Ensures that data and information are used in line with this policy and the NHVR's Data Governance Framework.

Related legislation and documents

- *Heavy Vehicle National Law Act 2012*
- *Heavy Vehicle National Regulations*
- *Information Privacy Act 2009 (QLD)*
- *Right to Information Act 2009 (QLD)*
- *Information Privacy Principles*
- NHVR's Ethical Use of Data Policy
- NHVR's Right to Information and Privacy Policy
- NHVR's Regulatory Intervention Strategy