



DRIVING THE FUTURE

MASTERING CANADA'S AUTONOMOUS VEHICLE REGULATIONS





THE CANADIAN REGULATORY FRAMEWORK

Canada's regulatory framework is designed to address these challenges through a multi-tiered governance structure.

At the federal level, **Transport Canada** enforces the **Motor Vehicle Safety Regulations** and collaborates internationally to set global benchmarks, aligning with automotive standards such as **ISO 26262** related to functional safety and **ISO 21434** related to cybersecurity, to protect the driver from potential hazards and threats within the automotive industry.

This comprehensive approach ensures that AV/CVs are integrated safely and effectively, allowing Canada to capitalize on opportunities while mitigating risks.



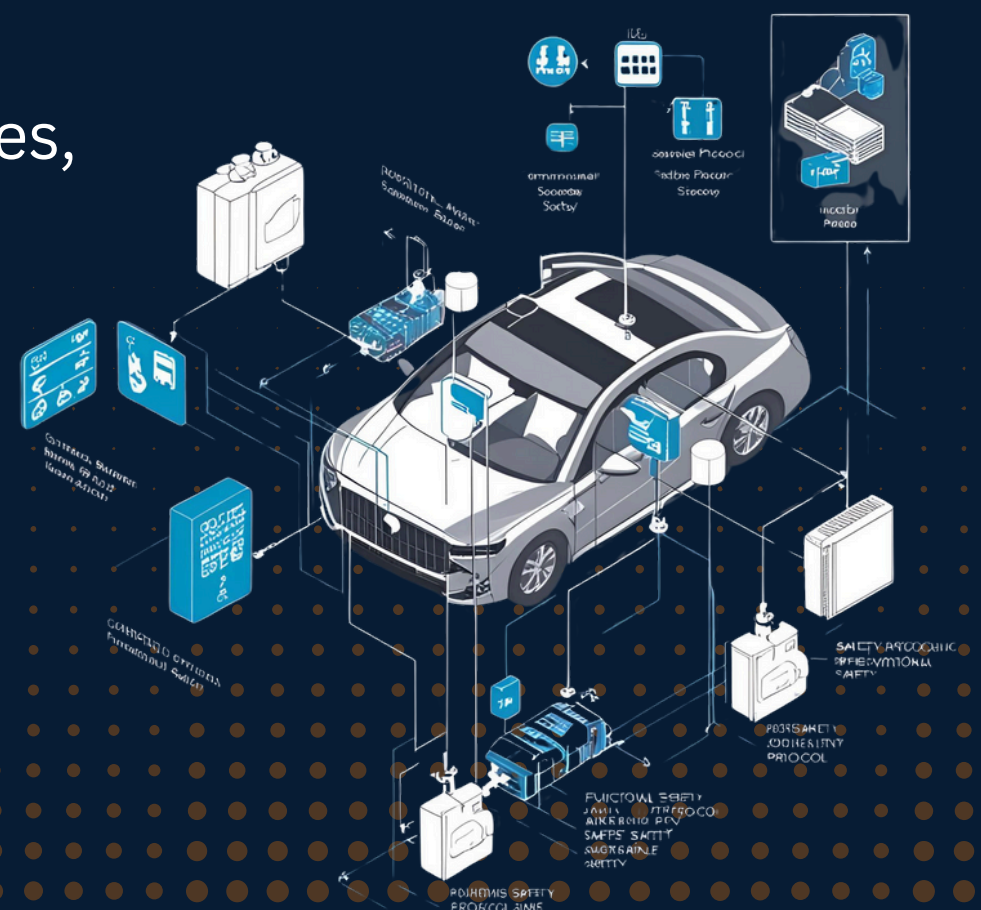


THE PILLARS OF FUNCTIONAL SAFETY IN AUTONOMOUS SYSTEMS

Functional safety is crucial for AV/CVs, especially in Canada's rigorous regulatory environment. With up to **94%** of collisions resulting from human error, AV/CVs have the potential to significantly reduce road accidents, deaths, and injuries.

Key components such as **redundancy, continuous monitoring, safety mechanisms, and fault tolerance** are essential for ensuring that autonomous systems operate reliably under all conditions.

Canada's regulations emphasize the need for these safety features, aligning with international standards like **ISO 26262**.





SECURING THE FUTURE: CYBERSECURITY IN AUTONOMOUS VEHICLES

IoT malware attacks have **increased 400%** compared to previous years, highlighting the urgent need for enhanced cybersecurity measures. **Canada's Vehicle Cyber Security Guidance** aims to advance the state of vehicle cybersecurity by providing technology-neutral and non-prescriptive guiding principles.

These principles encourage organizations to identify and manage cybersecurity risks, ensure the vehicle integrity from potential threats with appropriate safeguards, detect and respond to cybersecurity events, and recover from incidents quickly and safely.

The country's regulations require robust **safeguards and continuous monitoring** to mitigate risks and maintain the integrity of autonomous vehicle systems.





INNOVATION AND COMPLIANCE

Innovation within **regulatory boundaries** is essential in Canada, where AV/CVs present both challenges and opportunities.

The country's regulations require that new technologies not only meet safety standards but also contribute to innovation and the optimization of transportation operations.

Canada's vision for the future of transportation is a **system that is safe, secure, green, efficient, and sustainable**, improving the quality of life for all Canadians.





DRIVING FORWARD: YOUR PARTNER IN AUTONOMOUS VEHICLE SUCCESS

At CS Group - Canada, we are dedicated to leading the way in navigating Canada's regulatory landscape for **autonomous vehicles**.

Our expertise in **functional safety, cybersecurity, and embedded systems development** positions us as a trusted partner in this evolving field.

We understand the unique challenges and opportunities that the Canadian market presents, and we are committed to delivering solutions that meet these demands.

Contact us today to explore how our expertise can drive your success in this dynamic and exciting market.

