

This is NOT a test: Inaugural AV safety standard published

May 20, 2020

On April 1, 2020, Underwriters Laboratories (UL) published the first dedicated safety standard for fully autonomous vehicles: UL 4600, “Standard for Evaluation of Autonomous Products”.

UL 4600 is a starting point for addressing the concern of many autonomous vehicle **stakeholders: is their product “safe enough” given the complete absence of human supervision?** To ensure that the appropriate parties were at the table, UL created a diverse body of international stakeholders to develop the standard, including government agencies, academia, autonomous vehicle developers, technology suppliers, insurance companies and many others.

As it stands, UL 4600 serves as a guide for autonomous vehicle designers to make a **“safety case” for their products. At a high level, this includes three elements: goals, argumentation and evidence.** It asks developers what it means to be safe in a specific context (e.g. do not hit other vehicles), how that goal will be achieved and what is the evidence that these arguments are valid.

In that respect, UL 4600 is essentially a standard of care, not a test. It does not prescribe hardware or software specifications. Instead, it recognizes there are no humans in charge and specifies a level of care that would ensure an acceptable safety system. In that regard, it provides developers with an extensive list of factors that will **essentially force the question “did you think of that”?**

Notably, UL 4600 does not provide guidance on the following:

- Performance criteria;
- Which technology to use;
- Pass/fail criteria for safety;
- Benchmarks for road testing of prototype vehicles;
- Acceptable risk levels; or
- Ethical decisions.

While UL 4600 is a huge leap in the safety direction, many questions remain up in the air surrounding certification, potential conflicts with existing safety standards and non-

compliance. Although the document is promoted as fluid and evolving, it will certainly be interesting to follow how manufacturers, designers and developers alike will adhere to this new standard.

By

[Laura M. Day](#), [Samantha Bonanno](#)

Expertise

[Transportation](#), [Automotive](#), [Autonomous Vehicles](#)

BLG | Canada's Law Firm

As the largest, truly full-service Canadian law firm, Borden Ladner Gervais LLP (BLG) delivers practical legal advice for domestic and international clients across more practices and industries than any Canadian firm. With over 725 lawyers, intellectual property agents and other professionals, BLG serves the legal needs of businesses and institutions across Canada and beyond – from M&A and capital markets, to disputes, financing, and trademark & patent registration.

blg.com

BLG Offices

Calgary

Centennial Place, East Tower
520 3rd Avenue S.W.
Calgary, AB, Canada
T2P 0R3

T 403.232.9500
F 403.266.1395

Ottawa

World Exchange Plaza
100 Queen Street
Ottawa, ON, Canada
K1P 1J9

T 613.237.5160
F 613.230.8842

Vancouver

1200 Waterfront Centre
200 Burrard Street
Vancouver, BC, Canada
V7X 1T2

T 604.687.5744
F 604.687.1415

Montréal

1000 De La Gauchetière Street West
Suite 900
Montréal, QC, Canada
H3B 5H4

T 514.954.2555
F 514.879.9015

Toronto

Bay Adelaide Centre, East Tower
22 Adelaide Street West
Toronto, ON, Canada
M5H 4E3

T 416.367.6000
F 416.367.6749

The information contained herein is of a general nature and is not intended to constitute legal advice, a complete statement of the law, or an opinion on any subject. No one should act upon it or refrain from acting without a thorough examination of the law after the facts of a specific situation are considered. You are urged to consult your legal adviser in cases of specific questions or concerns. BLG does not warrant or guarantee the accuracy, currency or completeness of this publication. No part of this publication may be reproduced without prior written permission of Borden Ladner Gervais LLP. If this publication was sent to you by BLG and you do not wish to receive further publications from BLG, you may ask to remove your contact information from our mailing lists by emailing unsubscribe@blg.com or manage your subscription preferences at blg.com/MyPreferences. If you feel you have received this message in error please contact communications@blg.com. BLG's privacy policy for publications may be found at blg.com/en/privacy.

© 2025 Borden Ladner Gervais LLP. Borden Ladner Gervais LLP is an Ontario Limited Liability Partnership.