

FCEV bus penetration test for R155 compliance

Case Study Overview

Wrightbus needed an independent cybersecurity specialist to undertake vehicle level penetration testing to support the compliance requirements of UNECE R155 as part of their vehicle Type Approval submission for a new FCEV bus.

HORIBA MIRA provided the necessary skills and large screened facilities to help identify possible exploitable attacks, following development and agreement of the test plan.

The penetration testing work was witnessed by the customer's TAA as an input for the Type Approval process.

Successes and Benefits

- Use of "grey-box" attack approach gave appropriate balance to test time vs. reverse engineering to ensure robust test plan was developed quickly.
- Range of connected interfaces, comms networks and diagnostics ports were tested to ensure relevant vulnerabilities were considered, allowing Wrightbus to demonstrate compliance.
- Support provided to the TAA to witness the testing meant Wrightbus was able to meet the critical project timing for their overall submission.

