Comment from Phil Rink

Human beings are not capable of monitoring a high-speed automated operation and intervening when the operation fails. This is well-know, basic automation stuff. If you want the human being to do something about a process, the human being needs to be involved in the process.

Therefore, you cannot develop automated driving software on public roads using real vehicles in proximity with non-automated vehicles. When the automation fails, and it will fail, the human driver will not be able to detect the failure soon enough to prevent the failure. If notified by the automation, the human will not be able to gain situational awareness soon enough to choose a corrective action and apply that action. Things happen too quickly in driving situations, and especially in uncommon situations, which is where the automation will fail.

Regulating authorities must develop, curate and maintain a minimum set of conditions where the automation can be verified and applied. Use outside of those known conditions must not occur on public roads in public use.