Embracing AI-based vehicle checks

Puspakom launches #MacamBaharu for more efficient inspections

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PETALING JAYA: Puspakom Sdn Bhd, the nation's sole authorised vehicle inspection agency, is embracing artificial intelligence (AI) and other measures to make vehicle inspections more efficient under a transformative move called #MacamBaharu.

This multi-year programme to expand and modernise its vehicle inspection network nationwide focuses on strengthening service capacity and easing congestion at its various branches.

"#MacamBaharu reflects a deliberate shift in how we plan and deliver vehicle inspection services. Instead of short-term fixes, we are expanding capacity, upgrading facilities and modernising our processes as demand continues to grow," said Puspakom chief executive officer Mahmood Razak Bahman in a statement on Tuesday.

He said the programme covers the development of new branches, the relocation and expansion of existing facilities, and the progressive addition of inspection lanes, alongside technology-enabled processes to support rising demand and evolving vehicle standards.

Safety first: A worker inspecting a lorry at Puspakom's Alam Megah branch. — IZZRAFIQ ALIAS/The Star

Puspakom conducted 4.22 million vehicle inspections last year, with an average inspection time of 35 minutes per customer across its 53 branches nationwide.

Over the next few years, Malaysia's first and only licensed vehicle inspection centre plans to open new branches in Kajang, Cyberjaya, Bukit Beruntung, Pelabuhan Klang and Penang, while upgrading facilities at places such as Batu Caves and Kluang.

Beyond physical expansion, Puspakom said its inspection operations are already supported by established digital systems, including Version 4 of its Computerised Vehicle Inspection System, which underpins inspection workflows across its network.

Building on this foundation, Puspakom said it is preparing to introduce additional AI tools to support vehicle inspections, starting with undercarriage assessments.

Mahmood said Puspakom received approval from the Road Transport Department last December to implement an AI-assisted system to support undercarriage inspections conducted through its Mobile Truck Service, with deployment scheduled this April.

The AI-assisted undercarriage inspection system was jointly developed with Keymag Sdn Bhd, a local technology company specialising in inspection and engineering solutions, to enhance defect detection and support more consistent undercarriage assessments during mobile inspections.

"All final PASS or FAIL decisions will continue to be made by our vehicle examiners, in accordance with the Road Transport Act 1987 and the National Guidelines on AI Governance and Ethics," Mahmood added.

In response, the Association of Malaysian Hauliers (AMH) stated that the logistics industry's "pain point" is the severe shortage of heavy vehicle inspection capacity in the Klang Valley.

"As of now, only the Alam Megah (in Shah Alam) branch can handle heavy vehicle inspections," said AMH secretary-general Mohamad Azuan Masud.

AMH welcomed the #MacamBaharu initiative, particularly its commitment to expanding inspection capacity, upgrading facilities and adopting technology.

"AMH supports all initiatives that strengthen road safety, inspection integrity, operational consistency, and infrastructure expansion and digital adoption are necessary to meet growing demand across the ecosystem.

"However, from the haulier industry's perspective, we wish to highlight that heavy vehicle inspections remain highly centralised, with Alam Megah currently serving as the primary branch handling heavy commercial vehicle inspections," he said.

"This concentration has resulted in persistent congestion, long waiting times and operational disruptions that directly affect hauliers' productivity, cost structures, and compliance timelines."

He said AMH hoped vehicle inspection planning will place stronger emphasis on decentralising heavy vehicle inspection capacity, including the designation of more branches capable of handling heavy vehicles, and the setting of clear timelines for adding heavy vehicle inspection lanes.

"Heavy vehicles play a critical role in supporting Malaysia's logistics ecosystem and as such, inspection planning should reflect the distinct operational realities and higher impact faced by commercial vehicle operators, compared to private vehicles," said Mohamad Azuan.