MALAYSIAN AUTOMOTIVE INDUSTRY'S TECHNOLOGICAL CAPABILITIES IN MEETING THE DEFENCE REQUIREMENTS

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DECLARATION

I hereby declare that this research report submitted to University of Malaya as a partial fulfillment of the requirements for Masters of Science in Science and Technology Policy Studies has not been submitted as an exercise for a degree at any other universities. I also certify that the work described here is entirely my own except for excerpts and summaries whose sources are appropriately cited in the references.

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May 24, 2002

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SGEX 01005
The end of cold war in late 1980s had totally changed the strategic outlook in the management of military crisis. The revolution in military affairs (RMA) that took place thereafter, had witnessed the importance of technology in determining the national resilience and military power. In modern warfare, technology is considered the main determinant in victory or defeat in the battlefield.

The Malaysian Army, realising the need to prepare a lean and mean force to fight a conventional warfare, requires state-of-the-art equipment in order to provide the mobility, firepower and intelligence, which are vital in waging war. All these elements can be obtained through the possession of land vehicles of various functions, be they soft- skinned or armoured platforms. The military capability is further enhanced with the support of local automotive industry, which enables the force to be self reliant on military hardware.

This paper intends to look at the development of local automotive industry’s technological capabilities that help enhance the nation’s defence posture. The automotive sector provides the basis for the
development of defence land transportation requirement for logistics support and combat tasks. The research is conducted on three companies that are actively involved in supplying and manufacturing various types of vehicles required by the army. The companies are Malaysian Mining Corporation-Defence (MMC-Defence) which specialises in armoured vehicle modernisation and upgrading, Diversified Resource Berhad-Defence Technology (DEFTECH), which supplies and assembles trucks and armoured vehicles, and Pesaka Astana (M) Sdn Bhd (PA), which manufactures customised and special purpose vehicles.

The study shows that the companies have obtained a considerable level of technological capabilities, mainly due to government’s incentive and favourable policies. However, they need to further increase their R&D efforts and the diffusion of technology provided by their strategic alliances, the foreign military hardware manufacturers. It is also felt that the local defence industry does not fully benefit from the transfer of technology arrangement from the purchases of equipment. This is where more comprehensive policies and monitoring systems should be formulated so that the taxpayer’s money is worth spent.
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LIST OF ABBREVIATIONS

APC       Armoured Personnel Carrier
AVR       Armoured Vehicle Repair
ABS       Anti-lock Breaking System
CKD       Complete Knock Down
CIW       Counter Insurgency Warfare
CBU       Complete Built-in Unit
CW        Conventional Warfare
GPS       Global Positioning System
HRD       Human Resource Development
KIFV      Korean Infantry Fighting Vehicle
MBT       Main Battle Tank
MINDEF    Ministry Of Defence
MAF       Malaysian Armed Forces
OEM       Original Equipment Manufacturer
REME      Royal Electrical and Mechanical Engineers
REM       Replacement Equipment Manufacturer
R & D     Research and Development
ToT       Transfer of Technology
WWI       First World War
WW2       Second World War