

05/09/2003

`Smart dust' set to change lifestyles

Chok Suat Ling; Firdaus Abdullah; Deborah Loh; Zaidi Isham Ahmad  
CYBERJAYA, Thurs. - The new Malaysian custom-made MM Chip - the first of its kind in the world - is set to revolutionise applications and lifestyles in the world, Datuk Seri Dr Mahathir Mohamad said today.

From next year, Malaysia will undertake mass production of the contactless microchip, dubbed "smart dust" because it is the smallest ever produced with such a variety of functions, the Prime Minister said.

With the high-security microchip embedded in banknotes, passports and identity cards, the documents will be difficult to forge. The micro-chip is also expected to replace the bar codes.

Dr Mahathir said the MM Chip, or Malaysian Microchip, could be used in a variety of applications, including boosting airport security, particularly an advantage now with threats from terrorists.

"With the need for greater security at airports and other transport terminals, the current security level provided by the available system is insufficient.

"The application of RFID (Radio Frequency Identification) technology combined with the current technology will greatly prevent the possibilities of terrorist acts," Dr Mahathir said at a Press conference at the Cyberview Lodge on the sidelines of the seventh MSC International Advisory Panel meeting.

Dr Mahathir said the microchip would be produced by Silterra (M) Sdn Bhd's wafer fabrication plant at the Kulim Hi-tech Park in Kedah.

"It is 0.25 square mm in size and can be used as a security feature in currencies, personal identification documents, and in the health and defence sectors."

Dr Mahathir said the technology, which was jointly developed with a group of Japanese companies, would see microchip technology at its highest level of development.

"In the trend of fast-moving technology, Malaysia is on the edge of performing a new feat in the world of high technology. Malaysia will be part of the ubiquitous world by being among the first few to carry out a national project with the establishment and promotion of a contactless microchip using RFID technology.

"The project is a national strategy to achieve Vision 2020. The project targets to enrich the Malaysian community and create greater value in the Malaysian economy in the distribution sectors, import and export, environmental and other potential sectors."

He said the project involved the application of RFID technology that would move existing industries to a new phase in creating savings in terms of time, space and cost.

"Consequently, the resulting innovation and productivity will spur growth and competitiveness world-wide."

He said the basic plan of the joint venture between Malaysia and its Japanese partners was to establish a platform for the application of the basic technology of the RFID chip before December, and from early next year, various government agencies were expected to collaborate with the private sector to enhance greater application of the advanced technology.

"After the chip with a built-in antenna is successfully applied here, Malaysia as the patent holder would offer the technology internationally.

"The cost of the chip, estimated to be less than 10 cents (US) or 38 sen, will see the turning point of this development in the market.

"We are expecting this project to initiate new economic initiatives that can revolutionise technology applications. We anticipate Malaysia will lead the establishment of the global RFID industry in future," Dr Mahathir added.

Present were Deputy Prime Minister Datuk Seri Abdullah Ahmad Badawi, FEC (M) Sdn Bhd chief executive officer Kuniko Ichioka and FEC managing director Maj-Gen (Rtd) Datuk Gophal Ramdas.

FEC is a company specialising in the miniaturisation of microchip antennas.

On how long the technology would keep Malaysia in the lead, Dr Mahathir said: "Like all new technologies, others are also moving in the same direction."