

# Japan Issues E-Passports

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By Jonathan Collins

Mar. 28, 2006—Last week, Japan started issuing its first electronic passports (e-passports). Every five-year, 10-year and diplomatic passport the government issues will now include an RFID tag. The country expects to dispense more than 3.5 million e-passports within the next 12 months, with all Japanese passports will expected to carry an RFID chip within the next 10 years. Currently, Japan has 35 million passports in circulation.

To support the e-passport rollout, Japan has deployed e-passport printers in 60 of its 322 passport offices throughout the country. "Each of the 47 prefectures in Japan has at least one office with an e-passport printer," Susumu Kitamura reported at the Global Border Control Technology Summit in London, adding that 184 overseas passport offices have also been equipped with e-passport printers. Kitamura works for the passport division of the Consular Affairs Bureau at the [Japanese Ministry of Foreign Affairs](#) (MOFA).

While e-passports are being issued, Japan's Immigration Bureau has yet to announce when it will start reading them as the e-passport holders enter the country. However, says Kitamura, an announcement is expected within the next few months.

Japan is using RFID chips from two suppliers, [Toshiba](#) and [Sharp](#). In accordance with [International Civil Aviation Organization](#) (ICAO) e-passport standards, the chips all conform to the ISO/ 14443 Type B standard and carry Basic Access Control, designed to stop unauthorized access to data on the chip. The Toshiba and Sharp chips, however, differ in onboard memory—one design carries 32 kilobytes, the other 512 kilobytes. "We only use less than 32 kilobytes on both designs and lock the remaining memory. The extra memory doesn't affect us, as the price of the 512-kilobyte chip is still low enough," Kitamura told *RFID Journal*.

Japan is deploying the e-passports to increase security against counterfeited and forged passports. Each e-passport includes a digital photograph of the holder on the chip, as well as a physical photo in the passport. That way, if the physical picture on the passport is altered, it will be easier to detect through comparison with the image stored on the chip. In addition to a digital picture of the passport holder—a scanned version of the physical photo submitted with the passport application form—the new e-passport chips also carry the bearer's name, nationality, date of birth and passport number. The chips are embedded in the center page of the passport to use the thickness of the passport as added protection for the chip.

In February, Japan set up what it calls its e-passport depository in Tokyo. The depository enables secure testing of e-passports from other nations to help ensure global interoperability of e-passports. The depository will temporarily hold and test sample e-passports submitted by ICAO member states and conduct interoperability tests between those e-passports and a variety of e-passport readers set for use by member states or brought in by reader vendors. Sample e-passports from Japan and the United Kingdom have already started testing at the center.

A number of other countries, including Sweden, Australia and Singapore, are also issuing e-passports. In the United States, the Department of Homeland Security (DHS) is carrying out a trial at San Francisco International Airport to test e-passport readability and assess how the RFID interrogators (readers) and biometric equipment needed to process the e-passports will impact the passport inspection process. The trial will also determine how well the RFID interrogators read the tags embedded in the passports (see DHS Testing E-Passports in San Francisco). By early 2007, all newly issued U.S. passports, with the exception of a small number of emergency passports issued by U.S. embassies or consulates, will reportedly contain RFID tags.

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