NEWS COMMENT – Industry statistics all positive (almost!)

Statistics are a wonderful thing. Given a little thought almost any amount of spin can be placed on a given set of figures to make the picture appear healthier than it might otherwise be. One only has to look at the financial reports released by beleaguered technology companies over the last few years to find evidence of that.

While **Eurosmart**, one of the industry's leading associations of smart card suppliers, is to be congratulated on its hard work in producing relevant and regular industry statistics, its latest published predictions released at a recent press conference could be slightly guilty of such 'spin'.

Of course there is no suggestion that any of the figures released were deliberately inaccurate. It is more that the emphasis of certain statistics this time round and the non-publication of others could easily have misled the audience. (And in fact some subsequent media reports didn't pick up on the hidden negatives in the figures.)

What was really obvious from the figures, and is clearly great news for the smart card industry, is that worldwide demand for smart cards is growing sharply, with high-value microprocessor cards leading the way as we head into 2004. In fact, according to the latest round of predictions, 2004 could be a bumper year for manufacturers in terms of shipments, with microprocessor card volumes expected to break through the one billion barrier for the first time (for a breakdown, see Figure 1 in this month's survey on page 13).

Tainting the good news, however, is the poor performance of the memory card sector, where shipment volumes are a real cause for concern. (This is the part that is hard to deduce from Eurosmart's presentation material.)

Earlier in 2003, Eurosmart had boldly predicted year-on-year growth for both memory-based and microprocessor cards at 1.1 billion (up 2%) and 815 million (up 16%) cards, respectively. Memory card shipments in 2003, the association had predicted, were likely to stage a welcome recovery thanks to double digit growth in non-telecoms sectors, such as government/healthcare and financial services/loyalty. This proved to be a prediction that failed to materialise and the latest forecasts tell an altogether different story. Based on the new estimates, memory card shipments for 2003 could drop to 961 million – more than 10% down on 2002. Primarily this erosion is being caused by a more severe than expected fall in the demand for memory cards in the telecoms sector. Microprocessor cards, meanwhile, are now likely to ship at the higher level of 867 million (see Table 1 opposite).

It is notoriously difficult to make predictions of any kind. But when a bold prediction is made forecasting a reverse to a current downward trend, it needs to be highlighted as being inaccurate when it subsequently falls down. It is interesting that Eurosmart didn't publish predictions for memory card shipments in 2004.

Let's not forget the positives, however. Taken together the outlook is still very encouraging, with shipments for 2003 growing to more than 1.82 billion units, a 24% increase over 2002.

The upward revision for microprocessor cards has primarily been made thanks to the strong performance of the SIM card market – with particular credit given to the Chinese market. The new estimates show that some 570 million will have been shipped in 2003, a 19% hike on Eurosmart's original 2003 projection and 32% up on 2002. Microprocessor shipments in the financial services sector, meanwhile, were set to reach 185 million units in 2003 and 235 million units in 2004.

According to Olivier Piou, chairman of Eurosmart and CEO of **Axalto**, the financial services market is still growing, "even if slightly slower than expected due to low Geldkarte volume in Germany and some EMV programme slow starts". Piou said stronger growth is expected in this market in 2004, as well as the government and healthcare markets, where the first concrete projects are now being deployed.

The 2003 and 2004 figures are still subject to change, although concrete figures for the first half of 2003 are given in Table 2.

Mark Lockie

Interesting ATM stats

Although not directly related to the performance of the smart card business, a recent report has highlighted the growing popularity of the important ATM and cash dispenser market in Western Europe. The figures published by *Retail Banking Research* revealed the following findings:

- European ATM market grows by 6% in 2002 to 283,590 machines;
- Germany leads with 50,487 machines followed by Spain at 49,925 and UK at 40,795;
- UK is fastest growing market at more than 10% per year;
- Nordic countries have slowest growth, with Finland's installed base falling by 1%;
- There were 10.8 billion cash withdrawals in 2002 up 2% on 2001, while the value of cash withdrawals also rose 9% to €1215 billion.
- NCR leads market share at 47.5%, followed by Diebold (20.6%) and Wincor Nixdorf (20.2%).

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	Memory	Microprocessor
Telecom	850	570
Financial, retail, loyalty	27	185
Government/healthcare	20	50
Transport	50	15
Pay TV	—	35
Corporate security	4	7
Others	10	5
Total	961	867

Source: Eurosmart

Table 1. Worldwide shipment forecast 2003 (millions of units).

	Memory	Microprocessor
Telecom	410	285
Financial, retail, loyalty	13	85
Government/healthcare	7	25
Transport	24	7
Pay TV	—	15
Corporate security	2	4
Others	5	3
Total	461	424

Source: Eurosmart

Table 2. Actual worldwide shipments for first half of 2003 (millions of units).

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The government expects that 80% of the adult population would have an ID card by 2013 through issuance of new passports and driving licences. The government, through Parliament, would only make ID cards compulsory when the technology is seen to be working, take-up reaches an appropriate level and public acceptability of the card enables the implementation of a universal scheme. It will not be compulsory to carry a card.

The UK is already working on upgrading passports, which will be based on contactless chip technology containing at least one biometric. The **UK Passport Service** (UKPS) said it is planning to implement a facial biometric in the British Passport book from mid-2005. Meanwhile the Home Secretary also announced that the UKPS (in collaboration with **DVLA**, the **Immigration and Nationality Directorate**, and the **Home Office Identity Cards Delivery Unit**) will be running a biometric enrolment pilot in early 2004.

The pilot will evaluate issues around biometric recording using facial recognition, iris pattern and fingerprint. Over six months it will enrol 10,000 volunteers in several locations (including mobile units) to ensure a representative coverage of the population. It will be run by a consortium of technology vendors led by **SchlumbergerSema**, who is the prime contractor. Other members of the consortium are **NEC**, **Identix** and **Iridian Technologies**. The survey research component of the project will be undertaken by **MORI**.

A national ID card scheme would take advantage of the infrastructure being put in place to support these developments, significantly reducing the costs of the card. (In fact the cost of a non-passport-based card is estimated at £3.50 per year per person over 10 years.)

It is said that the scheme would: help in the fight against illegal working; tackle immigration abuse; disrupt the use of false and multiple identities by terrorists and organised crime groups; ensure that free public services are only used by those entitled to them (preventing abuses such as 'health tourism'); and help protect people from identity theft, which can reportedly take the average victim 300 hours to put their records straight.

Public responses to the government's consultation last year showed that 62% of people are in favour of ID cards. This rose to 80% in a survey of a representative sample of the population. The consultation also showed that the public preferred the term "identity" rather than "entitlement" cards.

MULTI APPLICATION

Keycorp to supply 2m 'entry level' chips

Keycorp has announced a two million smart card chip order from a major card issuer. Exact details of the deal were not divulged, but significantly it is believed to be the first to use the recently released 'entry level' Multos operating system, *step/one*.

Step/one is an open smart card operating system based on Multos and is designed to appeal to cost conscious financial organisations making the switch to EMV smart cards. According to **Maosco**, the consortium controlling the Multos operating system, this new specification exploits much of the security,

IN BRIEF

• Smart card chip supplier **STMicroelectronics**, secure paper provider **ArjoWiggins** and **Gep**, a provider of high security contactless applications, have announced that they will develop solutions for **ICAO** (International Civil Aviation Organisation) compliant electronic passports. The first ArjoWiggins/Gep/ST electronic passport solution has already been delivered in samples and is currently undergoing field tests. The passport, produced by ArjoWiggins, has a secure contactless IC from ST running Gep's secure passport OS/application embedded into the cover of the document.

• **Sharp Microelectronics of the Americas** has announced the development of a smart card with 1MB of embedded flash memory. The new card – product number *SM4128* – is manufactured using a 0.18 µm manufacturing process, which reportedly allows a reduction in chip size, lower power consumption and higher speeds than chips manufactured using a more typical 0.25 µm process. Samples of the 1MB module were available from December 2003, and a 512KB version will appear in April 2004. In particular, the company has demonstrated its "chip in passport" solution, where the expanded memory size will allow for the storage of multiple biometrics, as well as excess capacity for any future requirements. Sharp said it plans to get the card Common Criteria certified and will comply with **GlobalPlatform** standards.

• **Scotiabank** is to launch Canada's first trial of chip and pin technology at the point of sale in a retail environment. Participants in the Ontario-based pilot will receive a smart Visa card, which they will be able to use at chip-enabled point-of-sale terminals in the Barrie area. **Paymentech Canada** will be responsible for deploying the chip terminal readers at merchants in the area. In subsequent phases, the bank plans to use technology developed by **Cardis Enterprises International** to test the use of chip cards for small dollar purchases.

• **Oberthur Card Systems** has announced a smart card solution for use by the corporate market. Based on both contact and contactless technology, the *AuthentIC Cosmo 64 RSA card* is capable of being loaded with ActivCard's digital identity applet suite and implements Java Card 2.2 and Global Platform 2.1.1. Oberthur and ActivCard intend the card to be used by enterprises and administrators wanting an easily implemented multi-function smart ID badge solution.