**COUNCIL OF
THE EUROPEAN UNION**

**Brussels, 18 September 2003 (23.09)
(OR. it)**

**10857/03
ADD 1**

LIMITE

**VISA 109
COMIX 407**

ADDENDUM TO NOTE

from :	Presidency
to:	Visa Working Party
Subject :	Presidency initiative on visa security and controls

8.   Conclusions

c.   Cost-effectiveness of chip-on-paper technology

The costs for a fully operational project can be identified, merely by way of illustration, as follows:

−   hardware costs for microchip read/write terminals and for any equipment for recording and checking fingerprints, estimated at about EUR 200 per workstation for a simple capacity fingerprint reader measuring half an inch (1,25 cm) square and a read/write device capable of operating in reasonable time with a limited amount of memory (2 Kbyte);

If it becomes necessary to use microchips with a much greater memory capacity (32 Kbyte), a more powerful reader/writer will be needed and the cost per workstation could rise to around EUR 300.

These costs are based on order for large numbers of units; for a small number of experimental workstations on which substantial discounts cannot be made, prices could be much higher.

The total cost for a country with, say, 150 consulates and 50 border posts works out at a one-off sum of EUR (150+50)*300=60 000. After expiry of the guarantee, there would also be an annual maintenance cost of around EUR 6 000.

– consumable hardware costs for the chip on paper, estimated at:
  • about EUR 4 per item for microprocessors using symmetrical security algorithms (e.g. DES, 3DES);
  • about EUR 6 per item for microprocessors using asymmetrical security algorithms (e.g. PKI);
  • consumable hardware manufacturing costs (microchip assembly and antenna on adhesive support) : initally estimated at about EUR1.

– Thus for a country issuing, for example, 500 000 visas per annum, the annual expenditure on chips (with PKI) would be about EUR 7*500 000=3 500 000, which could be passed on to visa applicants.

– software development costs for the interface between terminals and the chip on paper, estimated at a one-off sum of EUR 100 000;

– software development costs for the interface between read/write terminals and the visa-issuing and border control systems currently used by each individual Member State. The cost will vary according to the sophistication of the particular systems in use. It could be very high and exceed previously given figures, which is why individual Member States should study this very carefully.

In particular, these costs should include the cost of hardware installation in sites distant from the home country, staff training, logistical and transport costs and the secondment of staff to carry out this work.

In conclusion, consideration of the proposal as a whole shows it to be especially cost-effective, bringing considerable benefits for a moderate cost, largely comparable to those achieved by the VIS system. Bearing in mind that the chip on paper costs will subsequently have to be factored into the cost of the VIS if it is decided to include biometric data, the additional outlay is very small indeed and the benefits both considerable and immediate, and highly cost-effective.

_____