

Toward common understanding for smartcard PPs

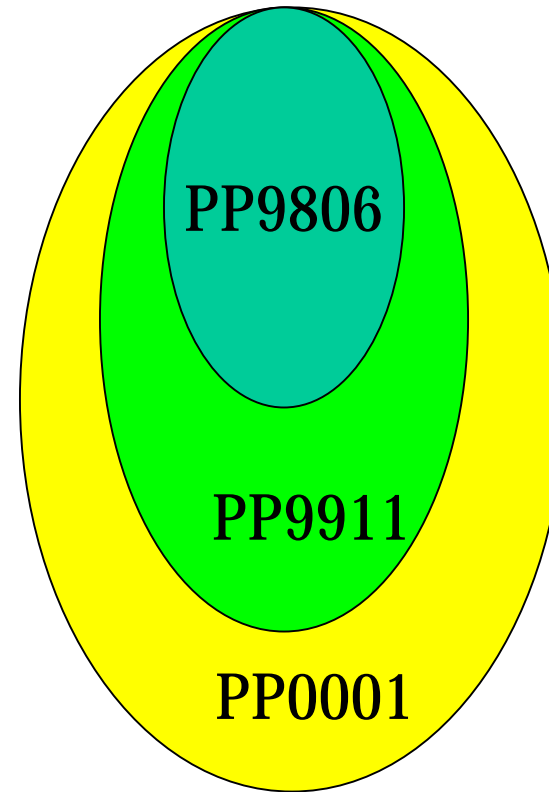
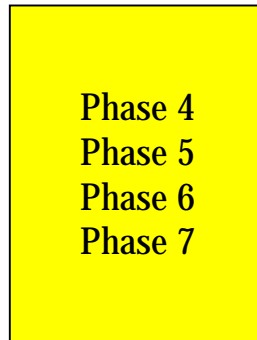
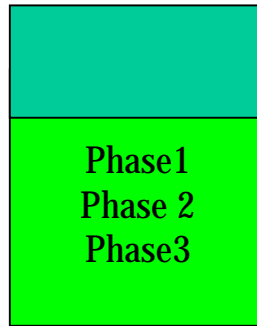
2001/03/29

Yasuyoshi Uemura

ECSEC

PP Developing according to Lifecycle Eurosmart 's approach

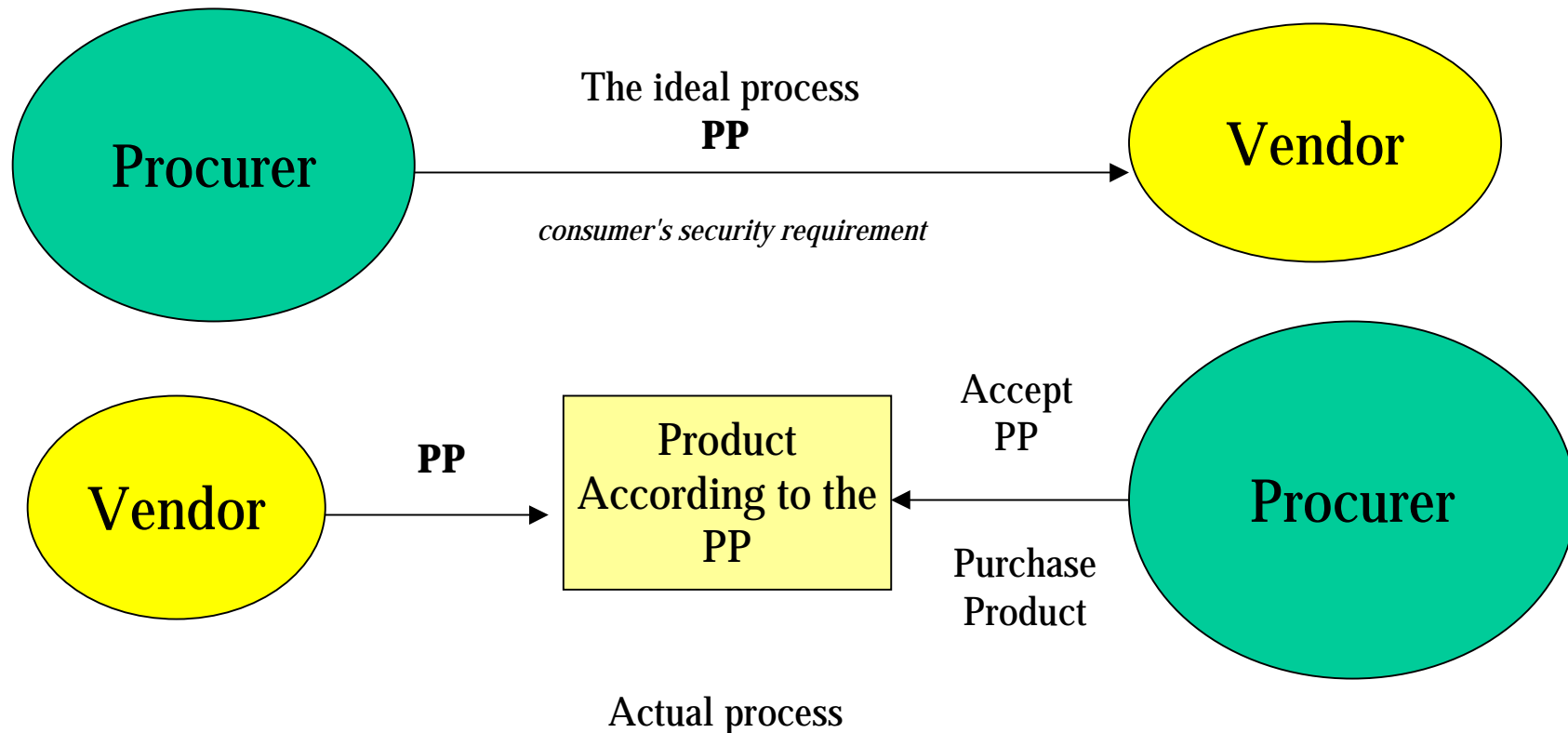
Smartcard IC database construction
IC Photomask
Fabrication
IC Manufacturing
IC Testing and
Prepersonalisation
IC Packaging
Testing
Smartcard product
Finishing process
Testing
Personalisation
Testing
Smartcard product
End-Usage
End of life process



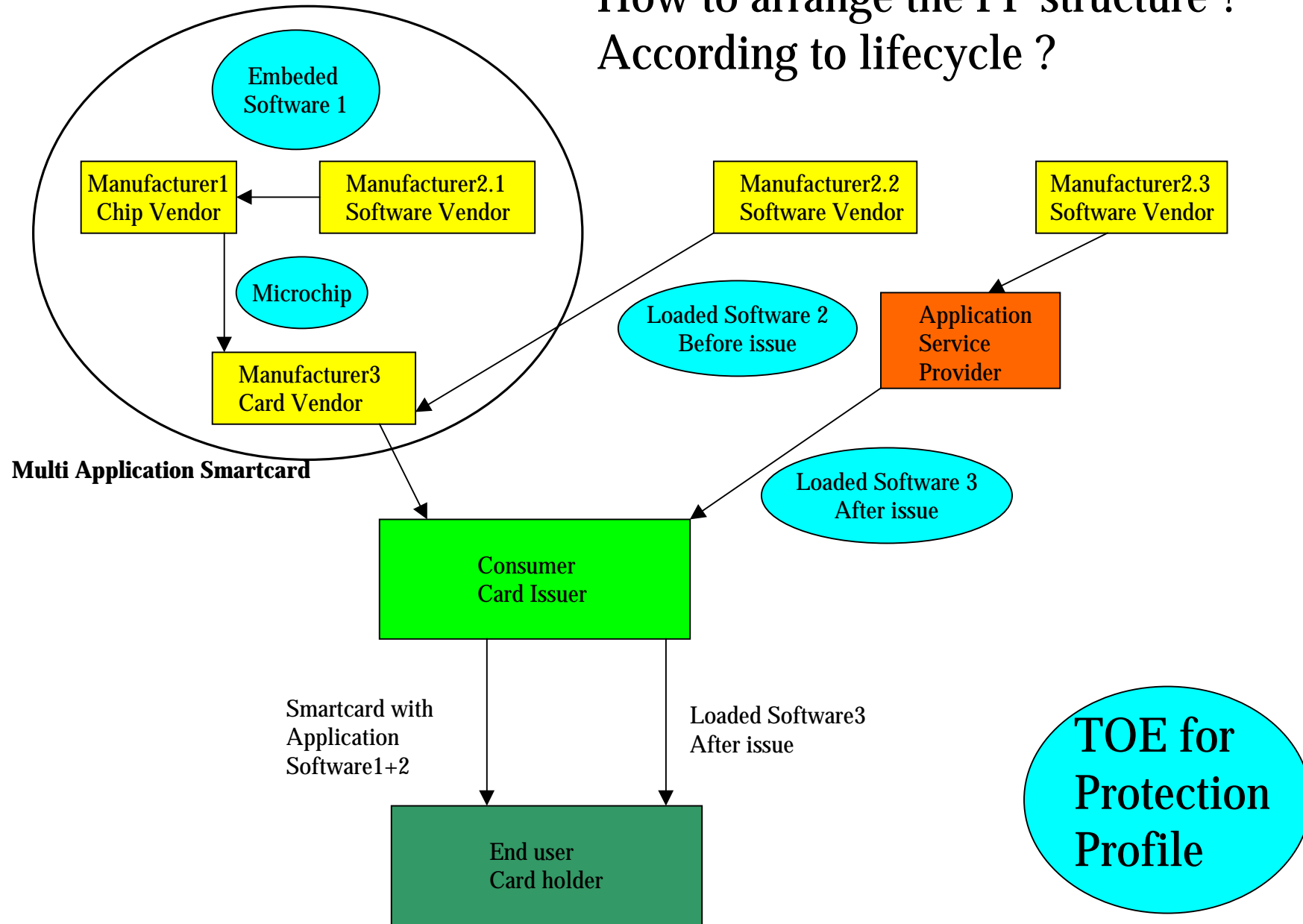
The ideal process SCSUG approach

As the PP is primary for consumer's security requirement in procurement, the SCSUG process should be ideal.

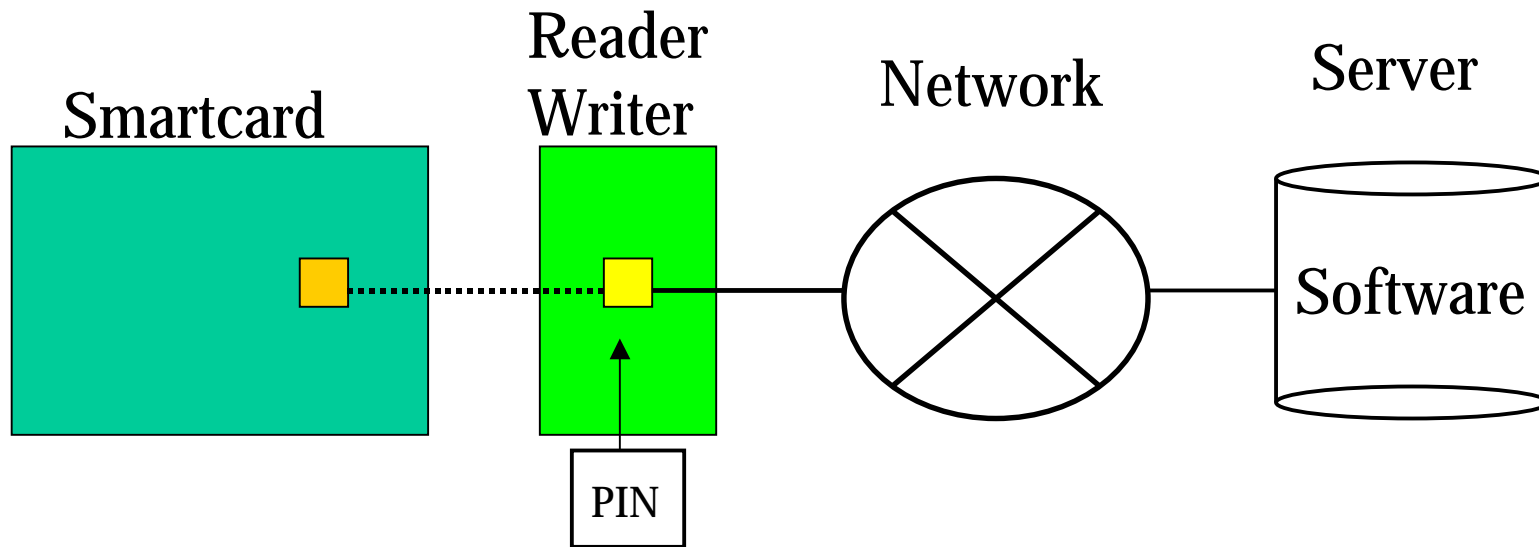
But this approach is not acceptable to whom developing parts of products. For example, some vendors are developing IC chips before the negotiating from the smartcard manufacturers.



How to arrange the PP structure ? According to lifecycle ?

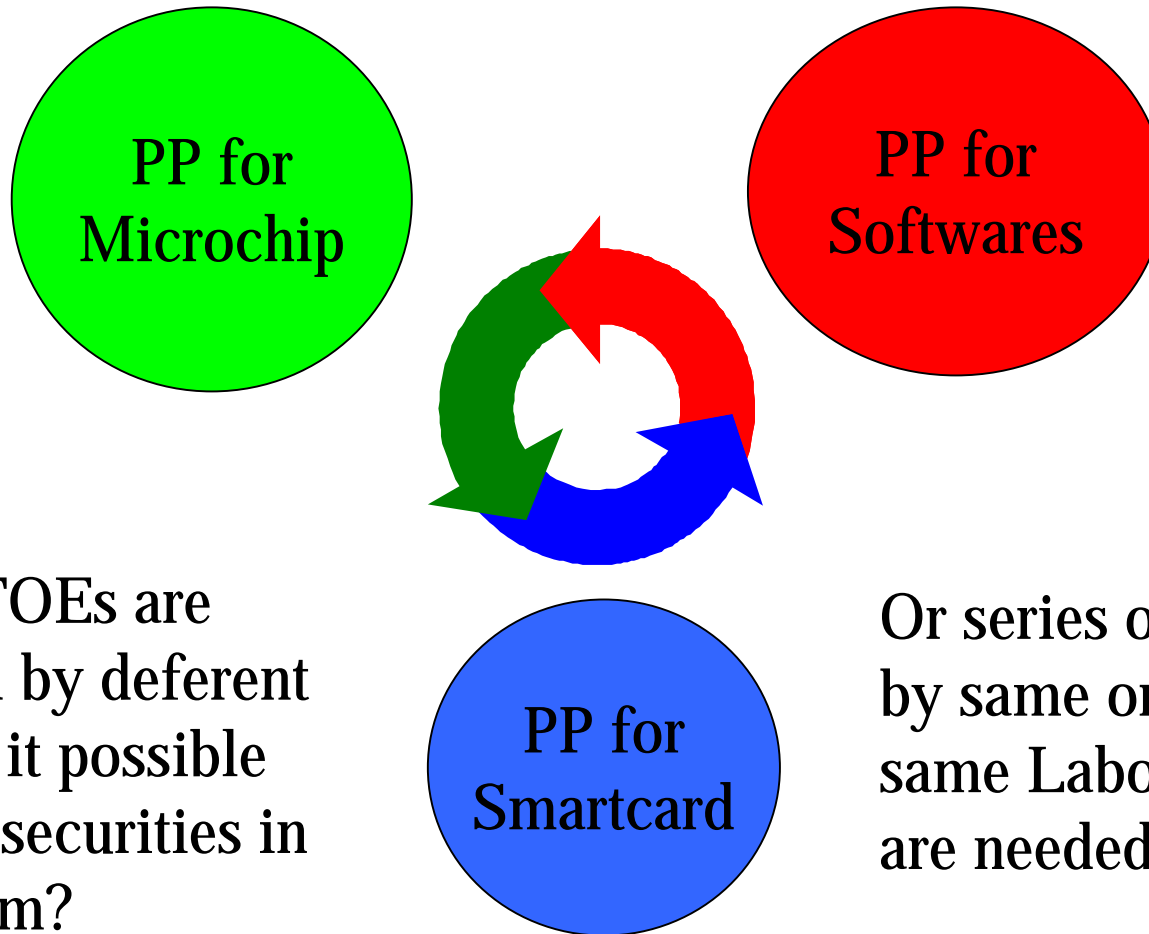


How to keep hole system security?
Evaluations for each elements are needed?
How to describe human factor?
How to arrange too many assumptions?



Is it enough to use Common Criteria or not?

Will they be independent or not ?



If those TOEs are evaluated by deferent Labos, is it possible to assure securities in one system?

Or series of PPs issued by same organization and same Labo evaluations are needed ?

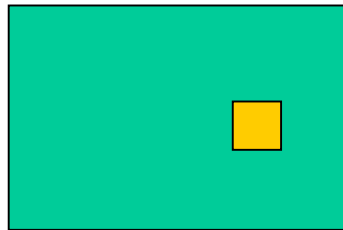
Key issue should be keeping security of microchips.

Why microchip?

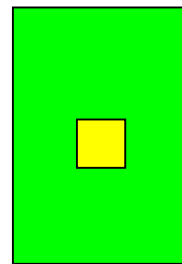
It is key element to keep security of smartcard system.

It is easy to close the unit.

It will be used not only in smartcard system but also be used in mobile system.



Smartcard



Reader
Writer



Mobile
Phone

For

Keeping security of microchip developing process.

Keeping security of microchip product process.

Keeping security of microchip itself.

Keeping security of microchip embeded softwares.

What is needed?

PP series

Implimentation technology

Testing process, testing devices, testing method

Evaluation Labos who have enough skill to testing hardware