Criteria for privacy enhancing security technologies

Walter Peissl
Institute of Technology Assessment
Austrian Academy of Sciences
A-1030 Vienna, Strohgasse 45/5
Tel.: +43-1-51581-6584
Fax: +43-1-710 98 83
mailto:wpeissl@oeaw.ac.at
http://oeaw.ac.at/ita

Objectives of WP6

- **identify best practice models** regarding the privacy friendly design and implementation of security technologies, based on the results of workpackage 3 (design principles) and workpackage 5 (participatory technology assessment)
- **transform these models into different sets of criteria** for research programmes (incorporation into call and evaluation guidelines), industry projects, evaluation by data protection authorities, implementation processes, legislation, regulation and execution of security policies and
- **discuss and test these sets of criteria** for applicability within the user and stakeholder panel
What sets of criteria do exist?

Examples:

to achieve
- anonymity
- pseudonymity
- unlinkability
- unobservability
- …

by
- data minimisation
- data protection
- data management
- identity management
- …

What are the criteria for criteria?

Dimensions:
- Technical
- Organisational
- Legal

Adapted to…
- needs of different actors
- various application environments
- different phases in technology development and implementation

Should be…
- clear and measurable
What is the privacy-security dilemma all about?

More surveillance = more security
more surveillance = less privacy
→
more security = less privacy

• Does less privacy automatically lead to more security?
• Is more security possible with the same (or even higher) level of privacy?

What levels of protection do we deal with?

Systems may be...

• compliant to (national) regulation for inner security and law enforcement
• data protection compliant
• privacy enhancing
How could a scheme for privacy compliant security technologies in Europe look like?

Step by step approach:
- Baseline of systems development (the „limit“)
- Data-protection compliant systems design
- Context sensitive trade-off between potential security gain and privacy loss
- Privacy enhancing systems design (the step further)

Guiding questions for the workshop to discuss

- Are the 5 questions adequate to fulfil the task?
- How would you answer these questions?
- What is missing?