# Call for cooperation: network of biometric testing laboratories

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### The idea of testing labs network - how it evolved

### Biometrics projects

Evident need for cooperation

#### Databases

- Collection problematic and costly
- Scattered and heterogeneous data (e.g. different race)
- Enlarging number of teams and testing activities
  - Hard to follow the knowledge
  - Different testing protocols

### Security concerns

- Large scale of new deployments
- Inadequate harmonization
- Need to increase society awareness who is currently the best authority to do it?



### **Common interest**

- Who will suffer the consequences of frauds in biometrics?
  - Failure of biometrics X influences entire biometric business (even vendors of biometrics Y)
- Knowledge exchange in the underground world is <u>much faster</u> than in academia or industry
- It seems there is no place where the information about biometric frauds, attacks and vulnerabilities is systematically collected and published
  - Purpose: identification of trends, threats, statistics etc.
- There is no contradiction between cooperation and competitiveness among the players
- Economical aspects
  - Reducing the costs of biometric systems deployment due to recommendations of trusted testing laboratories
  - Weaknesses disclosure first of all to vendors (and to the public rather as the last step)



# **Network security analogy (CERT)**

- The wake-up call: late 1980s, first global worm (Morris)
  - <u>Sudden</u> awareness of a strong need for global cooperation
- Over the years IT security specialists worked out the cooperation models of CERT teams
  - Reactive services (alerts and warnings, vulnerabilities analysis and handling ...)
  - Proactive services (technology watch, security audits security tools ...)
  - Security quality management (risk analysis, security consulting, product evaluation and certification ...)

For further details on CERTs cooperation see: "CERT Cooperation and its further facilitation by relevant stakeholders", ENISA Deliverable WP2006/5.1 (CERT-D3), available at: http://www.enisa.europa.eu/act/cert/background/coop



# Models of cooperation and trust

- Centralized authority is not a good idea
  - This idea failed e.g. in CERT model
- Bilateral team-team cooperation
- Association of teams
- Cooperation between associations
- Sector cooperation
  - Government, industry, academic, region, ...
- Legal aspects
  - NDA, MOU, contract, ToR ...
- Trust models
  - Bilateral and multilateral agreements, sponsorship
  - Accreditation (yet has some limitations)
    - procedures take time
    - requirement of independency
    - legal aspects (different in each country)



# Things to think over

- Need for confidence
- Financial aspects
- Assurance of quality (the base of trust)
- Differences in legal systems
- Organisational and political support



## **Example: Polish Platform for Secure Implementation of Biometrics**

#### Areas of cooperation

- Development of testing methodologies (including legal aspects) at three testing levels (lab, real and operational scenarios)
- Information, knowledge and expertise exchange
  - Tools, best practices
- Resources exchange
  - Common multimodal database collection, including data for template ageing assessment

#### Consortium

- Warsaw University of Technology (coordinator)
- Research and Academic Computer Network NASK
- Polish Security Printing Works PWPW S.A.
- Department of Criminalistics, Warsaw University
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# What is your opinion?

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