PRIPARE

PReparing **I**ndustry to **P**rivacy-by-design by supporting its **A**pplication in **RE**search

Privacy-by-Design

Antonio Kung, TRIALOG

SEVENTH FRAMEWORK PROGRAMME

Bio & Outline

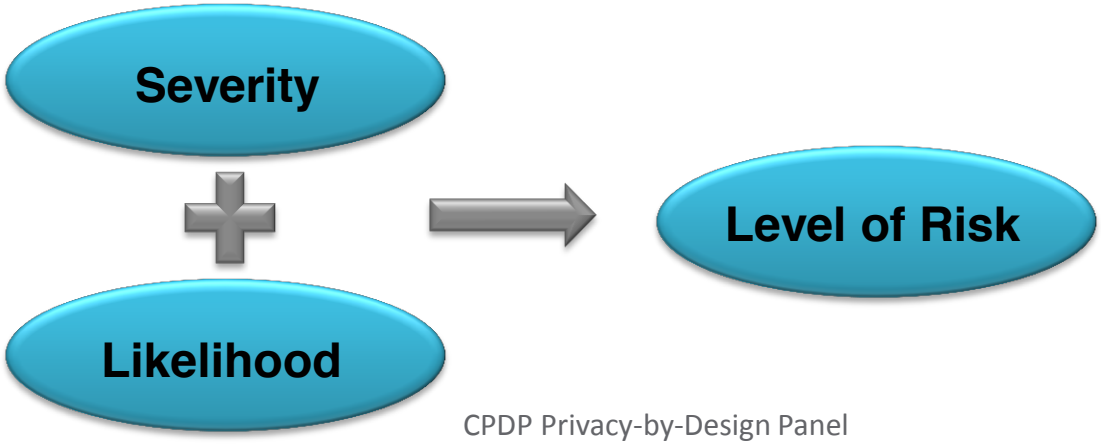
- Antonio Kung
  - CTO of TRIALOG (www.trialog.com)
    - Software house focusing on embedded systems
    - Located in Paris, France
  - Coordinator of the FP7 project **PRIPARE**: **PR**eparing the **I**ndustry to **P**rivacy and Security-by-Design by supporting its **A**pplication in **R**esearch
- Presentation outline
  - PbD practice today (engineering viewpoint)
  - Need for practice in research projects
  - PRIPARE support action

Privacy-by-Design Today

- Problem Statement
  - Privacy will impact many ICT undertakings
    - smart grids, active ageing, smart cities, intelligent transport systems, etc
- Engineering gaps
  - Defining PbD engineering methodologies
  - Practicing PbD methodologies
    - in ICT research projects which prepare smooth transition to industry deployment
    - in industry

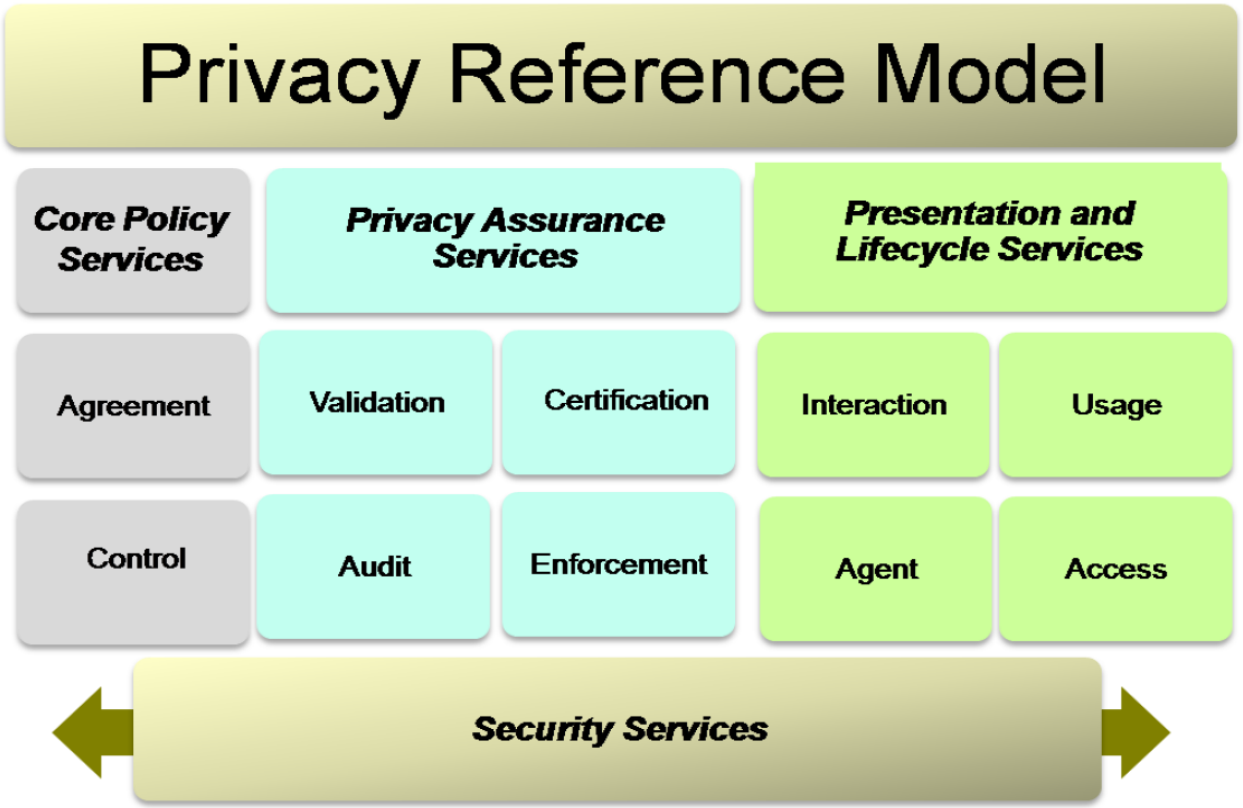
From Compliance to Operation

- From Privacy Impact Assessments
  - Bullet lists
- To methodologies
  - Currently available
    - Methodology for privacy risk management
      - Severity + Liklihood = Level of Risk
    - CNIL privacy risk management
      www.cnil.fr/fileadmin/documents/en/CNIL-ManagingPrivacyRisks-Methodology.pdf



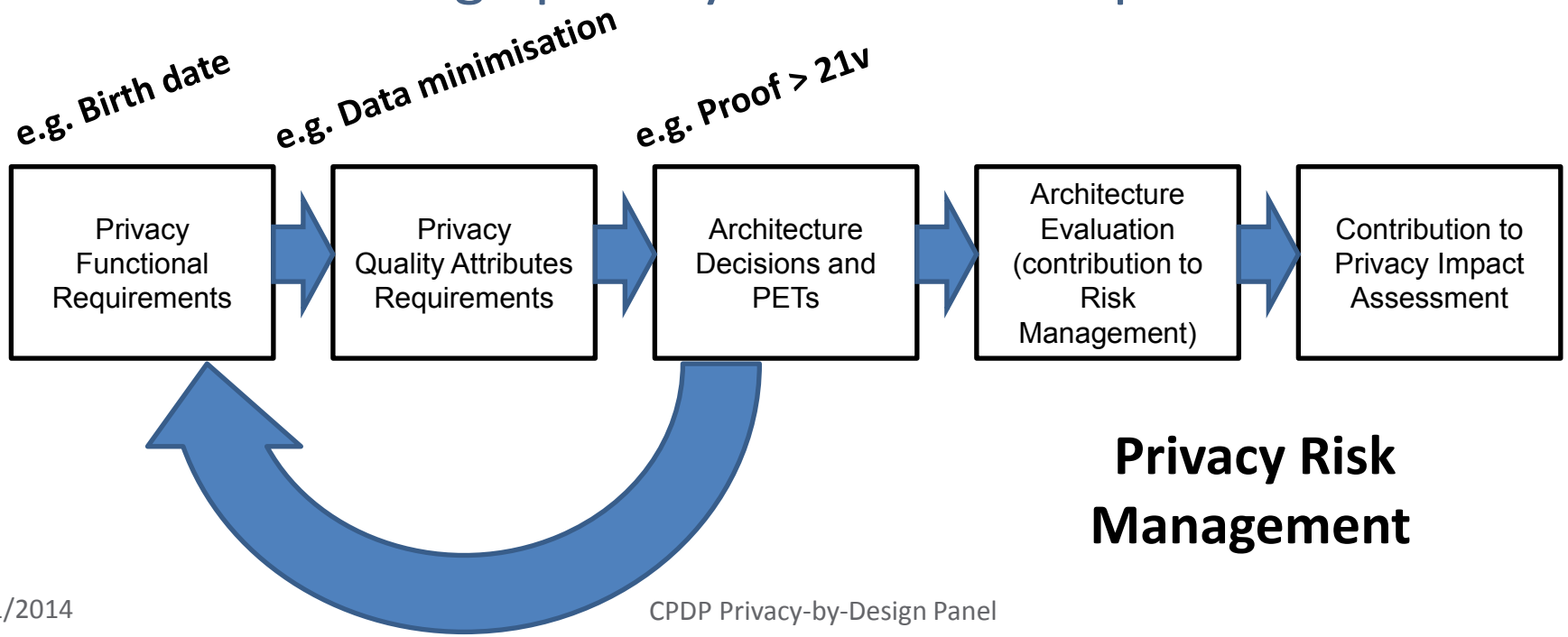
From Compliance to Operation

- Currently available
  - Mapping privacy requirements to operational services: OASIS **PMRM**
    - **P**rivacy **M**anagement **R**eference **M**odel



Architectural Dimension Not Well Addressed

- Need for a **PEAR** methodology
  - **P**rivacy **E**nhancing **Ar**chitecture methodology
  - Architecture decisions for minimisation, enforcement, accountability and modifiability
  - Can change privacy functional requirements



Further Barriers

- Lack of PbD Practice
- Lack of education/training
- Diversity of engineering processes
  - Domain specific processes (Energy, Railways, Automotive, etc.)
- Diversity of standards, ecosystems, markets

PRIPARE Project

- **PR**eparing **I**ndustry to **P**rivacy-by-design by supporting its **A**pplication in **Re**search
- EC FP7 Project: Coordination & Support Action
  - Define PbD methodology
  - Support practice in ICT research (and prepare for industry practice)
- 2 years: Oct 2013 to Oct 2014

Partners

- Trialog
- Atos
- Trilateral
- INRIA
- American University of Paris
- Gradiant
- UP Madrid
- University Ulm
- Fraunhofer SIT
- Waterford TSSG
- KU Leuven ICRI

Advisory Board Chair

- Ann Cavoukian

Challenges and Issues

- Application vs. Technology development

Applications, Projects

PbD focus
- **Data Minimization**
- **Privacy in Context**

Technologies, Methodologies, Platforms, Projects

PbD focus
- **Architecture**
- **Features for minimisation, enforcement, accountability and modifiability**

- Many Application Domains
- Small vs. Big applications

Announcement

- Workshop on Privacy-by-Design Issues
- Colocated with Annual Privacy Forum
- 21-22 May 2014 Athens
  - http://privacyforum.eu
- For more information contact:
  - Antonio Kung
    TRIALOG
    25 rue du Général Foy, 75008 Paris, France
    antonio.kung@trialog.com

PRIPARE

PReparing **I**ndustry to **P**rivacy-by-design by supporting its **A**pplication in **RE**search

Thank you for your attention

Questions?

Website: www.priparepproject.eu

Project Co-ordinator
Antonio Kung (Trialog)

Technical Co-ordinator
Christophe Jouvray (Trialog)

Presenter
Antonio Kung (Trialog)

SEVENTH FRAMEWORK PROGRAMME