Privacy Management in Smart Cities

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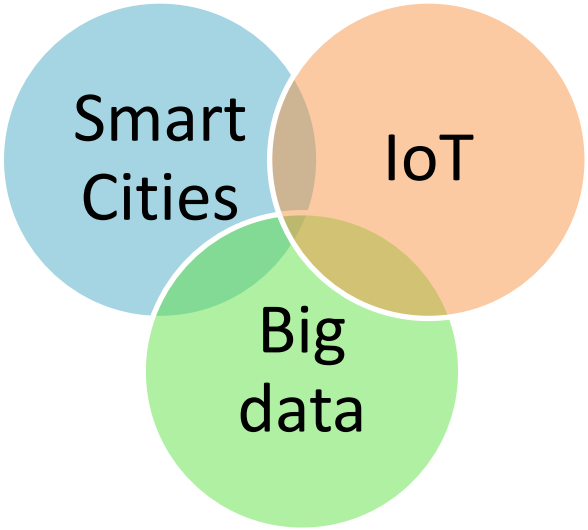
Introduction Speaker

- Antonio Kung, Trialog (www.trialog.com,FR)
  - Engineering background - CTO
  - Involved in standardisation
    - Editor ISO 27550 Privacy engineering
    - Contributor ISO 20547-4 Big data – Security and privacy fabric
    - Rapporteur ISO SC27
      - Privacy in smart cities
      - Privacy guidelines in the IoT
  - Member ipen
- PRIPARE support action (priparepproject.eu)
  - Handbook (March 7th 2016 Press release)
    - Methodological Tools to Implement Privacy and Foster Compliance with the GDPR

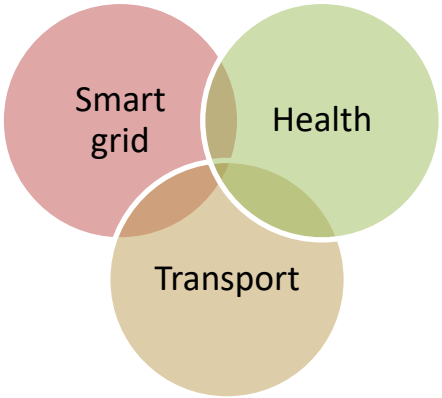
Privacy from a Policy Maker Viewpoint

A demand side vision

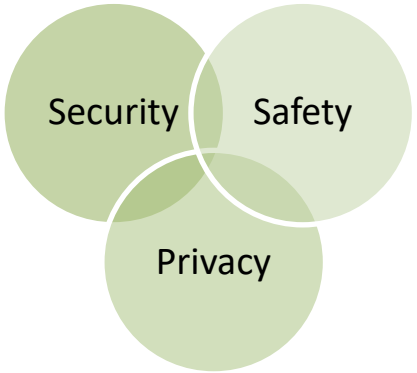
Deals with Complex Ecosystems



Ecosystems



Domains



Concerns

Must take into account

General Data Protection Regulation (GDPR)

May 25th 2018

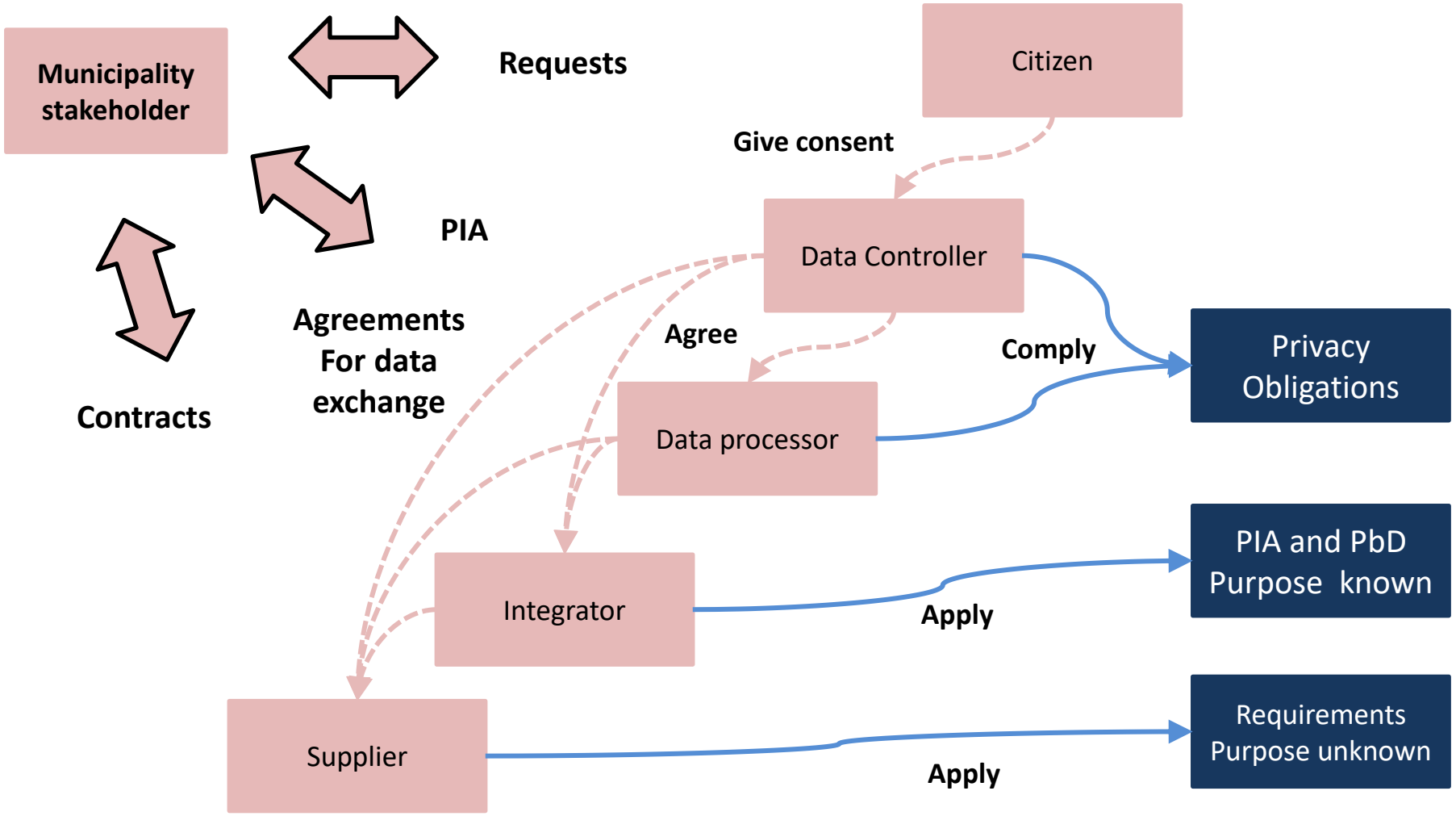
- Data controllers
- Data processors
- Data Protection Officers
  - All public authorities
  - Companies processing more than 5000 data subjects
- Sanctions for breaches
  - up to 20,000,000 EUR
  - up to 4% of the annual worldwide turnover

Must understands these terms

- Privacy-by-design: **PbD**
  - Institutionalisation of privacy management
  - Integration of privacy concern in the engineering of systems
- Privacy-by-default
  - Highest level of protection by default
- Privacy Impact assessment: **PIA**
  - Process that evaluates impact on privacy

- Note that the GDPR uses the term “data protection” instead of “privacy”

Must Manage Privacy in Complex Ecosystem



IoT Vision: Supply Chain

Smart City Officer

Privacy impact assessment 1

Privacy impact assessment 2

Operator
Smart City Application 1

Operator
Smart City Application 2

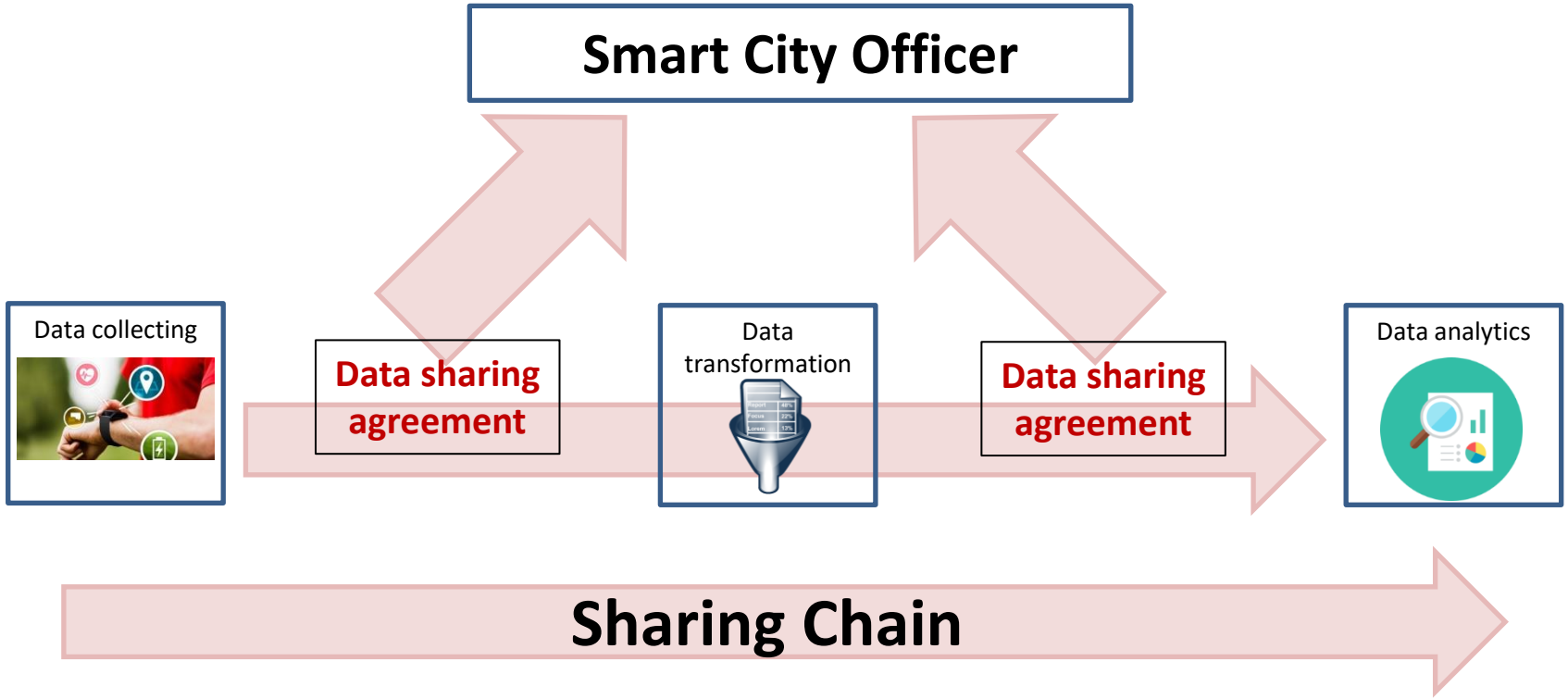
Integrator - Purpose known

Supplier - Purpose unknown

Sensor | Device | Smart device | Cloud solution | Electronics | Security module | OS | Middleware

Supply Chain

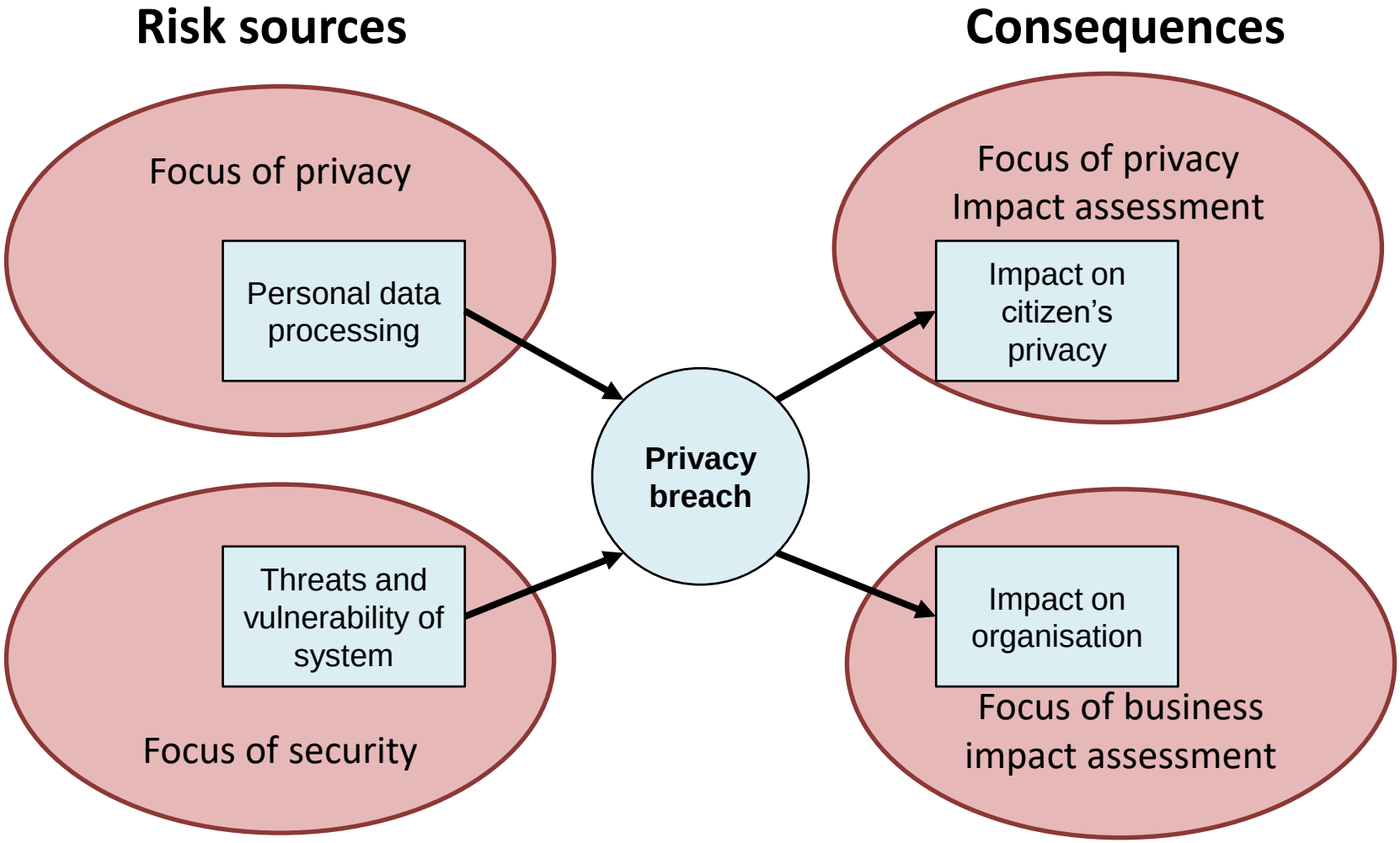
Big Data Vision : Sharing Chain



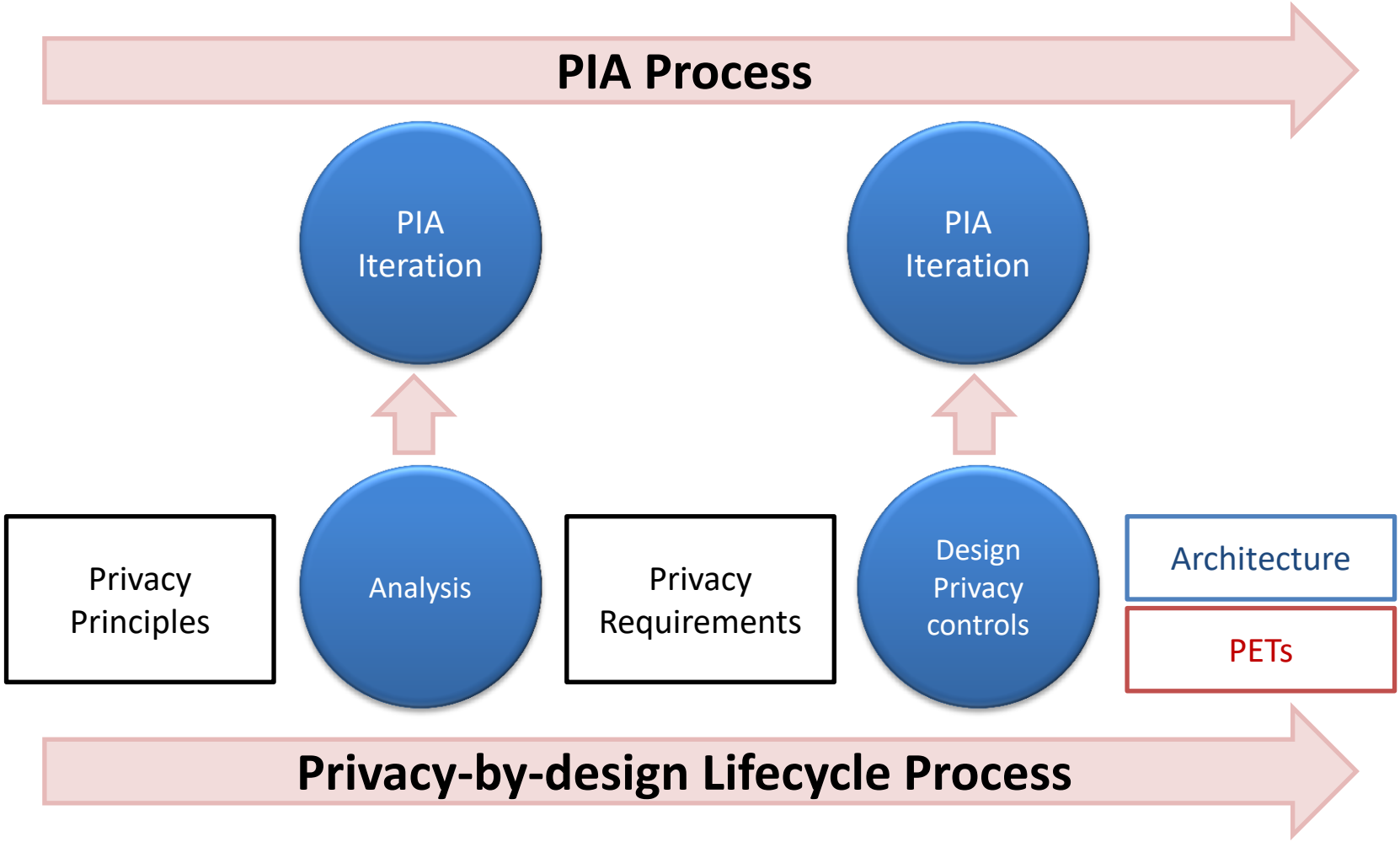
Several Types of Concerns

Stakeholder		Legal Compliance Concern	Management Concern	System Lifecycle Concern
Demand side	Policy maker 	**Compliance Check Transparency**		
	Operator Data Controller 	Regulation **GPDR**	Privacy Impact Assessment **PIA**	Privacy-by-Design **PbD**
	Operator Data processor 		Sharing Agreement	
Supply side	**Supplier** 	**Operators Requirements**		

Privacy Impact Assessment



Privacy-by-design



Example: Sharing Cities

Sharing Cities work on GDPR Compliance

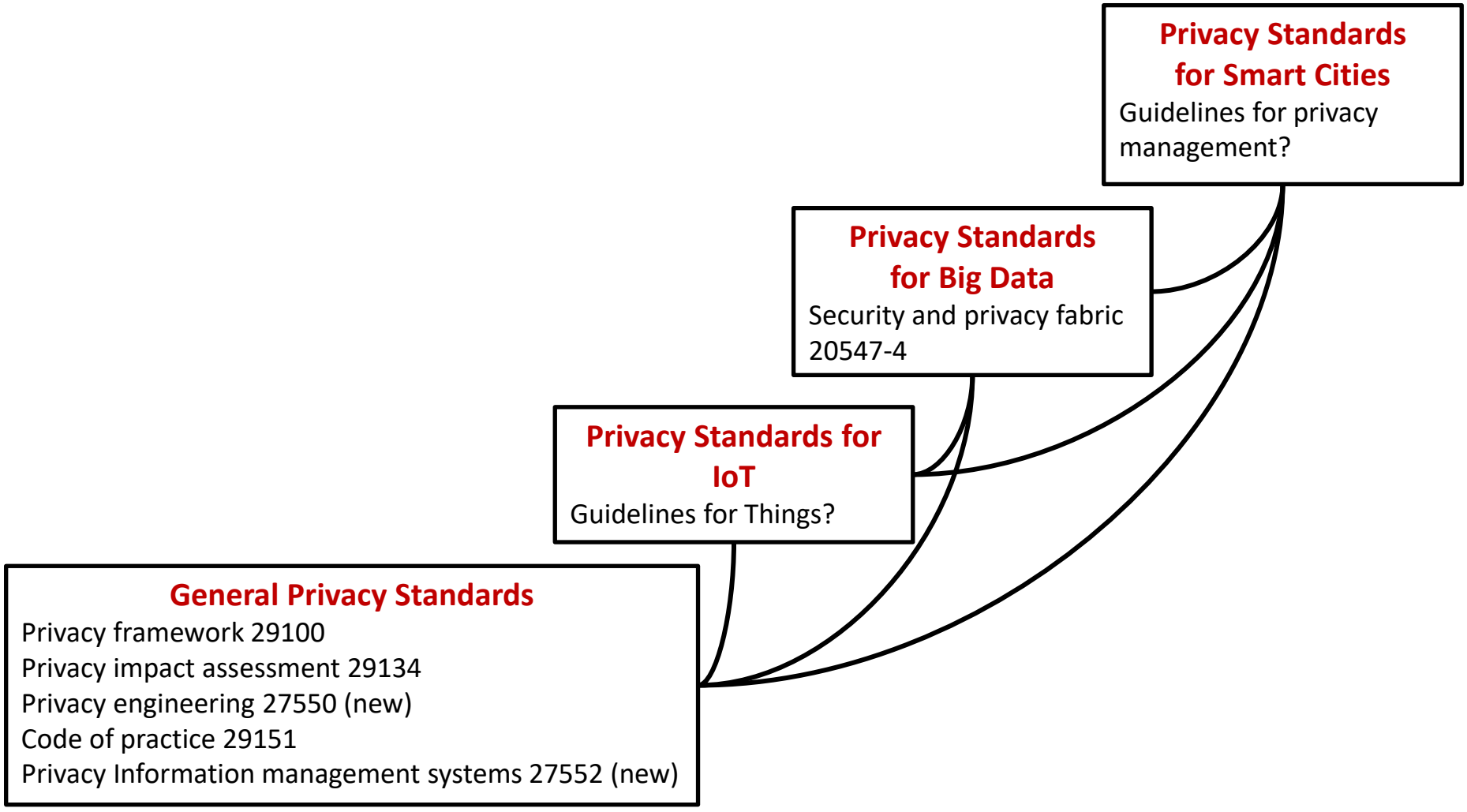
- H2020 lighthouse project (http://www.sharingcities.eu)
  - € 24 million grant
  - Cities: London, Milan, Lisbon, Bordeaux, Burgas, Warsaw
- Program
  - March 2017 – Workshop on GDPR
    - Use case London
    - Use case Milan
    - Use case Lisbon
  - June 2017 – Workshop on PIAs
  - Further – Applying a management plan for GDPR compliance

Next steps
Common work on privacy management

Guidelines for GDPR Compliance

- Privacy management plan
  - Governance scheme
  - Roles and duties
    - Data controllers
    - Data processors
    - Suppliers
  - Resources
- Management
  - Repository of PIAs and data sharing agreements
  - Interaction with citizens
    - Transparency (dashboard)
    - Complaints
  - Breach management
  - Continuous improvement
- Templates
  - PIA template
  - Data sharing agreement template
  - Privacy notice template
  - Supplier privacy support description template

Standardisation?



Thanks