



Privacy Management in Smart Cities

Antonio Kung



Introduction Speaker

- Antonio Kung, Trialog (www.trialog.com,FR)
 - Engineering background - CTO
 - Involved in standardisation
 - Privacy engineering (ISO 27550)
 - Big data – Security and privacy fabric (ISO 20547-4)
 - Privacy in smart cities (Study period)
 - Privacy guidelines in the IoT (Study period)
 - IPEN Member
 - See ipen.trialog.com



- Leader of EIP-SCC initiative
 - Citizen approach to data: privacy-by-design
- Coordinator PRIPARE support action (pripareproject.eu)
 - Methodological Tools to Implement Privacy and Foster Compliance with the GDPR

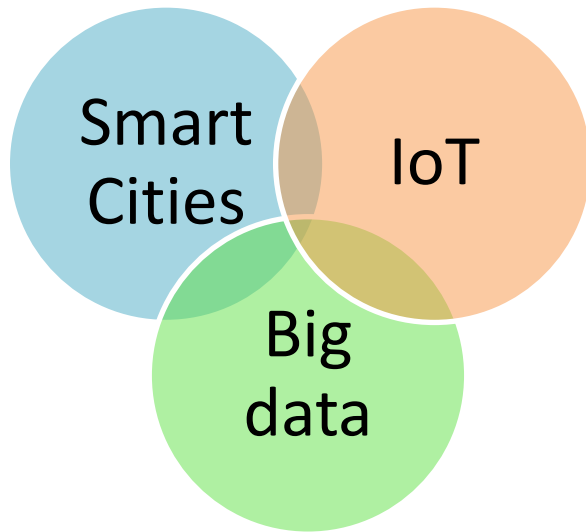


Privacy from a Policy Maker Viewpoint

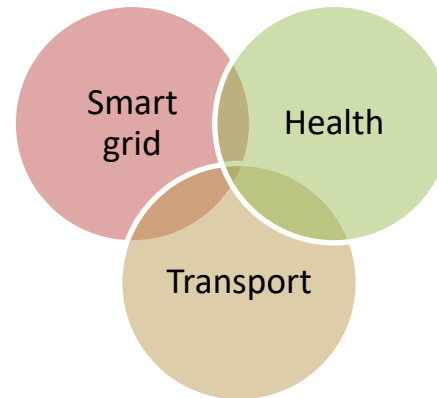
A demand side vision



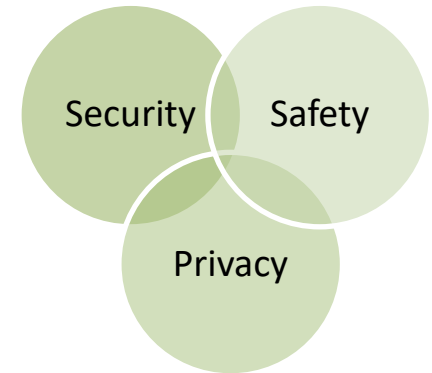
Deals with Complex Ecosystems



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 a large number of data subjects e.g. 5000
- Sanctions for breaches
 - up to 20,000,000 EUR
 - up to 4% of the annual worldwide turnover

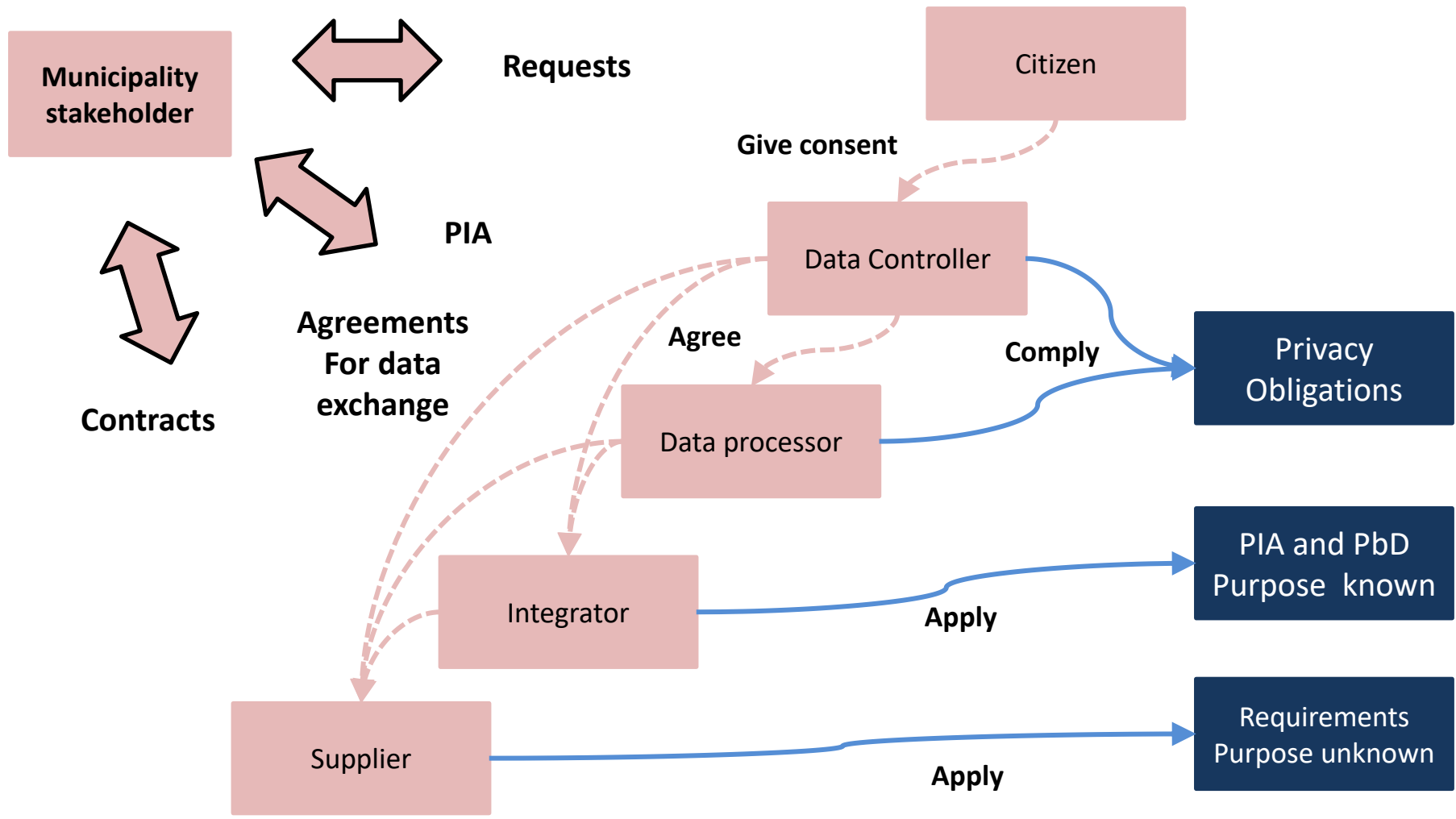


Must understand these terms

- 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



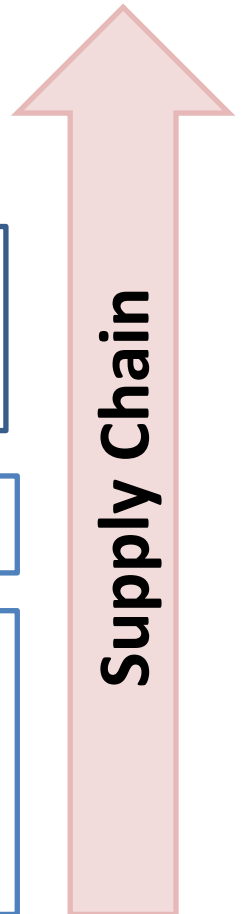
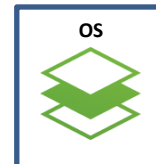
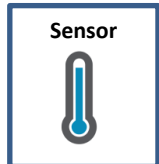
Operator
Smart City
Application 1



Operator
Smart City
Application 2

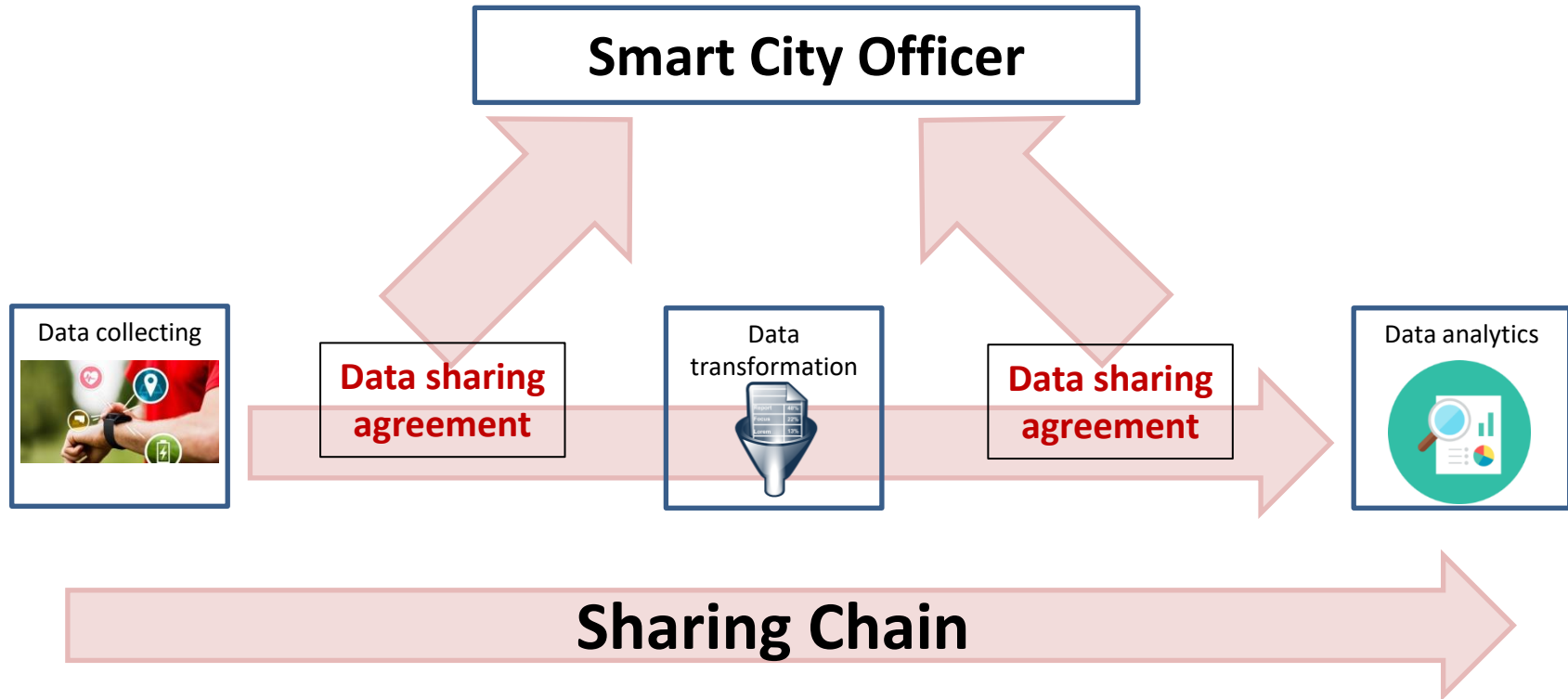
Integrator - Purpose known

Supplier - Purpose unknown



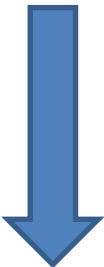






Big Data Vision : Sharing Chain





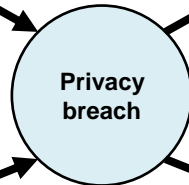
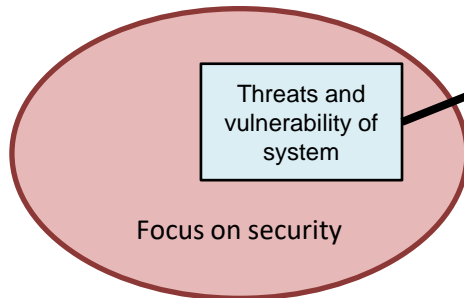
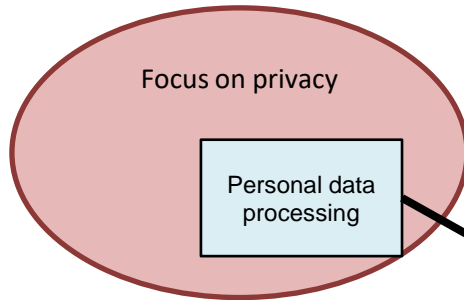
Several Types of Concerns

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

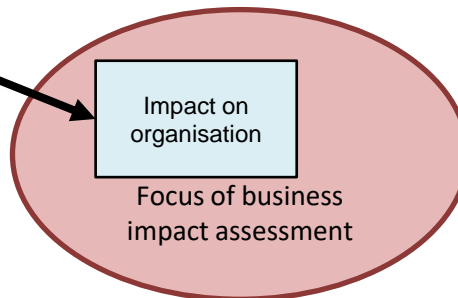
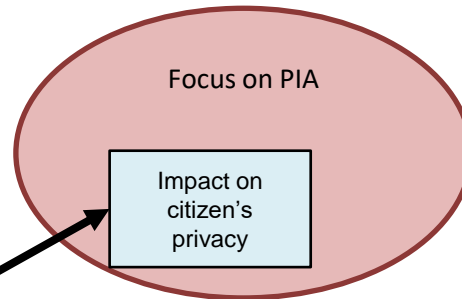


Privacy Impact Assessment

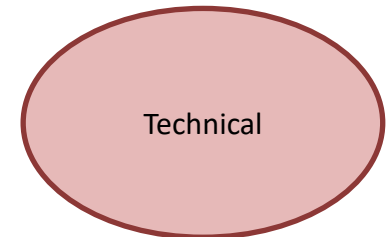
Risk sources



Consequences

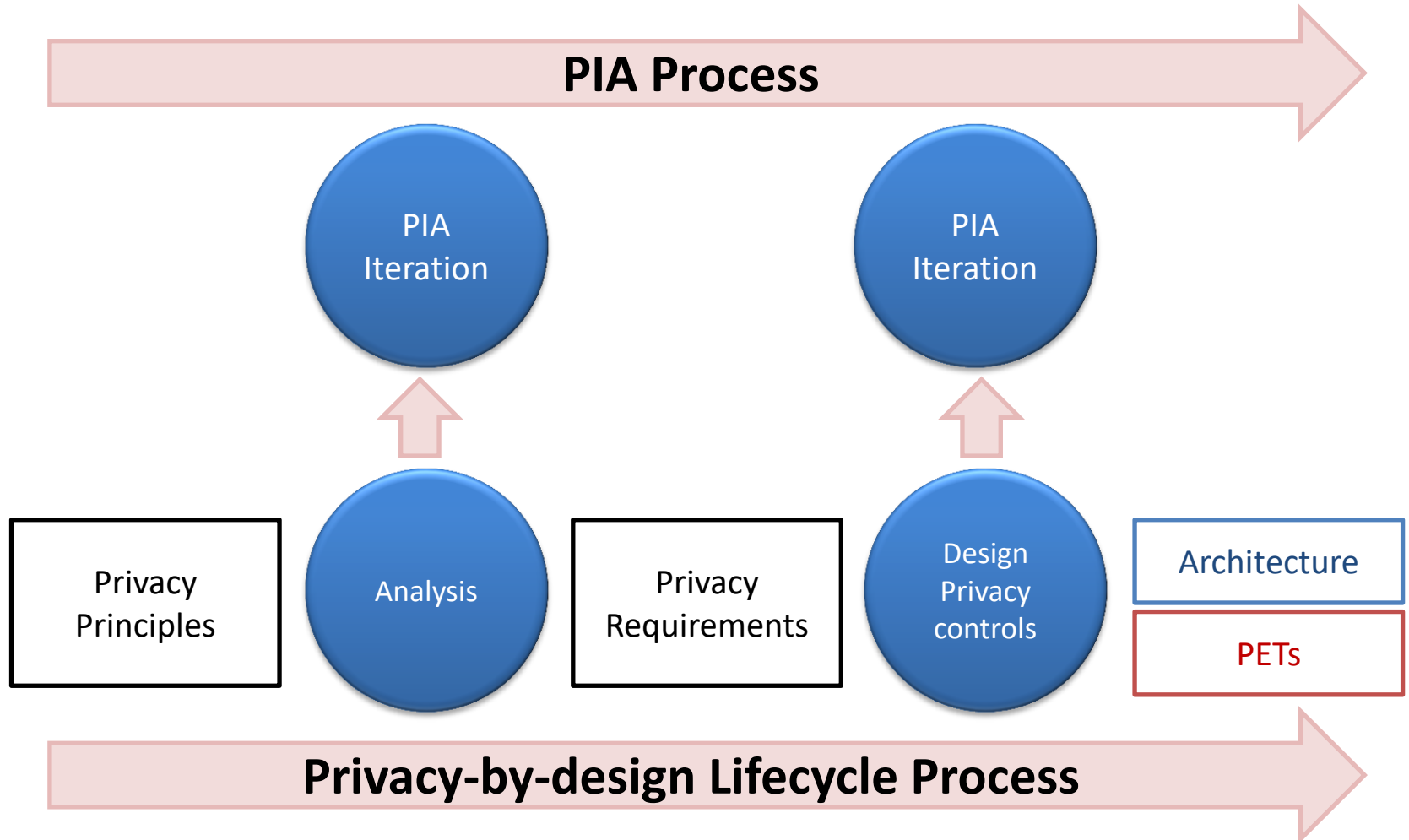


Measures





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

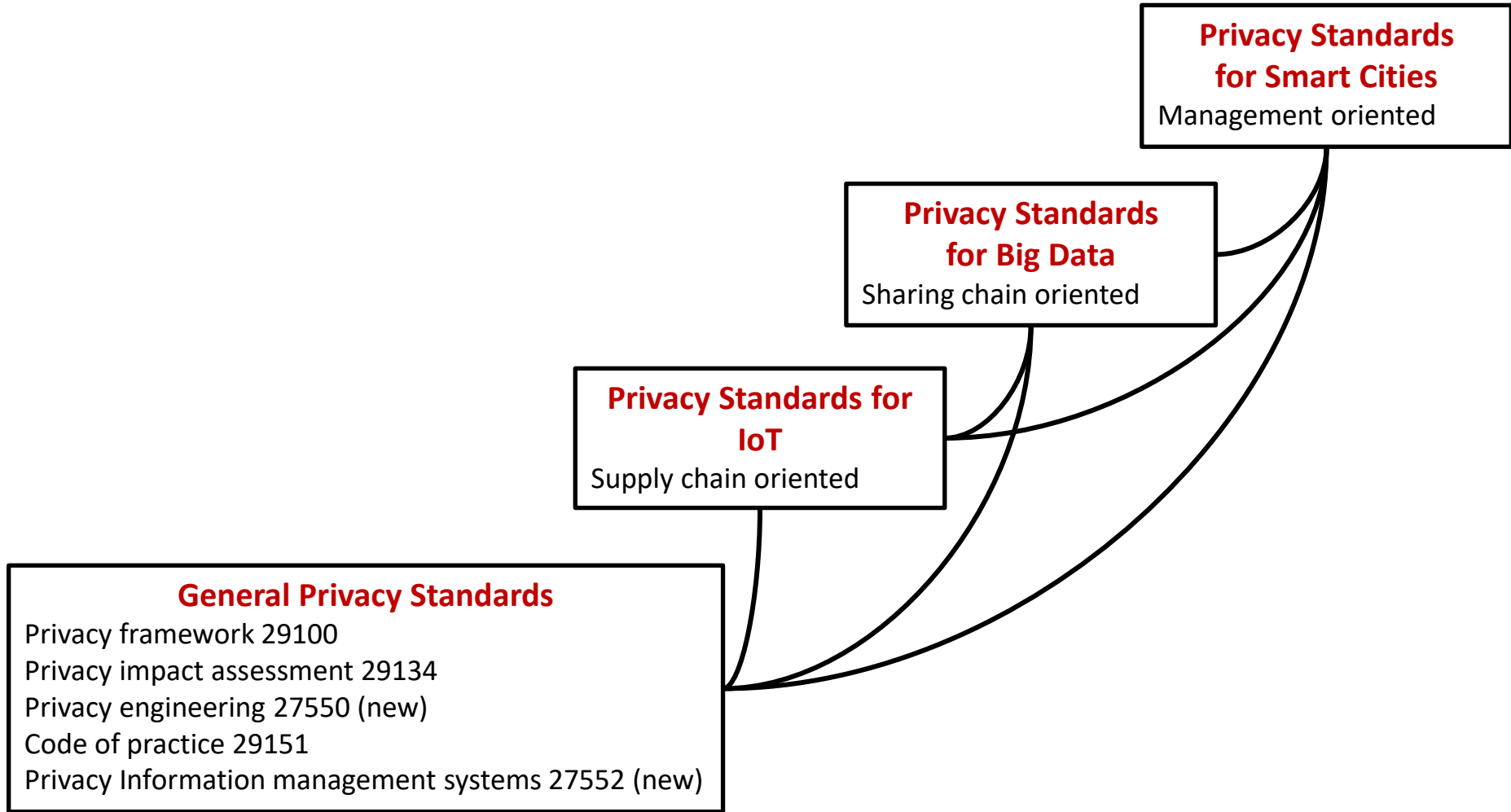


Guidelines for GDPR Compliance

- Privacy management plan
 - Governance scheme
 - Roles and duties
 - Data controllers
 - Data processors
 - Suppliers
 - Resources and staff
- 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