



Initiative
Citizen-centric approach to data: Privacy-by-design

Antonio Kung 



Antonio Kung

- CTO Trialog / 30-year experience ICT
- Coordinator PRIPARE
 - Support action Privacy-by-design
 - Commitment 7001
- Active in standardisation
 - Rapporteur ISO SC27/WG5 Privacy in smart cities
 - Discussion on future standard : privacy management guidelines for smart cities
 - Editor ISO 27550 Privacy engineering
 - Active participation to
 - ISO SC27/WG4 Guidelines for security and privacy in the IoT
 - ISO 20547 Big data reference architecture – part 4. Security and privacy fabric



Initiative

- Citizen Centric Approach to Data: Privacy-by-design
 - Snowden revelations
 - Something must be done to protect a citizen's right to privacy
- Initiative leaders
 - Antonio Kung (co-chair)
 - Chris Cooper (co-chair)



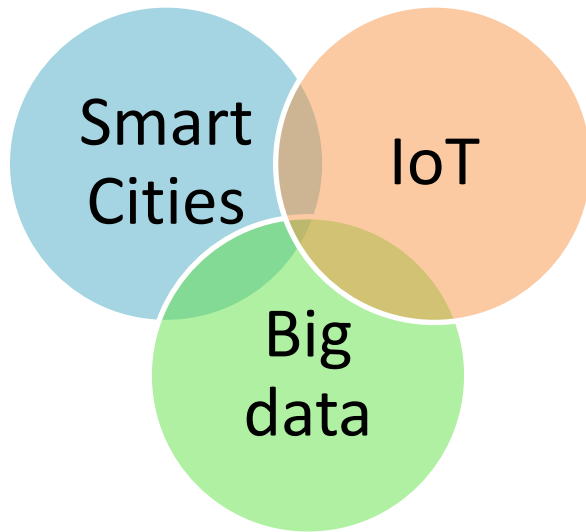


Achievement

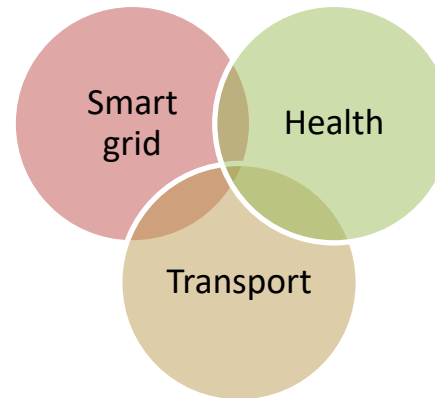
- **Context**
 - June 2014. PRIPARE Commitment 7001 on privacy
 - Sept 2014. EIP-SCC Kickoff
 - May 2015. Initiative proposal at GA Berlin
- **Three webinars**
 - April 2016. Webinar for demand side
 - May 2016. Webinar for supply side
 - **April 2017. Espresso webinar**
- **Six workshops**
 - Nov 2015. AC Brussels – World café
 - May 2016. GA Eindhoven - Workshop
 - Sept 2016. ERRIN workshop on privacy
 - Nov 2016. AC Brussels workshop « offer »
 - **March 2017. Sharing Cities workshop 1**
 - **July 2017. Sharing Cities workshop 2**
- **One document**
 - August 2016. PRIPARE recommendation document



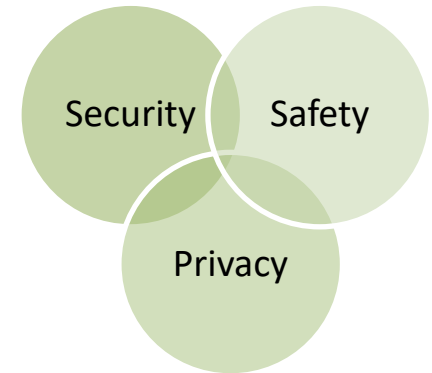
Smart Cities Authorities Must Deal with



Ecosystems



Domains



Concerns





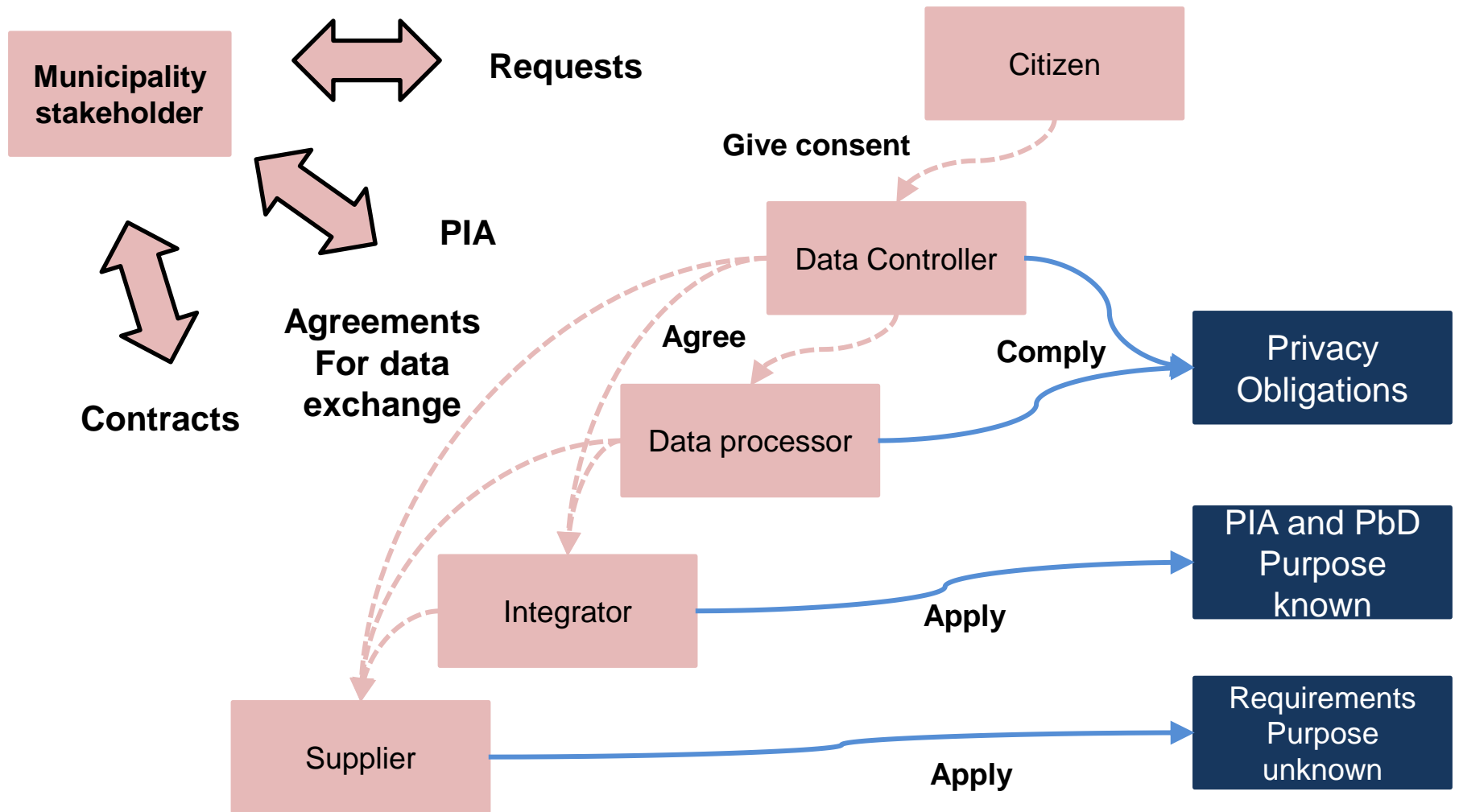
They Must Take into Account

- 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



They Must Manage Privacy in such Ecosystems





IoT Vision: Supply Chain

Smart City Officer

Privacy impact assessment 1

Privacy impact assessment 2



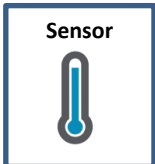
Operator
Smart City
Application 1



Operator
Smart City
Application 2

Integrator - Purpose known

Supplier - Purpose unknown



Sensor



Device



Smart
device



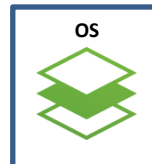
Cloud
solution



Electronics



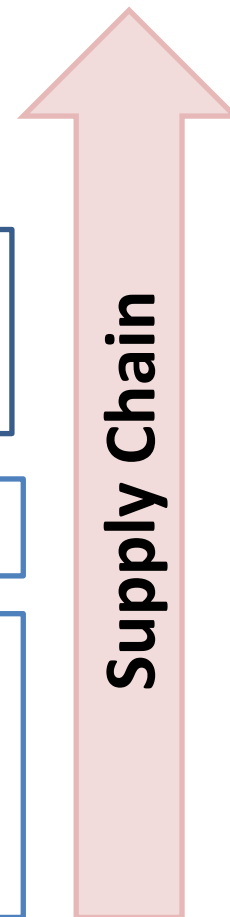
Security
module



OS

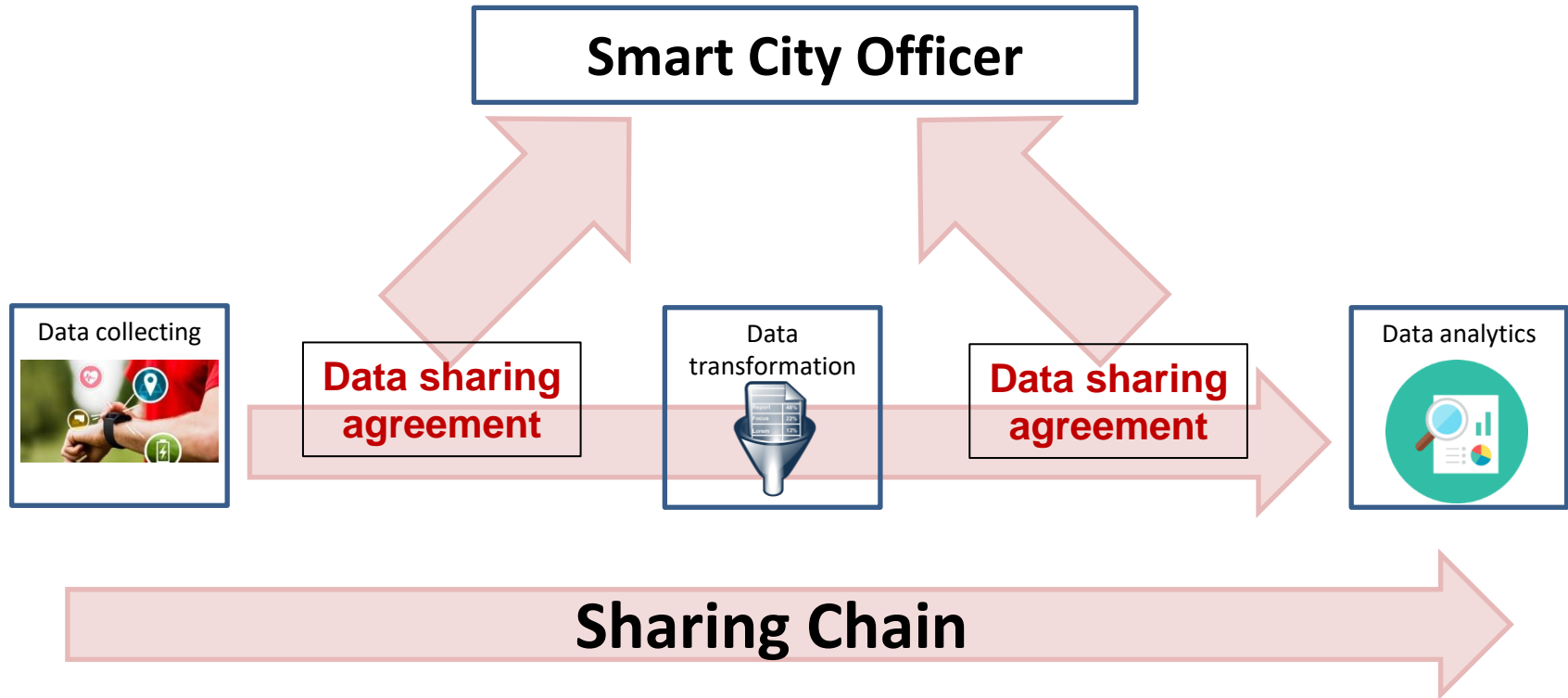


Middleware









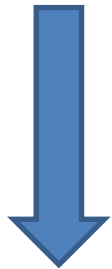
Big Data Vision : Sharing Chain





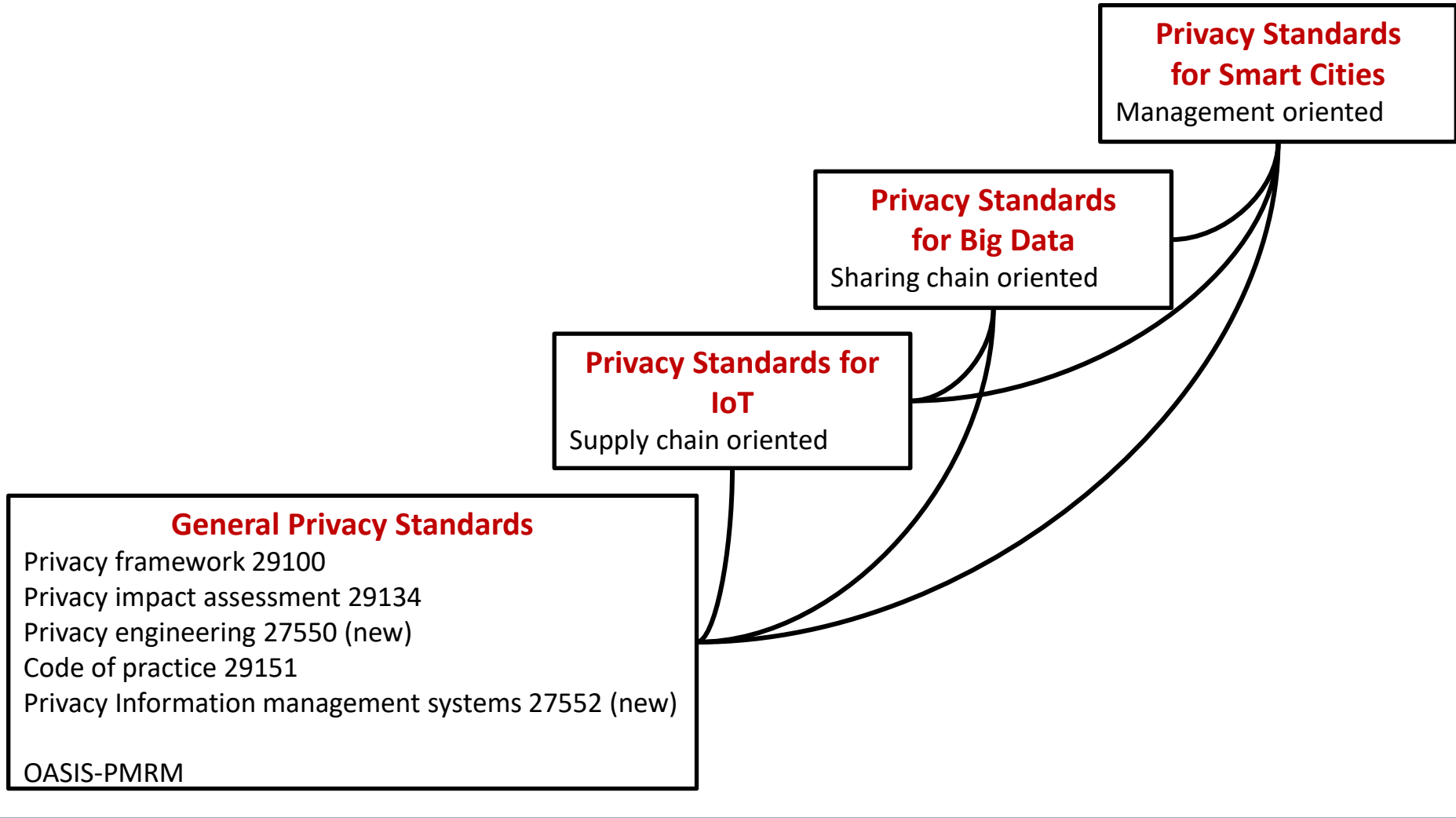
Several Types of Concerns

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





A Possible Standard Landscape





Towards Guidelines for GDPR Compliance

- Privacy management plan
 - Governance scheme
 - Roles and duties
 - Resources and staff
- Management
 - GDPR Registry
 - Interaction with citizens
 - Transparency (dashboard)
 - Complaints
 - Breach management
 - Continuous improvement
- Templates
 - PIA
 - Data sharing agreement
 - Privacy notice
 - Supplier privacy support description



- 2017 SharingCities workshops
 - H2020 lighthouse project
 - <http://www.sharingcities.eu>
 - London, Milan, Lisbon, Bordeaux, Burgas, Warsaw
 - March 2017 – Use cases
 - July 2017 – Privacy Impact Assessments
- 2017 Contribution to standardisation
 - ITU Focus group on IoT and Smart cities (July 2017)
 - CEN-CLC-ETSI SSCC meeting (July 2017)
 - ISO SC227/WG5 meeting (October 2017)



EIP-SCC

European Innovation Partnership
on Smart Cities and Communities

Thanks

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