



DATA ECONOMY: COMMERCIALIZATION, ECOSYSTEM & IMPACT ASSESSMENT

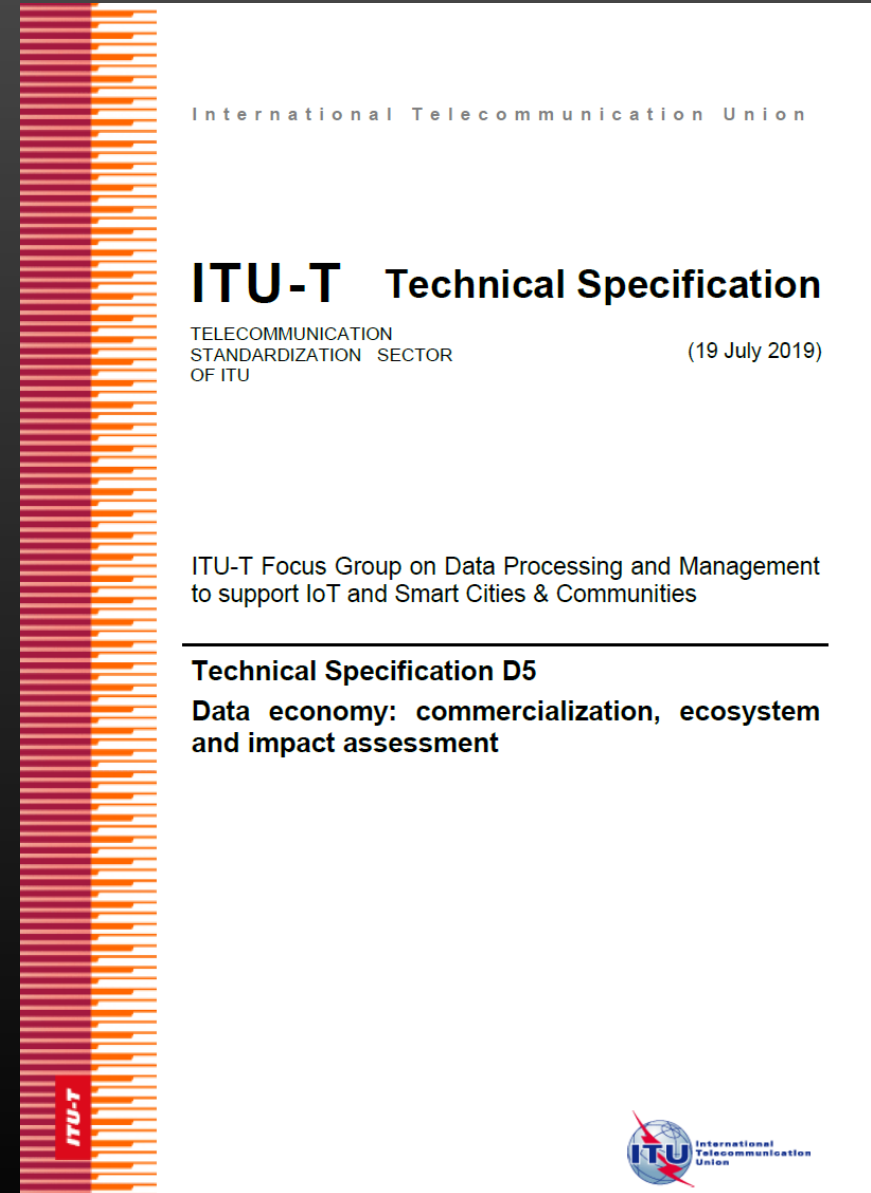
Dr. Okan Geray, Smart Dubai Office, ITU FG DPM Co-Chair WG5

FOCUS GROUP STRUCTURE

WORKING GROUP	TITLE	CHAIR
WG1	Use Cases, Requirements and Applications/ Services	MR.Martin Brynskov (open and Agile Smart Cities Initiative)
WG2	DPM Framework, Architectures and Core Components	Mr Steve Liang (OGC), Mrs Hakima Chaouchi (Telecom SudParis)
WG3	Data Sharing, Interoperability and Blockchain	Mrs Liangliang Zhang (Huawei)
WG4	Security, Privacy and Trust including Governance	Mr Robert Lewis-Lettington (UN-HABITAT)
WG5	Data Economy, commercialization, and monetization	Mr Okan Geray (Smart Dubai), Mr Abdulhadi AbouAlmal (Etisalat)

WG5 WORK

- E-Meetings
- Face to Face Meetings
- Subject Matter Expert (SME) Interviews



ECONOMIC CHARACTERISTICS OF DATA



GOODS

- TANGIBLE
- STORED
- CONSUMED AFTER PRODUCTION



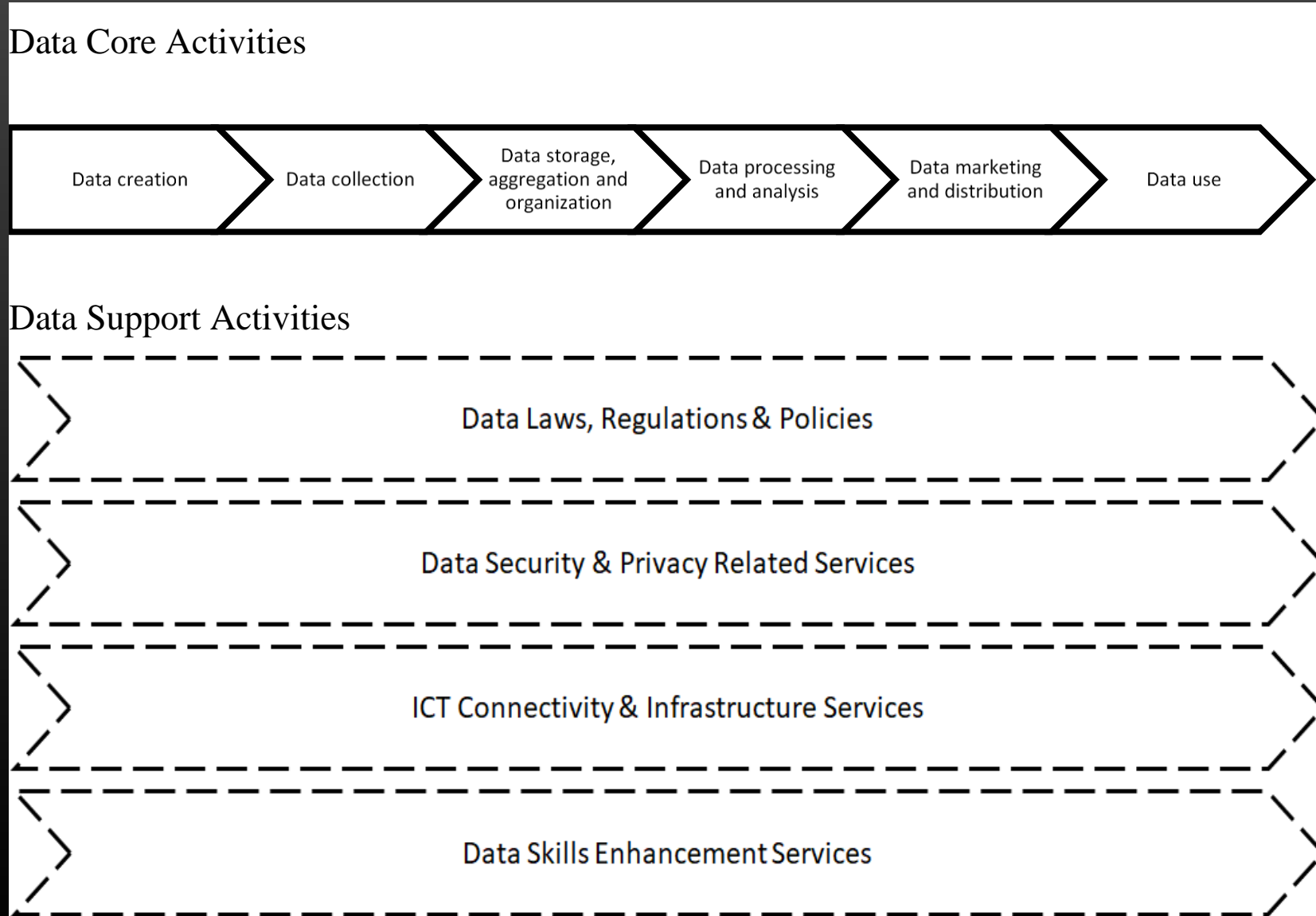
SERVICES

- INTANGIBLE
- UNSTORED
- CONSUMED & PRODUCED SIMULTANEOUSLY

DATA DILEMMA

- INTANGIBLE
- STORED
- CONSUMED AFTER PRODUCTION

DATA VALUE CHAIN



DATA ECOSYSTEM STAKEHOLDERS

- **Data creator, collector and aggregator**
 - Consumers (individuals), organizations (public and private including NGOs, etc.) and machines (e.g. IoT devices such as sensors)
 - Online search engines
 - Online websites, mobile apps, e-commerce sites
 - Content owners (data owners)
 - Open data portals
 - Data marketplaces
- **Advertising organization**
 - Ad networks
 - Ad exchanges
 - Ad agencies
 - Retargeters
 - Advertisers
- **Data related services provider**
 - Payment providers
 - Data management platform providers
 - Data processing and analysis tools providers
 - Data processing and analysis services providers
 - Telecommunications services providers
 - Data security and privacy services providers
- **Regulatory organization**
 - Sector specific organizations (e.g. energy, mobility, health, education, etc. regulatory bodies, councils, etc.)
 - Data regulatory agencies
- **Data skills**
 - Data related labour force in economy
 - Academia
 - Data related training and skills enhancement providers
- **SDO**
 - Data related standards development organizations (SDOs)

DATA ECONOMY TODAY & BUSINESS MODELS

CONSUMERS

- “FREE DATA FOR FREE SERVICES”
- GLOBALIZED

- Targeted Advertising Business Model
- Retargeting
- Personalisation and recommendations
- Data intermediation and sale of customer insights

GOV'T & BUSINESSES

- OPEN DATA
- VERY LIMITED DATA MARKETPLACES
- Data Marketplaces (Centralized & Decentralized)
- Data Driven Commercial Solutions (e.g. vertical apps)
- Public Sector Use-Case Specific Commercial Solutions
- Public Private Partnerships (PPPs)

DATA COMMERCIALIZATION

DATA MONETIZATION

**DATA
VALUATION**

**DATA
PRICING**

**DATA
LICENSING**

**DATA
DISTRIBUTION**

**DATA
MARKETING**

**DATA
SALES**

DATA ECOSYSTEM ENHANCEMENT



**DATA LAWS &
REGULATIONS**



**DATA
POLICIES**



DATA STANDARDS



**DATA R&D
PROGRAMS**



DATA SKILLS



**DATA ECONOMY
FINANCIAL
INCENTIVES**

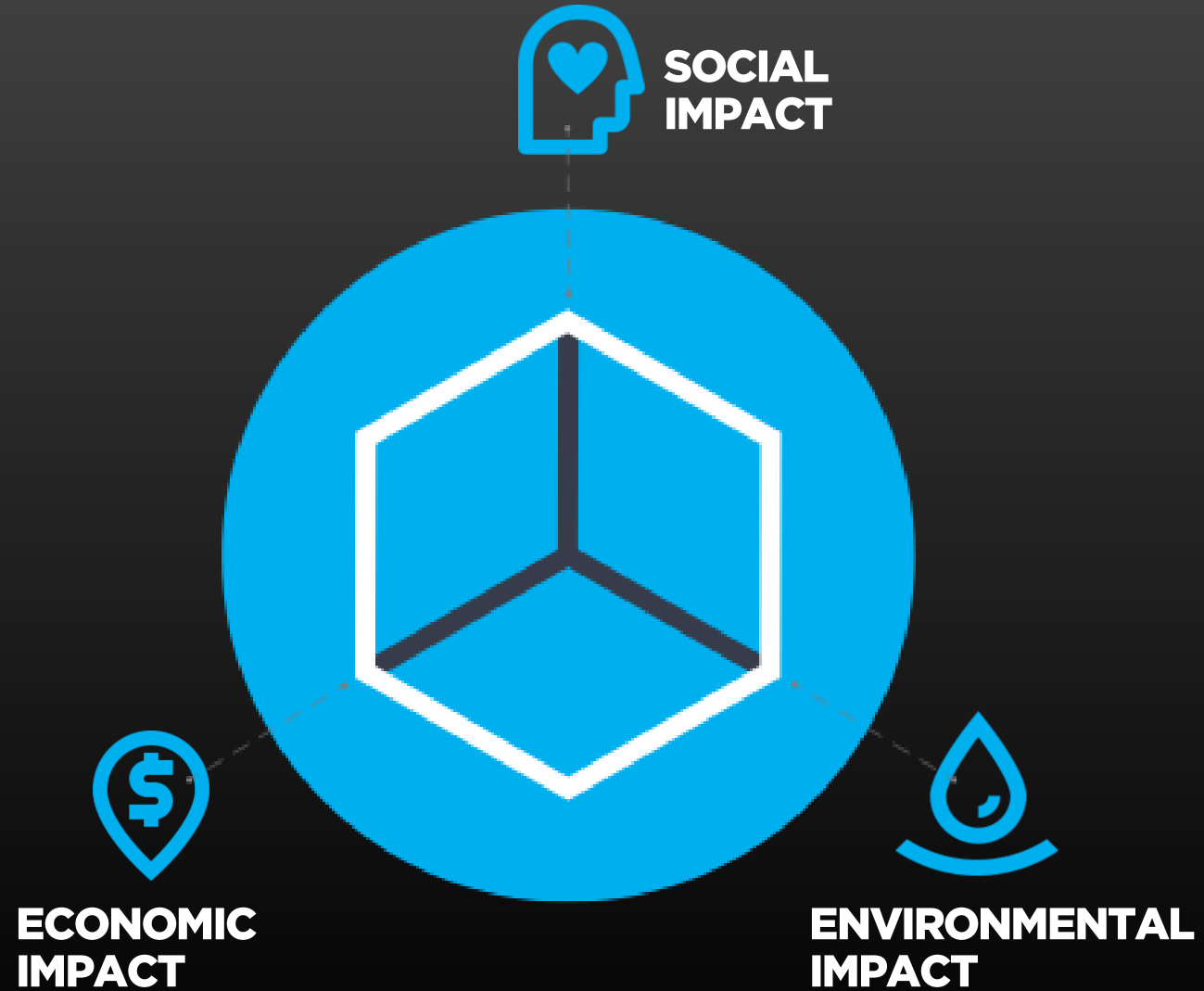


**DATA
ENTREPRENEURSHIP**



**DATA PLATFORMS
AVAILABILITY**

DATA ECONOMY IMPACT ASSESSMENT



DATA ECONOMY FUTURE RESEARCH AREAS - EXAMPLES

- What should be the right balance for government intervention versus market mechanism for data economy?
- Is there a “One size fits all” regulatory framework for data economy?
- How can economic wealth be created in data economy?
- How can we value, price and trade data?
- How can we use data for economic, social and environmental sustainability?
- What is the right governance and policy framework for data economy?
- Should we standardize data to capitalize on globally applicable data analytics and algorithms?

WG5 DATA ECONOMY WORK & SG20 COLLABORATION

- In the absence of a dedicated holistic Question in SG20 comprised of data issues:
 - Data value chain and stakeholders can be defined in Question 5 as a supplement
 - A framework for Data commercialization can be developed in Question 1 (since Q1/20 involves big data aspects – however data commercialization encompasses all data aspects)
 - A framework for Data economy ecosystem can be developed in Question 1
 - Data economy impact assessment can be developed in Question 7
- Further potential:
 - A holistic Data economy assessment framework can be developed in Question 7 (going beyond mere impact and addressing readiness issues as well)
 - Frameworks for individual components of data commercialization can be developed in Question 1 (e.g. data valuation framework, data pricing framework, data licensing framework, etc.)

THANK
YOU