

Accelerating data-driven innovation in Europe



BDV BIG DATA VALUE
ASSOCIATION

Laure Le Bars, SAP
BDVA President
www.bdva.eu

The **mission** of the BDVA is to develop the Innovation Ecosystem that will enable the data-driven digital transformation in Europe delivering maximum economic and societal benefit, and, achieving and sustaining Europe's leadership on Big Data Value creation and Artificial Intelligence.



Industry-driven and fully self-financed international non-for-profit organisation under Belgian law

194 Members

35 Large companies

63 SMEs

82 Research institutions

14 Others

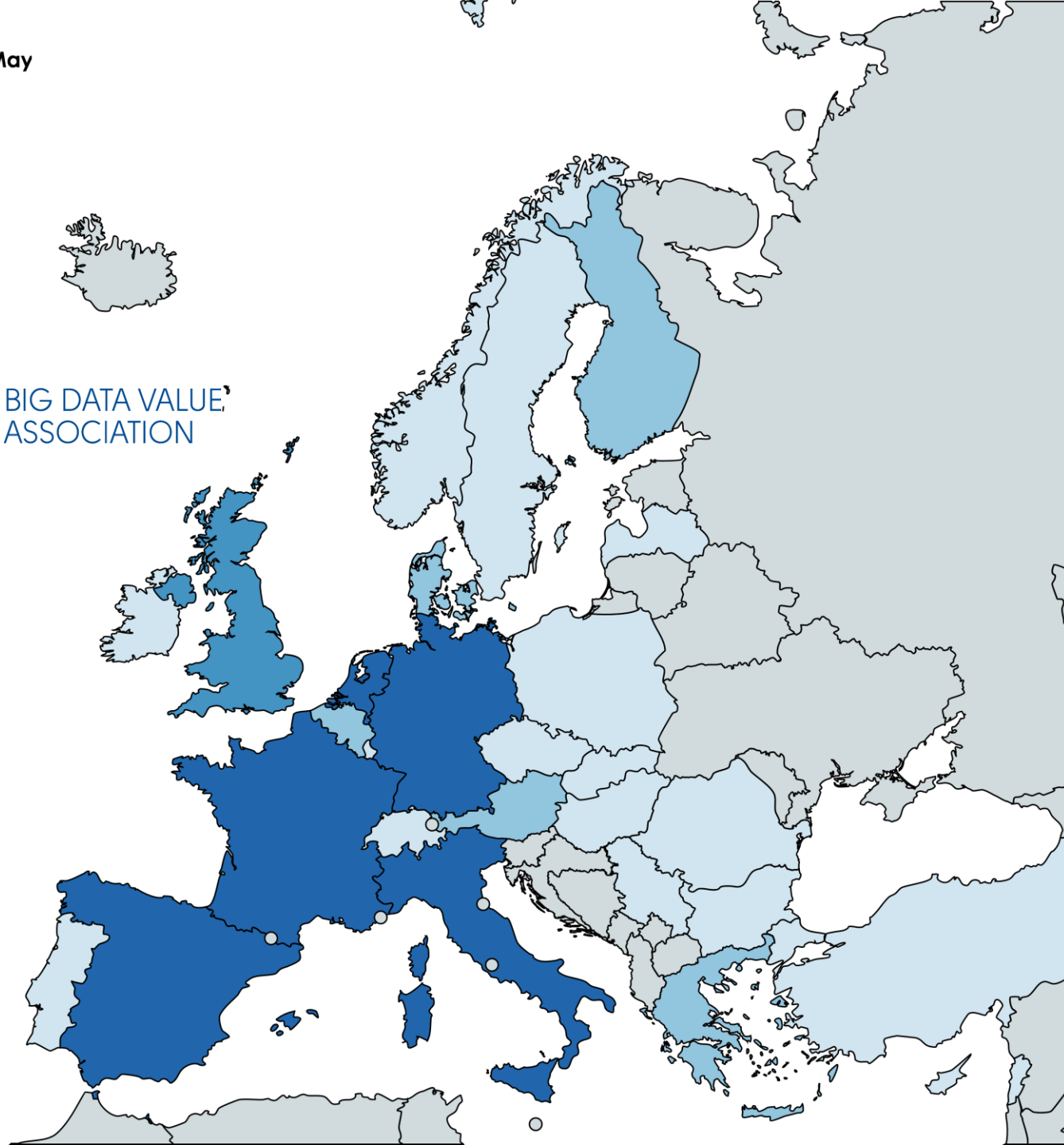
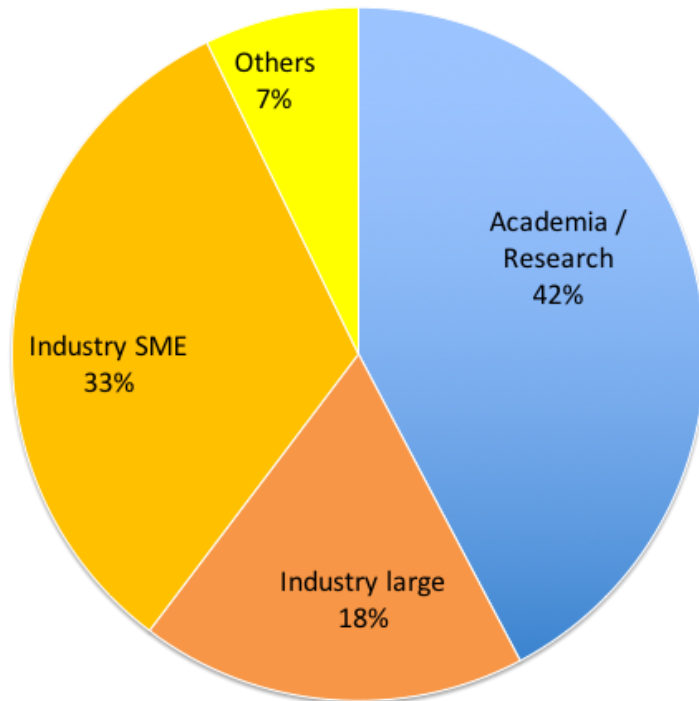
Present in 28 countries

BDVA members per country (May 2017)

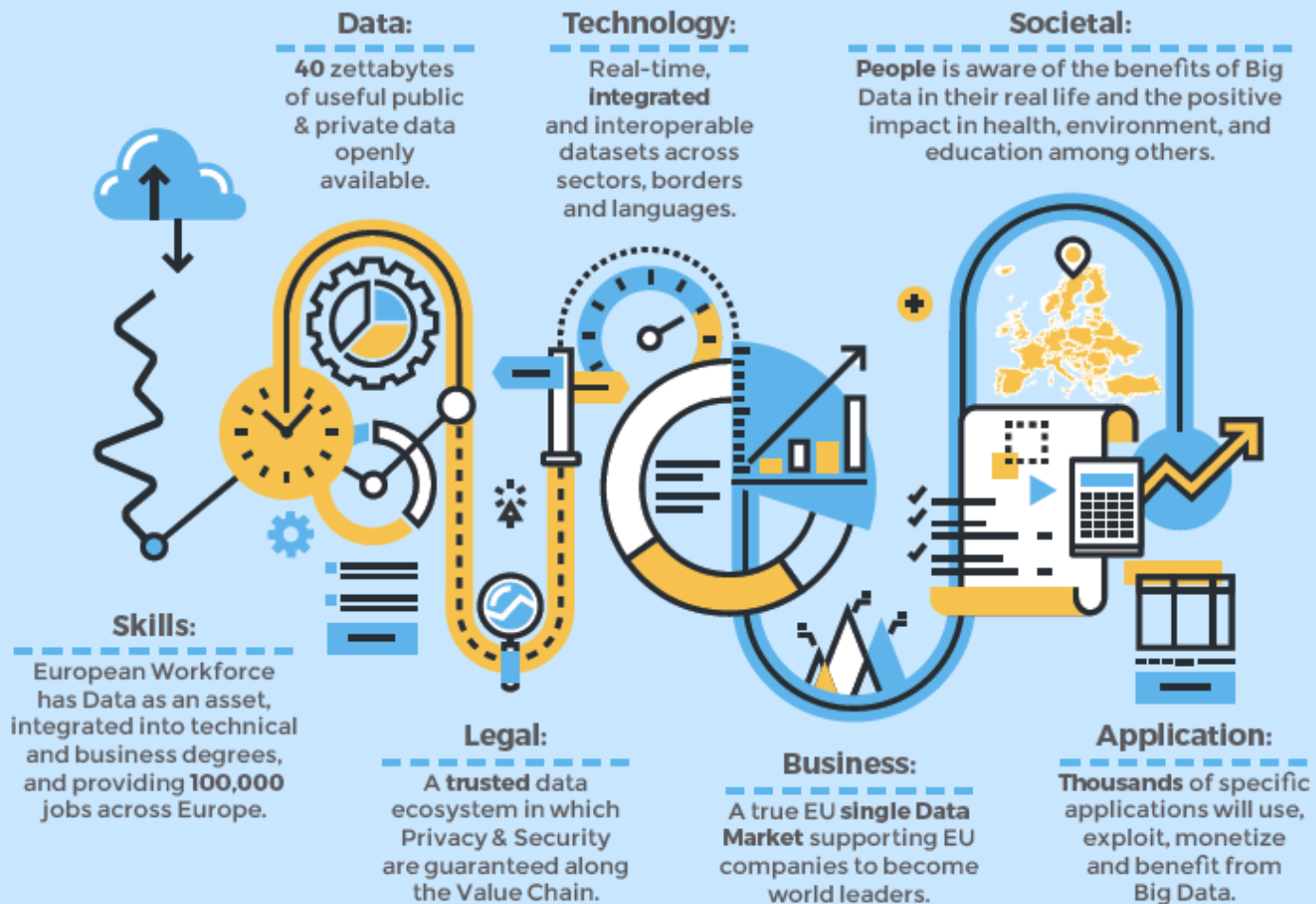
- 15 or more members
- 10 - 14 members
- 5 - 9 members
- 1 - 4 members



BDV BIG DATA VALUE ASSOCIATION



Big Data Value Vision for 2020



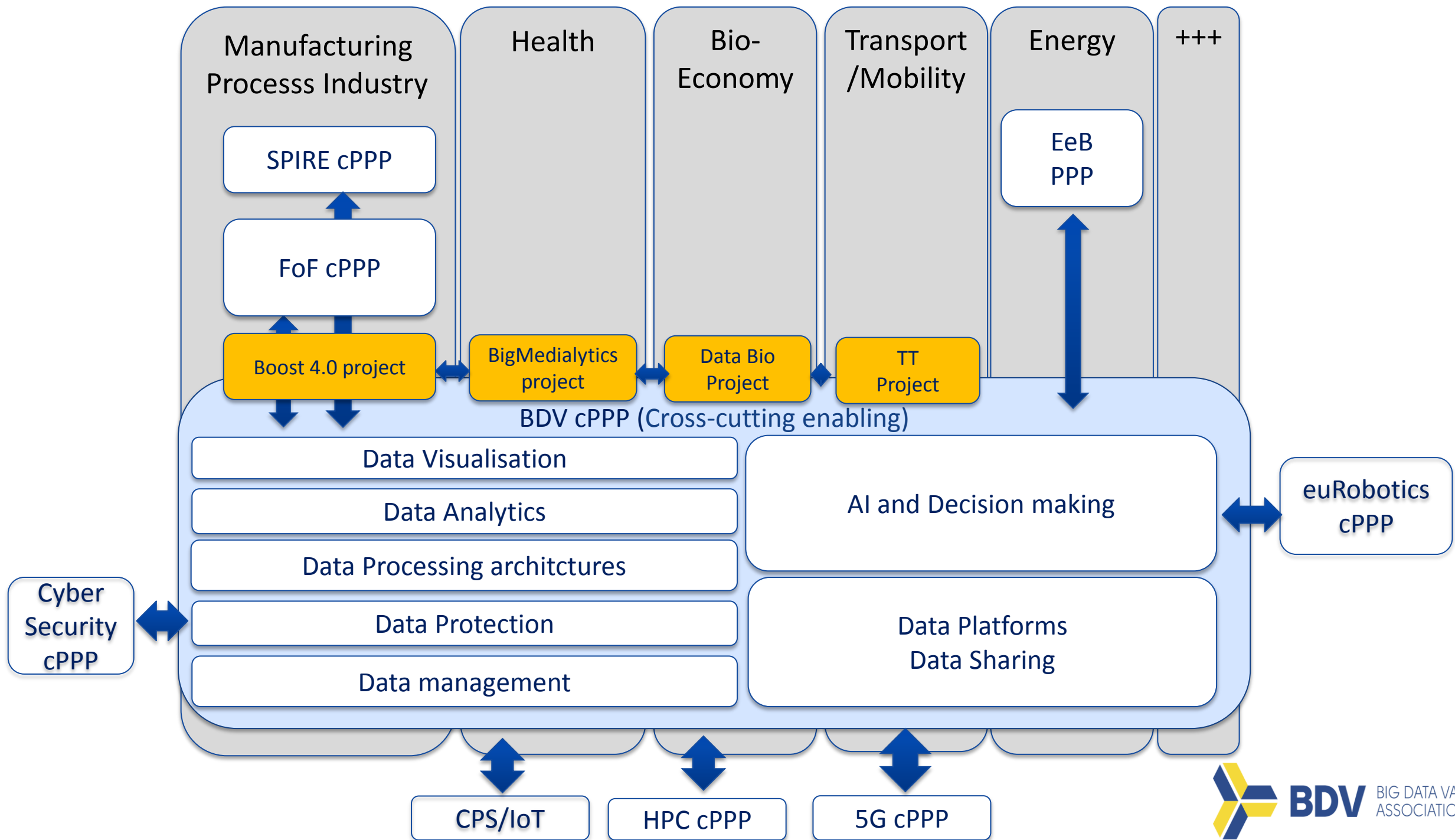
BDV SRIA European Big Data Value Strategic Research and Innovation Agenda

Version 4.0 October 2017

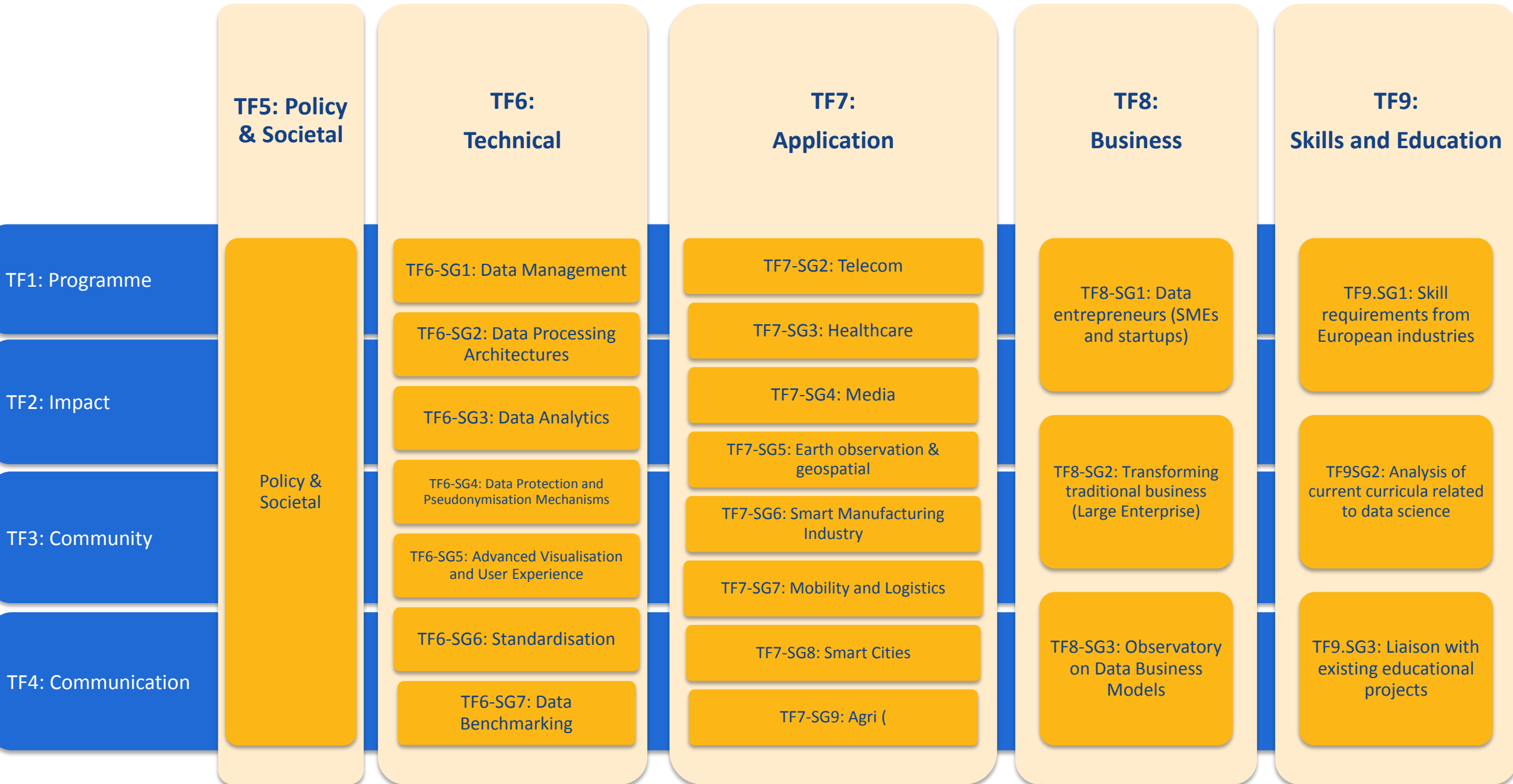
Accelerating Data-Driven
Innovation in Europe

www.bdva.eu

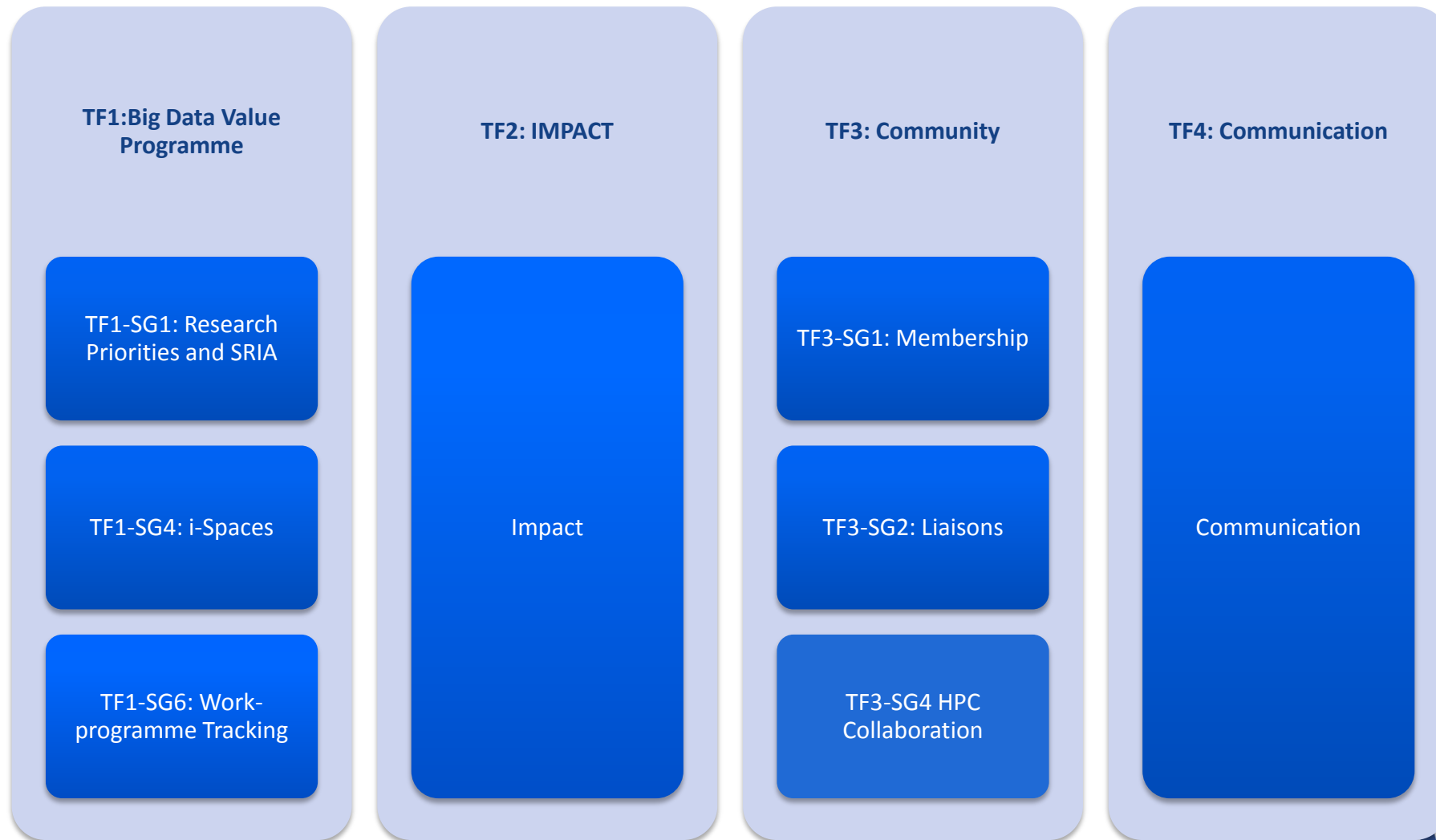
SRIA v4.0 @www.bdva.eu



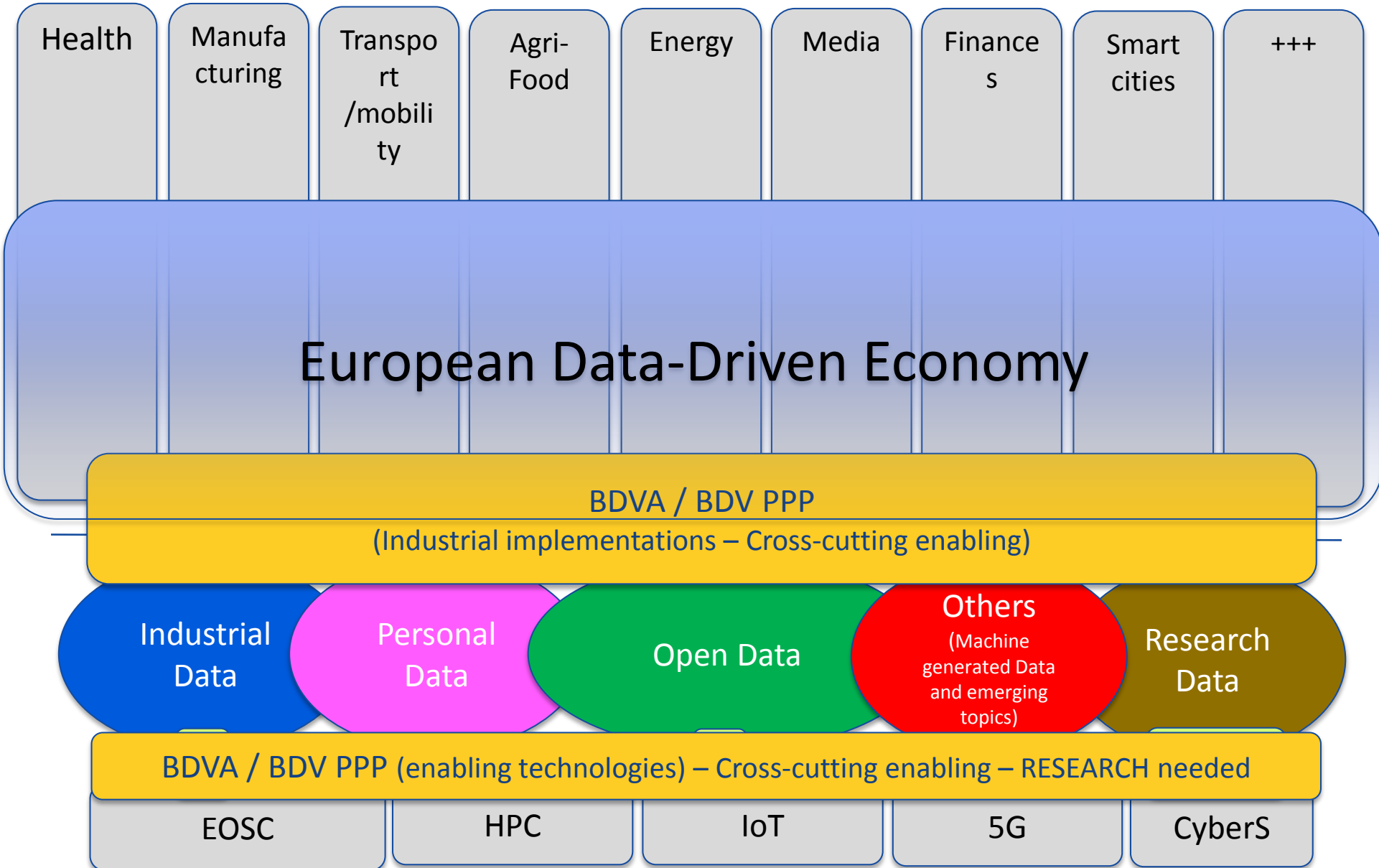
Current TF-SG structure (TF5 – TF9)



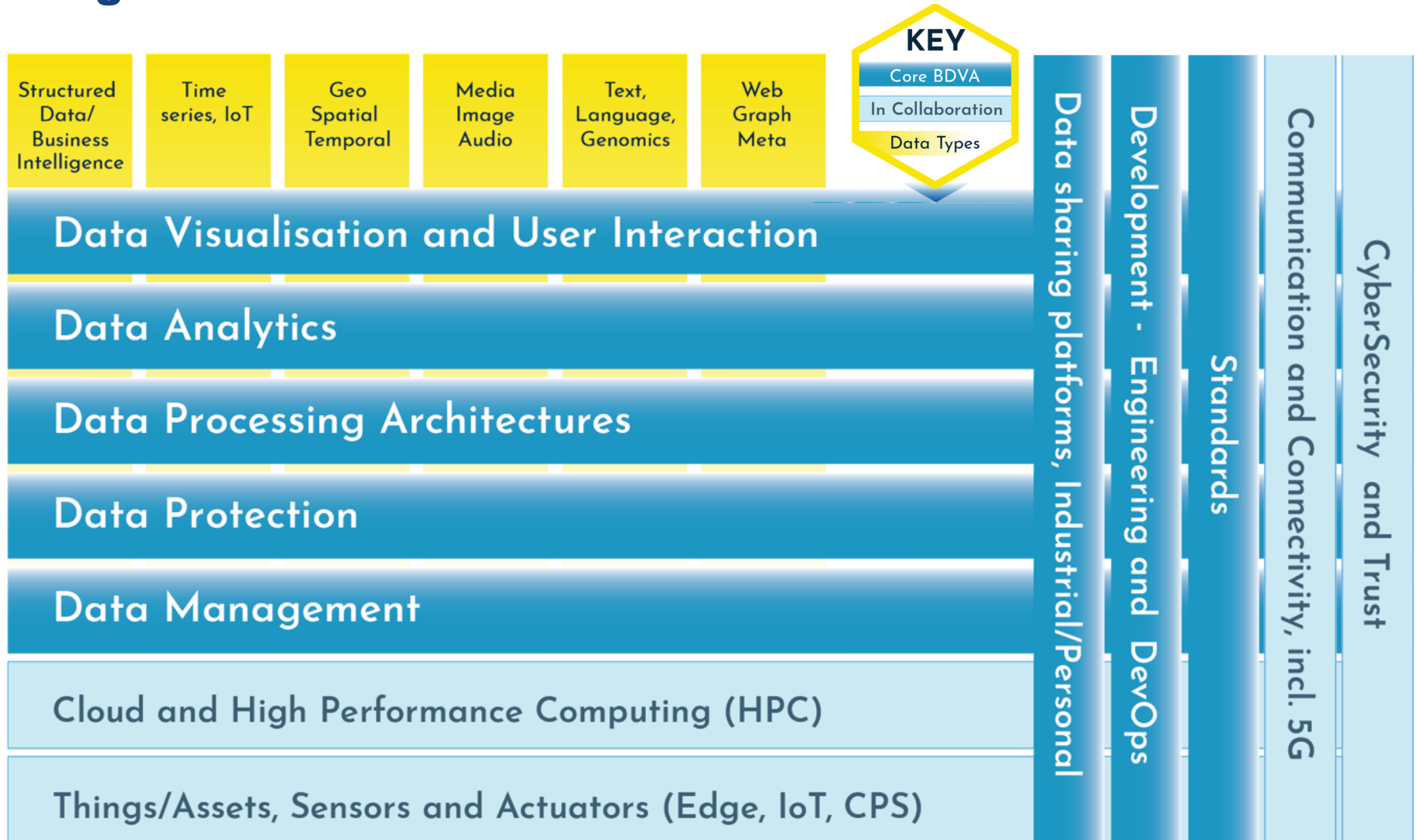
Current TF-SG structure (TF1 – TF4)



Scope Big Data Value



Big Data Value Reference Model



BDV PPP Implementation projects (H2020-ICT-2016-2017): 33 projects

15 data experimentation / data incubators: Cross sectorial, cross-lingual data integration and experimentation

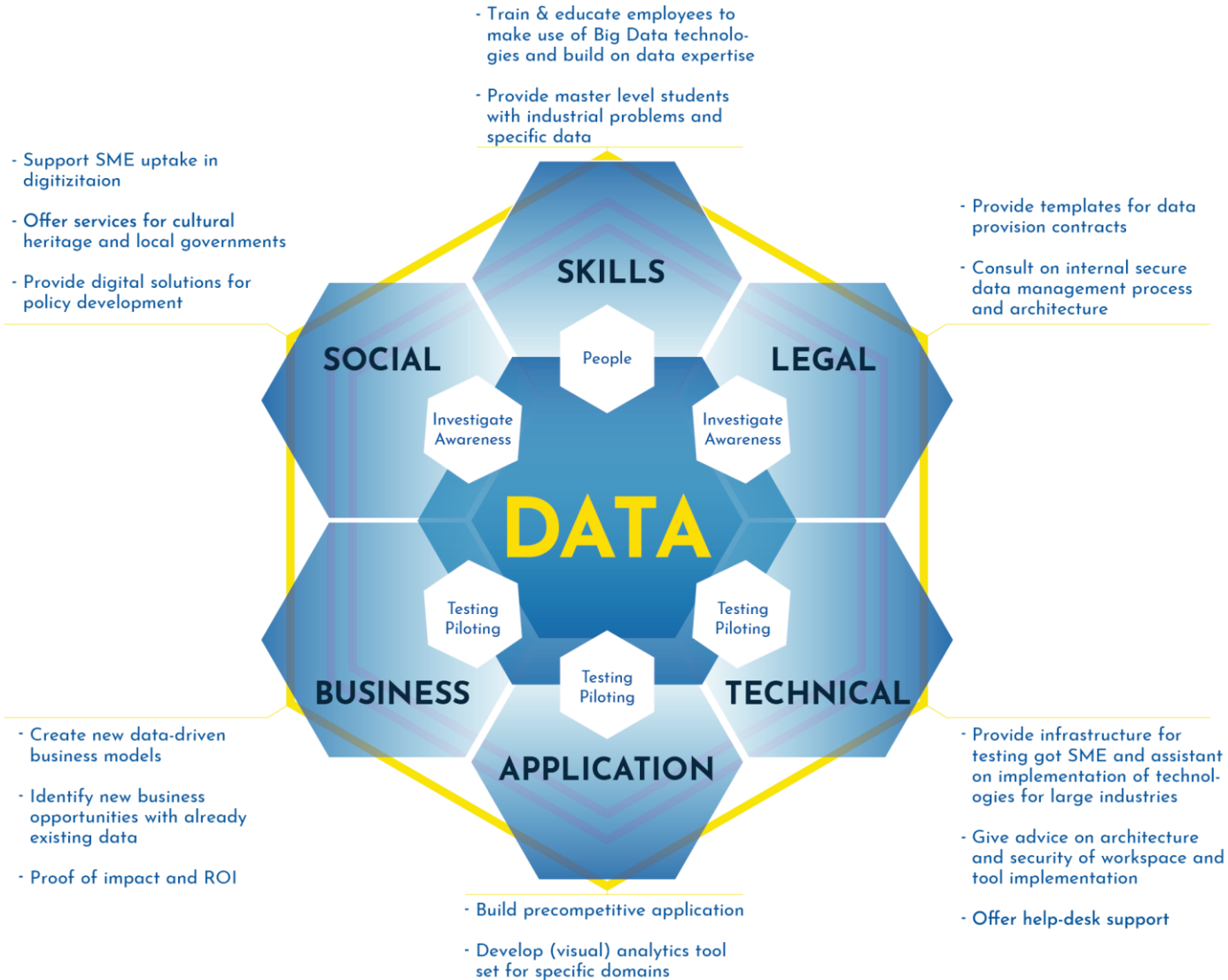
4 Large scale pilots (Light house projects) in 4 major application domains (vertical data platforms):

- Bio Economy
- Transport, mobility and logistics
- Healthcare
- Smart Manufacturing

12 Technical projects covering different **data technical challenges** including **3** focused on **privacy preserving technologies**

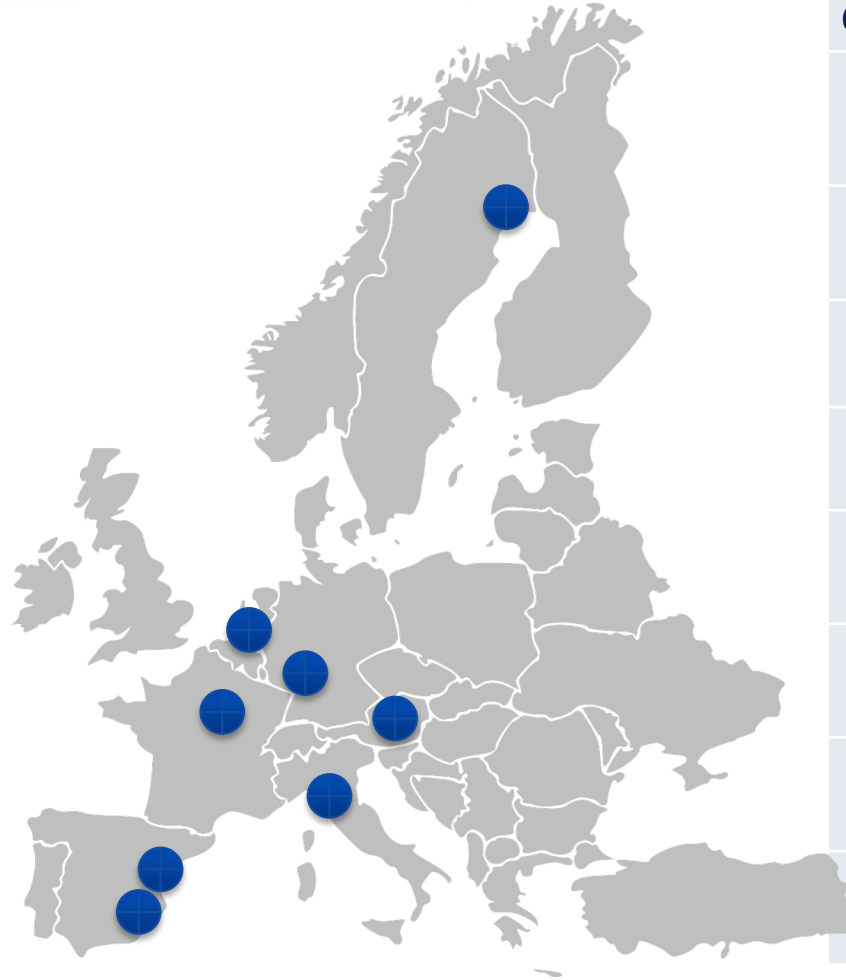
2 CSAs (skills, entrepreneurship, privacy, ethical issues, comms, ecosystem, coordination, etc)

BDV i-Spaces (1)



- i-Spaces are Trusted Data Incubators targeted to **accelerate** take up of **data driven innovation** in commercial sectors as well as in nonprofit sectors.
- These platforms **host** Closed as well as Open **Data** from Business and Public sources.
- The basis of i-Spaces are an **existing infrastructure & expertise**.
- They are **pre-competitive and nonprofit**, though proposing a sustainable business model.
- Act as a **nucleus** in the concept of **DIH**

BDV i-Spaces (2)



Excellence of
INFRASTRUCTURE

QUALITY of
SERVICES

PROJECTS &
SECTORS

IMPACT
to ECOSYSTEM

BUSINESS
strategy

BDVA labelled i-Spaces

Country	Initiative Name	BDVA label
ES	Big Data Centre of Excellence Barcelona	SILVER
IT	Cineca	SILVER
AUT	Know-Center	SILVER
SE	RISE SICS North ICE	SILVER
DE	Smart Data Innovation Lab	SILVER
FR	Teralab	SILVER
NL	EGI Foundation	BRONZE
ES	ITI Big Data Space	BRONZE

1. The Industry Vision

European Industrial leadership in Data and AI platforms and technologies

Digital platforms dominate value creation across all sectors and they are at the heart of the digital economy. Business dynamics are changing, **Usage of data will define global competitiveness.**

An **strong data economy is emerging in Europe** with **large companies and SMEs** clearly seeing the fundamental potential of Big Data Value and AI for causing disruptive change in markets and business models.

To **secure industrial prosperity in the future Europe** must be able to **develop and operate its own Data / AI platforms** and to **promote them globally.**

To **stay competitive Europe** needs **industrial leadership** in some of the **fields of technology** that are key for the **development and operations of Data / AI platforms**

Public interventions are needed

in the form of

horizontal cross-sectorial actions in data value and AI technologies

to ensure European leadership in the Digital Transformation of society that **address economic challenges for sectors and key societal challenges** (Migration, Water, energy, climate, food, etc.) preserving European fundamental values.

Funding **focus** should be directed to those **technological fields of strategic importance** and where Europe already has competences and capacities.

2. Future Challenges of the European Data Economy and Society

- **Secure industrial prosperity** in the future Europe in the context of the global data-driven economy
- **Industrial leadership in Big Data and AI platforms and technologies** (develop, operate, promote its own Data / AI platforms)
- Secure autonomy in AI technology
- **Seamless interconnected Data ecosystems (open, private, research, personal,**

Next Generation Data and AI Platforms

- **Trusted co-evolution between humans and AI-based** systems
- Legal issues with data decisions
- **Trust in algorithms and data**

Trust in Data-Driven Critical Decision Making

- **Scalable value chains** involving key enabling technologies
- **Extracting value** from the fusion of technologies

Extract Value from Next Generation Digital Infrastructure (5G, HPC, Cloud, IoT, BD, AI,..)

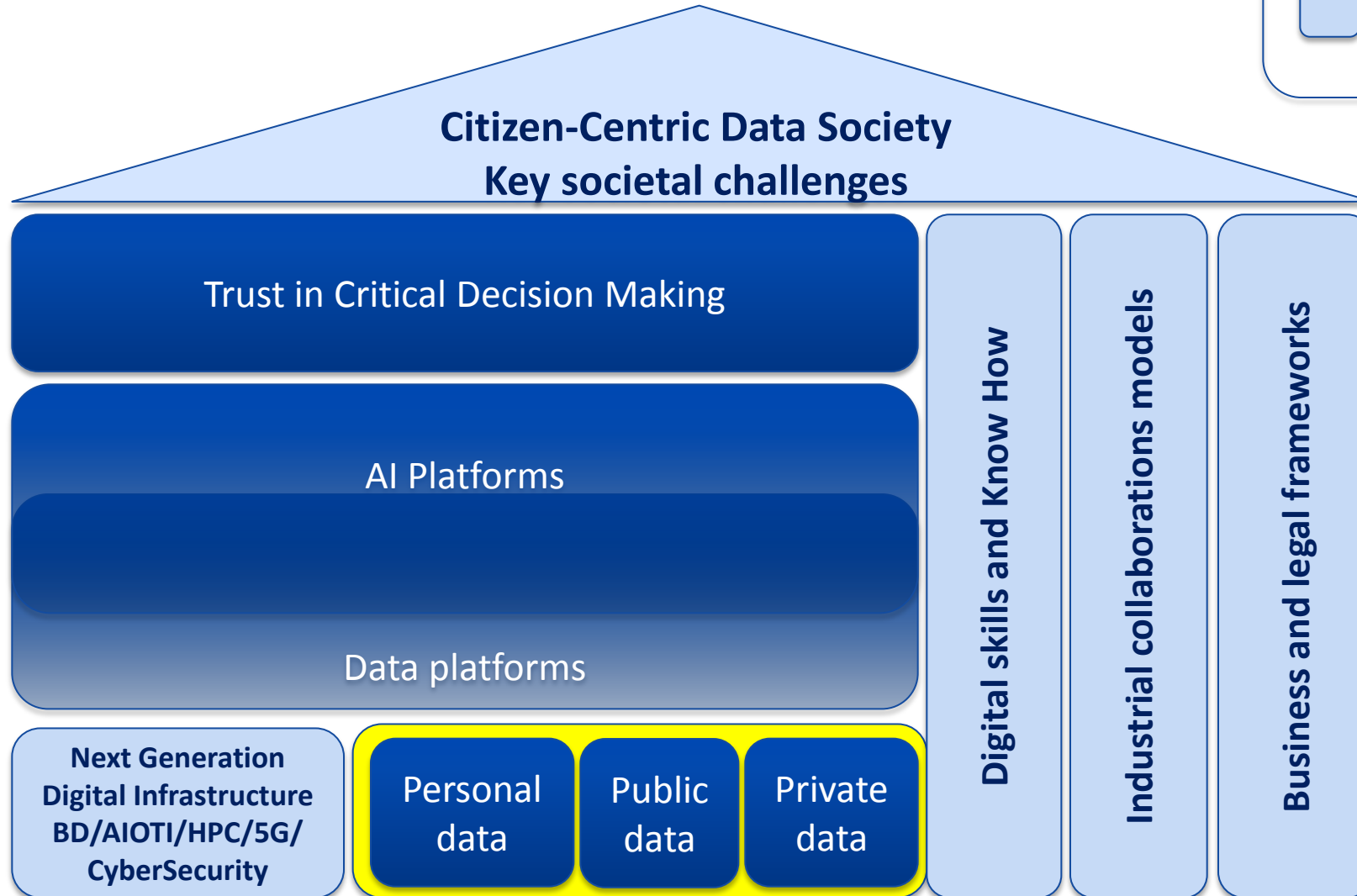
- **New data-driven business models** across value chains
- Lack of **data interoperability**. Data sharing and exchange
- Data-driven **industrial cooperation** across value chains

Scaling Industrial Cooperation Models in the Data Economy

- **Specialisation** required (sophistication of the leading-edge tools and algorithms)
- **Data will become a significant part of most jobs** (Managers, workers and decision makers)
- **Retaining talent:** driving new forms of academic and industrial research and educational partnerships

Digital/Data Skills and Know-how

Vision paper BDVA : Main pillars



4. From Challenges to R&I visions for the future (activities)

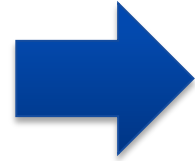
Next Generation Data and AI
Platforms

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Scaling Industrial Cooperation
Models in the Data Economy

Digital/Data Skills and Know-
how



VISION Papers → WORKSHOPS

- **Data-Driven AI** (technical and non-technical challenges):
 - March 2018 (BDVA, euRobotics, AIOTI)
 - June 2018 (IoT week, challenges from verticals)
 - July 2018 (ijcai-18, BDVA, euRobotics)
 - June, September, October 2018 (BDVA workshops)
 - November 2018 (EBDVF 2018: Data-driven AI for the Future)
- **Data for AI:** workshop 19th September 2018 + EBDVF 2018 (Nov. 2018) (Towards a European Data Space)
- **Scaling data platforms for re-use of industrial, personal and open data** (workshop planned for Sep 12th 2018, EBDVF 2018)
- **Future Scenario workshops driven by verticals** (e.g AI in Healthcare planned for Q3 2018)
- **DIH in Big Data and AI** (workshop planned for October 2018)
- **Technical challenges and data applications for global challenges** (Data management, Data processing architectures, interoperability, privacy-preserving technologies, Extreme-performance data analytics) → Driven by Verticals and technology integration
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4. From Challenges to R&I visions for the future (2) (activities)

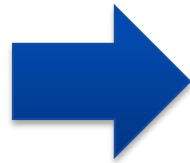
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VISION Papers, Workshops, Collaborations

- **Future Scenario workshops driven by verticals** (e.g AI in Healthcare planned for Q3 2018) **in collaboration with other PPPs**
- **HPC (ETP4HPC) - Big Data (BDVA) common workshops:**
 - Ongoing activity (driven by industry-driven scenarios)
 - Common paper (draft in July 2018)
 - Common workshops envisaged in September 2018, EBDVF 2018 and ICT event 2018.
- **Collaborations**
- **EBDVF 2018**

Big Data Value ecosystem

BDVA Collaborations

Officially established

Ongoing collaboration (initiated)

Ongoing collaboration with outcomes

Identified collaboration

Society

Market

Regulation/policies

Standards

Research
Innovation

MyData

Platform Industrie 4.0

EC/EU

NSB

ETSI

CEN/CENELEC

ISO

ITU

W3C

IEEE

Platform
Industrie
4.0

ETP4HPC

ECSO

AIOTI

Robotics

5G

EIT
Digital

RDA

IIC

IoT
Forum

National Initiatives
BIG DATA VALUE

IDS

Sectorial PPPs: EFFRA

Other Sectorial PPPs (and association)s

National level

EU level

Worldwide level

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EUROPEAN
**BIG DATA
VALUE** FORUM

2018 NOV 12-14. Vienna, Austria



Further Information:

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@BDVA_PPP #Bigdatavalue #Bigdata

