DATA ACT –

Implications for IoT

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30 November 2021

European Strategy for Data and related legislation

4 key instruments

Nov 2020 Data Governance Act
Ensure **TRUST** in data transactions
Public sector data, private sector data and personal data voluntarily made available by data holders

Dec 2020 Digital Market Act
Regulate **MARKET POWER** based on data
Personal data and private sector data held by online platforms and originating from the users (both businesses and individuals)

Q4 2021 Impl. Act. High Value Datasets
Unleash the socio-economic potential of data as a **PUBLIC GOOD**
Public sector data of high value

Q1 2022 Data Act
Ensure **FAIRNESS** in the allocation of data value among the actors of the data economy
Private sector data, personal data and co-generated (IoT) data

Complemented by sectoral legislation

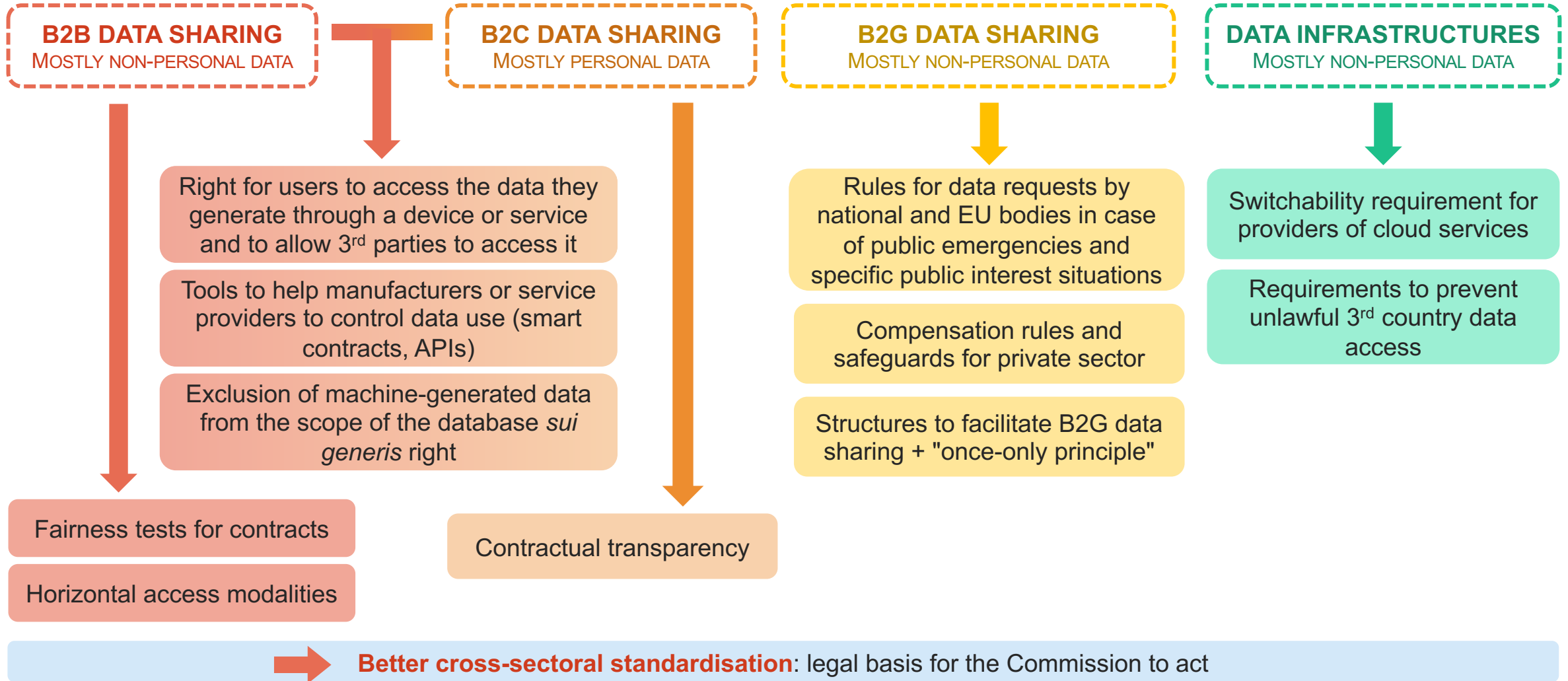**2022 Access to in-vehicle data**
Promote a competitive market on car data services, expanding the current legislation on non-discriminatory access to repair data

Existing legislation

Directive 96/9/EC on the **legal protection of databases**

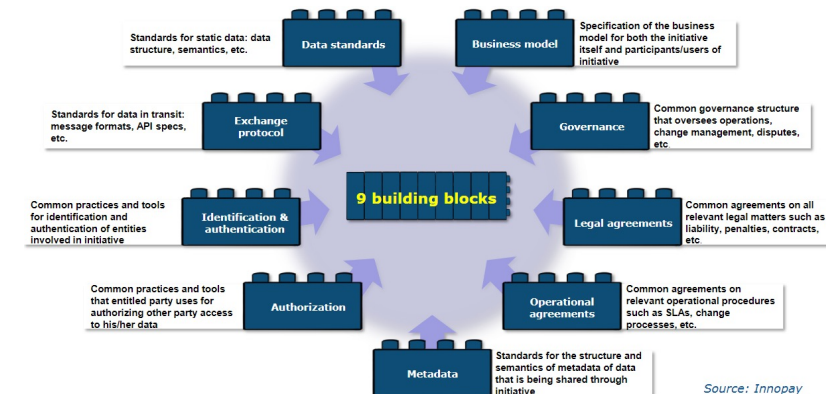**General Data Protection Regulation** – Regulation (EU) 2016/679

European Commission

Data Act overview

B2B DATA SHARING
MOSTLY NON-PERSONAL DATA

B2C DATA SHARING
MOSTLY PERSONAL DATA

B2G DATA SHARING
MOSTLY NON-PERSONAL DATA

DATA INFRASTRUCTURES
MOSTLY NON-PERSONAL DATA

Right for users to access the data they generate through a device or service and to allow 3rd parties to access it

Tools to help manufacturers or service providers to control data use (smart contracts, APIs)

Exclusion of machine-generated data from the scope of the database *sui generis* right

Rules for data requests by national and EU bodies in case of public emergencies and specific public interest situations

Compensation rules and safeguards for private sector

Structures to facilitate B2G data sharing + "once-only principle"

Switchability requirement for providers of cloud services

Requirements to prevent unlawful 3rd country data access

Fairness tests for contracts

Horizontal access modalities

Contractual transparency

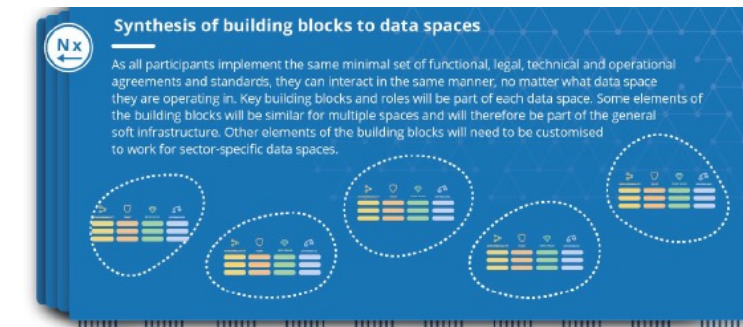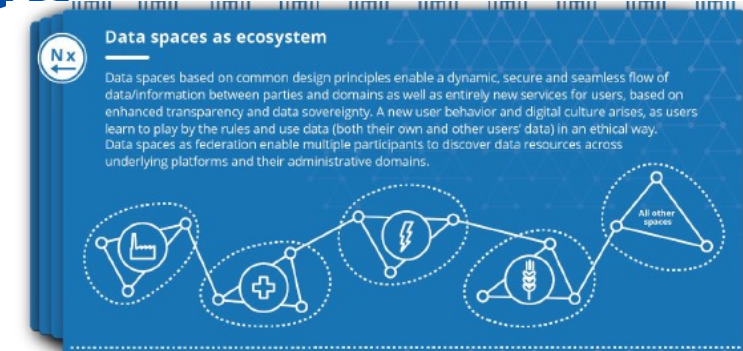**Better cross-sectoral standardisation**: legal basis for the Commission to act

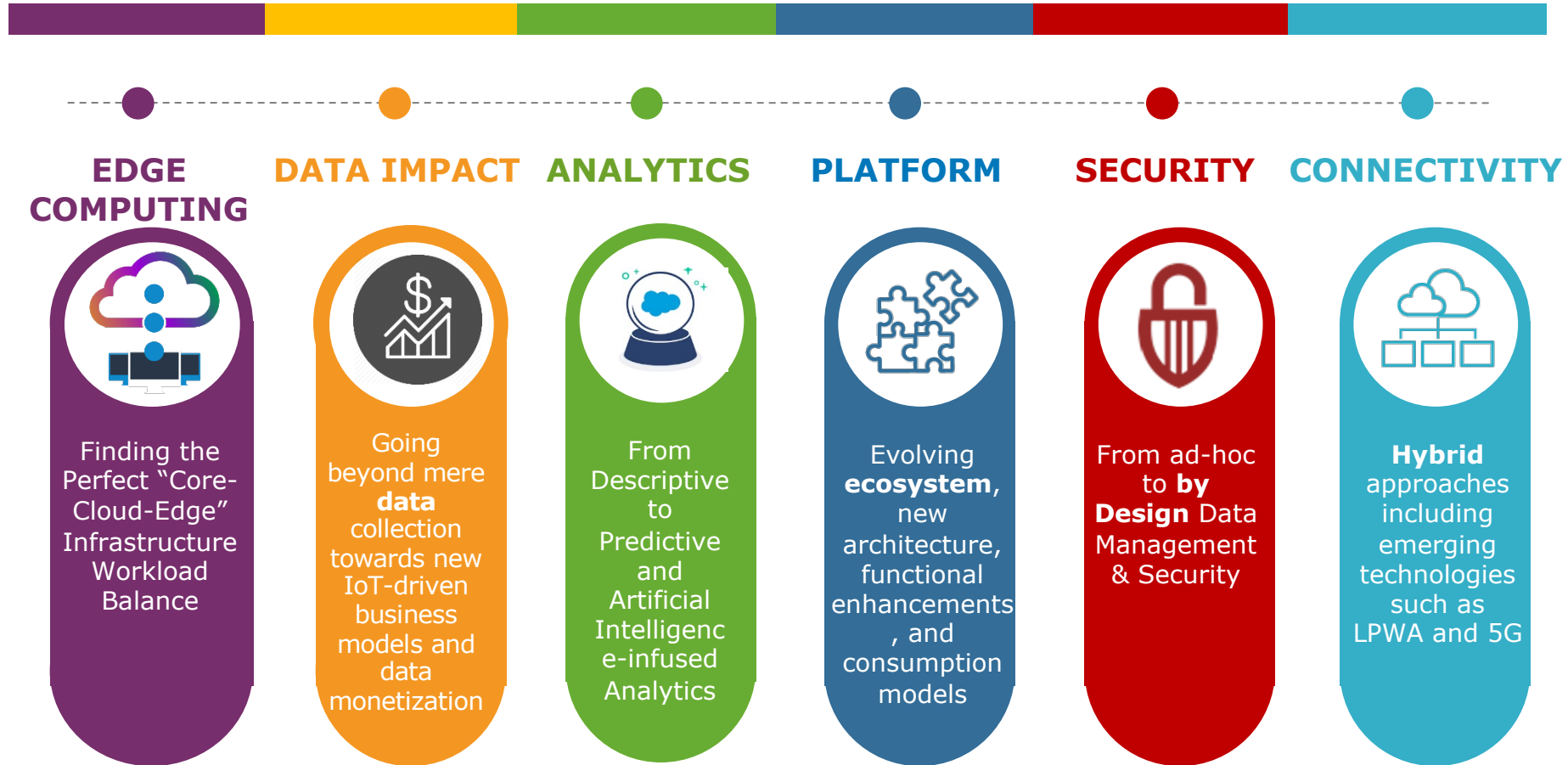# OpenDEI: Design Principles for Data Spaces

- **Principles for Data Governance / Data Sharing:**

  - **Data Spaces supported by an**

    Ecosystem

  - **Synthesis of *building blocks***

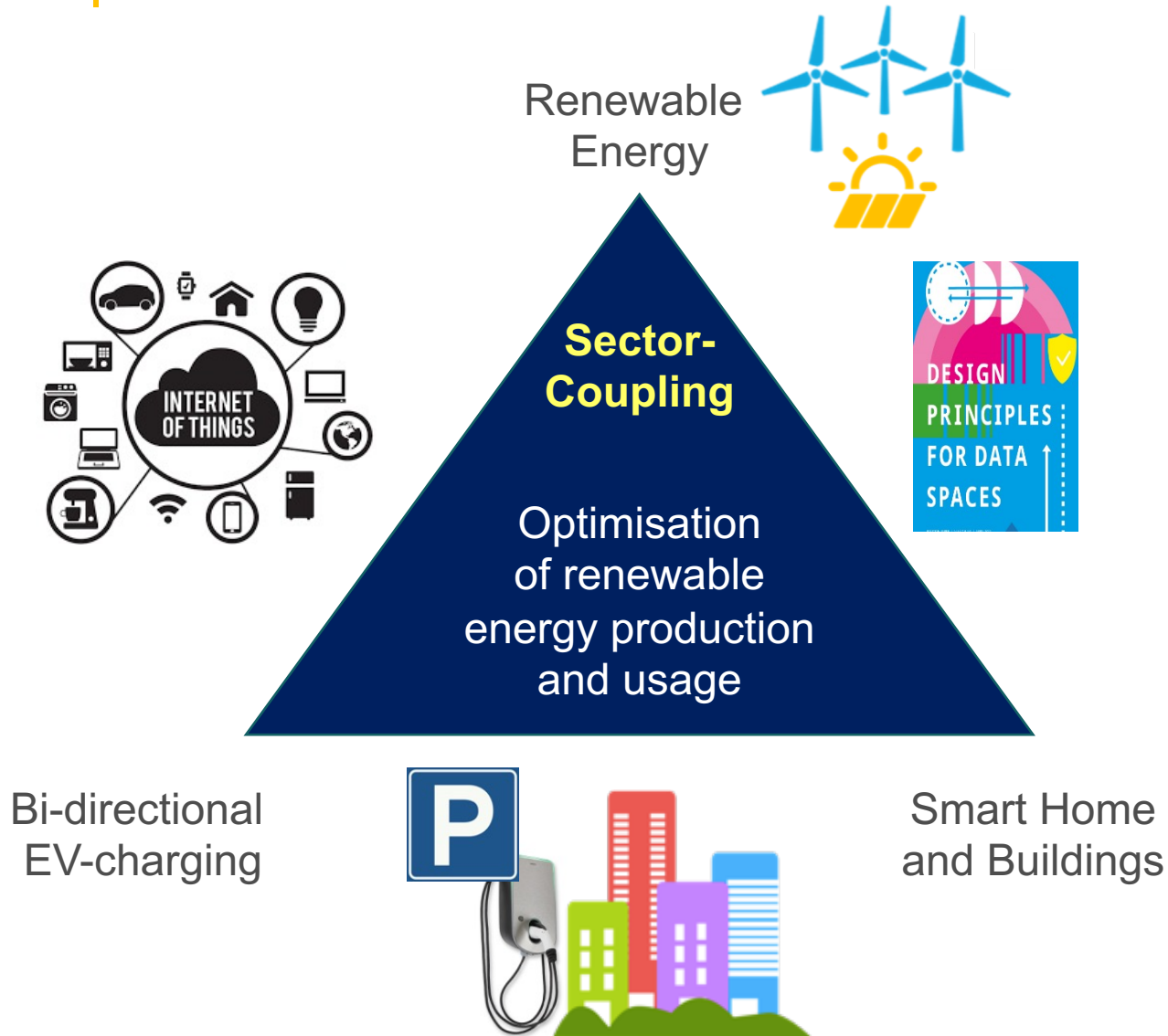 - **Soft Infrastructure**

    (9 building blocks)

Courtesy: IDSA, InnoPay, **OPEN DEI CSA**
https://www.opendei.eu/

Industrial IoT: Where are we heading at ?

EDGE COMPUTING

Finding the Perfect "Core-Cloud-Edge" Infrastructure Workload Balance

DATA IMPACT

Going beyond mere **data** collection towards new IoT-driven business models and data monetization

ANALYTICS

From Descriptive to Predictive and Artificial Intelligence-infused Analytics

PLATFORM

Evolving **ecosystem**, new architecture, functional enhancements, and consumption models

SECURITY

From ad-hoc to **by Design** Data Management & Security

CONNECTIVITY

Hybrid approaches including emerging technologies such as LPWA and 5G

Source: IDC European IoT Practice, 2019

European Commission

Visionary use-case for sector coupling:
Energy connected to Electromobility and Smart Buildings

Renewable
Energy

**Sector-
Coupling**

Optimisation
of renewable
energy production
and usage

INTERNET
OF THINGS

DESIGN
PRINCIPLES
FOR DATA
SPACES

Bi-directional
EV-charging

Smart Home
and Buildings

Delivering a fair and green deal for consumers:

- Market push through e-Mobility
- Efficient integration of renewables
- Integrated smart home/building services through IoT
- Storage / EV batteries to mitigate peak capacity

R&I – Policy space:

- Connected and interoperable x-sector data spaces
- Decentralised intelligence at the Edge (HE Cluster 4)
- AFID regulation
- RED II, - Integration of Renewables
- Smart Building Readiness Indicators / new labelling
- International cooperation: Linux Foundation LF Energy, US DoE

European
Commission

THANK YOU

Useful links:

- **European Data Strategy**:
  https://ec.europa.eu/digital-single-market/en/policies/building-european-data-economy

- **BRIDGE Framework**:
  https://www.h2020-bridge.eu/

- ETIP SNET

- Coordination & Support Action OPEN DEI
  → **https://www.opendei.eu/**

- The Alliance of Internet of Things Innovation AIOTI
  https://aioti.eu/news/

7