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DIGITAL TECHNOLOGIES **ACTING**  
AS A **G**ATEKEEPER TO INFORMATION  
AND DATA **FL**OWS





# MAKE CROSS-SECTOR DATA SHARING SECURE

Citizens produce and share data with private and public organisations. Businesses and public administrations gather, analyse, and share data across organisational and industrial boundaries around Europe. Cyber threats, unauthorized use or misuse of data harm individuals' privacy, cause economic losses for businesses and hamper the development of essential public services.

With TANGO, data can be managed and shared in a secure and privacy-preserving way while data sovereignty and ownership are guaranteed. TANGO will provide the technological solution and governance frameworks to support the adoption of the key reference architectures of the European data ecosystem (Gaia-X and EOSC).

## GOALS

Design and develop a holistic, flexible and open framework for fair, responsible and green data management while maintaining data ownership

Design and implement distributed trust management mechanisms for identity management and onboarding providing security and user-friendliness

Provide a secure, trusted and auditable data management, storage and sharing environment ensuring security and privacy

Data security and infrastructure management processes that prioritise green data operations

# SIX USE-CASES IN THE EUROPEAN DATA ECOSYSTEM



**Smart Hospitality:** Using sensors, digitalising processes and sharing data allows hosts to streamline registration processes and take better care of guests' experiences. Guests can benefit from more personalised services and effortless registration processes. However, personal data is at the center of smart hospitality, thereby making privacy a key concern. TANGO will ensure secure and privacy-preserving processes through tokenisation and highest-level of assurance in ID management. In parallel, it will also strengthen the cybersecurity of hosts' infrastructures.



**Financial Institutes:** Financial data sharing opens up an array of possibilities for clients, while safeguarding banks and more broadly the economy from financial crimes. People benefit from single access points to multiple banking accounts and services relying on financial data, while banks can certify their clients' identity. TANGO will guarantee people's data ownership and sovereignty, harnessing blockchain and tokenisation. Meanwhile, it will allow proactive fraud detection through behavioural authentication.



**Autonomous Vehicles:** Data sharing is at the core of the autonomous vehicles ecosystem. It enables authentication of drivers, navigation, and other key or accessory services. Data sharing in this ecosystem encompasses data sharing between vehicles, to device, to the infrastructure, etc. (V2x). TANGO will enable real-time privacy-preserving and trustworthy data sharing in a energy-efficient way in this ecosystem.



**Smart Manufacturing:** Arguably one of the industries where digital transformation is most advanced. Data is managed and shared, often in real-time, about customers, processes, operations, products, etc. Cyber-threats may originate in any of multiple devices or systems and both IP and customers' personal data may be targeted. TANGO will demonstrate the security, accountability, trustworthiness of its solution in this highly complex setting. It will ensure secure data exchange and trustworthy and accountable data management.



**Public Administration:** Public administrations are responsible for the most fundamental services. Granting a VISA is usually among the most cumbersome processes for both governments and citizens. Additionally, immigration offices handle sensitive data in the process. TANGO will allow for seamless onboarding and streamlined processing of requests, while enabling a secure data sharing between stakeholders.



**Retail Sector:** While the potential benefits for cross-company data sharing in the retail sector are noteworthy, retailers do not share data due to the fear of non-compliance with regulations. This hampers personalisation of products and services, as businesses only rely on historical data. TANGO will ensure cross-company data sharing in parallel with privacy for customers.