

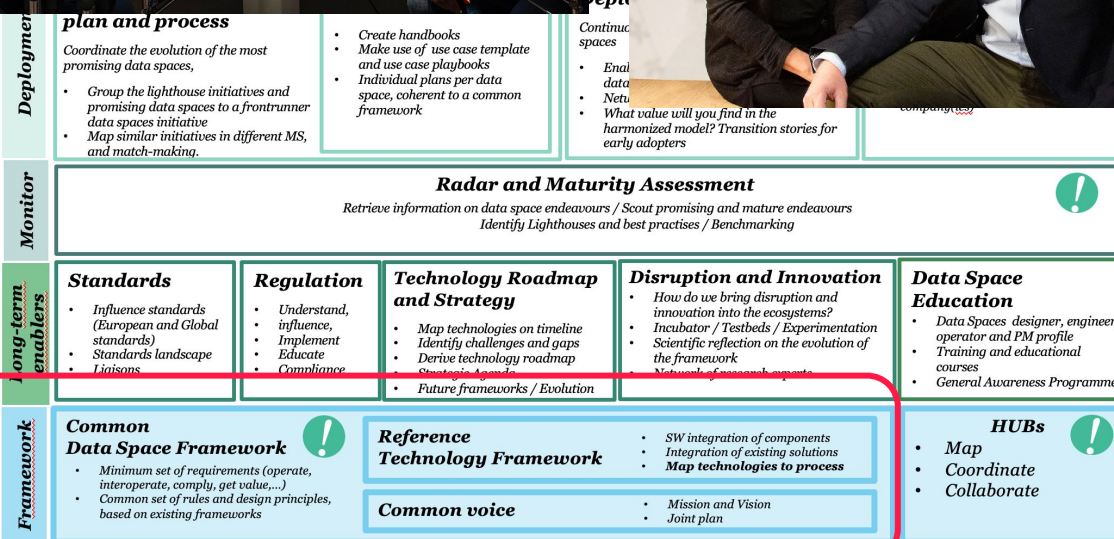
Proposed plan for addressing technical alignment within the DSBA



DSBA: Making Interoperable Data Spaces happen

BDVA, FIWARE, GAIA-X and IDSA launch an Data Spaces Business Alliance (DSBA) to accelerate Business Transformation in the Data Economy (Sep 23rd, 2021)

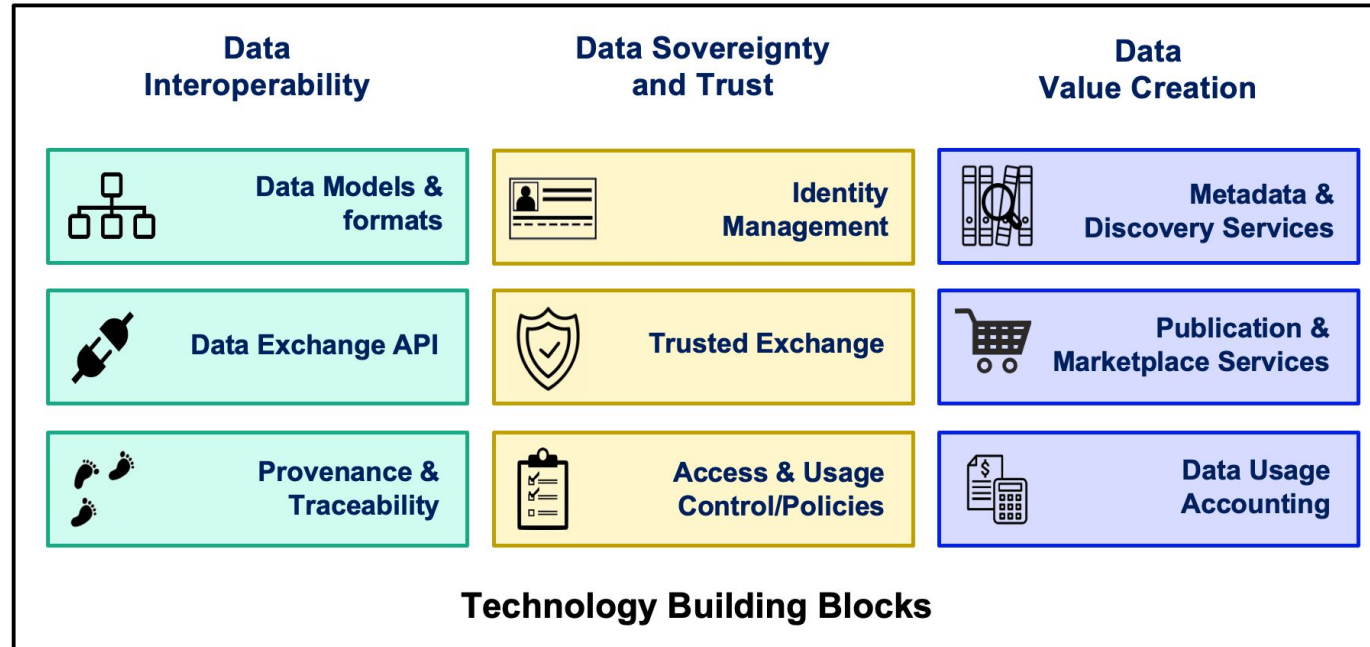
- One voice and a common framework to make interoperable Data Spaces happen;
- Together, the Alliance's founding organisations represent 1,000+ leading key industry players, associations, research organisations, innovators, and policy-makers worldwide;
- With its combined cross-industry expertise, resources and know-how, the Alliance drives awareness and uses more than 100 Hubs for dissemination
- **Technical Coherence WG** created seeking for technical alignment



Ecosystem engagement and Communication
Data Spaces Support Centre

100-day Plan

Data Spaces Building Blocks



Data Spaces Governance



Convergence catalyzers

- W3C DID and VC/VP standards are getting mature as basis for decentralized Identity and Access Management (IAM): FIWARE, Gaia-X and IDSA are working towards integration of these standards in their respective frameworks
- W3C VC/VP standards are also adopted in Gaia-X for representing service and service offering descriptions, supporting trusted verification and labelling. Also considered base reference for recently created IAM SWG
- Marketplace services are fundamental and planned in Gaia-X roadmap for 2023
- Extensive experience in FIWARE regarding implementation of marketplace services based on TM Forum open standards and piloted in several projects (SynchroniCity, i4Trust, KI Marktplatz, ...)
- Proposal DOME submitted to Digital Europe Programme brought together a relevant number of members of the four DSBA associations towards development of an architecture facilitating federation of marketplaces based on TM Forum standards and Gaia-X specifications: Engineering, Atos, Ionos, Orange, Dawex, Outscale, CloudFerro, OCHK, TOP-IX, CSI Piemonte, iSHARE, Alastria, Tolar-Hashnet, TeamDev, FICodes, Elliot Cloud, TecNALIA, DEKRA, ...



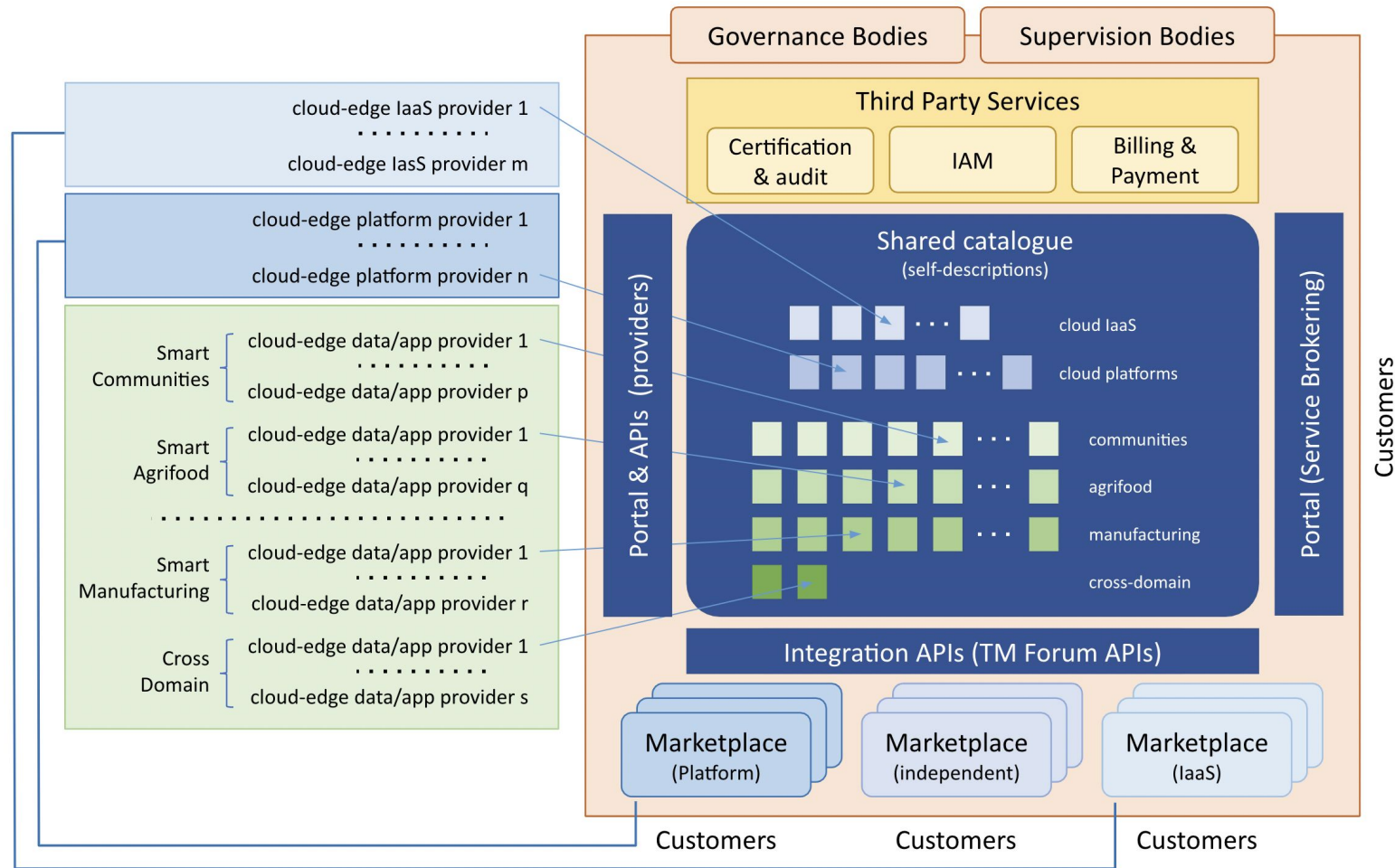
How to get there

- Implementation-driven agile approach based on delivery of subsequent versions of a **Minimum Viable Framework (MVFs)** of the target technology framework
- Parallel workstreams launched to address a concrete aspect:
 - **Workstream 1:** Incorporation of Decentralized Identifiers (DIDs) and VC/VPs in IAM framework, Trust Anchor services aligned with Gaia-X
 - **Workstream 2:** Incorporation of additional IDS Connector functions and support to ODRL for access control
 - **Workstream 3:** Integration of Federated Marketplace, Services Catalogue and Data Publication services
 - **Workstream 4:** Incorporation of IDS Connector functions for usage control
- Once alignment within a given workstream is achieved, implementation of an initial/new version of the MVF will be started.
- First three workstreams will start now in parallel:
 - It may be anticipated that workstream 1 will close first (design ready) → start of version 1
 - workstream 3 may end before workstream 2, that depends on the progress of discussions within each workstream
- FIWARE Foundation has already mobilized a development team, meeting on June 27-28 involving IDSA, Gaia-X and FIWARE teams



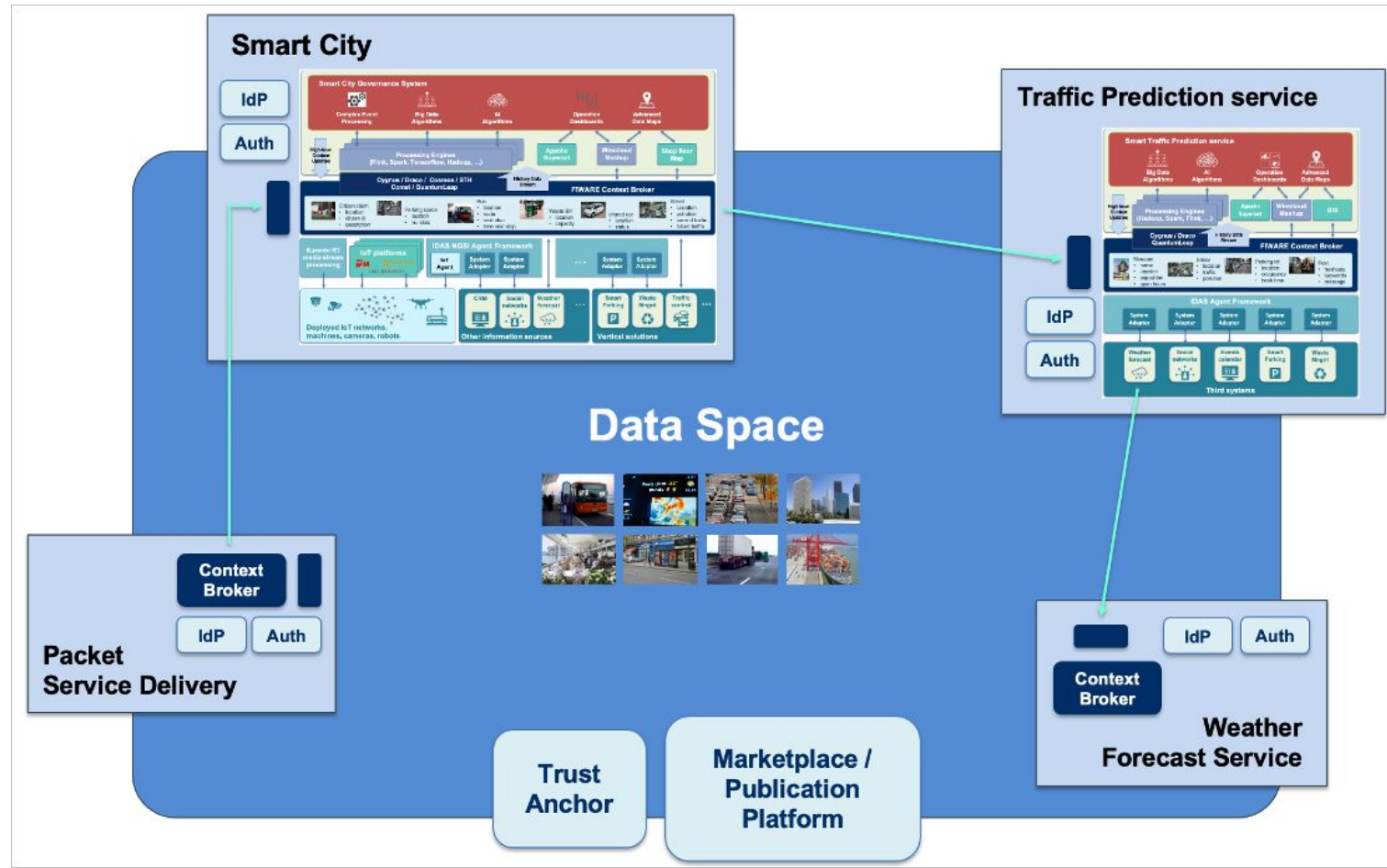
Ideas on the table (1/2)

- Different kind of service providers:
 - IaaS providers
 - Platform service providers
 - Data Access/Processing(App) service providers
- Usage rights acquired via marketplaces:
 - connected to IaaS (e.g., IONOS)
 - connected to Platforms (e.g., Digital Enabler)
 - independent (e.g., DAWEX)
- Shared Catalogue of service & service offering descriptions:
 - formatted as Verifiable Credentials / Presentations (VC/VP) following Gaia-X
 - stored in blockchain networks
- Standard TM Forum APIs used:
 - by federated marketplaces to access service & service offering descriptions
 - to record logs during lifecycle of service orders and activation of services
 - to record logs during execution of services

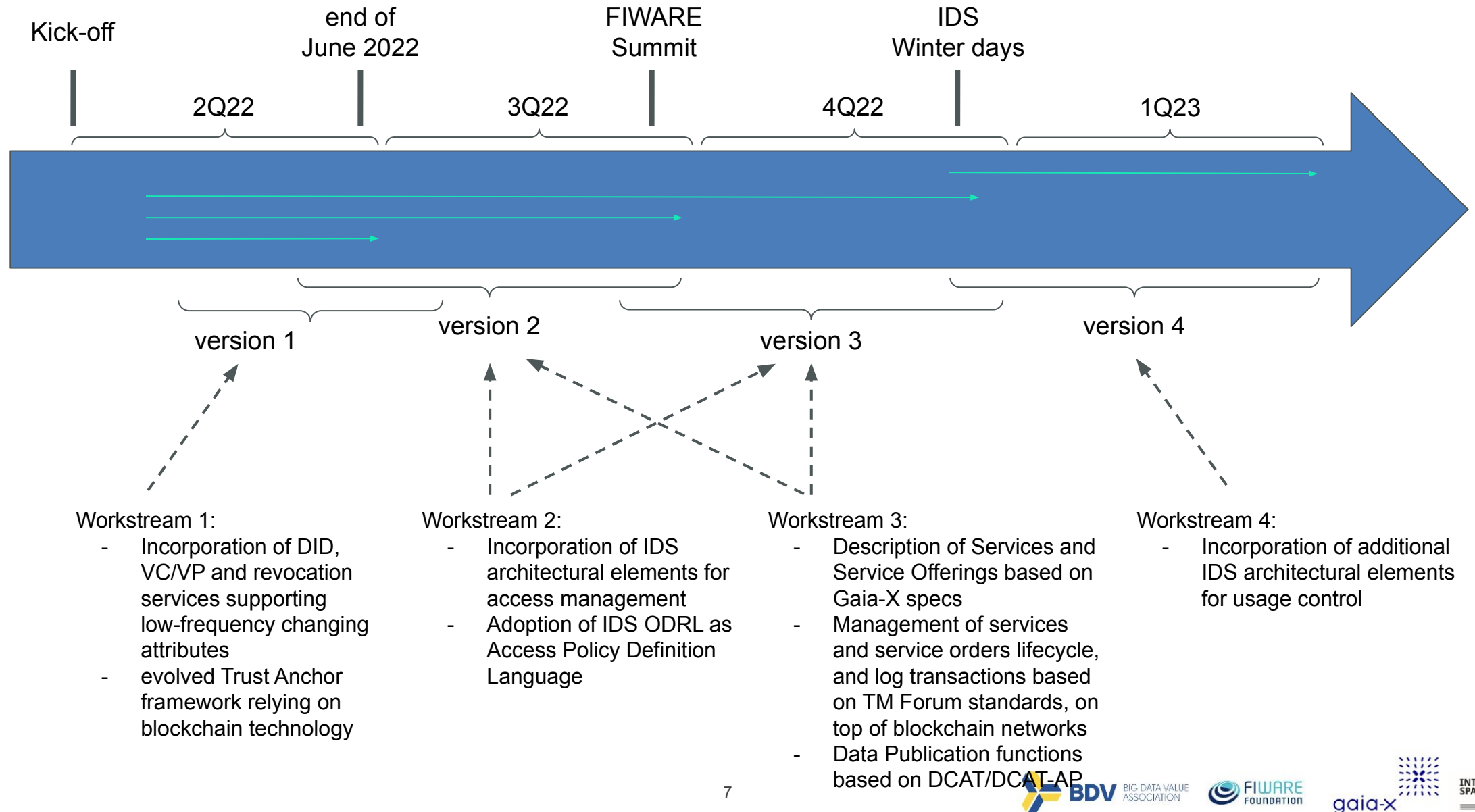


Ideas on the table (2/2)

- VCs issued by certification agencies, for example describing compliance with certain regulations/recommendations. Examples:
 - GDPR compliance
 - Low carbon emission
 - ...
- VCs issued by certification agencies describing compliance with certain standards. Examples:
 - NGSI-LD API supported
 - Data models X, Y, Z supported
 - IDS Connector used
 - ...
- VCs meaningful at application level, typically assigned to service users and considered for Attribute Based Access Control (ABAC)
- Access Control at three levels
 - Verifying whether participants can be trusted (Trust Anchor service)
 - Verifying whether access rights were properly acquired (e.g., via some marketplace)
 - Verifying credentials at platform (e.g. NGSI-LD or IDS connector support) and app level



Proposed plan



Thank you!

