



CBTL Prototype Data Dictionary Management and Administration Platform

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Digital Delivery Governance Requires People, Process, and *Technology*

People and Process: The Foundation of Governance

- Digital Delivery succeeds only when governance of open standards is led by people, supported by clear processes, roles, and decision structures.
- Standards creation, approvals, stewardship, and oversight are organizational, not technical tasks.
- Aligning agencies, committees, and stakeholders is essential before technology can scale governance.

Technology: Essential to Governing & Using National DD Architecture

- CBTL: Helps implement the national data & process architecture.
- Activates national standards on projects: IDS validation, data templates, object definitions, model-based requirements.
- Helps apply national dictionaries, IDMs, IDSs, and classifications consistently across workflows.
- Makes governance real by providing a platform for alignment, version control, and interoperability.

EU Approach as a Comparative

- CEN/CENELEC provide the people-side governance
- EU Acts (Data Act, DGA, Interoperability Act) set the policy and process framework
- Technical standards (Trusted Data Framework, CEN/ETSI) supply the platform and enforcement
- Europe shows that open data + open process governance works only when all three operate together.

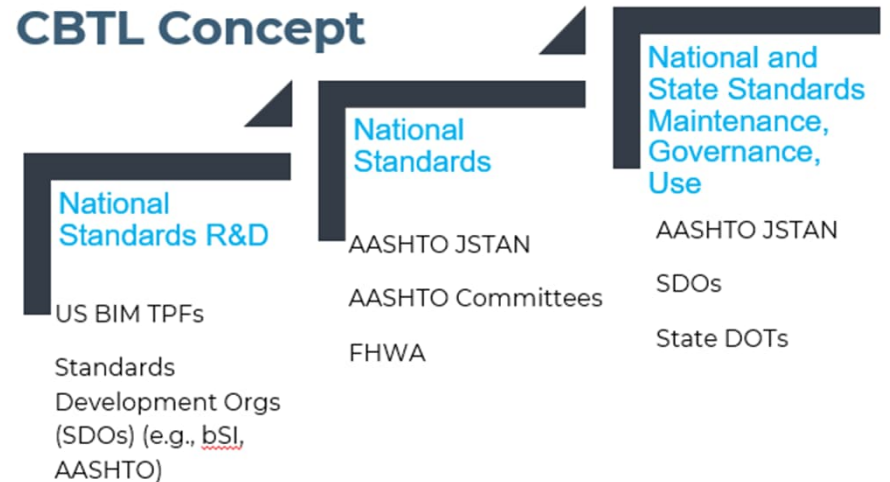


CBTL Concept: Management and Governance of BIM Artifacts

BIM Artifacts

- ❑ Classification, object types, model elements, ontology
- ❑ Data Dictionary: Source BIM Authoring Applications and Common Data Environment (CDE)
- ❑ Exchange Information requirements and specifications (EIR, IDS)
- ❑ Digital process models and use cases
- ❑ BIM Execution Plans (BEPs), Model Contract Documents

CBTL Concept



Host and Manage National and State BIM Artifacts, including alignment and versioning of National and State level content with each other and with International Standards

CBTL Pilot Project : Objectives



Acquire/create and ingest approved BIM artifacts for hosting on CBTL platform, e.g., Pooled Fund Outputs

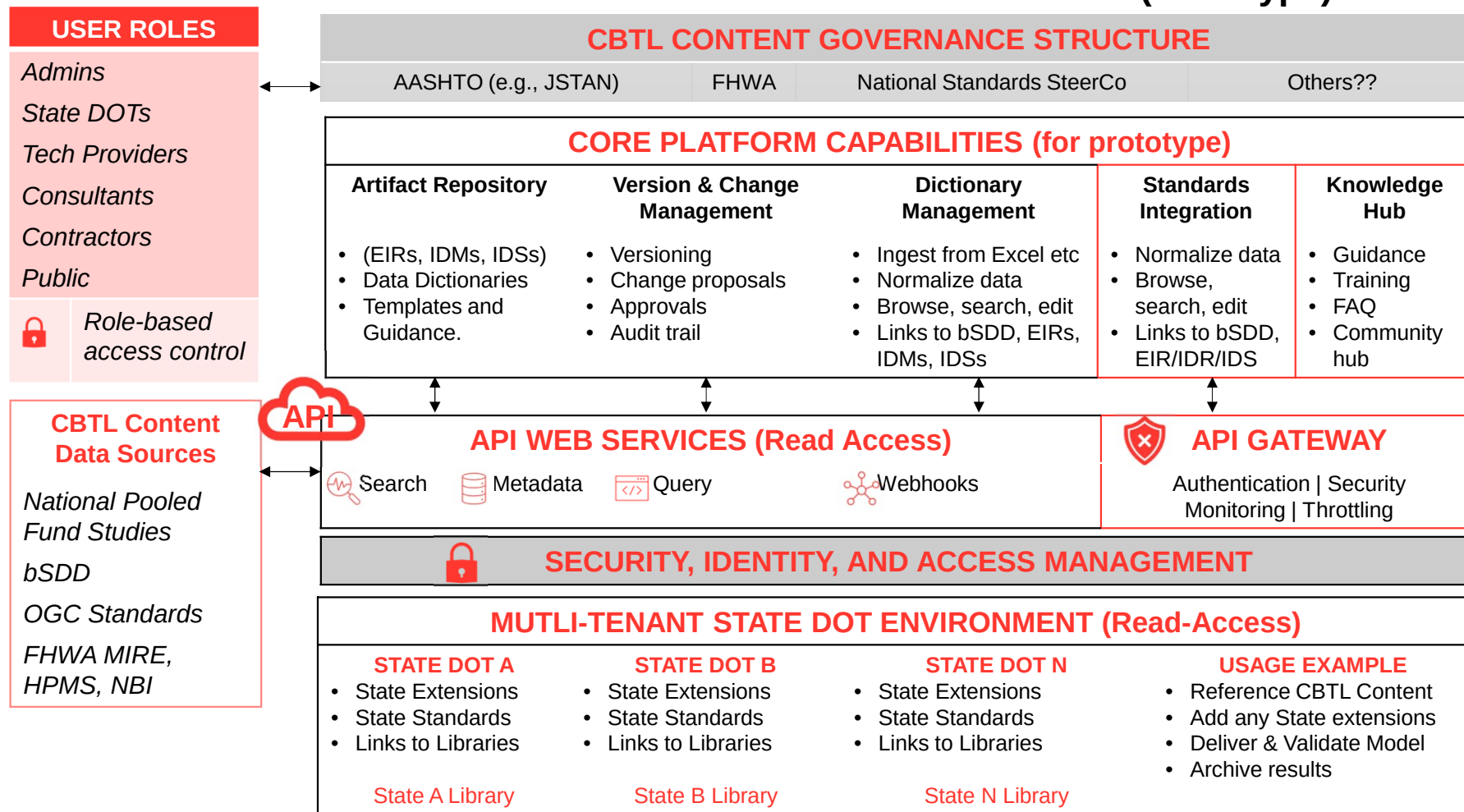


Establish and demonstrate CBTL content management and governance workflows



Engage national and state agency stakeholders in testing project usage workflows of CBTL Content

CBTL PLATFORM ARCHITECTURE (Prototype)



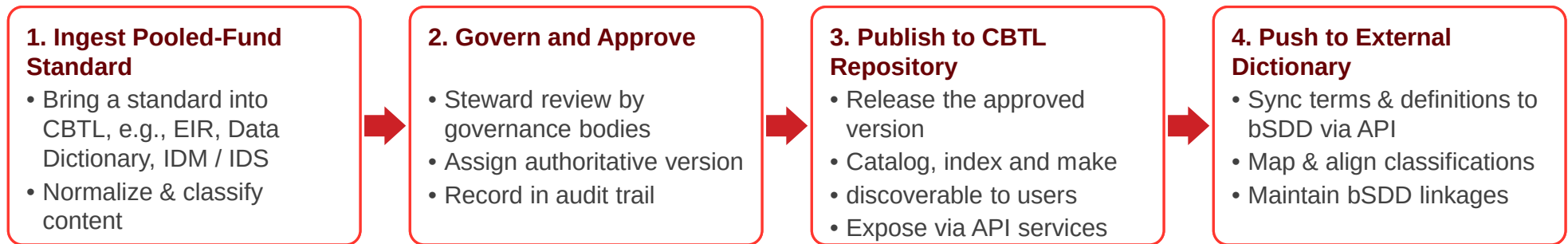
Prototype Outcome: Demonstrate a governed platform for managing national BIM standards and data dictionaries, enabling lightweight authoring, change management, external standards integration, and limited project validation through APIs and a modern web interface.



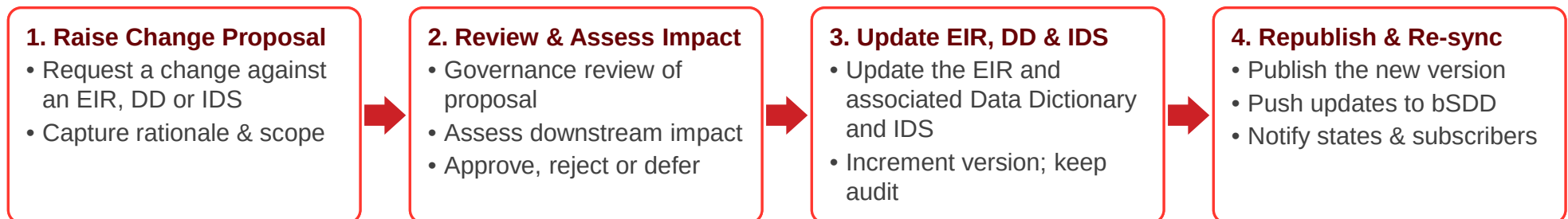
Example Workflows

CBTL Content Lifecycle: Ingest, Publish and Change Management

Workflow 1 — Ingest a Pooled-Fund Standard and Publish to bSDD



Workflow 2 — Manage Changes to Published Content





Example Workflows

From National Content to Validated Project IFC Data

Workflow 3 — Ingest National Content & Prepare Authoring Template

1. Confirm Project Requirements

- Select the correct project-specified EIR with associated Data Dictionary, IDM / IDS per the project BEP / EIR



2. Ingest National Content

- Pooled-fund design-to-construction set: EIRs, Data Dictionary, IDM/ IDS
- Correct versions from CBTL



3. Add State Extensions

- Layer state-specific requirements (*if needed*) onto the national standards
- No forking of national content



4. Create Data Template

Build authoring template for the native authoring tool
Driven by the ingested standards

Workflow 4 — Author, Export & Validate the Model

1. Author Model

- Model externally in the native authoring tool using the data template



2. Export to IFC

- Generate the open IFC deliverable from the authoring tool



3. Validate Export

- Check IFC against the project's governing IDS: national CBTL version + any state extensions



4. Document Findings

Record validation results
Flag issues & gaps
Feed back to CBTL



Project Work Plan: 12-Month Development





Open Discussion

