1.2 Purpose and Intent

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The purpose of this white paper is to propose a platform-independent Reference Architecture for the interpretation of regulated data. The fdta serves as a representative case, but the architecture applies to a broader class of statutory and regulatory reporting regimes across jurisdictions and domains. The proposed Reference Architecture identifies architectural concerns common to systems that interpret, validate, and compare data produced through regulated reporting processes.

The Reference Architecture does not prescribe specific technologies, products, data formats, or implementation patterns. Instead, it identifies recurring architectural responsibilities, interaction patterns, and interface boundaries common to regulated data interpretation environments, particularly those supporting oversight and supervisory functions. By making these concerns explicit, the architecture seeks to improve semantic consistency, comparability, auditability, and long-term evolvability of interpreted data across systems and over time without constraining implementation choices.

This Reference Architecture addresses a central concern: the architectural treatment of meaning itself. In many regulatory and financial environments, organisations handle semantic interpretation, including definitions, classifications, calculation logic, and ontological commitments, implicitly through documentation, tooling conventions, or embedded artefacts. This Reference Architecture treats semantic interpretation as a first-class architectural responsibility and frames its governance as an independent architectural concern, separate from specific representations, tools, or technologies.

This white paper is informative, not normative. It supports shared understanding among regulators, standards bodies, system and enterprise architects, and technology providers rather than mandating conformance or replacing existing specifications. The Reference Architecture complements existing standards and architectural practices by clarifying roles, boundaries, and responsibilities rather than superseding them or introducing new mandates.

This work is positioned within the Object Management Group (OMG) standards ecosystem and draws on architectural principles developed within the Data Integration and Data Operations (DIDO) community. It reflects the policy objectives of the Financial Data Transparency Act, which emphasises machine-readable, comparable, and analysable data across federal agencies while deliberately avoiding prescription of specific technical solutions. In this context, the Reference Architecture provides a coherent foundation for applying semantic standards, such as the Standard Business Report Model (SBRM), and representation-oriented specifications consistently without conflating conceptual meaning with implementation details.

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