Cross-Authority Settlement Taxonomy

by Nick Clark | Published April 25, 2026

What It Specifies

Each authority maintains its taxonomy of settlement classes. Pair settlements crossing authorities require taxonomy reconciliation: a settlement class in authority A maps to one or more classes in authority B through declared mapping rules.

Mappings are governance-credentialed. The mapping authority signs the rules; participating authorities admit the rules; cross-authority pairs admit the mapping before settling.

Why It Matters Structurally

Forced single-taxonomy approaches face structural problems: authority autonomy is contested, taxonomy evolution is centrally bottlenecked, regional variations cannot be accommodated.

Cross-authority taxonomy composition produces structural decomposition. Each authority maintains its taxonomy; cross-authority effects propagate through declared mappings; governance authority remains regional with declared composition.

How It Composes With Mesh Operation

Each pair settlement declares the authorities involved and the relevant taxonomy classes. The architecture admits the declared classes against the cross-authority mapping; admissible classes proceed to settlement.

Mapping evolution operates structurally. Authorities update their taxonomies through governance procedures; the architecture admits the updated mappings; existing settlements continue under their original taxonomy.

What This Enables

Multi-jurisdictional commerce, cross-border logistics, and federated industrial operations all gain structurally-supported cross-authority settlement.

The architecture also supports gradual harmonization. Authorities declaring compatible taxonomies enable smoother cross-authority pairs; authorities declaring stricter taxonomies maintain regional control with declared composition.