Policy-Configurable Harm Ordering

by Nick Clark | Published April 25, 2026

What Configurable Ordering Specifies

A harm ordering is a structured policy specifying: the entity classes (pedestrians, cyclists, occupants, etc.), relative weighting between classes, situation-modifying factors (occupants of the unit are weighted higher than property; emergency-response context modifies civilian weighting), and the credentialing authority that signs the ordering.

Different jurisdictions can configure different orderings. A state DOT signs an ordering applicable to its territory. A federal aviation authority signs an ordering applicable to its airspace. A defense theater command signs an ordering applicable to its operational area. The architecture supports the heterogeneous-jurisdictional reality.

Why Different Jurisdictions Need Different Orderings

Operating contexts differ in ways that justify different orderings. Urban-vehicle operation weights pedestrian protection heavily; rural-vehicle operation may weight property differently; defense theater operation has fundamentally different entity classes (combatants, non-combatants) than civilian operation.

Hardcoded orderings cannot accommodate this. A single global ordering chosen by the manufacturer doesn't fit the actual diversity of operating contexts. Configurable ordering — chosen by the appropriate credentialing authority for each context — does.

How Cross-Jurisdictional Transitions Operate

A vehicle operating across jurisdictions consumes the local authority's ordering as part of its credentialed observation stream. When the vehicle crosses a jurisdictional boundary, the local authority's ordering replaces the prior jurisdiction's; the architectural transition is structurally observable rather than reconstructed.

Conflict resolution between jurisdictions operates through cross-recognition. A state's ordering applies within the state; federal ordering applies on federal-jurisdiction segments; cross-recognition policies signed by authorities standing in both jurisdictions resolve interface ambiguity.

What This Enables for the Regulatory Future

State DOTs and federal regulators face the LAWS-equivalent question for autonomous vehicles: who decides the harm ordering. Configurable ordering provides the structural answer that fits how regulatory authority actually works.

The architecture also supports international operation. Different national authorities configure different orderings; vehicles operating across borders consume the appropriate ordering at each border crossing. The patent positions the primitive at the layer where international AV operation will need governance support.