

AOIC — Roadmap

Phased Development of a Neutral Aviation Traceability Infrastructure

1. Framing

AOIC is being developed through a phased architecture model designed to progressively transition from controlled operational validation to institutional-grade infrastructure.

The roadmap reflects a layered system construction process, where each phase enables new forms of coordination, verification and governance.

Guiding principles:

- Operational validity over theoretical completeness
- Progressive multi-actor integration
- Resistance to capture as a system-level constraint

2. Phase I — Foundation Layer

Objective: Establish a minimal system capable of capturing and validating operational events.

Key elements:

- Event-based data architecture
- Initial traceability layer
- Basic auditability framework
- Controlled validation environments

3. Phase II — Structured Integration Layer

Objective: Expand into real multi-actor operational contexts.

Key elements:

- Integration across actors
- Event standardization protocols
- Multi-source reconciliation
- Responsibility attribution

4. Phase III — Institutional Alignment Layer

Objective: Align with institutional actors and governance structures.

Key elements:

- Institutional interfaces
- Standard definition frameworks
- Audit mechanisms
- Governance model

5. Phase IV — Distributed Infrastructure Layer

Objective: Build interoperable, distributed infrastructure.

Key elements:

- Interoperability protocols
- Distributed validation
- System redundancy
- Cross-region consistency

6. Phase V — Non-Capturable System Layer

Objective: Ensure long-term neutrality and system integrity.

Key elements:

- Anti-capture mechanisms
- Governance neutrality
- Structural auditability
- Incentive alignment

7. Closing Statement

AOIC is not being developed as a product, but as an operational and institutional layer.

It represents a transition:

- From isolated data to structured events
- From isolated actors to coordinated systems
- From tools to infrastructure