



IATA Open Air

API Compliance Checklist v1.0

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Background

This document is intended for developers of APIs in the airline industry. It identifies which Best Practices are used to certify industry Open APIs by IATA.

When describing the Best Practices and the Checklist, the key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC 2119](#).

Checklist for IATA-Compliant APIs

Assumptions:

- IATA Open Air-compliant APIs **MUST** be RESTful, leveraging JSON format (aiming for a compliance level 2 of RMT and considering the use of link relations to support resource navigation and affordances [available actions] based on the resource's state).
 - Additional information can be found [here](#).
- IATA-compliant APIs **MUST** use HTTP(S) protocols.
- The Checklist itself is versioned. So compliance always refers to a checklist version. Lifecycle management of the checklist and the compliant API specifications based on the checklist will be reviewed in future.

Checklist:

1. Formal specification **MUST** be documented using OpenAPI Specification 3.0.
 - Additional information can be found [here](#).
2. Resource modeling, including JSON object creation and naming conventions **SHOULD** follow JSONAPI.org specification with the exception of the "Document Structure". This includes examples referencing the document structure.
 - Additional information can be found [here](#).
3. Data definitions **MUST** be standard from the AIDM, with the exception of any "experimental" content. All entities and concepts used in the API must have been defined and designed following the IATA AIDM methodology (Business, Information, Technical pillars).
 - Experimental content is defined as any non-standard AIDM content which has not yet been approved and integrated into the AIDM as per the standard governance process.



4. "Experimental" content **MUST** be designated in a way in which identifies it as such and **SHOULD** be produced from the AIDM.
5. If the API includes links, a links section **MUST** be produced following JSONAPI.org specification.
➤ Additional information can be found [here](#).
6. Each specification (OAS) **MUST** have its own version. Version notation **MUST** follow Semantic Versioning 2.0.0. Versioning of the API Endpoint is focusing on the concept of backward compatibility, so *MAJOR* versions **MUST** be denoted as part of the API's URL (e.g. <http://api.iata.org/v1/references>).
➤ Additional information can be found [here](#).
7. APIs **SHOULD** apply OWASP best practices.
➤ Additional information can be found [here](#).
8. APIs **SHOULD** apply OAuth 2.0 as a mechanism to manage developer/application identity.
➤ Additional information can be found [here](#).

Preconditions for API Listing in IATA API Portal

The IATA API Portal provides a list of Airline or IATA APIs with access information and links to further API information.

To allow early entry into the Listing, compliance is done in levels:

- **Level 0:** Only Checklist item #1 is required.
- **Level 1:** All Checklist items are fulfilled.

Notion of IATA-Conformant APIs

For IATA compliant APIs the formal specification can differ from Airline to Airline.

IATA-conformant APIs are IATA-compliant APIs with IATA being the owner of the specification and Airlines or IATA provide implementations and service endpoints for that specification.