Web Services
Australian Immunisation Register (AIR)

AIR API Authorisation

TECH.SIS.AIR.04

11 July 2022 Release

Australian Immunisation Register Web Services	
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Document Change Control

Date of Issue	Brief Description of Change
11 December 2020	Initial version – Version 1.0.0
29 April 2021	Minor update – Version 1.0.1 25 February 2021 systems release: • **Section 5.2.3.1** – AIRAccessListRequestType o New validation error message AIR-E-1016 for HPI-I and HPI-O. Document updates only to provide clarity/further information: • **Section 2** – API Product Summary o Additional information around Minor ID and PRODA requirements. • **Section 5.2.2** – Request – Data Elements and Field Validations o Additional information for the Virtual Request Header requirements for this API. Document updates only to update terminology • Removed the acronym ATSI to align with Agency preferred terms. • Added definition of Indigenous Indicator
25 August 2021	Minor update – Version 1.0.2 • **Section 2** – API Product Summary o Additional text for clarity when developing integration with the AIR. • **Section 5.2.5.3** – Access Type Code o Note added to advise that a new access type code for COVID-19 digital certificate may be returned but it is not required to be developed. • **Section 5.3** – Notice of Integration (NOI) testing requirements o Note added to advise that a new access type code for COVID-19 digital certificate may be returned but it is not required to be developed.
11 July 2022	Minor update – Version 1.0.3 • **Section 1** – Introduction o Updated Developer Support team name and email address to Developer Liaison

Associated Documents

The following table lists all documents that are relevant to this document:

Document Name	TECH.SIS
AIR Developers Guide	User Guide
AIR Message Code List	User Guide

Document Name	TECH.SIS
AIR Vaccine Code Formats	User Guide
AIR Web Services Change Guide	Change Guide
AIR Web Services - Common Rules	TECH.SIS.AIR.01
AIR Record Encounter	TECH.SIS.AIR.02
AIR Planned Catch Up Date	TECH.SIS.AIR.03
AIR API Individual Details	TECH.SIS.AIR.05
AIR API Medical Exemptions	TECH.SIS.AIR.06

Definitions, Acronyms and Abbreviations

The following table provides a list of all terms, acronyms and abbreviations required to properly interpret the System Interface Specifications:

Acronym	Description
Additional Vaccines Required	An individual may have an Additional Vaccines Required indicator recorded on the AIR as they may require additional vaccines as per the *Australian Immunisation Handbook* for **special risk groups.**
AIR	Australian Immunisation Register- A national register that records all vaccinations given to individuals of all ages.
AIR-WS	Australian Immunisation Register Web Service
API	Application Programming Interface
B2B	Business to Business
CA	Client Adaptor - A suite of Application Programming Interfaces (API's) developed for online Medicare claiming (including AIR). The APIs are utilised at Health Care Locations (HCL) to interface between Client Systems and Medicare's systems using the latest web service channel. Client Adaptors are being replaced by the more modern B2B web services technology.
Catch up schedule	Catch up schedules are recorded on the Australian Immunisation Register (AIR) so that children or individuals may have an up-to-date status for family assistance payments purposes for the duration of the catch up schedule. Catch up schedules do not bring children or individuals up-to-date for immunisation purposes.
Claim	Group of one or more encounters. A claim will always have the same information provider but may have one or more different immunisation providers.
CS	Client System is a generic name for the software systems provided by a software developer used at Health Care Locations (HCL). Also known as Practice Management Software (PMS).
Date of service	The date entered on an Encounter Header form to record the immunisation date for all episodes for that encounter.
Encounter	A visit to a general practitioner or a vaccination provider where one or more episodes (vaccines) are administered.
Episode	An immunisation given to the individual by the vaccination provider. Each encounter will have at least one episode and may have up to five.
Health Care Location (HCL)	A Health Care Location is where the web services enabled software is located that is used by health professionals and administrators to send transmissions to the agency.
Health Care Organisation (HCO)	A Health Care Organisation is the entity registered in PRODA for B2B Web Service transmissions.
Health Systems Developer Portal	This secure platform (the portal) provides a gateway to access our licenced development material and API's, and to manage your applications and company details when on-boarding with Services Australia.
HPI-O	Healthcare Provider Identifier - Organisation (HPI-O) is allocated to organisations that deliver health services (e.g. hospitals, health centres). This identifier forms part of the national infrastructure needed to support secure electronic communications and in particular the My Health Record system.
HPI-I	Healthcare Provider Identifier - Individual (HPI-I) is allocated to health professionals involved in providing patient/client care. This identifier forms part of the national infrastructure needed to support secure electronic communications and in particular the My Health Record system.
HTTP	The Hypertext Transfer Protocol is a stateless application-level protocol for distributed, collaborative, hypertext information systems.
ICT	Information and Communications Technology

Immunisation date	The date the immunisation was provided.
Immunisation provider	The provider who administered the vaccine to the individual.
Indigenous indicator	Indigenous indicator identifies the Aboriginal and/or Torres Strait Islander status of the individual, as voluntarily provided by the individual.
Information payment	Eligible vaccination providers can get an information payment for completing a National Immunisation Program Schedule or a planned catch-up schedule for a child under 7 years old and recording it on the AIR. The information payments are up to $6 per completed National Immunisation Program Schedule and $6 per completed planned catch-up schedule for children under 7 years old.
Information provider	This is the provider who sent the information to the AIR. An information provider may be the same as an immunisation provider.
IRN	Individual Reference Number. A unique, identifying number for each person listed on a Medicare card. It appears to the left of each name on the Medicare card.
IT	Information Technology
JSON	JavaScript Object Notation (JSON) - an open-standard file format that uses human-readable text to transmit data objects consisting of object-properties pairs and array data types (or any other serializable value).
Medical contraindication	An individual may have a contraindication recorded on the AIR if they are "… assessed by a general practitioner, a paediatrician, a public health physician, an infectious diseases physician or a clinical immunologist as having a medical contraindication to a vaccine, and as a result should not receive a vaccination".
Medicare	Medicare is Australia's universal health insurance scheme. It guarantees all Australians (and some overseas visitors) access to a wide range of health and hospital services at low or no cost.
Message	In ICT terms, a message is a logical unit of information to communicate between ICT systems.
Minor Id	The Minor Id is an identifier used by Services Australia. It is the identifier allocated to the location by the software developer (vendor) and is used to identify the transmission origin. The Minor Id is also known as the Customer Id, Location Id or Software Id.
Natural immunity	An individual may have a natural immunity recorded on the AIR if they are "… assessed by a general practitioner, a paediatrician, a public health physician, an infectious diseases physician or a clinical immunologist as not requiring a vaccination because the individual has contracted a disease or diseases, and as a result has developed a natural immunity".
NOI	Notice of Integration. For each Software Product Release a Software developer, in conjunction with Online Technical Support (OTS), performs a series of integration tests. If the integration tests are successful, the Software developer is issued with a Notice of Integration (NOI).
OTS	Online Technical Support
PBS	Pharmaceutical Benefits Scheme
PMS	Practice Management Software/System is a generic name for the software systems used at HCL's. Also known as Client System (CS).
PRODA	The Provider Digital Access system that authenticates and manages identity for providers and organisations.
Receipt date	This is the date the information is received on the AIR.
REST	REST (Representational State Transfer) defines a set of architectural principles by which you can design Web services that focus on a system's resources, including how resource states are addressed and transferred over HTTP by a wide range of clients written in different languages.
RESTful	RESTful APIs enable the developer to develop any kind of web application having all possible CRUD (create, retrieve, update and delete) operations.
Software Instance	A Software Instance (SI) node represents an instance of an off-the-shelf software product or equivalent proprietary item of software.

Services Australia	Services Australia is an Australian Government agency within the Social Services portfolio. The agency, formerly known as the Department of Human Services, continues to deliver Medicare, Centrelink and Child Support payments and services
TECH.SIS	Technical System Interface Specification
the agency	Services Australia (the agency)
the portal	Refer to Health Systems Developer Portal
Vaccination provider	A medical practitioner or a person who is recognised by the Services Australia as a provider of vaccinations to individuals as per the *Australian Immunisation Register Act 2015*.
Vaccine trial	An individual may have a vaccine trial recorded on the AIR if they are participating in a trial that has been approved by a Department of Health and only for the duration of the trial period.
Web Service Request	A Web Service Request is a message sent from a Service Consumer to a Service Provider.
Web Service Response	A Web Service Response is a message returned from a Service Provider to a Service Consumer in response to a Web Service Request.
WS	Web Services are application components which enable the communications between the Client Systems and Services Australia ICT systems using the Web. Web Services is replacing the older Adaptor technology.
WS-Client	Web Service Client. An application or software that consumes a Web Service.
YAML	YAML Ain't Markup Language (YAML) - a human-readable data serialization language that is commonly used for configuration files, but could be used in many applications where data is being stored (e.g. debugging output) or transmitted (e.g. document headers). YAML is used to define data requirements within the web service request.

1 Introduction

This document forms part of the Web Services Licenced Material as referenced in the Interface Agreement. The Web Services Licenced Material includes guides, documents and other material.

For a complete list of other Web Services Licence Material associated with AIR Web Services, *refer to the document "AIR Developers Guide".*

1.1 Document Purpose

The purpose of this document is to provide software developers with the information to develop software products to interface with Services Australia (the agency) and to integrate with the AIR Web Services.

This document provides technical information to assist software developers with the application of Web Services for provider authorisation on the AIR using the following AIR Web Service:

- AIR Authorisation Access List API

1.2 Scope

The scope of this document is to describe the YAML data elements and the business rules for each of the abovementioned AIR Web Services within the **AIR API Authorisation** product for the AIR programme.

1.3 Target Audience

The intended audience for this document includes software developers with an interest in integrating AIR Web Services into their product, including:

- IT Managers
- IT Architects and System Designers
- Business/Systems Analysts
- Software Developers (Medicare Online, PBS and AIR only)

1.4 Legal, Privacy & Policy Requirements

When building your software product/s you should consider that end users, e.g. health professionals, have legal, privacy and policy requirements when dealing with their patients/individuals' information. Below are some requirements.

Participating health professionals may utilise the services and information provided including personal information only in accordance with National (*Privacy Act 1988, Health Insurance Act 1973, Australian Immunisation Register Act 2015* and other relevant legislation), State or Territory legislation, Policy and Guidelines.

Participating health professionals are advised to verify that their intended use of services and information does not contravene any applicable legislation or regulations or is inconsistent with any applicable policy or guidance.

All transactions with AIR Web Services are recorded in the System Log by the Service Operator, Services Australia (the agency).

1.5 Pre-Requisites

The pre-requisites for the reader to understand this document are:

- A basic knowledge or familiarity of Web Services concepts and terms.
- A basic knowledge or familiarity of web based business applications.

1.6 Terminology

Refer to Definitions, Acronyms and Abbreviations for a list of Acronyms and Terms used in this document.

1.7 Changes

Please contact the Developer Support Liaison team at DevSupport DeveloperLiaison@servicesaustralia.gov.au if you have any changes, or recommendations for this documentation.

2 API Product Summary

To access the AIR, health professionals and health care locations must become a recognised vaccination provider.

Medical practitioners, midwives or nurse practitioners with a Medicare provider number
A medical practitioner, midwife or nurse practitioner with a Medicare provider number, are both:
- an automatically recognised vaccination provider
- authorised to search for individuals on the AIR and record immunisation information

They may have multiple Medicare provider numbers if they work at multiple locations. As long as the provider number attributed to their location is not end dated, the Medicare provider number will be considered valid for AIR-WS.

Other vaccination providers
If the health care location is not a medical practitioner, midwife or nurse practitioner with a Medicare provider number, they can apply to become a recognised vaccination provider.

This is typically a Council, pharmacy, or commercial organisation. They complete the following form: **servicesaustralia.gov.au/organisations/health-professionals/forms/im004**

Following the AIR processing the form, the health care location is given an AIR provider number (aka other vaccination provider number). They use this number to search for individuals on the AIR and record their immunisation details.

Both Medicare provider and other vaccination provider types must complete the following form: **servicesaustralia.gov.au/organisations/health-professionals/forms/hw027** before using your software product. You must assign and provide them with a unique Minor ID for their location in order for them to fully complete the form and submit to us.

This is important as the AIR system verifies the Minor ID for each location with the information provider number for authentication and authorisation purposes for every AIR-WS request. A location could be a medical practice with 10 medical practitioners (10 different information provider numbers) or a pharmacy with an AIR provider number (1 information provider number). Further conditions are also required refer to section @*Preconditions*.

The **AIR API Authorisation** product will validate the information provider number and authorise the provider's eligibility as registered on the AIR. Included is an 'authorisation information service' that will return an access list of which Web Services the provider is eligible to use. This will help you render the available menu options depending on an information provider's authorisation.

Notice of Integration (**NOI**) **testing requirements:**
It is a requirement to develop all the AIR Web Services within this document in conjunction with all other AIR Web Services so full AIR functionality is provided. This enables health professionals and health care locations to perform a full range of services.

Note: Whilst some fields are optional for health professionals to select when submitting to the AIR, it is **mandatory** for software developers to develop for all fields and their corresponding values.
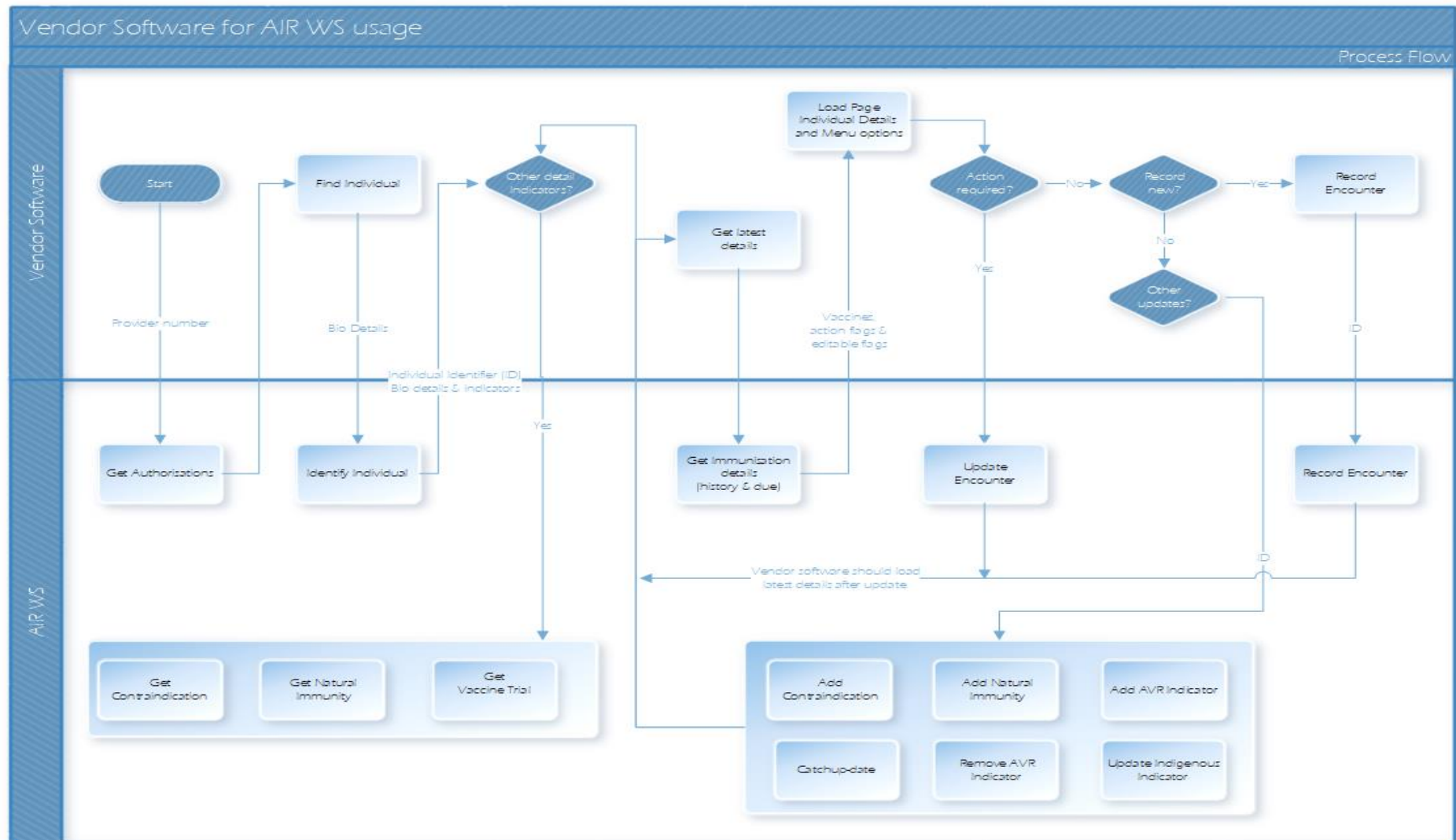
3   Preconditions

In order to send a request for any of the Web Services described in this document the following conditions must be met:

- The organisation must have a valid **PRODA** organisation account with the associated permissions to transmit to AIR; and
- The CS Software must have a NOI for Web Services in place to send a request for the applicable Web Service contained within the **AIR API Authorisation** product.
- The location's PRODA organisation credentials are successfully verified for the Web Service Request by the agency;
- The transmitting location (Minor Id) and the organisation's associated PRODA account have been registered (linked) with the *Medicare Online/ECLIPSE/DVA/AIR* service provider.

Note: If a CS has an existing NOI in place for client adaptors, this is not transferrable. Any software developed for Web Services has to go through the full testing process to receive a NOI for Web Services.

4 AIR API Authorisation Web Service Process Flow Diagram

Note: The Individual Identifier (ID) is not applicable for the *AIR Record Encounter API* and *AIR Planned Catch Up Date API*.

5 AIR Authorisation Access List API

5.1 Description

The **AIR Authorisation Access List API** is a retrieve Web Service which will process the request and send a response message in real-time. This service will:

- validate the information provider number,

- authorise the provider's eligibility as registered on the AIR,

- retrieve the eligible Web Services available to the information provider, and

- return the access list which services are available to the information provider

5.2 Message Structure

The message diagrams are indicative only. The YAML, as published in the Health Systems Developer Portal will be the source of truth.

5.2.1 Request Message – Data Structure Diagram

Key: **O** = Object   **V** = Value

5.2.2 Request – Data Elements and Field Validations

Transmissions will be validated against the YAML interface before validations based on the Business Rules associated with each API are performed. Any errors found will be returned in the response.

The system will not repeat the errors returned to the CS even though the same business rule is documented against multiple fields.

Any errors returned will contain an error code and a detailed, easy to understand error message.

If an invalid value is supplied for an unused field, it may result in an unexpected error.

Note:

- It is a requirement that error messages are displayed to the end user as supplied by Services Australia, and not truncated, transformed or changed in any way. This will ensure that the correct message is received by the end user, as they may be updated at any time by the agency. Refer to the *AIR Message Code List User Guide*

- Whilst some fields are optional for health professionals to select when submitting to the AIR, it is **mandatory** for software developers to develop for all fields

- For further detail on Data Conditionality Details, including date and time formats, and the Virtual Request Header requirements for this API, refer to *AIR Web Services - Common Rules (TECH.SIS.AIR.01).*

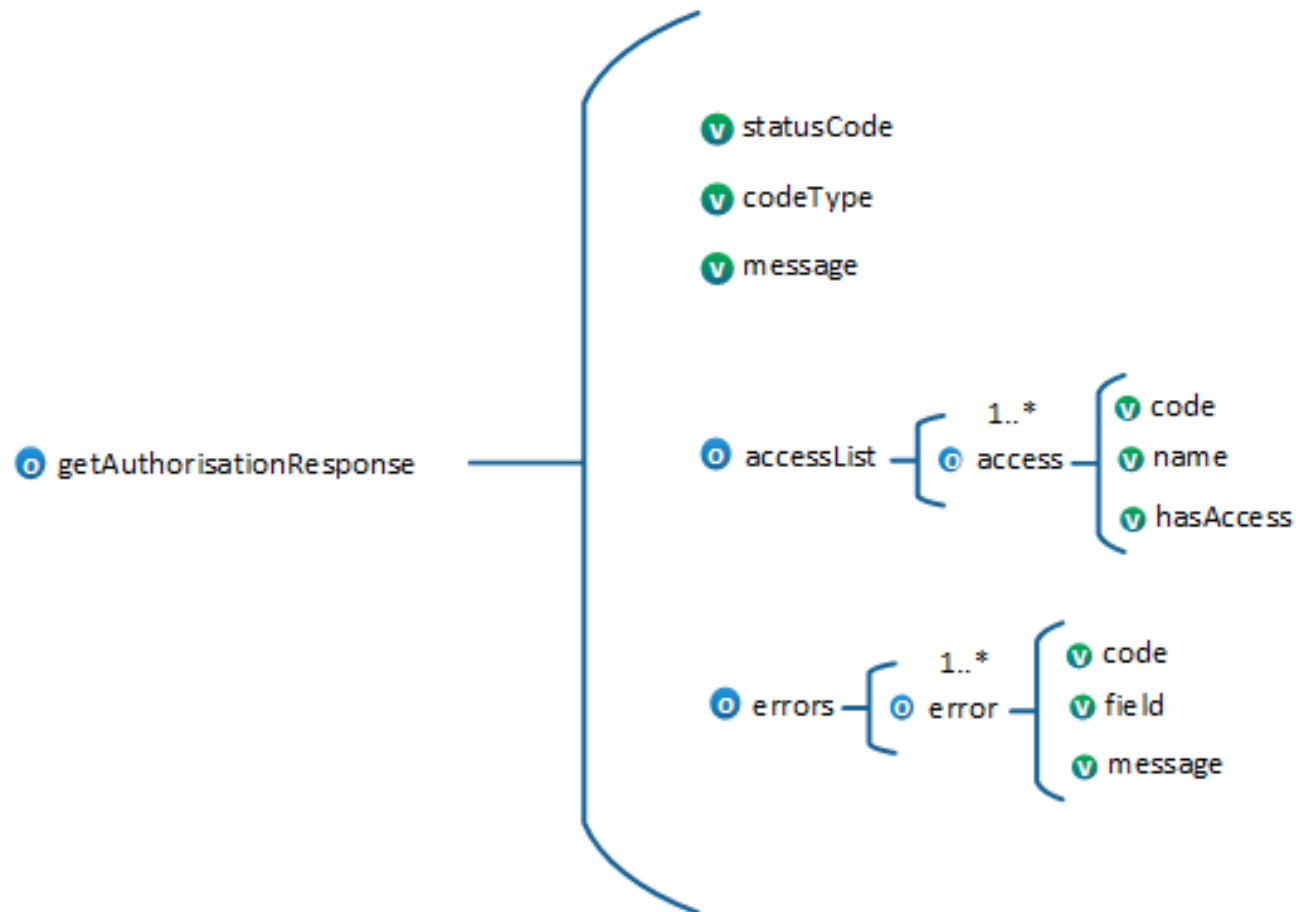## 5.2.3 Request – Type definitions, Business Rules and Data Validations

Get Authorisation Request

5.2.3.1 AirAccessListRequestType

Name	Type	Size	Conditionality M/C/O/D	Description	Business Rules and Data Validations	Error messages
informationProvider	ProviderIdentifierType	6-8	M	This contains the number of the information provider. This is the provider who is sending the information to the AIR, may not necessarily be the immunisation provider although can be. **Note**: The descriptions for HPI-I and HPI-O number values are outlined in ProviderIdentifierType in the *AIR Common Rules (TECH.SIS.AIR.01).*	@see ProviderIdentifierType in the *AIR Common Rules (TECH.SIS.AIR.01)*	**AIR-E-1016** **AIR-E-1017** **AIR-E-1029** **AIR-E-1039** **AIR-E-1063**

5.2.4 Message Response – Data Structure Diagram

The message diagrams are indicative only. The YAML, as published in the Health Systems Developer Portal will be the source of truth.

Key: **O** = Object   **V** = Value

5.2.5 Response – Type definitions, Business Rules and Data Validations

Get Authorisation Response

5.2.5.1 AirAccessListResponseType

Name	Type	Size	Conditionality M/C/O/D	Description	Data Validations
statusCode	Refer to *AIR Common Rules (TECH.SIS.AIR.01)*				
codeType	Refer to *AIR Common Rules (TECH.SIS.AIR.01)*				
message	Refer to *AIR Common Rules (TECH.SIS.AIR.01)*				
errors	Refer to *AIR Common Rules (TECH.SIS.AIR.01)*				
accessList	List	0..*	0..*	List of the access privileges that the provider has on the AIR.	@see AccessType

5.2.5.2 AccessType

Name	Type	Size	Conditionality M/C/O/D	Description
code	string	N/A	M	See access code in section @Access Type Code
name	string	1-255	C	See access name in section @Access Type Code
hasAccess	boolean	N/A	M	Whether the provider has access or not to this access privilege.

5.2.5.3 Access Type Code

Code	Name
IDV	Identify individual details
IDGST	Update Indigenous status
ADINDT	Add/Remove additional vaccine indicator
NATIMM	Record natural immunity
MEDCON	Record medical contraindication
RECUPD	Update vaccination encounter
RECENC	Record encounter
NXTDUE	Record planned catchup date
IHSPDS	Get immunisation history statement in PDF
GETIHS	Get immunisation history details
GETMEDCON	Get medical contraindication history
GETNATIMM	Get natural immunity history
GETVACTRL	Get vaccine trial history

Note: A new access type code of GETCOVIDPDF may return in the accessList. This is not required to be designed or displayed by software developers.

5.3 Notice of Integration (NOI) testing requirements:

In addition to passing all the business rules for this service, it is a requirement that the software product will have ability to pass the following tests:

- If a valid Medicare provider number is used in the request; then render the Web Service menu options from the response and only display each applicable service to the provider (end user).

- If a valid AIR provider number is used in the request; then render the Web Service menu options from the response and only display each applicable service to the provider (end user).

- If any of the following codes for a provider are returned as 'true'; then display the name of the menu option to the end user as:

Code	Name	Display as
IDV	Identify individual details	Identify Individual
IDGST	Update Indigenous status	Indigenous Status
ADINDT	Add/Remove additional vaccine indicator	Additional Vaccines Required
NATIMM	Record natural immunity	Natural Immunity
MEDCON	Record medical contraindication	Medical Contraindication
RECUPD	Update vaccination encounter	Update Encounter
RECENC	Record encounter	Record Encounter
NXTDUE	Record planned catch up date	Planned Catch Up
IHSPDS	Get immunisation history statement in PDF	Immunisation History Statement
GETIHS	Get immunisation history details	Immunisation History
GETMEDCON	Get medical contraindication history	Medical Contraindication History
GETNATIMM	Get natural immunity history	Natural Immunity History
GETVACTRL	Get vaccine trial history	Vaccine Trial History

@see AccessType for more information

Note: A new access type code of GETCOVIDPDF may return in the accessList. This is not required to be designed or displayed by software developers.