FSDF Place Names Project:

Deliverable Submission Summary

# Document purpose

This document provides a summary of project deliverables for the FSDF Place Names Theme Modelling Project.

# Deliverable name

* Deliverable 3.1 - National Gazetteer Product model
* Deliverable 3.2.1 - Draft Place Names Thematic Conceptual Model
* Deliverable 3.2.2.- Model review workshop
* Deliverable 3.3 - Mapping between place Names Thematic Conceptual Models and other models

# Client action

# Review and provide acceptance decision for submitted deliverables

# Deliverable description

## Deliverable 3.1 – FSDF National Gazetteer Product Model

Place Names Product Model (PN-PM) was developed and presented for review at a workshop at GA on 17th June. The PN-PM is a GML application schema implementation of the Place Names Thematic Conceptual (PN-TCM). This product model was generated for comparison purposes only and is not considered to be suitable as is for delivery of FSDF National Gazetteer data. It was used to:

* Validate that the Place Names Thematic Conceptual Model (PN-TCM) could be implemented as a Product Model;
* Enable population of an XML instance example with data from a WFS-G instance; and
* Compare GA’s WFS-G implementation delivering the national gazetteer product against the FSDF Place Names Thematic Conceptual Model.

A basic assessment of the WFS-G implementation highlighted several tweaks to the WFS-G that could improve service quality and performance as well as several issues with the WFS-G specification. These were presented during a review workshop (deliverable 3.2.2).

* The Place Names Product Model is a direct GML implementation of the Place Names Conceptual Model. The XML schema is located on a CSIRO hosted Subversion repository (https://svnserv.csiro.au/svn/FDSF/PlaceName/Schema/FSDFGazetteer.xsd). Access to this repository can be provided on request.
* The Place Names product schema will be published to the FSDF schema location at <http://communications.data.gov.au/standards/fsdf/schema/placename/gazetteer.xsd>
* .

The product model was developed based on the methodology described on FSDF Govdex site: <https://govdex.gov.au/confluence/display/THEMEWGS/Place+Names+Modelling+Process>

A presentation made at the GA review workshop (deliverable 3.2.2) covering the Place Names Product Model (PN-PM) development methodology and presentation of the model and comparison to and assessment of the existing WFS-G service is available on Govdex site: [Session4-2014-06-17 PlaceNames Theme Workshop for GA.pptx](https://govdex.gov.au/confluence/download/attachments/256481055/Session4-2014-06-17%20PlaceNames%20Theme%20Workshop%20for%20GA.pptx?version=2&modificationDate=1403062364789&api=v2)

## Deliverable 3.2.1 - Draft Place Names-Thematic Conceptual Model (PN-TCM)

The Place Names Thematic Conceptual Model (PN-TCM) was developed and presented for review at a workshop at GA on 17th June. The model is shown in Figure 1.

* Canonical versions of the model are located on a CSIRO hosted Subversion repository (<https://svnserv.csiro.au/svn/FDSF/PlaceName>). Access to this repository can be provided on request.
* Place Names models will be published to the FSDF model registry on data.gov.au pending completion of model registry configuration (anticipated to be circa 4 weeks).
* In the interim an Enterprise Architect project file (FSDFModelSnapshot18-06-2014.EAP) has been provided containing the place names models.
* The place Names Thematic Conceptual Model is contained in the <<ApplicationSchema>> FSDFGazetteer package (see FSDF > FSDF TWG Models > TWG Place Names > TWG Conceptual Model in the EAP file)
* NOTE these models are disconnected from the subversion repository and are intended for the purposes of deliverable review only. Models should be accessed from source either directly from the subversion repository or by download from the FSDF model registry once available



Figure Place Names Thematic Conceptual Model - FSDF-Gazetteer

The model was developed based on the methodology described on FSDF Govdex site <https://govdex.gov.au/confluence/display/THEMEWGS/Place+Names+Modelling+Process>

A presentation made at the GA review workshop (deliverable 3.2.2) covering the Place Names Thematic Conceptual Model (PN-TCM) draft model and the modelling methodology is available on Govdex site - [Session3-2014-06-17 PlaceNames Theme Workshop for GA.pptx](https://govdex.gov.au/confluence/download/attachments/256481055/Session3-2014-06-17%20PlaceNames%20Theme%20Workshop%20for%20GA.pptx?version=1&modificationDate=1403048546844&api=v2)

## Deliverable 3.2.2. - Model review workshop

A model review workshop was conducted on 17 June 2014 with Geoscience Australia personnel to review:

* Place Names Thematic Conceptual Model (PN-TCM);
* Place Names Product modelling (PN-PM); and
* Place Names Thematic Conceptual Model (PN-TCM) mapping.

The agenda for the review workshop is provided below:

* 9:30-10:00 - Session 1 - Introduction
* 10:00-10:20 - Session 2 - Place Names context
* 10:20-10:50 – Session 3 - Place Names Thematic Conceptual Modelling and model mapping
* 10:50-11:00 – break
* 11:00-12:00 - Session 4 - Place Names Product modelling
* 12:00-12:30 - Session 5 – Place Name Products – future direction and discussion

PowerPoint presentations covering sessions are available on the Govdex site - <https://govdex.gov.au/confluence/display/THEMEWGS/Place+Names+Modelling+Process>

These presentations have been submitted as part of the deliverable package.

**Deliverable 3.3 – Mappings to and from the Place Names Thematic Conceptual Model (PN-TCM)**

FSDF modelling methodology is based on the development of a framework of highly modular and inter-related models across a number of levels of abstraction from conceptual through logical to physical models and between models in different FSDF Themes. FSDF modelling activities are undertaken within an ISO modelling paradigm and framework. Model mapping is required in order to ensure harmonisation of and alignment between the various kinds and levels of abstraction of models. Requirements for model mapping are articulated in the requirements package (TWG Place names > TWG Requirements Model in the EAP file). Model mappings were created using mapping tools and paradigm implemented in the CSIRO Solid Ground toolset. The following mapping models were created:

* from the PN-TCM (FSDF Gazetteer) to installed base (i.e. existing geospatial information services and components):
  + IS019112 Location by identifier WFS-G version; and
  + SIRF common gazetteer.
* from the PN-TCM (FSDF Gazetteer) to external standards (i.e. existing geospatial information services and components):
  + ISO19112;
  + INSPIRE Annex 1 Place Names; and
  + W3C Points of Interest Model.
* from IS019112 Location by identifier WFS-G version to SIRF common gazetteer (an extension of ISO 19112)

These mappings are summarised in the diagram below.



Figure 2 Place names mapping with respect to requirements

Of particular note is the mapping of the IS019112 WFS-G to the Place Names Product Model (FSDF Gazetteer) which enables the formal comparison of properties between the two models ( see <<mapping package>> WFS-G version of ISO19112 to FSDF-Gazetteer (in the following location in the EA project browser - TWG Place Names > TWG Conceptual Model)

* Canonical versions of the model are located on a CSIRO hosted Subversion repository (<https://svnserv.csiro.au/svn/FDSF/PlaceName>). Access to this repository can be provided on request.
* Place Names models will be published to the FSDF model registry on data.gov.au pending completion of model registry configuration (anticipated to be circa 4 weeks).
* In the interim an Enterprise Architect project file (FSDFModelSnapshot18-06-2014.EAP) has been provided containing the place names.
* Mapping Models are contained within the FSDF Gazetteer Mapping package (see FSDF > FSDF TWG Models > TWG Place Names > TWG Conceptual Model > FSDF Gazetteer Mappings in the .EAP project browser)
* NOTE these models are disconnected from the subversion repository and are intended for the purposes of deliverable review only. Models should be accessed from source either directly from the subversion repository or by download from the FSDF model registry once available.



Figure Requirements for FSDF Place Names Conceptual Model with respect to existing models



Figure Mapping between WFS-G SI\_Gazetteer class properties and FSDF Place Names Product Model Gazetteer class propertiies



Figure Mapping between WFS-G SI\_LocationInstance class properties and FSDF Place Names Product Model GazetteerEntry class propertiies