GIS Standard Specifications – GIS-CT001

1.   GENERAL

This Standard Specification sets out the requirements for Geographical Information Services.

This includes but is not limited to;
- Map Production
- Digital Mapping & web based GIS Service production
- Spatial Analysis & Modelling
- Spatial Dataset Manipulation

The Contractor shall comply with the requirements of:

Location SA Metadata Standard	http://www.location.sa.gov.au/locationsa/data/metadata
ANZLIC Metadata Standard	http://www.anzlic.gov.au/resources/asnzs-iso-1911512015-metadata
Geospatial Project Report	https://www.dpti.sa.gov.au/standards/survey
Geospatial Metadata Template	https://www.dpti.sa.gov.au/standards/survey

2.   Coordinate Projections and Datum's

2.1 Horizontal Datum

Unless specified otherwise in the Project Brief, the horizontal datum shall be GDA94 using either projection - Map Grid of Australia (MGA) or SA Lambert Conic Conformal (LCC)

All data files shall have a referenced coordinate system.

2.2 Vertical Datum

Unless specified otherwise in the Project Brief, datasets containing height values shall adopt the Australian Height Datum (AHD) as the vertical datum.

3.   DATA ACCURACY

3.1 Documenting Data Accuracy

All data deliverables shall be accompanied by a recommended data accuracy. Accuracies shall be defined in metres and satisfy a 95% confidence level. Accuracy statements shall be documented in the appropriate metadata template for each dataset, and the project transmittal report.

4.   DELIVERABLES

4.1 Digital File Formats

Unless specified otherwise in the Project Brief, all data shall be provided in the ESRI based formats.

Accepted formats include;
- ESRI Geodatabase feature class types (file or personal Geodatabase accepted)
- Shapefile (.shp, .shx, .sbn, .sbx, .prj, .dbf)

Data files shall be accompanied with their relevant symbology layer (.lyr) files.

File naming of data shall include as a minimum; eg GalwerRail_ENV_VegSurvey_Rev1
- Project Site
- Discipline

- Work Task
- Revision

When requested MXD Map documents shall be delivered as a package with all dataset links intact.
Refer online help site for ESRI based formats.   http://desktop.arcgis.com/en/arcmap/

4.2 Map Production

All maps shall as a minimum contain the following information;
- Project Title
- Scale Bar
- North Arrow
- Legend

Unless specified otherwise in the Project Brief, Maps shall be supplied as an Adobe pdf format.

File naming of maps shall include as a minimum;
- Title
- Publish Date
- Revision
- Page Size & Orientation ie; A3L , A1P

If requested by the principal ESRI based map documents (MXD) shall be delivered as a package accompanied by the relevant dataset links intact.

4.3 Items To Be Supplied By Contractor

The Contractor shall supply the following items:

- Digital data in the form of either as specified in the project brief:
  - ESRI based file formats
  - Adobe pdf format.

- Project Report (presented in the following order):
  - Date
  - Job Title, Number & Description
  - Project Lead & Manager
  - Contact Details
  - Data Files, Revision & Format
  - Horizontal Coordinate System
  - Vertical Datum
  - Nominated Data Accuracy
  - Metadata Standard
  - Capture Scale
  - Data Origin
  - Production Methodology
  - Exception Report: details of any abnormalities relating to the project.

5. METADATA STANDARDS

5.1 Minimum DPTI Metadata Standard

The minimum metadata standard for the purposes of this panel agreement is outlined below;

PROJECT

Dataset Title	Name of the dataset record.
Custodian	Details of the dataset provider eg name, organisation, email and contact phone no.

K-Net Doc: 12149422
Version No.: 1.1
Issue Date: 10/11/2017
Doc. Owner: Coordinator, Geospatial Services

UNCONTROLLED COPY WHEN PRINTED

Page 2 of 4

Project Number	Assigned project number (PATCHES) eg 201800123

DESCRIPTION

Description	Describes the content of the dataset, its spatial type, textual properties, geographic extent, attribute information, classification themes and associated information.
Dataset Use	Describes the usage of the dataset for a non- expert user, in plain language.
Projection / Coordinate System	Identifies the projection in which the dataset is referenced and stored.

DATA QUALITY

Data Origin	Describes the source and ownership of the dataset, including method of capture and editing.
Completeness	Percentage of dataset completeness for the spatial geometry, thematic classes and attribute information, and compliance to standards.
Positional Accuracy	Assessment of the dataset's closeness in relation to their true position on the Earth. Accuracy defined in metres and satisfy a 95% confidence level.
Capture Scale	Describes the scale range used to create or edit the dataset.

DATA STATUS

Last Updated	Date when the dataset was last updated.
Revision	As required for each new dataset updated.

This standard shall form the minimum metadata accompaniment for each GIS dataset supplied by the contractor. The minimum metadata standard shall utilise the ESRI electronic metadata sheet.

5.2 Location SA Metadata Standard

If requested in the contract brief data shall be required to comply to the Location SA Metadata standard. Details on how to apply this standard can be found at the following website: http://www.location.sa.gov.au/locationsa/data/metadata

Datasets requiring the LMS specification are intended for use as a state wide, primary maintained open data source.

5.3 ANZLIC Metadata Standard

If requested in the contract brief data shall be required to comply to the ANZLIC metadata standard. Details on how to apply this standard can be found at the following website: http://www.anzlic.gov.au/resources/asnzs-iso-1911512015-metadata

6. DATA PRODUCTION METHODOLOGY

6.1 General

In order to achieve the required standards, the methodology used shall be documented to support accuracy statements and provide context for the use/ application of GIS information. Details of this shall be included as a brief summary in the Geospatial Project Report.

K-Net Doc: 12149422
Version No.: 1.1
Issue Date: 10/11/2017
Doc. Owner: Coordinator, Geospatial Services

UNCONTROLLED COPY WHEN PRINTED

Page 3 of 4

6.2 Data Origin

Methodology statements shall include the origin of datasets. The contractor shall nominate whether information has been captured via GPS, data entry, digitised/ drafted or via automated feature extraction techniques etc. Details shall be noted in the Project Report.

6.3 Capture Scale

Methodology statements shall include the captured scale range of datasets, in accordance with Location SA metadata standard for Data Quality. Details shall be noted in the Project Report.

    Eg   Digitalising   1:1000
          Data Entry   1:1000
          Survey Data 1:500

K-Net Doc: 12149422
Version No.: 1.1
Issue Date: 10/11/2017
Doc. Owner: Coordinator, Geospatial Services

UNCONTROLLED COPY WHEN PRINTED

Page 4 of 4