eServices Categories

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Contents

Introduction

This document describes the Category and Sub-category structure implemented for the eServices register. The document will be kept updated from time to time.

A description has not been provided for some Categories and Sub-categories. The services delivered under these undefined Categories and Sub-Categories are to be structured and scoped according to Victorian government requirements and market capabilities or offerings.

GDS (Geospatial Data Services) Aerial Survey Data & Services

3D Modelling & Visualisation

Aerial Photography

Aerial imagery generally captured by means of a passive camera or sensor. Typical aerial photography is true-colour visible but may include Infra-Red and other wavelengths. Can be collected by various platforms including manned and un-manned aerial systems.

Bathymetry

Bathymetric data represent under water depth/elevation measurements of the bottom surface under features such as rivers, lakes and coastal waters. Can be collected by various platforms and sensors including airborne LiDAR.

Electromagnetic

Electromagnetics data represent conductivity of the ground sub-surface and is collected by an active system that sends/emits and records returned EM signals. Can be collected by various platforms, including airborne and ground platforms.

LiDAR

Light **D**etection **a**nd **R**anging data are elevation point clouds generated by an active system that emits and receives infra-red laser pulses. The signal return time is used to deduce distance from the sensor and accurate elevation in relation to the Earth's surface. Can be collected by various platforms, including airborne platforms.

Radar

Radar data is derived from active sensors that emit radio waves and record backscatter responses from the Earth's surface. Typically used for high-precision measurements of

changes in the Earth's surface. Can be collected by various platforms, including airborne platforms.

RPAS (Remotely Piloted Aircraft System), UAV Drone

Remotely **P**iloted **A**erial **S**ystems is a sub-category of aerial platforms. These are unmanned aerial vehicles, usually fixed-wing or multi-rotor, that are used to collect small scale coverage of various data types including videography, photography and LiDAR.

Thermal Imagery

Thermal Imagery data represents thermal radiation emitted from objects and is typically captured by a thermal camera that can be mounted on various platforms or vehicles.

Videography

Capture of moving images by way of a video camera. Typically true-colour. Can be collected via various platforms or vehicles.

GDS Data Maintenance Services

Raster

Raster Data are discrete regular-sized cell-based matrices of thematic or colour composite information. Typical sources of raster data are remotely sensed geospatial data and are useful for storing data that varies continuously.

Vector

A representation of features using points, lines, and polygons. Vector models are useful for storing data that has discrete boundaries, such as country borders, land parcels, and streets

GDS Sea Survey Data & Services

Bathymetry

Bathymetric data represent underwater depth/elevation measurements of the bottom surface under features such as rivers, lakes and coastal waters. Can be collected by various platforms and sensors including airborne LiDAR.

Sonar

Sound Navigation and Ranging uses soundwaves to map water features. These genera include both active and passive systems and is typically collected via Multibeam and Side Scan systems.

GDS Terrestrial Survey Data & Services

3D Modelling & Visualisation

Three-dimensional modelling or representation of the Earth's natural surface or of the built environment. Typically supported by remotely sensed geospatial data such as (but not limited to) LiDAR and photography.

Building Information Modelling

Three-dimensional representation of built features such as buildings typically generated from point cloud geospatial data sources such as LiDAR or photography.

Electromagnetic Induction

Electromagnetics data represent conductivity of the ground sub-surface and is collected by an active system that sends/emits and records returned EM signals. Can be collected by various platforms, including airborne and ground platforms.

Geostationary Sensors

Remote sensing devices that collect data from a fixed or relative geostationary location.

GPS Survey

Global navigation system utilising time and distance differentials from a receiver linked with a constellation of satellites in order to provide information relating to positioning on the Earth's surface.

LiDAR

Light **D**etection **a**nd **R**anging data are elevation point clouds generated by an active system that emits and receives infra-red laser pulses. The signal return time is used to deduce distance from the sensor and accurate elevation in relation to the Earth's surface. Can be collected by various platforms, including airborne platforms.

Photography

Thermal Imagery

Videography

ICT Application Expertise

.Net

Drupal

Groupware

J2EE

Lotus

Microsoft

Multimedia

Open Source

Oracle

PeopleSoft

Portal

Salesforce

SAP

ServiceNow

SQL

Wordpress

ICT Architecture & Design

Application Architecture

Application architecture is part of the enterprise architecture (EA). IT covers the structure and organisation of the range of aspects of an application or the set of applications used by the enterprise.

The application architecture includes:

- The capabilities which together make up the application

- The relationship of the application to business functions, business processes and sets of data/information

- The organisation of the components within the application, such as presentation, business logic, business rule & workflow

- The way in which components or capabilities communicate with one another

- The way in which applications communicate with one another

- The organisation of the software within the application (software architecture)

- The relationship of the application to operating systems & middleware.

Application architecture services may include:

- Development of EA (both for current state and future state) for the application architecture layer within complex organisational environments

- Development of models, standards and guidelines for the application architecture to meet the diverse needs of EA projects

- Understanding of the architectural capabilities and constraints of the range of applications, capabilities, services and application technologies used in modern business

- Utilisation of tools, models and templates to support capture, analyses and presentation of findings to a wide variety of stakeholders.

(Note: the Victorian Government is adopting an approach closely based on the US Government Federal Enterprise Architecture Framework (FEAF) modelling approach).

Business Architecture

Business architecture is a component of current and target architectures and relates to an organisation's mission and goals. It contains the content of the business models and focuses on the organisation's business areas and processes responding to business drivers. The business architecture defines high-level business processes, information flows and information needed to perform business functions.

Business architecture services may include:

- Business architecture services may include: development of enterprise architectures (both for current state and future state) for the business architecture layer within complex organisational environments

- Development of models for the business architecture to meet the diverse needs of business transformation and EA projects

- Analysis of the relationships between business entities such as stakeholders, inputs, outputs, business functions, processes, metrics organisation and skills and their relationships with the information they use and the systems they support

- Utilisation of tools, models and templates to support capture, analyses and presentation of findings to a wide variety of stakeholders.

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Enterprise Architecture

Enterprise architecture (EA) is both a process and a set of strategies that is used to develop enterprise models. The models define the business, the information and technologies needed to operate and support the business, and the transition necessary for implementing new technologies in response to changing business needs. EA services may include:

- Planning, developing and implementing EA within complex organisational environments

- Knowledge of current trends and developments relevant to EA

- Implementing and understanding the critical role of governance in ensuring alignment between business objectives & IT strategy

- Utilisation of tools, models and templates to support capture, analysis and presentation of findings to a wide range of stakeholders.

(Note: the Victorian Government is adopting an approach closely based on the US Government Federal Enterprise Architecture Framework (FEAF) modelling approach).

Information Architecture

Information architecture covers all the sources and forms of information that define the enterprise architecture. The information architecture layer includes:

- Information and data models

- Processes for managing information

- Standards for the manipulation and presentation of information

- Governance of information

- Infrastructure and technology for storing, manipulating and transmitting information

- Taxonomy for categorisation of information.

Information architecture services may include:

- Development of enterprise architectures (EA, both for current state and future state) for the information architecture layer within complex organisational environments

- Development of models, standards and guidelines for the information architecture to meet the diverse needs of EA projects

- Understanding the architectural capabilities and constraints of the range of technologies that support data and information in distributed systems

- Information and data modelling, taxonomies and content descriptions

- Utilisation of tools, models and templates to support capture, analyses and presentation of findings to a wide variety of stakeholders.

(Note: The Victorian Government is adopting an approach closely based on the US Government Federal Enterprise Architecture Framework (FEAF) modelling approach).

Solution Architecture

Technology Architecture

Technology architecture is a model that physically depicts the technical environment for an enterprise. It shows actual hardware, systems software and details of networks. Technology architecture services may include:

- Development of enterprise architectures (EA, both for current state and future state) for the technology architecture layer within complex organisational environments

- Development of models, standards and guidelines for the technology architecture to meet the diverse needs of EA projects

- Understanding the architectural capabilities and constraints on the range of applications, capabilities, services and application technologies used in modern business

- Utilisation of tools, models and templates to support capture, analyses and presentation of findings to a wide variety of stakeholders.

(Note: The Victorian Government is adopting an approach closely based on the US Government Federal Enterprise Architecture Framework (FEAF) modelling approach).

ICT Benchmarking

Benchmarking

Benchmarking includes identifying accurate historical and/or current data against which a data set can be compared now and/or in the future. Demonstrated experience in the identification, adaptation and adoption of benchmarking processes is also required

Function Point Analysis

Function Point Analysis (FPA) requires a methodology to calculate the relative size of individual applications or subsystems to establish a meaningful unit-of-work measure, which can be used to establish baseline costs and performance level monitors to quantify the functionality (value) being delivered to the business user. Demonstrated experience is required in FPA measurement to determine any software deliverables in logical user-oriented terms either pre/during or post system delivery.

ICT Business Process Expertise

Asset Management

Benefits Management

Business Intelligence

Client and Case Management

Contract Management

Financial Management

Grants

HR

Information Management

Licensing Permits

Procurement Management

Scientific & Engineering

Supply Chain Management

Tax

ICT Cloud Services

IaaS Management

PaaS Management

SaaS Management

ICT Industry Sector Expertise

Community/Social Services

Construction & Capital Works

Education & Training

Emergency Services

Energy

Environment

Finance Services

Gaming

Health

Housing

Information & Communications

Justice & Law Enforcement

Land Management

Local Government

Natural Resource Management

Primary Industries

Science & Research

Transport & Roads

ICT Learning Services

Learning Design

Learning Needs Analysis

Learning Strategies

Training Delivery

Training relates to providing government with IT training courses in metropolitan and regional areas for the nominated areas of specialities.

Training will be delivered via a combination of differing methods, including:

- Instructor-led in a seminar style to large groups

- Training at departmental site or provider site

- Interactive workshops, customised courses, modular course, train the trainer, computer-based training, roaming trainer, e-learning training, in-house developed system and associated training programs, and technically aligned training.

Training services include:

- Guaranteed personnel availability

- Flexibility and adaptability to the wide range of differing requirements across WoVG, with a focus on keeping up to date with the latest technology, training tools and techniques available

- Delivery of ICT industry accredited training courses

- Delivery of training needs analysis, course design, course delivery, etc.

For example, the delivery of: MCSE, MCSD Training; Web Server Management; MS Networks; Cisco certification (CCNA); Netware V5 & 6; Citrix Metaframe; Certified Netware Administrator (CNA); International Computer Driver's License (ICDL); Certified Lotus Professional (CLP); Certified Lotus Specialist (CLS), ITIL, etc.

ICT Other Services

Digitisation

ICT Programs

Panel suppliers in this service category have demonstrated experience in providing consulting services across all three of these areas in an IT environment, including the appropriate management methodologies and the associated transfer of skills to the customer.

Change Management

Portfolio Management

Portfolio management organises a series of projects into a single portfolio, consisting of reports that capture project objectives, costs, timelines, accomplishments, resources, risks and other critical factors.

Program Management

Program management combines the ability and resources to define, plan, implement, and integrate every aspect of a comprehensive program of work.

Program Office Standards

Project Management

Project management is the application of knowledge, skills, tools and techniques for a range of activities to meet the requirements of a particular project including initiating, planning, executing, controlling and closing.

Quality Assurance & Compliance

Quality assurance (QA) includes the planned and systematic activities implemented in a system to fulfil the quality requirements for a product or service. Quality assurance also requires demonstrated QA methodologies and extensive experience in implementing QA programs to ISO 9000 standards. JASANZ Certification for Lead Auditors is preferred for nominated personnel.

ICT Risk Management

Business Continuity Planning

Capacity & Availability Planning

Process & Technology Audits

Strategic Risk Management

ICT Security Management

Information Security

Penetration Testing

Security & Firewall Management

Security Strategy

Security Testing

ICT Services Management

Disaster Recovery

ITSM/ITIL

Networks

ICT Strategy & Analysis

Business Analysis

Business analysis includes structured identification, analysis and documentation of requirements associated with the design, development and implementation of business systems. This includes, but is not limited to:

- Business requirements specification

- Process analysis and design

- Procedure development

- Data migration and conversion planning

- Development and execution of testing strategies

- Problem identification and resolution

- Assessment of training needs

- Liaison between technical and business staff

- Research and analysis (e.g. market and customer)

- Risk assessment and management.

Business Intelligence

Strategy Development

Strategy development includes the provision of strategic vision and documentation associated with information and communications technology supporting IT in government. This includes, but is not limited to:

- Strategy and plan development and evaluation

- Forecasting or analysis of future trends

- Strategic research and analysis

- Development of and advice on management frameworks (e.g. risk, service delivery management, and portfolio management).

ICT Support

Maintenance & Support

Maintenance and support are defined as the ongoing services which ensure that a system or application is available to users for the agreed periods and at agreed service levels. This service category includes the use of ITIL methodology for service desk management as well as robust systems of managing and tracking problems and issues. IT also includes the utilisation of processes and procedures for problem/issue escalation.

Support services may include:

- Problem and/or issue definition

- Problem and/or issue resolution and rectification

- Availability management and configuration management

Maintenance services may include:

- Minor changes/modifications to applications, systems or interfaces

- Minor upgrades to applications, systems or interfaces and the installation and testing of patch releases.

(Note: maintenance services specifically exclude major application enhancements and modifications and major upgrades and releases. These services are covered within the Systems and Solutions Service Category.)

ICT Systems & Solutions

API Management

Business Intelligence

Custom Application Development

Customer Relationship Management (CRM)

Data Migration & Conversion

Data Migration in information technology Is the process of moving data from the use of one operating environment to another operating environment including such services as integration, data management and quality. Data migration can be as simple as moving data from one storage device to another, or it may be more complex, requiring a conversion process if the format of the old and new databases differ.

Conversion is the process of changing software or information to make it relevant and correct in a new or different operating environment. This may include the extraction & transformation and loading of data from one operating platform to another.

Data Visualisation

Databases

Design & Development

Design and development services include:

- Software engineering and the development of software applications and services (as per SDLC including Business Requirements Specifications, Functional Specification, Systems, Infrastructure & Technical Design, Coding, Compilation, Testing, Deployment, Documentation, and Maintenance & Support) to government, or large/complex organisations

- Understanding of emerging technologies and trends and how government may take advantage of such developments

- Understanding of government IT standards, strategic directions and practices for application development, and technical and IT/environment requirements across a wide range of government clients.

Electronic Document & Records Management

ERP and Related Corporate & Shared Services

Human Capital Management (HCM) & eRecruitment

Integration/Implementation

Integration refers to the process of combining parts so that they work together. In an information technology context, integration is the process in which separate components or subsystems are combined to function together seamlessly as one. It includes application integration, integration of server hardware and integration testing services.

Implementation refers to and encompasses all the processes involved in ensuring new software or hardware operates properly in its environment. It includes installation, configuration, running, testing, and making necessary changes.

Performance & Metrics

Performance and metrics include the quantification of system usage, average response time, benefits achieved and other measures to determine if a software or hardware environment is performing at its peak and delivering the responses that are required by the user.

Software Support & Maintenance Services

ICT Testing Services

Testing covers both software and hardware to determine that the product(s) are fit for purpose. This also encompasses the development of testing strategies and the configuration and use of automated test tools right through to the actual testing regime. Types of testing include Unit Testing, System Testing, Regression Testing, Performance/Load Testing, Security/Risk Testing, End to End Testing, Integration Testing, User Acceptance Testing, Conversion and Implementation Testing, Server and Software Compatibility Testing, Server Configuration Testing and Sociability Testing.

Testing services may include:

- Understanding the complete testing lifecycle from test case development right through to the configuration of test software, running of test cases and writing of test reports.

- Determining and delivering testing strategies for software projects

- Conducting tests utilising manual methods and automated testing tools.

Automated Testing

Testing Services

ICT Web

Accessibility Testing

User Experience (UX)

Web Analytics

Web Design & Content Management Services

Website/Server Performance Testing

Cyber Security and Associated Services

Cyber Security general consultation

Stakeholder Mapping including needs & risks

Victorian Protective Data Security Framework - implementation and assessment

Information asset discovery and classification including critical asset

Strategy, policies, procedures and guidelines

Strategy development

Configuration/Security Architecture assessment, design and implementation

Security Audits

Third party management including risk assessments and audit

Threat and Risk Assessments

IRAP Assessments (note must have staff with Australian Signals Directorate accreditation)

Specialist ICT and Cyber legal advice

Specialist SCADA and Industrial Control System (ICS) security consulting

SCADA and ICS testing

Cyber human behaviour

Culture surveys

Training and awareness

Security testing

Social engineering testing including phishing testing

Vulnerability assessment services

Red team services

Disaster recovery testing

Technical security services

Anti-malware

Denial of service protection

Monitoring services

SIEM & Anomaly Detection

Security Operation Centre (SOC)

Hunt & CERT Services

Threat Intelligence

Security incident and Data breach management

Forensic analysis services

Incident management training and event simulation

Incident management procedures

Incident management services