ICT Project Guidance

Definition:  
Requirements -   
Default Solution System(s)   
Transitional Requirements

Version:

0.1

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## Purpose

To diminish project delivery risk by defining requirements and expectations to transition from the current state to a preferred target state.

## Synopsis

Transitional Requirements cover the requirements for collaborative design, development, and delivery of a service.

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## Introduction

BOSSCARD/ RAID: Background [], Objective, Options, Scope[In/Out], Stakeholders [Users], Constraints, Assumptions, Risks, Dependencies, Decisions, Deliverables.

Default Issues

Commonly misunderstood as covering only “Transition into BAU”.

# Quantitative Values

This document refers to the non-functional requirement’s quantitative values.  
  
Any specific to this document are listed below.

|  |  |  |  |
| --- | --- | --- | --- |
| Term | Description | Value | Comments |
| Seniority % | Portion of Delivery Role that must be acceptable as senior. | 1/3 | It is accepted practice for vendors to place junior resources on projects. There is a point where the juniority can impede design, implementation and delivery. |

# Transitional Requirements

## Collaboration

##### ID: **Agreed Common Services**

|  |  |
| --- | --- |
| **Category** | Transitional/Collaboration |
| **Responsible** | Vendor |
| **Statement** | The [vendor organisation](#Term_VendorOrganisation) MUST use [sponsor organisation](#Term_SponsorOrganisation) agreed digital services to manage the discovery, definition, design, development, assessment, delivery, operation and maintenance of the solution. |
| **Rationale** | The [sponsor organisation](#Term_SponsorOrganisation) remains responsible for providing the service to service consumers even if and after collaboration between [sponsor](#Term_SponsorOrganisation) and [vendor](#Term_VendorOrganisation) has terminated. |
| **Details** | - Domain Services (e.g., AAD) - Team Collaboration & Communication Services (e.g.: MS Teams, other) - Electronic Document Management Service (e.g.: SharePoint, other) - Knowledge Management Service (e.g.: Confluence, other) - Code Store (e.g., ADO, GitHub, etc.) |
| **Prompts** | … |

## Dependencies

The delivery of expected deliverables is dependent on obtaining the following specific resources beforehand.

### Sponsor Standards

Although not international standards (ISO, RFC, etc.) the sponsor organisation has standards that facilitate its integrating, supporting, operating, maintaining and evolving systems used to deliver business services.

##### TR-DEP-ID: **Visual Standards**

|  |  |
| --- | --- |
| **Category** | Transitional/Dependencies |
| **Responsible** | Sponsor |
| **Statement** | The **sponsor organisation**’s visual standards [**MUST**](#Term_MUST) be obtained. |
| **Rationale** | To guide the development of compliant user interfaces where technically feasible. |
| **Details** | **Important:** The visual standards MUST be compliant to the acceptable level of WCAG.  **Important:** Deviation from standards for better outcomes is acceptable if prior agreement is obtained from the sponsor. |
| **Prompts** | … |

##### TR-DEP-ID: **System Integration Standards**

|  |  |
| --- | --- |
| **Category** | Transitional/Dependencies |
| **Responsible** | Sponsor |
| **Statement** | The **sponsor organisation**’s **integration standards** [**MUST**](#Term_MUST) be obtained. |
| **Rationale** | To guide system integration in a manner maintainable by the organisation. |
| **Details** | **Important:** Deviation from standards for better outcomes is acceptable if prior agreement is obtained from the sponsor. |
| **Prompts** | … |

##### TR-DEP-ID: **Data Development Standards**

|  |  |
| --- | --- |
| **Category** | Transitional/Dependencies |
| **Responsible** | Sponsor |
| **Statement** | Custom development data storage and retrieval for of **SaaP**s [**MUST**](#Term_MUST) align with the **sponsor organisation**’s data development standards unless agreed otherwise. |
| **Rationale** | Poor data store development can greatly impact performance, and limit availability of services within **quantified** resource utilisation expectations. |
| **Details** | Note that the data development standards MUST not dictate schema shape constraints. **Important:** Deviation from standards for better outcomes is acceptable if prior agreement is obtained from the sponsor. |
| **Prompts** | … |

##### TR-DEP-ID: **Development Standards**

|  |  |
| --- | --- |
| **Category** | Transitional/Dependencies |
| **Responsible** | Sponsor |
| **Statement** | The **sponsor organisation**’s custom development standards [**MUST**](#Term_MUST) be obtained. |
| **Rationale** | To guide custom development (of custom systems, extensions and/or supporting automation) to produce deliverables maintainable by the **sponsor organisation**. |
| **Details** | The primary purpose of development standards is to reduce the introduction of security risks, while improving analysability, maintainability and evolvability. **Important:** Deviation from standards for better outcomes is acceptable if prior agreement is obtained from the sponsor. |
| **Prompts** | … |

### SMEs

SMEs representing stakeholder groups are consulted to develop stakeholder requirements.

##### TR-ID: **Separate Business Service Consumer SME**

|  |  |
| --- | --- |
| **Category** | Transitional/Resourcing |
| **Responsible** | Sponsor |
| **Statement** | The Business Service Consumer SME [**MUST**](#Term_MUST) be a different resource than the Business Service Support Specialist SME. |
| **Rationale** | There is a large risk that a business service support SME will – unintentionally -- reflect what business service support specialists wish from the service to assist their tasks, rather than reflecting what business service consumers wish. |
| **Details** | Different stakeholder groups often desire different outcomes. While this is normal, it is important that – of all stakeholder groups -- the desires and or needs of system consumers are captured clearly unadulterated by other stakeholder groups’ perspective. Note that [paying] service consumers often desire more functionality and quality than an internal [paid] stakeholder would accept. |
| **Prompts** | Is the service consumer SME separate from the business service provider or business service support specialist SME? |

## Provisioning

### Resourcing

##### TR-RES-ID: **Stakeholder Analysts**

|  |  |
| --- | --- |
| **Category** | Transitional/Resourcing |
| **Responsible** | Supplier |
| **Statement** | A Stakeholder Analyst delivery role [**MUST**](#Term_MUST) be resourced as an integral part of the design and delivery resource team. |
| **Rationale** | A Stakeholder Analyst – as opposed to a Business [stakeholder] Analyst – elicits Stakeholder Requirements from *all* Stakeholders involved with the service over its full service lifespan. |
| **Details** | While a full stakeholder map would include sponsor and user categories, a it would also include the following list of specialist SMEs to query for functional requirements: - Business Service Consumer SME, - Business Service Support SME, - [General] Customer Support Specialist SME, - System Operations Specialist SME, - System Monitoring Specialist SME,  - System Maintenance Specialist SME, - Privacy Specialist SME,  - Security Specialist SME, - Enterprise Data Warehouse Specialist SME.  Note that single persons may fulfil multiple SME roles – but it is a high risk if a Business Service Support SME is also fulfilling the Business Service Consumer |
| **Prompts** | Is a **stakeholder** **analyst** part of the delivery team? |

##### TR-ID: **Test Analysts**

|  |  |
| --- | --- |
| **Category** | Transitional/Resourcing |
| **Responsible** | Supplier |
| **Statement** | A Test Analyst Role [**MUST**](#Term_MUST) be resourced as an integral part of the delivery resource team. |
| **Rationale** | A Test Analyst – as opposed to a Business Analyst – develops automatable Acceptance Criteria for custom code developers for work items previously developed by Business Analysts for stakeholders. |
| **Details** | The Test Analyst is expected to be capable of developing Acceptance Criteria in the “Gherkin” Domain Specific Language (DSL). |
| **Prompts** | Is a Test Analyst Role part of the delivery team? |

##### TR-ID: **Test Developers**

|  |  |
| --- | --- |
| **Category** | Transitional/ Resourcing |
| **Responsible** | Supplier |
| **Statement** | A Test Developer Role [**MUST**](#Term_MUST) be resourced as an integral member of the delivery resource team. |
| **Rationale** | Tests are required to be automated, run by a pipeline. These tests require a developer with the skill to develop tests via code (as opposed to either manual testing or pseudo test development -- recording operations using a testing platform). IF the solution’s service(s) are SaaS  THEN the tests will not be testing custom code but will be testing configuration, system settings, workflows, and data provisioning. |
| **Details** | A Test Developer is required to develop Acceptance Criteria into code. |
| **Prompts** | Is a Test Developer part of the delivery team? Does the Test Developer have experience coding tests? |

##### TR-ID: **Delivery** **Pipeline** **Developers**

|  |  |
| --- | --- |
| **Category** | Transitional/Resourcing |
| **Responsible** | Supplier |
| **Statement** | A pipeline development engineer [**MUST**](#Term_MUST) be provided to develop a delivery pipeline that will repeat multiple steps to deploy to multiple environments in a consistent manner. |
| **Rationale** | A delivery pipeline is the single most important system to develop to ensure continuity of service while resource come and go from a project. |
| **Details** | The resource will be expected to develop a deliver pipeline that will  - Run Infrastructure as Code and Datbase Schema as Code to develop target environments and data stores, - optionally check out, compile, static test, deploy, configure services, - configure settings, provision, and dynamic test systems. Systems and Tests are developed by other roles (see Test Developers and System Developers). |
| **Prompts** |  |

##### TR-ID: **System Developers**

|  |  |
| --- | --- |
| **Category** | Transitional/Resourcing |
| **Responsible** | Supplier |
| **Statement** | System Developers [**MUST**](#Term_MUST) be provided to develop custom systems and/or custom supporting integration and provisioning code. |
| **Rationale** | Even when procuring SaaS services there is a tremendous amount of supporting code that is required to be developed. |
| **Details** | Common development tasks include developing ETL services in between services, integrating services via APIs, etc. |
| **Prompts** | What custom development tasks are envisioned? Will resources be provided for these tasks? Are they skilled and experienced in these tasks? |

##### TR-ID: **Senior Role Ratio**

|  |  |
| --- | --- |
| **Category** | Transitional/Resourcing |
| **Responsible** | Supplier |
| **Statement** | Supplied Role positions [**MUST**](#Term_MUST) be filled by 1/3 senior roles. |
| **Rationale** | Experienced roles collaborate and complete work items at a faster rate than junior roles that need guidance. |
| **Details** | Qualifications presented must remain acceptable to the sponsor. |
| **Prompts** | Are 1/3 or more of the supplied resources senior in experience in their role? |

##### TR-PRO-RES -00: **Technically Capable**

|  |  |
| --- | --- |
| **Category** | Transitional/Provisioning |
| **Responsible** | Vendor |
| **Statement** | The vendor organisation [**MUST**](#Term_MUST) ensure that at least 1/2 of resources allocated to the project at any time are technical implementors. |
| **Rationale** | While discovery, managing and reporting up are important activities, delivering automation to end users remains more important. |
| **Details** |  |
| **Prompts** | … |

##### TR-COLAB-00: **Acceptable Resources**

|  |  |
| --- | --- |
| **Category** | Transitional/Provisioning |
| **Responsible** | Vendor |
| **Statement** | Vendor organisation resources MUST remain approved by the sponsor organisation. |
| **Rationale** | The sponsor organisation may have had a negative previous experience working with some resource. |
| **Details** | The vendor organisation must propose to the sponsor organisation the names of resources they wish to bring on to the project. |
| **Prompts** | What are the names of the key resources expected to be part of the project. |
| **Details** | … |

### Access

##### TR-PRO-ACC-ID: **User Accounts**

|  |  |
| --- | --- |
| **Category** | Transitional/Integration/Preparation |
| **Responsible** | Vendor |
| **Statement** | The sponsor [**MUST**](#Term_MUST) provision access within systems the supplier resources require access to. |
| **Rationale** | Data to legacy systems is required. Access is granted via Service Accounts. |
| **Details** | The default way is to make develop user accounts within the organisation directory service for users, but the actual required method may vary system to system. |
| **Prompts** | … |

##### TR-ID: **Service Accounts**

|  |  |
| --- | --- |
| **Category** | Transitional/Dependencies |
| **Responsible** | Vendor |
| **Statement** | Production Data Environment Service Accounts MUST be requested to support Data Provisioning and Migration tasks |
| **Rationale** | Data to legacy systems is required. Access is granted via Service Accounts. |
| **Details** | One Service Account is required per legacy system as well as per authoritative source system. |
| **Prompts** | … |

### Tooling

##### TR-ENV-00: **Accredited Environments & Platforms**

|  |  |
| --- | --- |
| **Category** | Transitional |
| **Responsible** | The solution MUST use Accredited Platforms for Environments and Services |
| **Statement** | [**IF**](#Term_IF) … [**THEN**](#Term_THEN) … **ELSE** … |
| **Rationale** |  |
| **Details** | Cloud Providers, Service Providers must be accredited. |
| **Prompts** | Accreditation is a recurring event. |

##### TR-PRO--ID: **Devices, Services, Licenses**

|  |  |
| --- | --- |
| **Category** | Transitional/Tooling |
| **Responsible** | Supplier |
| **Statement** | Stakeholders [**MUST**](#Term_MUST) use sponsor devices, services, licenses unless permitted otherwise. |
| **Rationale** | Avoid supplier lock-in. |
| **Details** | The sponsor organisation will provide access to the following services: - A virtual meeting and chatting service for discovery, design, and delivery collaboration, - An [online] suite of work document development tools (e.g., Office 365) - A Electronic Document Management Service (EDMS) for the development and persisting of versioned developed documents. - A work item visual management service (e.g.: agile or scrum kanban) to collect, refine, prioritise and action work items by team resources, - A Distributed Repository/Code Versioning Service for persisting custom developed system and/or supporting code. Note that even if the solution’s key systems are SaaS based, custom code will be developed for configuring, integrating, provisioning and/or automated testing of the services. - Adequate development Integrated Development Environment (IDE) instances and/or licenses, - [optionally] Laptop devices as needed, sufficiently resourced (memory, CPU, etc.) for role’s intended tasks |
| **Prompts** | Are there any other devices, services you will require licensing and/or provisioning to discover, define, design, develop and deliver the solution’s services in a usable state? |

### Environments

Multiple environments are required to test solution system(s) before they are released to end users to manage production data.

##### TR-ENV-ID: **Environments**

|  |  |
| --- | --- |
| **Category** | Transitional/Environments |
| **Responsible** | Vendor |
| **Statement** | Multiple **environments** [**MUST**](#Term_MUST) be developed, associated to different **domain controllers**. |
| **Rationale** | Deployments of system and/or configuration MUST be passed through multiple test environments before being deployed to the Production website. |
| **Details** | Environments must be built using Infrastructure as Code, executed by a pipeline. Environments to create include:  - Non-Production Domain Controller:  - Build Test (BT)  - Developer Test (DT)  - System Test (ST)  - User Test (UT) - Production Data Domain Controller:  - Integration Test (IT)  - Training (TR))  - Production (PR) |
| **Prompts** |  |

##### TR-ID: **WAF**

|  |  |
| --- | --- |
| **Category** |  |
| **Responsible** | Vendor |
| **Statement** | **production data** **environments** [**MUST**](#Term_MUST) be behind **Web Application Firewalls (WAFs)**. |
| **Rationale** | The Defence in Depth system design **principle** implies wrapping services in secondary lines of defence. |
| **Details** | If the organisation does not or cannot provide an appropriate **WAF** for the solution, the vendor is expected to develop a [temporary] one as as part of the delivered solution. |
| **Prompts** |  |

## Service Delivery Systems

The delivery of a service requires tools for remote collaboration, document development and storage, development, and testing tooling.

See: “**Devices, Services, Licenses”**

## Induction

Resources added to a delivery team require induction to constraints and expectations, as well as processes to use and resources available.

##### TR-ID: **Production Data Use**

|  |  |
| --- | --- |
| **Category** | Transitional/Induction |
| **Responsible** | Sponsor, Vendor |
| **Statement** | Delivery Stakeholders [**MUST**](#Term_MUST) not accept or propose the use of production data for testing or any other purpose in non-production environments. |
| **Rationale** | The use of production data, irrespective of its size or age, in any non-production data environment where access is not controlled, audited and monitored is a security risk. It is illegal in many jurisdictions. |
| **Details** | Production data, irrespective of being truncated and/or obfuscated, is an insecure process. It is illegal to use data for any purpose that is not disclosed to end users with a prior accepted data use statement. |
| **Prompts** | Agreement must be collected in writing as part of the induction process. |

##### TR-ID: **Security Training**

|  |  |
| --- | --- |
| **Category** | Transitional/Training |
| **Responsible** | Sponsor/Vendor |
| **Statement** | Vendor provided resources [**MUST**](#Term_MUST) complete sponsor supplied yearly security training. |
| **Rationale** | Security Quality Non-Functional Requirements cannot be met if stakeholders are ignorant of what actions are insecure and to be avoided. |
| **Details** | The training may be as simple as reading a supplied guidance document or sitting and passing an electronic training module and assessment. |
| **Prompts** | Specific items to test for are an understanding that: - Confidential information (e.g.: integration credentials) are NOT to be included in any document and/or persisted in any EDMS (e.g.: SharePoint) or distributed version control system (e.g., Git).  - Production Data is not to be accessed or handled by stakeholders outside of a system running in a production data environment. It is NOT to be used in whole or in part, obfuscated or not, to develop Data for testing purposes.  - Production or Confidential information is not to be transmitted outside of a functioning and auditing environment (e.g.: as email attachments, etc.). |

## Process

##### TR-ID: **Datastore**

|  |  |
| --- | --- |
| **Category** | Transitional/Integration |
| **Responsible** | Sponsor / Vendor |
| **Statement** | Documents [**MUST**](#Term_MUST) be developed and managed in the sponsor’s appropriate electronic datastores. |
| **Rationale** |  |
| **Details** | Documents are not to be developed in the supplier’s datastore, limiting sponsor feedback till handover. |
| **Prompts** | … |

##### TR-ID: **Certificates Replacing**

|  |  |
| --- | --- |
| **Category** |  |
| **Responsible** | Vendor |
| **Statement** | [**IF**](#Term_IF) … [**THEN**](#Term_THEN) … **ELSE** … |
| **Rationale** |  |
| **Details** |  |
| **Prompts** |  |

##### TR-ID: **Security Incidents**

|  |  |
| --- | --- |
| **Category** | Transitional/…Processes or Monitoring |
| **Responsible** | Sponsor / Vendor |
| **Statement** | Security Incidents in **production data environments** [**MUST**](#Term_MUST) be immediately reported to the Sponsor Organisation’s responsible role. |
| **Rationale** | Besides regulation requirements, **system users** have the right to know their data is at risk so as to make their own tactical decisions. |
| **Details** |  |
| **Prompts** |  |

## Artefacts

A number of artefacts require development that are delivered as individual deliverables, but are required to be developed and included in deliverables.

### Delivery Management

Projects delivery of valued services is an ongoing process, requiring automation to manage it.

##### TR-ART-MAN-00: **Delivery WorkItem Management**

|  |  |
| --- | --- |
| **Category** | Transition/Artefacts/Management |
| **Responsible** | Sponsor |
| **Statement** | A dedicated project area [**MUST**](#Term_MUST) be developed, configured and used to manage project **workitems**. |
| **Rationale** | **Workitems** must be visible to all project stakeholders so as to be developed, validated, managed, prioritised, assigned and completed. |
| **Details** | The system MUST permit remote access via partners and consultants. An example would be the creation of a project area with |
| **Prompts** | What is the process of enabling consultants to access the service? |

##### TR-ART-REG-ID: **Delivery Management Information Hub**

|  |  |
| --- | --- |
| **Category** | Transition/Artefacts |
| **Responsible** | Sponsor |
| **Statement** | A Project Information Hub [**MUST**](#Term_MUST) be delivered. |
| **Rationale** | Information required to manage the process of discovery, definition, design, development, delivery, must be collected in one place. |
| **Details** | The project information hub MAY be the same as the corporate intranet site but this is not recommended (a corporate intranet site is best suited for the different task of communicating purpose, value, prerequisites, etc., to other corporate groups). |
| **Prompts** |  |

### Registries

Registries are a type of deliverable intended to inform current and future delivery, deployment, and maintenance stakeholders.

##### TR-ART-REG-ID: **Maintenance Scheduling Registry**

|  |  |
| --- | --- |
| **Category** | Transitional/Artefacts/Registries |
| **Responsible** | Sponsor |
| **Statement** | System Maintainers [**MUST**](#Term_MUST) know when to perform regular maintenance operations to keep the system available. |
| **Rationale** | Unknown, therefore unperformed, regular maintenance operations make service system(s) unavailable to system users. |
| **Details** | Common tasks include:  - the registration and regular extending of www Domain Name reservation,  - redevelopment and deployment of regularly updated certificates (e.g., supporting HTTP/S) *(note: Every 90 days is a security risk mitigation recommendation)*.  - schedule review and possible updating of WAF rules  - re-accreditation and certification  It is a system design principle to iteratively optimise the design and development of solution system(s) to remove manual maintenance operations.  The registry is used to inform the development of automation tasks until the manual operations are no longer required. |
| **Prompts** |  |

##### TR-ART-REG-ID: **Delivery** **Role Registry**

|  |  |
| --- | --- |
| **Category** | Transition/Artefacts/Registries |
| **Responsible** | Sponsor |
| **Statement** | The **sponsor** [**MUST**](#Term_MUST) develop and maintain a registry of roles associated to the names of current and past **stakeholders** fulfilling the roles. |
| **Rationale** | Onboarding project delivery and maintenance resources require being able to determine the role of persons mentioned in legacy documentation, etc. |
| **Details** | Solution system(s) are operated and maintained for long durations, and the stakeholders mentioned in documentation changes. |
| **Prompts** |  |

##### TR-ART-REG-ID: **Engagement Registry**

|  |  |
| --- | --- |
| **Category** | Transitional/Artefacts/Registries |
| **Responsible** | Vendor |
| **Statement** | A User & user group engagement registry **SHOULD** be developed. |
| **Rationale** | Statements that engender expectations (capabilities, features, dates, etc/) must be tracked against whom they were made to. |
| **Details** | Track what was said to whom, when, as well as when the expectations must be met. This is used to inform the development and priorisations of work items. |
| **Prompts** | … |

##### TR-ART-RES-ID: **Schedule Registry**

|  |  |
| --- | --- |
| **Category** | Transitional/Artefacts/Registries |
| **Responsible** | Vendor |
| **Statement** | Discovery of sponsor and market schedules that impact delivery MUST be recorded in a registry. |
| **Rationale** | Unsuccessful deployments may impact end users while the latest deployment is rolled back, data restored, and functionality verified. |
| **Details** | Schools, and therefore parents, have a natural schedule that impacts delivery considerations. Under project specific circumstances, it may be preferred that deployments are reserved to periods when a deployment will affect the least number of users (e.g., holidays).  Scheduling to consider: - school holidays - Xmas and new year breaks, and organisation specific associated brown-outs and black-outs that limit when deployment to production environments can occur |
| **Prompts** | … |

### Media Development

Media is used within deployed systems. Media comes in many forms. For example, it may be text only (e.g., data use statements), rich formatted text, or rich text combined with images, video, sound).

##### TR-ART-MED-ID: **Print & Web Media Resources**

|  |  |
| --- | --- |
| **Category** | Transitional Artefacts/Media |
| **Responsible** | Sponsor |
| **Statement** | The project [**MUST**](#Term_MUST) develop common resources to be used when developing web and print media and material. |
| **Rationale** | A common look improves recognisability, permitting stakeholders and system users to focus on usability. |
| **Details** | Resources would include fonts, [accessible] icons, graphics, styling guidelines, document templates (e.g.: PowerPoint, Word) provided in a commonly team accessible cloud location. |
| **Prompts** | … |

##### TR-ART-MED-ID: **Sponsor Organisation Corporate Website Media**

|  |  |
| --- | --- |
| **Category** | Transitional/Artefacts/Media |
| **Responsible** | Sponsor |
| **Statement** | The project MUST develop media and text for the corporate website. |
| **Rationale** | Groups external to the project may know how to dedicate a section of a website for this project’s use, but they don’t know what to write about the project. |
| **Details** | Develop the material in the languages available on the corporate website. The material must link to the solution’s system(s) Home Page. |
| **Prompts** | … |

##### TR-ART-MED-ID: **Project Website Media**

|  |  |
| --- | --- |
| **Category** | Transitional Artefacts/Media |
| **Responsible** | Sponsor |
| **Statement** | The project [**MUST**](#Term_MUST) develop media for dedicated stand-alone project website. |
| **Rationale** | The media Permits the publishing of a Privacy Statement, Copyright Statement and Contact options, separate from the solution’s service(s) which may not be configurable in such a way (e.g.: is a SaaS) -- but can *link* to the above-mentioned statements. |
| **Details** | Note that such sites are often read-only and do not collect any Personal Information (PI) and therefore can have the lowest data classifications. The site will require the development of a DNS name registration and certificate to publish the site as a subdomain of the project (eg: <https://info.ourservice.ourorganisation.tld/> ) |
| **Prompts** | … |

##### ID: **Data Use Statement**

|  |  |  |
| --- | --- | --- |
| **Category** | Transitional/Artefacts | |
| **Responsible** | | Sponsor |
| **Statement** | A Data Use statement [**MUST**](#Term_MUST) be developed for the service. | |
| **Rationale** | It is a system requirement that services provide a home page that links to a Privacy Statement scoped to the service offered. | |
| **Details** |  | |
| **Prompts** | … | |

##### TR-ART-MED-ID: **Privacy Statement Media**

|  |  |
| --- | --- |
| **Category** | Transitional Artefacts/Media |
| **Responsible** | Sponsor |
| **Statement** | Solution service(s) specific privacy statement [**MUST**](#Term_MUST) be created, communicating what personal data will be collected, what it is collected for, whom it will be shared with, and the process to follow to request corrections. |
| **Rationale** | A system user must be provided the means to ascertain the privacy cost to using a service. |
| **Details** | The privacy statement can be developed from an sponsor organisation provided template. The statement can be hosted on the service itself, or the service’s project website. |
| **Prompts** | … |

##### ID: **Privacy Statement**

|  |  |  |
| --- | --- | --- |
| **Category** | Transitional/Artefacts | |
| **Responsible** | | Sponsor |
| **Statement** | A Privacy Statement [**MUST**](#Term_MUST) be developed for the service. | |
| **Rationale** | It is a system requirement that services provide a home page that links to a Privacy Statement scoped to the service offered. | |
| **Details** |  | |
| **Prompts** |  | |

##### TR-ART-MED-ID: **Copyright Statement Media**

|  |  |
| --- | --- |
| **Category** | Transitional/Artefacts/Media |
| **Responsible** | Sponsor |
| **Statement** | Solution service(s) specific copyright statement [**MUST**](#Term_MUST) be created. |
| **Rationale** |  |
| **Details** | The statement can be hosted on the service itself, or the service’s project website. |
| **Prompts** | … |

##### TR-ART-MED-ID: **Contact Options Media**

|  |  |
| --- | --- |
| **Category** | Transitional Artefacts/Media |
| **Responsible** | Sponsor |
| **Statement** | Solution service(s) specific copyright statement [**MUST**](#Term_MUST) be created. |
| **Rationale** | A user must be provided information to obtain support. |
| **Details** | The statement may be linked to from the Privacy Statement, when it describes the process to follow to correct collected personal information.   The statement can be hosted on the service itself, or the service’s project website. |
| **Prompts** |  |

##### TR-ART-MED-ID: **Planned Downtime Message Media**

|  |  |
| --- | --- |
| **Category** | Transitional Artefacts/Media |
| **Responsible** | Sponsor |
| **Statement** | Downtime Notification Message MUST be created. |
| **Rationale** | Users [**MUST**](#Term_MUST) be notified ahead of time regarding planned upcoming downtime to permit them to plan alternate activities during that time. |
| **Details** | Depending on the system the notifications are shown in-system, and/or emailed out. If in-system, the notifications are typically succinct due to available banner message area available. If sent out by email, the notifications must be less succinct. |
| **Prompts** | … |

##### TR-ART-MED-00: **Tenancy Welcome Pack?**

##### TR-ART-MED-00: **Tenancy Member Welcome Pack?**

Discovery

@@@

## Service Systems

Whether a **SaaS** or a **SaaP**, solution system(s) are delivered within a constellation of supporting systems that require development of or for, and then integration with in one way or another.

##### TR-SYS-ID: **Corporate External Website**

|  |  |
| --- | --- |
| **Category** | Transitional/Systems |
| **Responsible** | Sponsor |
| **Statement** | The project [**MUST**](#Term_MUST) develop a publicly accessible area in the organisation’s website. |
| **Rationale** | Improve discoverability and trustability of the service by linking to its services from an already trusted site. |
| **Details** | The media developed and used must link to the solution’s system(s) Home Page. Depending on the system the Home Page may be within the system itself or require being within an intermediary Project Website. Media within the corporate website must be developed using project media (images, logos, phrases, etc.) and therefore has a dependency on it being completed first.  The development and delivery of an organisation corporate website is not the responsibility of the vendor organisation. |
| **Prompts** | … |

##### TR-SYS-ID: **Corporate Intranet**

|  |  |
| --- | --- |
| **Category** | Transitional/Systems |
| **Responsible** | Sponsor |
| **Statement** | The project [**MUST**](#Term_MUST) develop a corporate website area in the internal sponsor organisation’s internal intranet. |
| **Rationale** | Improve discoverability of the service by internal staff by linking to its services from an already trusted site. |
| **Details** | The media must link to the solution’s system(s) Home Page. Depending on the system the Home Page may be within the system itself, or require being within an intermediary Project Website. Media within the corporate website must be developed using project media (images, logos, phrases, etc.) and therefore has a dependency on it being completed first.  The development and delivery of an organisation corporate website is not the responsibility of the vendor organisation. |
| **Prompts** | … |

##### TR-SYS-ID: **Project Website**

|  |  |
| --- | --- |
| **Category** | Transitional Artefacts/Media |
| **Responsible** | Sponsor |
| **Statement** | The project [**MUST**](#Term_MUST) develop a dedicated stand-alone website. |
| **Rationale** | Permits the publishing of a Privacy Statement Media, Copyright Statement Media and Contact Options media, separate from the solution’s service(s) which may not be configurable in such a way (e.g.: is a SaaS) -- but can *link* to the above-mentioned statements. |
| **Details** | Note that such sites are often read-only and do not collect any Personal Information (PI) and therefore can have the lowest data classifications. The site will require the development of a DNS name registration and certificate to publish the site as a subdomain of the project (eg: <https://info.ourservice.ourorganisation.tld/> )  The development and delivery of an intermediary project website is not the responsibility of the vendor organisation. |
| **Prompts** | … |

##### TR-ID: **User Feedback Service**

|  |  |
| --- | --- |
| **Category** | Transitional/Systems |
| **Responsible** | Sponsor |
| **Statement** | The solution [**MUST**](#Term_MUST) provide a service to collect user feedback. |
| **Rationale** | Improvement of service should be influenced primarily by service consumer feedback as to frustrations, suggestions, and approvals – not service providers. |
| **Details** | The system may be an enterprise-wide service within which a tenancy needs licensing, developing, provisioning. Unacceptable is a site survey. Or collection of emails.  The service should be referenced from the Project website. |
| **Prompts** | … |

## Deliverables

### Systems

Solutions are delivered as one or more coordinated system(s), deployed and configured by other systems, managed by yet other systems.

|  |  |
| --- | --- |
| **Category** | Transistional/Deliverables |
| **Responsible** | Vendor |
| **Statement** | The primary system to deliver [**MUST**](#Term_MUST) be the automation pipeline that in turn delivers solution system(s) to environments in a configured and state usable by business service consumers. |
| **Rationale** | Automated pipelines are arguably the most important deliverables of an IT project. They are the factory that encodes the IP required to deploy and update the solution’s service(s).  The use of automation of all the steps required to deploy a system make it cost effective to iteratively update the capabilities and services offered over its full lifespan. |
| **Details** |  |
| **Prompts** |  |

### Documentation

Services are delivered with service documentation (not to be confused with system documentation that they may in turn reference).

##### TR-DEL-DOC-00: **Tenancy Welcome Pack**

For a tenancy?

##### TR-DEL-DOC-00: **Tenancy Member Welcome Pack**

For a tenancy?

##### TR-DEL-DOC-00: **Role Based Documentation**

|  |  |
| --- | --- |
| **Category** |  |
| **Responsible** | The vendor organisation MUST develop [documentation](#Term_Documentation) for sponsor organisation resources to perform their [role](#Term_Role)s as required. |
| **Statement** | The vendor organisation will prepare individual documents for each of the following generic [Role](#Term_Role)s: - User Support Services: to support Users with general system tasks - Business Service Support specialists: to support Users with business service specific tasks - Operations Service specialists: describing how to configure settings of the system, preparing it for use by Users - Maintenance Service specialists: describing how to monitor and maintain the solution’s systems and components. - Deployment specialists: describing how to operate the automated pipeline. |
| **Rationale** |  |
| **Details** |  |
| **Prompts** |  |

##### TR-ID: **Application Support Guide (ASG)**

|  |  |
| --- | --- |
| **Category** | Transitional/Deliverables/Documents |
| **Responsible** | Vendor |
| **Statement** | An **Application Support Guide (ASG)** [**MUST**](#Term_MUST) be developed and sponsor accepted prior to the system being deployed to a **production data environment**. |
| **Rationale** | Once deployed to an environment accessible by end users, contact by them is to be expected. |
| **Details** | **Note:** An **ASG** is not to be confused with a product system’s user guide. It includes guidance for Tier 0 **customer support specialists** on answering general support questions, and know where to forward calls for further assistance (generally **business service support specialists** or **system operations specialists**). See Business Service Operations Guide |
| **Prompts** | … |

##### TR-DEL-DOC -ID: **Business Service Operations Guide**

|  |  |
| --- | --- |
| **Category** | Transitional/Deliverables/Documentation |
| **Responsible** | Sponsor |
| **Statement** | Guidance on how to operate the system to provide a business service [**MUST**](#Term_MUST) be developed. |
| **Rationale** | Business service provider resources must know how to use the system to provide the service to service consumers. |
| **Details** | The documentation may be referenced from the ASG documentation used by customer support specialists.  The documentation is not the system operations manual (although it may refer to it as a source of information). |
| **Prompts** | … |

##### TR-DEL-DOC -ID: **Business Service Operations Guide**

|  |  |
| --- | --- |
| **Category** | Transitional/Deliverables/Documentation |
| **Responsible** | Vendor |
| **Statement** | Solution’s system(s) operating guidance [**MUST**](#Term_MUST) be developed and or delivered. |
| **Rationale** | Required to develop implementation specific instructions for **sponsor organisation** resources (e.g.: the **ASG** and **Business Service Operations Guide**). |
| **Details** | The system operations manual is expected to contain all information required to in turn develop a deployment guide, a configuration guide, an **ASG** and **Business Service Operations Guide**. |
| **Prompts** | … |

##### TR-DEL-DOC-ID: **Business Service Support Training Guide**

|  |  |
| --- | --- |
| **Category** | Transitional/Deliverables/Documentation |
| **Responsible** | Sponsor |
| **Statement** | Training Documentation and material to train Business Support Specialist [**MUST**](#Term_MUST) be developed and accepted by the Sponsor Organisation’s Training Specialists SME. |
| **Rationale** |  |
| **Details** | There is reliance on Non-Functional Requirements for   * a Training environment * controlled by production domain controller * the capability to provision training data * the capability to reset training data |
| **Prompts** | … |

##### TR-DEL-DOC-ID: **Deployment Instructions**

|  |  |
| --- | --- |
| **Category** | Transition/Deliverables/Documentation |
| **Responsible** | Vendor |
| **Statement** | Deployment Instructions [**MUST**](#Term_MUST) be provided. |
| **Rationale** | The deployment of **systems** either/or system data must be undertaken by **sponsor organisation** **maintenance specialists**. |
| **Details** | The instructions should be describing how to automate pipelines. If the system is a SaaS the pipelines may be only deploying system settings and provisioning data.  If the system is a SaaP the pipeline may be doing more steps, from compiling, static testing, packaging if a custom developed system, to deploying, configuring and integrating, bringing online, updating system settings via APIs, data provisioning, etc. if either a custom or OTS SaaP system. |
| **Prompts** |  |

##### TR-DEL-DOC-ID: **Disaster Recovery Plan**

|  |  |
| --- | --- |
| **Category** | Transition/Deliverables/Documentation |
| **Responsible** | Sponsor |
| **Statement** | The **sponsor organisation** [**MUST**](#Term_MUST) develop and document a plan to restore business services in the case of a critical error. |
| **Rationale** | Over a full multiyear service lifespan, critical errors that take the system offline or lose or corrupt data are to be expected. |
| **Details** | The instructions should be describing how to automate pipelines.  The pipelines steps would include one or more steps to rebuild infrastructure by code and **environment**s as required, redeploy **SaaP** **systems** to it, restore full and intermediate data backups as required to meet **quantified** **RTO** objectives. |
| **Prompts** |  |

##### TR-DEL-DOC-ID: **Disaster Continuity Plan**

|  |  |
| --- | --- |
| **Category** | Transition/Deliverables/Documentation |
| **Responsible** | Sponsor |
| **Statement** | The sponsor organisation [**MUST**](#Term_MUST) develop and document a business continuity plan. |
| **Rationale** |  |
| **Details** | Disaster Continuity Plans are developed to document how a Disaster Recovery will be first attempted, and if that fails how business services will be continued to be offered using alternate means (e.g., sometimes paper based, using previously printed data that may be considered as acceptable to use in the meantime). |
| **Prompts** |  |

## Integrating

…

## Provisioning

Data provisioning occurs

##### TR-ID: **Provisioned Datasets**

|  |  |
| --- | --- |
| **Category** | Transitional/Provisioning |
| **Responsible** | Vendor |
| **Statement** | Datasets and Reference Data [**MUST**](#Term_MUST) be provisioned via authenticated, authorised, audited APIs. |
| **Rationale** | Bypassing validation introduces errors.  Permitting the bypassing of auditing introduces security risks. |
| **Details** | Loading Reference Data from spreadsheets and/or direct datastore instructions is specifically NOT permitted. |
| **Prompts** | Do the solution’s system(s) have APIs sufficient for migrating legacy data to them?  Does the vendor organisation have prior successful experience with ETL’ing legacy data? |

## Discovery

|  |  |
| --- | --- |
| **Category** | Transitional/Artefacts/Discovery |
| **Responsible** | Vendor |
| **Statement** | A **stakeholder map** [**MUST**](#Term_MUST) be developed and maintained. |
| **Rationale** | A stakeholder map is used to inform a stakeholder analysts development of a Stakeholder SME Registry, which is then used inform the gathering and development of Stakeholder Requirements. |
| **Details** | A stakeholder map is used to define users by influence and power, prioritisation of informing and accepting their input.  It is developed by a **stakeholder analyst**. |
| **Prompts** | … |

### Definition

##### TR-ID: **Business Requirements**

|  |  |
| --- | --- |
| **Category** | Transition/Definition |
| **Responsible** | Sponsor |
| **Statement** | Business Requirements MUST be developed to capture the problem, purpose and value expected from investing in the creation of the planned solution’s system(s). |
| **Rationale** |  |
| **Details** | Informs the subsequent development of the Stakeholder Requirements. |
| **Prompts** |  |

##### TR-ID: **Stakeholder Map**

|  |  |
| --- | --- |
| **Category** | Transitional/Definition |
| **Responsible** | Vendor |
| **Statement** | A stakeholder map **MUST** be developed, capturing **RASCI** related stakeholders. |
| **Rationale** |  |
| **Details** | Informs the development of the Stakeholder Requirements. |
| **Prompts** |  |

##### TR-ID: **Stakeholder Requirements**

|  |  |
| --- | --- |
| **Category** | Transitional/Definition |
| **Responsible** | Sponsor |
| **Statement** | Stakeholder Requirements MUST be developed, capturing how stakeholders expect to help deliver the business outcomes defined within the Business Requirements. |
| **Rationale** |  |
| **Details** | Informs the subsequent development of the Functional System Requirements. |
| **Prompts** |  |

## Constraints

## Evaluation

Determine the Data Classification of the system and its resources. This will impact email sending. Should not impact integration if they were already done securely.

## Development

Even SaaS and OTS SaaP solutions require the development of some custom code. These artefacts must meet defined expectations to be delivered and remain maintainable.

##### TR-QA-ID: **Sponsor Standards Based**

|  |  |
| --- | --- |
| **Category** |  |
| **Responsible** | Sponsor / Vendor |
| **Statement** | **Custom development** [**MUST**](#Term_MUST) be managed to continue to align with and meet the **sponsor organisation**’s system design and development principles, standards and guidance, if available. |
| **Rationale** | The solution’s system(s) and supporting automation may be being managed by a different organisation than the vendor, including the sponsor organisation. |
| **Details** | The maturity of organisations vary and evolve. Principles, standards and patterns may evolve at the same time.  Guidance should exist for: - Service, Security, Enterprise, System Design, Infrastructure, Delivery, and Development Principles - User Interface design standards - infrastructure, integration, system, and data storage development standards  - etc. |
| **Prompts** | … |

## Quality Assurance

##### TR-QA-ID: **Architectural Review**

|  |  |
| --- | --- |
| **Category** | Transitional/Quality Assurance |
| **Responsible** | Vendor |
| **Statement** | A sponsor organisation approved independent review MUST confirm the solution architecture and design and implementation meets available agreements, principles, and guidance. |
| **Rationale** | The solution’s design must be validated against approved design patterns to decrease the risk of the solution’s system(s) being insecure, unusable, inoperable, unsupportable, or unmaintainable. |
| **Details** | The validation is undertaken before first deployment and when there are architecturally significant changes to the architecture. |
| **Prompts** | Inquire as to the sponsor organisation’s governance bodies. |

##### R-QA-ID: **As Built Review**

|  |  |
| --- | --- |
| **Category** | Transitional/Quality Assurance |
| **Responsible** | Vendor |
| **Statement** | A sponsor organisation approved independent review MUST confirm the as built solution continues to adhere to the agreed solution architecture. |
| **Rationale** |  |
| **Details** | This validation is done before the first deployment and later at intervals. |
| **Prompts** |  |

##### TR-QA-ID: **Automated QA**

|  |  |
| --- | --- |
| **Category** | Transitional/Quality Assurance |
| **Responsible** | Supplier |
| **Statement** | Quality Assurance Testing, excluding Exploratory Testing, [**MUST**](#Term_MUST) be performed by automation within a delivery **pipeline**. |
| **Rationale** | Manual testing tasks grow to being too long to be able to be completed within delivery iterations, delaying delivering value to system users. |
| **Details** | The recommended approach is to develop testing stages within a delivery pipeline: - Static Testing on the code, irrespective of the environment. - Dynamic Testing in the Non-Production Data Build Test (BT) environment. - Performance Testing in the User Test (UT) environment. |
| **Prompts** | Does the team resources include a Test Developer? Is the Test Developer capable of developing tests (as opposed to recording operation sequences using a Testing platform)? |

## Accreditation

TODO

## Change Control

|  |  |
| --- | --- |
| **Category** |  |
| **Responsible** | Vendor |
| **Statement** | Deployments of systems and/or data to Production Data Environments MUST be controlled by the sponsor organisation’s change control processes. |
| **Rationale** |  |
| **Details** | Change control processes exist to ensure that support, operational and maintenance stakeholders accept that they have received sufficient artefacts to perform their roles. Aspects that are checked include but are not limited to:  - the acceptance of a developed **Application Support Guide (ASG)**. - the acceptance of developed training material - the acceptance of business service operations documentation - the acceptance of Quality Assurance reports - the acceptance of Privacy Assurance statement - the acceptance of Data statements  *Note: Depending on the solution, the above artefacts may vary in length and complexity.* |
| **Prompts** |  |

## Deployment

##### ID: **Domain Name Registration**

|  |  |
| --- | --- |
| **Category** | Transitional/Deployment |
| **Responsible** | Vendor |
| **Statement** | Service Domain Names MUST be obtained from the sponsor organisation. |
| **Rationale** | Users trust systems they are new to if they can recognise them as being offered by an organisation they already trust. |
| **Details** | The domain naming strategy must adhere with organisation domain naming guidelines. This requirement implies the NFRs include a requirement for the solution system(s) to be configured so as to be discoverable via custom domain names. |
| **Prompts** |  |

##### ID: **HTTP/S Certificates**

|  |  |
| --- | --- |
| **Category** | Transitional/Deployment |
| **Responsible** | Vendor |
| **Statement** | Certificates matching the solution’s system(s) DNS names MUST be obtained via the sponsor organisation. |
| **Rationale** | Certificates are required to encrypt communication channels between service clients and servers. |
| **Details** | Security is improved when certificates have a short lifespan forcing regular (automated) updating of the certificates.  90 days is the recommended lifespan. |
| **Prompts** |  |

##### ID: **Secure Deployments**

|  |  |
| --- | --- |
| **Category** | Transitional/Deployment |
| **Responsible** | Vendor |
| **Statement** | Solution system(s) [**MUST NOT**](#Term_MUST_NOT) be deployed with any high or medium security related issues. |
| **Rationale** | Users should not be forced to commit personal information to systems known to be insecure. |
| **Details** | **Important:** reclassifying security issues as being not related to security is a known tactical move and is not an acceptable solution. |
| **Prompts** |  |

##### TR-DEP-ID: **Deployment Approvals**

|  |  |
| --- | --- |
| **Category** | Transitional/Deployment |
| **Responsible** | Vendor |
| **Statement** | **SaaP** systems [**MUST NOT**](#Term_MUST_NOT) be deployed to **production data environments** without prior approval by the **sponsor**. |
| **Rationale** | The **sponsor** will require the deployment to change managed to coordinate with other activities (comms, etc.). |
| **Details** | Approval must be obtained by the **sponsor organisation** for either individual deployments, the *cadence* or *schedule* of automated deployments. |
| **Prompts** | … |

##### TR-DEP-ID: **Deployment Scheduling**

|  |  |
| --- | --- |
| **Category** | Transitional/Deployments |
| **Responsible** | Vendor |
| **Statement** | The scheduling of **SaaP** system(s) deployments [**MUST NOT**](#Term_MUST_NOT) coincide with sponsor organisation defined periods. |
| **Rationale** | The sponsor organisation has periods of the year (e.g., national holidays) when staff are reduced to a point that deployments cannot be monitored and/or managed to an acceptable level. |
| **Details** | The schedule of these dates is obtainable from the sponsor organisation’s internally published information. |
| **Prompts** |  |

##### ID: **Automated Infrastructure and Schema Development**

|  |  |
| --- | --- |
| **Category** | Transition/Delivery |
| **Responsible** | Vendor |
| **Statement** | IF an installed SaaP, the delivery pipeline MUST first develop the target environment’s infrastructure. |
| **Rationale** | The development of infrastructure |
| **Details** | The process will use the sponsor organisation’s preferred [Infrastructure as Code](#Term_InfrastructureAsCode) approach to do this. |
| **Prompts** | Does the vendor organisation have experience with [infrastructure as code](#Term_InfrastructureAsCode)?  Does the vendor organisation have experience with the vendor’s specific type of [infrastructure as code](#Term_InfrastructureAsCode)? |

##### ID: **Automated Compilation, Packaging, Deployment, Integration**

|  |  |
| --- | --- |
| **Category** | Transition/Delivery |
| **Responsible** | Vendor |
| **Statement** | The solution’s system(s) will be configured, data provisioned and dynamically tested by automation. |
| **Rationale** |  |
| **Details** |  |
| **Prompts** |  |

## Data Migration

Lists known tasks to migrate data from legacy systems to replacement systems.

##### TR-ID: **Migrated Legacy Data**

|  |  |
| --- | --- |
| **Category** | Transitional/Data/Migrations |
| **Responsible** | Vendor |
| **Statement** | Legacy system data [**MUST**](#Term_MUST) be loaded into the solution’s system(s) via authenticated, authorised, audited API endpoints. |
| **Rationale** | Bypassing validation introduces errors.  Permitting the bypassing of auditing introduces security risks. |
| **Details** | **ETL** operations may query legacy system datastores directly if their **API**s are insufficient, but they may not access the system’s operational datastores directly, bypassing operation auditing. Neither can databases backups be created elsewhere and loaded by backup restoration processes. Imported legacy records will require Transforming into the new schema’s shape. Additionally, **Foreign Keys** to **Reference Data** will require remapping. |
| **Prompts** | Do the solution’s system(s) have **API**s sufficient for migrating legacy data to them?  Does the vendor organisation have prior successful experience with **ETL**’ing legacy data? |

##### ID: **Data Provisioning**

|  |  |
| --- | --- |
| **Category** | Transitioning/Data |
| **Responsible** | Vendor |
| **Statement** | The solution’s system(s) MUST be provisioned with data only through its authenticated, authorised, audited, and validated [API](#Term_API)s. |
| **Rationale** | Authorisation, auditing and validation is not performed when importing data directly into datastores. |
| **Details** | Develop [custom supporting code](#Term_CustomSupportingCode) to invoke [API](#Term_API)s of source systems, transform the data as required, then call the [API](#Term_API)s of the target systems. Sources to consider as being viable sources are systems of record and legacy systems.  If the source system does not have [API](#Term_API)s it is acceptable to revert to querying its datastore directly, but the subsequent loading into new system(s) *must* remain via the target system [API](#Term_API)s. |
| **Prompts** | Does the solution’s system(s) have the [API](#Term_API)s required to provision data as needed to deliver the solution? Does the vendor organisation have sufficient current experience in developing ETL pipelines under these circumstances? Summarise how the process may work. |

##### ID: **Data Provisioning Automation**

|  |  |
| --- | --- |
| **Category** | Transition/Data |
| **Responsible** | Vendor |
| **Statement** | The vendor organisation will use approved technologies and approaches to automate the extraction, transformation and loading (ETL) from existing systems (legacy or otherwise) into validated endpoints of the solution’s system(s) [API](#Term_API)s. |
| **Rationale** |  |
| **Details** | … |
| **Prompts** | … |

## Support

…

## Monitoring

Must integrate with MoE’s Security Information and Event Management system (SIEM) and log all security events.

## Onboarding

Onboarding of organisations (not the same as onboarding users).

## Operating

##### TR-OPS-00: **Prenotification**

|  |  |
| --- | --- |
| **Category** | Transition/Operation |
| **Responsible** | Vendor |
| **Statement** | Downtimes of the service MUST be pre-notified. |
| **Rationale** | Let [Users](#Term_SystemUser) plan their reliance on the service. |
| **Details** | The notification must be via channels they access most regularly. |
| **Prompts** | Is the notification in-system? How is notification made to users not currently using the system? |

## Maintenance

##### QR-MAIN-GEN-00: **Maintained Current**

|  |  |
| --- | --- |
| **Category** | Transitional/Maintenance |
| **Responsible** | Vendor |
| **Statement** | The solution [SaaP](#Term_SaaP) service(s) components, dependencies and encryption algorithms MUST be kept current to quantified targets. |
| **Rationale** | Incremental small manageable updates improve security while decreasing the risk, documentation, and specialisation required for larger updates done at larger intervals. Systems that are not upgraded risk the risk of not be certifiable for use. |
| **Details** | Note:  this may best be defined as a transitional requirement. |
| **Prompts** | What strategy is used to remain abreast of service’s components versions, and prioritising work to upgrade libraries and components? What strategies are used to remain abreast of the available versions of dependent service [API](#Term_API)s, and prioritising work to upgrade to the latest version? What strategies are used to remain abreast of the available versions of cryptographic algorithms, and prioritising work to upgrade to the latest version? |

## Terminations

Systems are decommissioned. Vendor relationships conclude or are terminated.

##### TR-END-DATA-00: **IP & Data Deletion & Repatriation**

|  |  |
| --- | --- |
| **Category** | Transitional/Terminations |
| **Responsible** | Vendor |
| **Statement** | Upon request, the **vendor** **MUST** return or delete or repatriate as directed all **sponsor** IP and data accumulated while collaborating with the **sponsor**. |
| **Rationale** | Access to data or IP in an unregulatable and/or unmonitorable manner may be used in contravention of data use disclosures or become a security risk. |
| **Details** | Consider Material collected or developed for Discovery, Definition, Design, Development, Assurance, Delivery, Operation, Maintenance. This may include but is not limited to collecting all copies of: - System and Processes Documentation - Reports  - Developed Media - System Design Documentation - System Access Credentials While Vendors should only have access to non-production data, consider still retrieving all copies of:  - Reference Data - Test Data - [System Data](#Term_SystemData) (Backup or Operational) |
| **Prompts** |  |

Appendices

Appendix A - Document Information

### Images

[Figure 1: TODO Image 2](#_Toc144995112)

### Tables

[Table 1: TODO Table 3](#_Toc145048484)

[Table 2: TODO Table 2 3](#_Toc145048485)

### References

**There are no sources in the current document.**

### Review Distribution

The document was distributed for review as below:

|  |  |
| --- | --- |
| Identity | Notes |
| Sandy Britain, Enterprise Architect |  |
| Duncan Watson, Enterprise Architect |  |
| Amy Orr, Data Domain Architect |  |
|  |  |

### Audience

The document is technical in nature, but parts are expected to be read and/or validated by a non-technical audience.

### Structure

Where possible, the document structure is guided by either ISO-\* standards or best practice.

### Diagrams

Diagrams are developed for a wide audience. Unless specifically for a technical audience, where the use of industry standard diagram types (ArchiMate, UML, C4), is appropriate, diagrams are developed as simple “box & line” monochrome diagrams.

#### Conditional Terms

**IF**

: a conditional statement defining the case(s) in which the requirement [**statement**](#Term_Statement) applies – typically defining whether it applies to solutions where the system(s) are [**SaaS**](#Term_SaaS) or [**Custom**](#Term_CustomSystem) or [**OTS**](#Term_OTS) [**SaaP**](#Term_SaaP) solutions.

**THEN**

: the desired outcome of a [conditional](#Term_IF) [**statement**](#Term_Statement).

**ELSE**

: the alternate outcome if the conditional statement is not met.

#### Modal Terms

[Requirement](#Term_Requirement) [statement](#Term_Statement)s are developed as one of the following modals:

**MUST** : an Obligation statement.

**SHOULD** : an Recommendation statement.

**COULD** : an permission statement.

**MUST NOT** : an Prohibition statement.

### Terms

Refer to the project’s Glossary.

##### IT

: acronym for Information, using Technology to automate and facilitate its management.

##### ICT

: acronym for Information & Communication Technology, the domain of defining Information elements and using technology to automate their communication between entities. IT is a subset of ICT.

Appendix B – Requirement Template

The following is the template used to describe a requirement in this document:

##### ID: **Title**

|  |  |
| --- | --- |
| **Category** |  |
| **Responsible** | Vendor |
| **Statement** | [**IF**](#Term_IF) … [**THEN**](#Term_THEN) … **ELSE** … |
| **Rationale** |  |
| **Details** |  |
| **Prompts** |  |

Appendix D – TODO

The following requirements are to be completed and categorized.

##### **TODO**

Document Repository

Code Repository

Work Item Management

ALM

Tools Used Must be agreed

Methodologies Must be agreed

Twilight./ Supported Technologies