DATA ITEM DESCRIPTION

1. DID NUMBER: DID-ENG-MGT-GP-V5.3
2. TITLE: GROWTH PLAN
3. DESCRIPTION AND INTENDED USE

The Growth Plan (GP) documents the Contractor’s plans and expectations for the management of technology changes for the system during the acquisition phase (ie, design, development and production) and over its Life-of-Type (LOT). The primary target of the GP is the Mission System; however, it shall also apply to any critical, high value Support System Components. Where the term ‘system’ is used in this DID, it encompasses both the Mission System and the critical, high-value Support System Components.

The Contractor uses the GP:

to document the approach, plans and procedures for managing technology changes over the LOT of the system;

to document the approach, plans and procedures that avoid Obsolescence problems at the time of delivery; and

as a baseline against which progress of these activities are monitored.

The Commonwealth uses the GP to:

gain an accurate insight into the approach, plans and procedures being employed by the Contractor in the execution of activities related to the management of technology changes;

ensure that the Contractor's design, development and production programs will not deliver equipment that has Obsolescence problems at the time of delivery; and

ensure that the Contractor’s solutions for the Mission System and Support System minimises Life Cycle Costs (LCC) when system growth and Obsolescence issues are taken into consideration.

1. INTER-RELATIONSHIPS

The GP is subordinate to the following data items, where these data items are required under the Contract:

Project Management Plan (PMP);

Systems Engineering Management Plan (SEMP);

Integrated Support Plan (ISP); and

Support Services Management Plan (SSMP).

The GP inter-relates with the following data items, where these data items are required under the Contract:

Life Cycle Cost Management Plan (LCCMP);

Life Cycle Cost Report and Model (LCCRM); and

System Review Plan (SRP).

1. APPLICABLE DOCUMENTS

The following documents form a part of this DID to the extent specified herein:

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| 1. Nil. |  |

1. PREPARATION INSTRUCTIONS
   1. Generic Format and Content

The data item shall comply with the general format, content and preparation instructions contained in the CDRL clause entitled ‘General Requirements for Data Items’.

The data item shall include a traceability matrix that defines how each specific content requirement, as contained in this DID, is addressed by sections within the data item.

* 1. Specific Content
     1. Growth, Evolution and Obsolescence Program Organisation

The GP shall identify and describe in detail the responsibilities of the organisation(s) and individuals tasked with managing the growth, evolution and obsolescence program, including those of Subcontractors.

The GP shall describe the relationship of the growth, evolution and obsolescence program to other speciality engineering, Integrated Logistics Support (ILS) and project management programs undertaken by the Contractor. In particular, the GP shall describe the relationship of the growth, evolution and obsolescence program to the technical metrics program.

* + 1. Candidate Elements

The GP shall identify candidate elements for change based on an assessment of the potential areas of the system that may change during the post-design phase (ie, post-DDR) or over the LOT of the system due to:

evolution of technology;

changes to threats;

changes to user needs;

changes to external systems and interfaces including, if applicable, changes to host systems (ie, the Materiel Systems, platforms or information technology networks for which the system being analysed is a component); or

system enhancements or upgrades.

Choice of candidate elements should include a consideration of system hardware and software, as well as elements that interface and integrate with humans. An element may be at any level of the system hierarchy and is not necessarily a Hardware Configuration Item (HWCI) or Computer Software Configuration item (CSCI) (ie, elements may include subsystems, segments or groups of design components).

The primary candidate elements are expected to come from the Mission System; however, candidate elements should also be identified for any critical, high value Support System components. Candidate elements are to include those elements under the control of Subcontractors.

The GP shall include the rationale for either including or excluding elements of the system as candidate elements for change. Although candidate elements may be assessed early in the design process, the list needs to be reassessed (in updates to the GP) as the design matures and all parties develop greater knowledge of possible future changes.

* + 1. Design Aspects

The GP shall identify design aspects for each candidate element that would allow those candidate elements to be either replaced or modified with new or updated technology. Examples of relevant design aspects include the use of architectural features, such as:

standardised internal and external interfaces with the greatest potential design lifetime (ideally greater than the LOT);

an open, flexible infrastructure, capable of adaptation, extension and scaling to counter Obsolescence and to provide new functionality and capacity;

modularity of design;

use of standards and 'openness' of architecture; and

minimisation of software dependence upon the hardware platform.

Key interfaces are those most likely to be subject to change or with the greatest desired design life. The GP shall identify the key internal and external interfaces at which future change is likely to occur and discuss the design approach taken to ensure interface longevity.

The GP shall identify likely impacts upon performance of the system that may be expected due to 'natural' evolution of technology and the consequence of that increased performance to the longevity of the overall design.

* + 1. Acquisition Phase

For the identified candidate elements, the GP shall identify the steps that will be taken by the Contractor, including the applicable scheduling and purchasing approach, to ensure that:

at the time of delivery, a balance has been achieved between the risks of immature technology and equipment Obsolescence (noting that a primary aim of the GP is to demonstrate that the Contractor has incorporated appropriate steps into its design-and-development plans to ensure that it will not deliver equipment that has Obsolescence problems); and

the Contractor’s solutions for the Mission System and Support System will minimise LCC (as demonstrated in accordance with the Approved LCCMP) when any expected through-life upgrades and enhancements are taken into consideration.

The GP shall identify the issues relating to system growth that will be addressed at each Mandated System Review and each Internal System Review. The entry and exit criteria and checklist items for each review, which relate to system growth, should be included in the SRP.

The GP shall identify the key decision points in the schedule where design or purchasing decisions, which relate to either system Obsolescence or system growth, need to occur and the visibility of these that will be provided to the Commonwealth.

The GP shall describe the Contractor’s methodology for incorporating the growth, evolution and obsolescence program into the LCC program (with appropriate cross-references to the LCCMP).

* + 1. Support Phase

For the identified candidate elements, the GP shall identify the expected need for upgrades over the LOT due to the evolution of technology, as well as the Contractor’s plans and timeframes for incorporating any such upgrades.

The GP shall identify and explain any implications for the Commonwealth of not maintaining the system delivered to the Commonwealth with the most current configuration of that system, or applicable subsystem, as it is upgraded by the original equipment manufacturer throughout the LOT. To the extent known, the GP shall also identify any implications should the Commonwealth choose not to proceed with any particular upgrade.

* + 1. Technical Data and Software Rights

For each of the areas of potential system growth over the LOT, including the key interfaces discussed in response to clause 6.2.3.2, the GP shall identify any issues or limitations associated with Technical Data and Software rights (including limits caused by the licensing of Intellectual Property), the implications of those issues and limitations, and how the Contractor proposes that these are to be addressed.