DATA ITEM DESCRIPTION

1. DID NUMBER: -V5.2
2. TITLE:  GROWTH PROGRAM REPORT
3. DESCRIPTION and intended use

The Contractor’s program for the management of technology changes for the system, during the Contract and over its Life-of-Type (LOT), is described in the Systems Engineering Management Plan (SEMP). The Growth Program Report (GPR) documents the outcomes of the growth, evolution and Obsolescence program, and enables its success to be assessed. 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 GPR to:

document the approach and procedures for managing technology changes over the LOT of the Mission System;

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

present analysis to identify technological opportunities that might lead to improved Supportability of the Mission System and Support System Components; and

present the progress of these activities up to Final Acceptance.

The Commonwealth uses the GPR to:

gain an accurate insight into the approach 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;

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

monitor progress in achieving the above activities up to Final Acceptance.

1. INTER-RELATIONSHIPS

The GPR is subordinate to the SEMP, and should be consistent with the standardisation aspects of the Integrated Support Plan (ISP) and the System Specification (SS).

1. Applicable Documents

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

|  |  |
| --- | --- |
| *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. General

The GPR shall be developed progressively during the Contract so that the Commonwealth may assess that:

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

the Contractor’s solution for the Materiel System minimises LCC when system growth and Obsolescence issues are taken into consideration.

* + 1. Candidate Elements with Potential for Growth

The GPR shall document the reasons for selecting elements assessed by the Contractor to have the potential to change during the post-design phase (ie, post-DDR) or over the LOT of the Mission System due to:

evolution of technology,

changes to threats,

changes to user needs,

changes to external systems and interfaces; or

system enhancements or upgrades.

Choice of candidate elements should include a consideration of both system hardware and Software, and elements that interface with humans. An element may be identified 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, some may be identified from critical, high-value Support System Components. Candidate elements are to include those elements under the control of Subcontractors.

* + 1. Design Aspects

The GPR shall explain how the system design has made provision for 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 functions 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 GPR 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 GPR 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. Support Phase

For the identified candidate elements, the GPR 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 GPR 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 as it is upgraded by the Contractor through the LOT. The GPR 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 GPR shall identify any issues and limitations associated with Technical Data and Software rights (including limits caused by the licensing of Intellectual Property) and how the Contractor proposes that these be addressed.