NCIA/ACQ/2020/6765
05 June 2020

To   :   See Distribution List

Subject   :   Distribution of MS-CO-115226-P3SM**:**
NCI Agency Market Survey Request
Project Portfolio, Program and Service Management (P3SM) Solution

1.   Forwarded herewith for your action is a copy of the subject Market Survey Request.

2.   The effective date of this Market Survey Request is: 05 June 2020.

For the Director of Acquisition:

Ijeoma Ike-Meertens
Senior Contracting Officer

NCIA/ACQ/2020/6761
05 June 2020

Market Survey Request for Information

Project Portfolio, Program and Service Management (P3SM) Solution

MS-CO-115226-P3SM

The NCI Agency is seeking information from Nations and their Industry in order to assess the feasibility of the delivery of a Project Portfolio, Program and Service Management (P3SM) Solution.

NCI Agency Contracting Officer: Mrs. Ijeoma Ike-Meertens
E-mail: Ijeoma.Ike-Meertens@ncia.nato.int

To: See Distribution List

Subject: NCI Agency Market Survey Request MS-CO-115226-P3SM Project Portfolio, Program and Service Management (P3SM) Solution

1. NCI Agency requests the assistance of the Nations and their Industry to identify available Commercial-Off-The-Shelf (COTS) solution to meet the requirement for Project Portfolio, Program and Service Management.

2. This Market Survey is being issued to identify potential solutions and possible suppliers.

3. The broadest possible dissemination by Nations of this Market Survey Request to their qualified and interested industrial base is requested.

4. Responses shall in all cases include the name of the firm, telephone number, e-mail address, designated Point of Contact, and a NATO UNCLASSIFIED description of the capability available and its functionalities. This shall include any restrictions (e.g. export controls) for direct procurement of the various capabilities by NCI Agency.

5. The NCI Agency reference for this Market Survey Request is MS-CO-115226-P3SM, and all correspondence and submissions concerning this matter should reference this number.

6. A summary of this emerging requirement is set forth in the ANNEX B attached hereto.

7. Other supporting information and documentation (technical data sheets, marketing brochures, catalogue price lists, descriptions of existing installations, etc.) are also desired.

8. The Market Survey will **ONLY** be assessed on the responses to questions in ANNEX C – Market Survey Questionnaire. ANNEX D & ANNEX E are details of the requirement.

9. Responses are due back to NCI Agency no later than **12:00 hours (The Hague Time) on 03 July 2020**.

10. Please send all responses, via email, using MS-CO-115226-P3SM in the title of the email to: Ijeoma.Ike-Meertens@ncia.nato.int

11. The Agency reserves the right to request a solution demonstration of the described solution. However, given the current global landscape, any solution demonstration will be delivered via video conferencing tool at the discretion of the Market Survey Respondent.

12. Any response to this request shall be provided on a voluntary basis. Responses to this request, and any information provided within the context of this survey, including but not limited to pricing, quantities, capabilities, functionalities and requirements will be considered as indicative and informational only and will not be construed as binding on NATO for any future acquisition.

13. The NCI Agency is not liable for any expenses incurred by firms in conjunction with their responses to this Market Survey and this Survey shall not be regarded as a commitment of any kind concerning future procurement of the items described.

14. Your assistance in this Market Survey request is greatly appreciated.

For the Director of Acquisition

Gael Craver
Principal Contracting Officer

Enclosures:

1. ANNEX A - Distribution List
2. ANNEX B - Market Survey Requirements
3. ANNEX C - Market Survey Questionnaire
4. ANNEX D - P3SM System and User Requirements
5. ANNEX E - P3SM User Stories
6. ANNEX F - Solution Demonstration Scope

ANNEX A.
Distribution List for Market Survey
NATO Delegations (Attn: Military Budget Committee or Infrastructure Adviser):

Albania	1
Belgium	1
Bulgaria	1
Canada	1
Croatia	1
Czech Republic	1
Denmark	1
Estonia	1
France	1
Germany	1
Greece	1
Hungary	1
Iceland	1
Italy	1
Latvia	1
Lithuania	1
Luxembourg	1
Montenegro	1
The Netherlands	1
North Macedonia	1
Norway	1
Poland	1
Portugal	1
Romania	1
Slovakia	1
Slovenia	1
Spain	1
Turkey	1
United Kingdom	1
United States	1

Belgian Ministry of Economic Affairs   1

Embassies in Brussels (Attn: Commercial Attaché):

Albania	1
Bulgaria	1
Canada	1
Croatia	1
Czech Republic	1
Denmark	1
Estonia	1
France	1
Germany	1
Greece	1

Hungary	1
Italy	1
Latvia	1
Lithuania	1
Luxembourg	1
Montenegro	1
The Netherlands	1
North Macedonia	1
Norway	1
Poland	1
Portugal	1
Romania	1
Slovakia	1
Slovenia	1
Spain	1
Turkey	1
United Kingdom	1
United States (electronic copy to brussels.office.box@mail.doc.gov)	1

Distribution for information

NATO HQ

NATO Office of Resources Management and Implementation Branch – Attn: Deputy Branch Chief	1
NATO HQ C3 Staff Attn: Executive Co-ordinator	1

NCI Agency –Internal Distribution

ACQ Director of Acquisition	1
ACQ Deputy Director of Acquisition	1
ACQ Contract Award Board Administrator	1
ACQ Chief of Contracts	1
ACQ Principal Contracting Officer	1
SSBA Service Line Chief	1
EBA Program Manager	1
SSBA Service Delivery Manager	1

ANNEX B.

MARKET SURVEY REQUIREMENTS FOR
PROJECT, PORTFOLIO, PROGRAM AND SERVICE MANAGEMENT
(P3SM) SOLUTION

1.   Scope

1.1.   NCI Agency is performing a market survey in order to identify available Project, Portfolio, Program and Service Management solutions on the market that fulfil the requirements presented below. At this stage, NCI Agency is willing to evaluate all the available systems on the market which can provide technological, robust, capable and cost effective solution to NATO.

1.2.   The NCI Agency delivers capabilities to NATO through projects and provides Communications and Information Systems (CIS) services used within NATO. To facilitate the delivery of these projects and services the Agency uses best practice Project Management and Service Management methodologies and tools, namely PRINCE2, Managing Successful Programmes (MSP) and Information Technology Infrastructure Library (ITIL), with the MS EPM 2010 (Microsoft Enterprise Project Management) toolset as the primary enabler.

2.   Current P3SM Solution

2.1.   MS EPM is used by the Agency for planning both projects and services and enables the Agency to be a professional projects and services delivery organisation. MS EPM comprises a number of distinct, but fully integrated modules:

2.1.1. MS-Project Professional client – used by Project and Service Managers (PSMs) to plan the activities required to deliver to the customer, and then to assign the resources that are required to execute the activities.

2.1.2. Time Accounting System (TAS) – used by all staff members and Interim Workforce Capacity (IWC) to record the time that they spend on specific activities.

2.1.3. Windows SharePoint Sites (WSS) – SharePoint site to be used to manage all project related documents, risks, issues etc.

2.1.4. Business Intelligence Centre – used by all staff working within the P3SM domain to run reports against the MS EPM reporting data warehouse facilitating Project reporting, Resource Management, Business Planning etc.

2.2.   MS EPM was originally implemented within NC3A in 2004, and was adopted as the P3SM tool when the NCI Agency was created in July 2012.

2.3.   Since 2004 a number of business extensions have been applied to the MS

EPM environment to enable the NCI Agency business rules to be enforced; please note that none of these impact on the core MS EPM product, i.e. they are not customisations, though they do extend the Project Server data schema. These cover aspects such as:

2.3.1. Data Quality Indicators
2.3.2. Project Template and planning protections within the MS EPM client
2.3.3. MS Project extensions for custom NCIA controls
2.3.4. Project mapping between MS EPM and financial systems
2.3.5. Milestone tracking
2.3.6. Offline Baselining
2.3.7. Integration with the Agency Financial System, EBA (based on Oracle EBS)
2.3.8. Multiple reporting solutions to enable Resource Management, Project Tracking etc.:
2.3.8.1. Time Accounting Control
2.3.8.2. Resource Management
2.3.8.3. Workload / work capacity management
2.3.8.4. Project Tracking Dashboard
2.3.8.5. Agency Project and Resource Management (APRM) tool
2.3.8.6. Price Proposal Pricing Sheet
2.3.8.7. Electronic Project Highlight Reports (ePHRs)
2.3.8.8. Risk Management.
2.3.8.9. Resource rates updater
2.3.8.10. Timesheet extensions and timesheet reports for IWC

3.   P3SM Interface Requirements

3.1. The NCI Agency's P3SM tool has two-way interfaces between MS EPM and Oracle EBS enabling the proper exchange of information between the Project Management domain and the other business areas such as Finance, Acquisition and Human Resources Management.

3.1.1. Projects are created in MS EPM and header information passed to Oracle for creation of "Master Projects".
3.1.2. Projects in MS EPM are mapped to one or more financial "Tasks" in Oracle Project Accounting.
3.1.3. Project labour actuals are collected by MS EPM, aggregated and passed to Oracle Project Accounting.
3.1.4. Non-labour expenses are covered through transactions in Oracle EBS and passed in aggregate to MS EPM.
3.1.5. Cost Budgets are created through the EPM-to-Oracle interface and passed to Oracle EBS.
3.1.6. Financial Reporting can be done through Oracle EBS, but MS EPM and Excel are frequently used tools for detailed P3SM reporting.
3.1.7. Some of the P3SM start-up and initiation process workflows are covered through the K2 workflow engine, thereby applying some control over P3SM procedures.

4.   Requirements/Functionalities

4.1.   The NCI Agency's goal for P3SM is to move to a COTS product and out-of-the-box business processes in every instance where it is technically feasible. It is assumed that very minimal or no customisation will be required to adapt these COTS products to meet the implementation requirements.

4.2.   Please refer to Annex D and E and focus on "Must Haves" requirements.

5.   Life Cycle information

5.1.   The system design should minimise total system life cycle costs, including its future Operations and Maintenance (O&M).

5.2.   The software and hardware environment in NATO are in the process of being upgraded by the IT Modernisation project based on a modern data centre approach. However, note that the majority of the NATO systems run on Microsoft/LINUX operating systems and must be capable of running in a virtual environment (VMWare Hypervisor).

ANNEX C.

1. Questionnaire

Organisation Name:

Contact Name & Details:

Notes:

1. Please **DO NOT** alter the formatting. If you need additional space to complete your text then please use the 'Continuation Sheet' at the end of this Annex and reference the question to which the text relates to.

2. Please feel free to make assumptions, *HOWEVER* you must list your assumptions in the spaces provided.

3. Please **DO NOT** enter any company marketing or sales material as part of your answers within this market survey. But please submit such material as enclosures with the appropriate references within your replies. If you need additional space, please use a continuation sheet and clearly refer to the question being answered

4. Please **DO** try and answer the relevant questions as comprehensively as possible.

5. All questions within this document should be answered in conjunction with the summary of requirements in ANNEX B.

6. All questions apply to Commercial or Government respondees as appropriate to their Commercial off the Shelf (COTS) or Government off the Shelf (GOTS) products.

7. Cost details required in the questions refer to Rough Order of Magnitude (ROM) including all assumptions the estimate is based upon.

2. General Questions

1. Do you have an in-service P3SM solution that currently meets the requirements as detailed in ANNEX B, ANNEX D, ANNEX E.

2. Can your solution be implemented on-premise and a Software as a Service (SaaS) model?
3. What is the migration path from on-premise to SaaS?

4. Does your COTS product use a SQL Server/Oracle database infrastructure? If not, elaborate.

5. Provide details of where it is used and deployed and the number of users.

3. Detailed Questions

1.   COTS Solution

1.1.   Please indicate the areas in ANNEX D and ANNEX E where your solution would not meet either entirely or partially.

1.2.   Is your proposed system/technology currently in active service as a COTS solution? If so, where and what types of support does your organisation currently provide for such a capability?

1.3.   Please provide the following information regarding current and previous uses of your available COTS solution:

1.3.1. Names of customers/users.
1.3.2. UNCLASSIFIED details on the specific programme your COTS solution supported.
1.3.3. Overview of any modifications to the COTS solution necessary to support these customers and the licensing terms applicable to modifications of the COTS product, stating also whether those will be assigned to the NCI Agency (Foreground/Background IPR).

1.4.   Please provide us with any additional capabilities of your COTS solution that go above and beyond those included in ANNEX B.

1.5.   Advantages & disadvantages of your product/solution/organization.

1.6.   Any other supporting information you may deem necessary including any assumptions relied upon.

2.   Commercial Aspects

2.1.   Are there any restrictions on the use and deployment of the P3SM solution within: NATO; NATO nations or NATO Deployed operations?

3.   Rough Order of Magnitude (ROM) price data

3.1.   Please provide a ROM pricing data for solution.

4.   Previous NATO or Equivalent National Defence Experience

4.1.   Does your company have experience in achieving Security Certification and Accreditation through the NATO or equivalent national defence process? Please list applicable past projects where such certifications were achieved.

4.2.   Does your company have experience in achieving approval through the NATO Request for Change (RFC) or an equivalent national defence process? Please list applicable past projects.

ANNEX D.
P3SM System and User Requirements

Requirements ID	Description	MoSCoW Priority
A. Classification of Data		
P3SM_TECH_001	The P3SM Capability must be able to manage information in the following NATO categories: 1. NATO Unclassified (NU) 2. NATO R*str*cted (NR)	Must
P3SM_TECH_002	For interface data the P3SM Capability must be able to create as required (if it does not exist at the source), include and maintain the appropriate Security Classification and Releasability information for each record within the interface data through the use of NATO XML Labelling standards.	Must
P3SM_TECH_003	Each P3SM output must have a classification assigned, which is kept through any export or print operation, decided by the user triggering the output.	Must
P3SM_TECH_004	There must be protection from unauthorised or unintended data deletion.	Must
B. Data Migration		
P3SM_TECH_005	Policies and procedures managing the conversion of data from the legacy P3SM systems to the new P3SM capability must be established.	Must
P3SM_TECH_006	If data transformation becomes necessary, the data custodians must approve the accuracy and validity of this transformation.	Must
P3SM_TECH_007	There must be a clear definition of entities to be migrated, structure and dependencies. This must be captured in a template to facilitate data export from legacy systems.	Must
P3SM_TECH_008	The data in the legacy systems must be accessible for a period of 10 years.	Must
C. Service Transition		
P3SM_TECH_009	All Verification and Validation activities must be performed on a reference / test environment that suitably reflects the target	Must

	production environment.	
P3SM_TECH_010	P3SM documentation must meet Request for Change (RFC) submission and release package requirements.	Must
P3SM_TECH_011	All P3SM code, customizations and configurations must be baselined and stored in the designated NCI Agency configuration management tool upon submission of the RFC.	Must
P3SM_TECH_012	The Service Transition Plan must address the move from legacy software to the new P3SM capability.	Must
P3SM_TECH_013	Operational Level Agreement (OLA) with business units must be in place prior to Go Live.	Must
P3SM_TECH_014	Approved Fielded Product List (AFPL) and the Service Portfolio must be appropriately updated.	Must
P3SM_TECH_015	Training Plan must address technical knowledge transfer and user training.	Must
P3SM_TECH_016	User Acceptance tests must be part of each iteration and the relevant user stories must have been accepted before RFC is released for a particular release.	Must
P3SM_TECH_017	P3SM releases must be security accredited before Go Live.	Must
P3SM_TECH_018	P3SM licenses must be obtained before Go Live.	Must
P3SM_TECH_019	1. System to be normally available during NCI Agency working hours 2. The live environment must be fully supported every working day from 08:00 to 18:00 apart from pre-agreed downtime 3. Planned maintenance must be scheduled and communicated 4. Availability measurement will be based on supported hours only	Must
P3SM_TECH_020	The P3SM capability must support the following user profiles: 1. Demand / Account management – 40 2. Project/Service management – 250 3. Resource management – 50 4. Time Management – 1000 5. Portfolio Management – 50 6. Programme Management – 20 7. Time Booking - 3500 The capacity must support 10% potential growth in the next 5 years.	Must
P3SM_TECH_021	Incidents in the different priority categories must be resolved as defined here:	Must

	1. For P1 incidents, 30 minute response time within supported hours 2. For P2 incidents, 60 minute response time within supported hours 3. For P3 incidents, 4-hour response time within supported hours 4. For P4 incidents, 24-hour response time within supported hours	
P3SM_TECH_022	All changes must follow documented and agreed change management process.	Must
P3SM_TECH_023	Service Management reports must be delivered on-time and in the agreed format.	Must
P3SM_TECH_024	P3SM vendor or implementer must be able to provide 3rd level support after Go Live.	Must
D. Performance and Capacity		
P3SM_TECH_025	The P3SM capability must be able to open and save projects within a short time frame, preferably no more than a few seconds.	Must
E. Scalability		
P3SM_TECH_026	The P3SM solution must be able to support a minimum of 2000 active projects, with a potential to grow 10% in the next 5 years.	Must
F. Operability		
P3SM_TECH_027	P3SM must collect performance data and provide reports that enable measurement of service levels against service level targets.	Must
P3SM_TECH_028	P3SM must have monitoring in place to trigger alerts if pre-defined thresholds (e.g. disk, CPU and memory utilization) are exceeded.	Must
P3SM_TECH_029	P3SM should monitor for all key events involved in the support of business processes. This should include, but not be limited to 1. Arrival of data through interfaces 2. Initiation and completion of batch processes 3. Initiation and completion of system backup	Should
P3SM_TECH_030	System Center Operations Manager (SCOM) should be configured to enable Alert monitoring at Service desk level.	Must
P3SM_TECH_031	Logs must be accessible online and provide detailed information on each event.	Must
P3SM_TECH_032	An automated facility must exist to archive system log files (e.g. event and security log files) on a regular basis. Application logs	Must

	must be online for a minimum of 45 days, technical logs online for a minimum of 28 days.	
P3SM_TECH_033	Support staff must be capable of providing the level of support as defined in the Service Level Agreement to the users prior to Go Live.	Must
P3SM_TECH_034	Contractor staff must have access to the required production and test environments, but must not be able to update the live data without authority.	Must
P3SM_TECH_035	An agreed proportion of the Service Desk and Support staff must be trained on the system prior to Go Live (separately for each release).	Must
P3SM_TECH_036	Automated backup and restore processes must be in place, including documentation, before Go Live.	Must
P3SM_TECH_037	A formal policy to manage the backup of data and storage of backup media is established.	Must
P3SM_TECH_038	A policy for monitoring backups is implemented.	Must
P3SM_TECH_039	Full recovery procedures, responsibilities and escalation paths must be documented for partial and complete failure of the environment and be tested.	Must
P3SM_TECH_040	The maintenance of data integrity during recovery from failure of all major elements must be demonstrated.	Must
P3SM_TECH_041	Recovery from an agreed set of failures (e.g. database failures) must be proven to be achievable within the time scales agreed.	Must
P3SM_TECH_042	Reliability of recoveries must be demonstrated – clear and concise acceptance criteria proving reliability should be documented and tested.	Must
P3SM_TECH_043	P3SM must be able to interoperate with interfaced and integrated systems consistent with interface requirements.	Must
G. Release Management		
P3SM_TECH_044	Release management shall be integrated with the customer requirements management, enterprise change management and service asset and configuration management (SACM) processes.	Must
P3SM_TECH_045	Releases shall only be produced in response to authorized requests for change (RFC), changes can be: 1. new and improved business functionality in the form of Business Change Requests (BCR) 2. technical changes in the form of Engineering Change Proposals (ECP)	Must

	3. Corrective, adaptive or perfective fixes. 4. The scope of releases in response to emergency changes shall be limited to repairing identified errors.	
P3SM_TECH_046	Releases shall be classified according to urgency and expected life span into: 1. Emergency Releases 2. Standard Releases 3. Long Term Support (LTS) Releases	Must
P3SM_TECH_047	Releases shall be produced in accordance with a Service Design Package approved by NCI Agency appropriate Service Lines.	Must
P3SM_TECH_048	Complex software products shall be developed applying an iterative and incremental development approach. The time to produce a single release shall in principle not exceed one year.	Must
P3SM_TECH_049	Releases shall be planned in advance, fully verified, validated and tested.	Must
P3SM_TECH_050	Releases shall be produced methodically to ensure that required quality assurance (QA) steps are performed and releases can be produced in a predictable way.	Must
P3SM_TECH_051	Releases shall be predictable and in accordance with the NCI Agency release schedule	Must
P3SM_TECH_052	Releases shall conform with the NCI Agency Architecture and NATO approved interoperability requirements	Must
P3SM_TECH_053	Releases in response to emergency changes shall be produced in accordance with special emergency operations procedure approved by management. For emergency changes and highly urgent requirements, release management processes may be compressed as required, if certain release management activities are skipped those activities must be conducted retrospectively.	Must
P3SM_TECH_054	With the exception of emergency releases, implementations of changes will be managed in the framework of a project in accordance with PRINCE2®.	Must
H. Deployment Management		
P3SM_TECH_159	Be integrated with the configuration and change management processes. Only Release Units from the centrally-managed NCI Agency Definitive Media Library (DML), with the complete deployment package(s), shall be used for deployment on NCI Agency operated and maintained networks.	Must
P3SM_TECH_055	Plan the deployment of all services, systems, software and	Must

	hardware; and shall agree with Service Lines, Change Management, CSUs, Operations Centre (OpsCen), data centers and customers/users how and when to deploy the release.	
P3SM_TECH_056	Maintain an Agency Deployment Schedule with the ability to provide CSU-level schedules and Service Line (SL)-level schedules.	Must
P3SM_TECH_057	Ensure, in conjunction with Release Management and Service Lines, that all deployments can be rolled-back or remedied if unsuccessful.	Must
P3SM_TECH_058	Ensure, in conjunction with Service Lines, that the necessary plans, training, supporting materials and resources are made available to the CSUs (if applicable, also to the AMDC2/Customer Service Desk) to facilitate the effective delivery of Early Life Support and Service Operations.	Must
P3SM_TECH_059	Ensure that the deployment of new release units does not compromise the integrity, availability (including data migration) and functioning of any components of the deployed baseline.	Must
P3SM_TECH_060	Ensure that deployments are measured for success and failure in conjunction with Quality Assurance and Quality Management practices to assure utility and warranty. Furthermore, all lessons learned shall be incorporated into Continual Service Improvement (CSI).	Must
I. Supportability and Maintainability		
P3SM_TECH_061	It must be possible to apply Production fixes.	Must
P3SM_TECH_062	It must be possible to recover the system to its state immediately prior to a fix being applied.	Must
P3SM_TECH_063	It must be possible to restore D&TE and similar environments to a specified state.	Must
P3SM_TECH_064	Where configuration changes are made, they can be achieved seamlessly without interruption to the service where possible.	Should
P3SM_TECH_065	Responsibility for supporting /maintaining and enhancing each system (service, platform) component and each side of every interface must be clearly defined and documented.	Must
P3SM_TECH_066	The scope of maintenance responsibility must be identified and documented. The responsibilities of 3rd party suppliers must be clearly defined.	Must
P3SM_TECH_067	All hardware and software must have a current license and/or a current maintenance contract and be supported by the	Must

	manufacturer or supplier to an agreed level as specified in the service level agreement.	
P3SM_TECH_068	At point of delivery to NCI Agency, all system software, hardware and manuals must be currently supportable versions and fully supported by the Contractor and/or 3rd party suppliers.	Must
P3SM_TECH_069	The scope of warranty must be identified, documented and agreed prior to implementation.	Must
P3SM_TECH_070	Project cannot be closed until all teams have confirmed that the project deliverable is to a suitable standard to support and all required handover activities have been completed.	Must
P3SM_TECH_071	Release, Configuration and Change Management functions, including software version control standards, must be clearly defined, supported by appropriate procedures and tools, and assigned as organizational responsibilities. The procedures for releasing amended components into the live environment must be shown to be in place.	Must
P3SM_TECH_072	An IT standard configuration management (version / source) control mechanism must be installed between development environments and production environments. Procedures must be documented and tested.	Must
P3SM_TECH_073	All code or COTS deliveries must be accompanied by release notes.	Must
P3SM_TECH_074	The development architecture, including application design tools, version control software and all associated procedures must be passed to, understood and signed off by the NCI Agency. The NCI Agency must be capable of running all the procedures without Contractor assistance.	Must
P3SM_TECH_075	Any changes to the technical design during development, test or live must go through the agreed change control process.	Must
P3SM_TECH_076	The NCI Agency incident, change, configuration and problem management procedures must be followed for all incidents, changes and problems according to ITIL recommendations. In addition, the support areas MUST fully understand all procedures BEFORE production rollout.	Must
P3SM_TECH_077	No releases or changes, apart from emergency changes, should be planned for the service for an agreed period of time following live implementation. Fixes for known bugs should be planned and implemented in future releases.	Must

P3SM_TECH_078	The upgrade strategy and approach must be documented giving details of the expected life span of the current system components, their proposed replacements.	Must
P3SM_TECH_079	All Lessons Learned shall be incorporated into Continuous Service Improvement (CSI).	Must
P3SM_TECH_080	Only files or data required for the live operation and support of the system must be included in the software handed over to the support teams, i.e. all redundant files and data must be cleared.	Must
P3SM_TECH_081	The production environment specification must include the release/version number of each software, file and data item to be handed over to the NCI Agency.	Must
P3SM_TECH_082	The system must be maintainable by the level of staffing agreed. Any component of system development handed over to a support group must be accompanied by the level of skills transfer identified in the resource profiles provided by the project.	Must
P3SM_TECH_083	Installation guides should be of sufficient quality to enable support staff to install and back out changes to the live environment.	Must
P3SM_TECH_084	Technical knowledge transfer to NCI Agency System Managers must be part of handover.	Must
P3SM_TECH_085	P3SM must use the EBA Change Advisory Board for any changes proposed post-delivery.	Must
J. Service Change Management		
P3SM_TECH_086	Application/System modifications are implemented appropriately using a formal methodology. Changes are appropriately documented, tested and approved before migration to production.	Must
P3SM_TECH_087	Change Management shall be integrated with all phases of the Service Lifecycle, and in particular, coordinate and support the information exchange requirements within the NCI Agency.	Must
P3SM_TECH_088	Change Management shall reinforce the NCI Agency's approved Service Portfolio, by ensuring changes are in line with the Service Roadmaps, and pipeline services.	Must
P3SM_TECH_089	Changes shall be planned, verified, validated as requirements, tested and recorded, under Quality Assurance (QA).	Must
P3SM_TECH_090	Changes shall conform to the NCI Agency Architecture and NATO approved interoperability requirements for the destination environment of the service or supported service.	Must
P3SM_TECH_091	The scope of releases in response to emergency changes	Must

	(functional or security), shall be limited to repairing identified errors.	
P3SM_TECH_092	Emergency changes shall be managed in accordance with, special emergency procedures approved by management. For emergency changes and highly urgent requirements, the Change Management processes may be compressed, as required, if any change management activities are skipped, those activities must be conducted retrospectively.	Must
P3SM_TECH_093	Be driven by Strategic Planning and Requirements Management (in accordance with NCI Agency Architecture Management).	Must
P3SM_TECH_094	Support the Agency wide Release Cycle.	Must
P3SM_TECH_095	Ensure that changes do not compromise the integrity, interoperability and functioning of any components of the dependent systems.	Must
P3SM_TECH_096	Ensure that Change processes are measured for success and failure, via the Agency Quality Management Service. All lessons learned shall be incorporated into Continual Service Improvement (CSI).	Must
P3SM_TECH_097	All new Service Requests, or Request For Changes, that are non-Project and unfunded (generally arise from users, customers, or administrators), and not within the Service Catalogue, shall be raised to the next higher board until they reach the Service Change Control Approval Board (SCCAB) for approval, as changes to the Agency Service Catalogue.	Must
P3SM_TECH_098	Both the removal and/or retirement of a system or service from a network segment or catalogue, requires the initiation and processing of an RFC by the Service Owner or the System Manager.	Must
P3SM_TECH_099	Standard update and patching policies will be completed according to the agreed patching policy as defined by NCI Agency	Must
K. Disaster Recovery		
P3SM_TECH_100	The primary data centre to be used is the NCI Agency Mons Data Centre (Casteaux, Belgium) and the secondary data centre is the NCI Agency Lago Patria Data Centre (Lago Patria, Italy)	Must
P3SM_TECH_101	Recovery Time Objective (RTO): The P3SM capability must be configured to provide Disaster Recovery with a 12-hour restoration time for high-availability.	Must

P3SM_TECH_102	Recovery Point Objective (RPO): The P3SM capability must be configured to make sure no more than 24-hours of data is lost.	Must
P3SM_TECH_103	Provision must be made for regular testing of the DR solution every 12 months.	Must
P3SM_TECH_104	Disaster Recovery procedures must be documented, agreed and proven. Recovery procedures must be available to be invoked effectively at any time.	Must
L. Usability		
P3SM_TECH_105	P3SM should provide mechanisms to use different fonts/colours in the preparation of plans, reports, dashboards etc. to aid visibility.	Should
P3SM_TECH_106	The P3SM capability must have an intuitive user interface, easy to use for all end users.	Must
P3SM_TECH_107	The solution interface language will be English.	Must
P3SM_TECH_108	No critical issues put into production unless waived by the project & system manager.	Must
P3SM_TECH_109	Users must participate in user acceptance testing.	Must
P3SM_TECH_110	Requirements traceability against test cases must be provided and must demonstrate full coverage.	Must
P3SM_TECH_111	Support for mobile devices for some P3SM features.	Should
M. Training		
P3SM_TECH_112	Training of end-users of the solution for the role(s) assigned to them must be addressed prior to being granted access to the solution. Any significant changes to the solution must be re-trained towards the end users. The training must be managed by the EBA P3SM project team.	Must
P3SM_TECH_113	Initial training should be Instructor led on the principle of train the trainers.	Must
P3SM_TECH_114	Self-service training techniques should be employed where possible.	Should
P3SM_TECH_115	A training plan should be agreed, documented and implemented with the various stakeholders. Namely E&T SL, SSBA SL and various the Business Units.	Must
N. Security		
P3SM_TECH_116	Integration with and use of authentication mechanisms provided by Active Directory (AD) should exist.	Should
P3SM_TECH_117	All access to the system must be preceded by the unique strong authentication of each user. Users must not be able to bypass	Must

	security controls. Generic accounts, will never be created or used. An audit trail must keep track of all user sign-on / sign-off activity.	
P3SM_TECH_118	Access granted to privileged-level shared, generic, service, and/or vendor accounts is appropriately secured, and passwords to such accounts are modified on a periodic basis (such as when employees with knowledge of the password leave the company). Procedures to change these passwords should be documented.	Must
P3SM_TECH_119	Passwords must be encrypted, both in transmission and in storage. Passwords must not be logged in the clear. Root or super user credentials must be stored and accessible only via a documented process that has the approval of the NCI Agency IT security manager.	Must
P3SM_TECH_120	Access is authenticated through unique user IDs and passwords or other methods as a mechanism for validating that users are authorized to gain access to the system. Password parameters meet NCI Agency and/or professional policies and standards e.g. 1. password format 2. complexity 3. expiration – especially for non-permanent staff 4. reuse 5. account lockout rules	Must
P3SM_TECH_121	User-access rights must be removed upon termination of employment, contract or agreement. Procedures/mechanisms to enforce this must be documented and implemented.	Must
P3SM_TECH_122	User access is periodically reviewed in accordance with the established requirements in NCI Agency documented company policy.	Must
P3SM_TECH_123	Privileged-level access (e.g., system administrators, emergency access, super-users) is authorized and appropriately restricted.	Must
P3SM_TECH_124	The ability to change the job schedule is restricted to authorized users.	Must
P3SM_TECH_125	Logs are monitored or audited on a regular basis to detect unauthorized or inappropriate activity.	Must
P3SM_TECH_126	The ability to make modifications to overall system security parameters, security roles, or security configuration over application systems, data structures, network and communication	Must

	software, and systems software is limited to appropriate personnel.	
P3SM_TECH_127	Access to system sensitive files/directories and/or objects/tables/data is limited to authorized personnel, based on their job responsibilities and assigned role, and such access is approved by NCI Agency management.	Must
P3SM_TECH_128	Physical access to data centres and computer rooms is appropriately restricted to personnel who require access to perform their assigned duties.	Must
P3SM_TECH_129	Virus protection software must be configured to prevent, detect and remove viruses on all network and application components.	Must
P3SM_TECH_130	Only authorised personnel must be able to change software or hardware configurations, or amend or introduce new software.	Must
P3SM_TECH_131	Intrusion detection software must be used to monitor all firewall data traffic with clearly defined responsibilities for monitoring security breach attempts and actions to take in the event of breaches.	Must
P3SM_TECH_132	The solution must be able to manage user roles, i.e. a set of permissions to perform certain operations. Operations can be associated with application features or application features, combination of application features and subset of data. This is based on the need to know principle according to which a positive determination is made that a prospective recipient has a requirement for access to, knowledge of, or possession of information in order to perform official tasks or services. In addition, the total number of users per role must be specified.	Must
P3SM_TECH_133	The solution must support role assignment: a given solution user can only perform a specific operation through a pre-defined application user role. Each user role corresponds to certain responsibilities and functions that the solution user has access to, based on the need to know principle.	Must
P3SM_TECH_134	The solution user must be assigned to one-to-many application user roles (user profile) provided that the 'segregation of duties' principle is respected. These roles must be linked to the security group defined during the development phase.	Must
P3SM_TECH_135	The solution must support the application administrator profile. The application administrator is responsible for configuring and administrating the solution. Their responsibility includes, but is	Must

	not limited to: application security, functions, functional and technical configuration settings.	
P3SM_TECH_136	A means shall be available to analyse and review system activity and audit data, looking for possible or real security violations (analysis may work in support of intrusion detection/automatic response to an imminent security violation).	Must
P3SM_TECH_137	The use of security tools to analyse and review audit data shall be in accordance with the NATO 'Security Tools' directive.	Must
P3SM_TECH_138	The supplier's solution must be required to pass formal security accreditation to ensure that the security measures agreed in the accreditation strategy have been delivered. Accreditation based on NR AIS generic baseline.	Must
P3SM_TECH_139	The solution design for EBA P3SM should properly address the following NATO Security Mechanisms in order to achieve Security Accreditation: 1. Malware Protection 2. Boundary Protection Devices and Systems (Content Check, Proxy and Firewall) 3. Integrity Check 4. Cryptography 5. Identity Management and Access Protection 6. Monitoring, Logging and Auditing 7. Storage and Digital Preservation 8. Interruptibility and Availability	Must
P3SM_TECH_140	System must be able to operate in the NR security domain with associated security settings.	Must
O. Audit		
P3SM_TECH_141	The system should automatically record an audit trail of agreed events under the control of the system. The audit log should contain as a minimum: 1. the action being executed 2. the objects being effected by the action (incl. changes to the object) 3. the user executing the action 4. the data & time of the event	Must
P3SM_TECH_142	The security events to be addressed in the accounting and audit shall be as set out in the security-related documentation. The delay before destruction of the audit record shall be stated in the	Must

	security-related documentation.	
P3SM_TECH_143	The audit log shall be generated and maintained. System Level, Application Level and User Level events shall be included in the log, as required by the relevant Security Authority as a result of a Risk Assessment. For each of the auditable events, individual user identities shall be associated to those events, and shall include date and time of the event, type of event, user identity, and the outcome (success or failure) of the event.	Must
P3SM_TECH_144	The audit trail and associated archive shall be protected from unauthorised deletion and/or modification; it shall be presented in human-readable format either directly (e.g. storing the audit trail in human-readable format) or indirectly (e.g. using audit reduction tools) or both.	Must
P3SM_TECH_145	Access to audit information shall be controlled; access permissions shall be established to permit access only by the appropriate security management staff.	Must
P3SM_TECH_146	The audit data shall be retained for a period agreed by the security approval or accreditation authority, and in accordance with the minimum requirements of the latest version of the NATO 'Directive on the Security of Information'.	Must
P3SM_TECH_147	Sign on audit should be enabled.	Should
P. Technology		
P3SM_TECH_148	The software code and components of the solution must comply with the latest version of the NATO Interoperability Standards and Profiles (NISP). Any deviation is to be justified and reviewed by the Technical Project Board.	Should
P3SM_TECH_149	The P3SM capability should have a single sign-on with Microsoft Windows.	Should
P3SM_TECH_150	P3SM should provide open APIs/Web services to let other applications communicate with it as required through standard SOA mechanisms.	Should
P3SM_TECH_151	EBAP3SM components shall be fully web-enabled and centrally hosted unless explicitly waived. No client software (other than the agreed internet browser, java plug-in and MS Office) will be deployed. All communication between the client and server software will utilize the HTTPS protocol.	Should
P3SM_TECH_152	The Collaborative Project Workspace (CPW) must provide indexing to enable enterprise-level search tools to reach the	Should

	documents stored.	
Q. Hosting and infrastructure		
P3SM_TECH_153	The P3SM solution must be hosted on-premise but must have a clear migration path to the Cloud and a migration strategy that is mostly automated. The Cloud solution must be available at the time of Contract.	Must
R. Interfaces		
P3SM_TECH_154	The P3SM solution should have out-of-the-box integration with Oracle EBS.	Should
P3SM_TECH_155	The solution must enable any reporting to have an approval workflow if required.	Must
P3SM_TECH_156	Reporting on P3SM data should not degrade the system, thus providing near-real-time reporting possibility.	Must
P3SM_TECH_157	Reports must have available, within a short time period, the most up-to-date information with minimal delays between submission of changes and availability of this data for reports and dashboards.	Must
P3SM_TECH_158	P3SM tasks that are attached to a workflow should be measurable, namely there should be standard periods for the workflow steps and the actual periods should be comparable to the standard periods and reported.	Must

Table 1 – P3SM Technical Requirements

ANNEX E.
P3SM User Stories

Identifier	User Story Name	MoSCoW Priority	User Story Text	Acceptance Criteria
P3SM_US_0004	Develop High-Level Plans for Proposals	Must have	As a Project Manager / Service Manager / HPMO I want to plan future projects or services at high level So that I can feed the data to the future business planning and resource planning processes	AC1 Given a new Project Plan When I save it as a Prospect Then I can include or exclude this plan from reports based on whether the report is for the current workload or a report for the future AC2 Given a new Project Plan When I save it as a Prospect Then I can provide a likelihood of realization (i.e. probability of demand occurring) AC3 Given a new Project Plan When I save it as a Prospect Then I can provide a template to enable it to be converted to a real plan in the future
P3SM_US_0006	Prioritize Projects and Services	Must have	As a Portfolio Manager / Programme Manager / HPMO I want to be able to prioritize projects and services based on one or more criteria So that I can analyse the impact of changing priorities on resource loads, schedules and costs	Given a Portfolio or Programme When I change priorities on one or more projects Then I can see the impact of the changes on schedule, cost and resource loads, without impacting the current situation.
P3SM_EP_0101	**Plan Project**			
P3SM_US_0101	Create Project/Service Plan from template	Must have	As a Project Support Officer I want to create a new Project / Service Plan using a template So that the plan can be used for planning projects or services	AC1 Given a FWI that has been tagged for plan creation When I select a template for the plan to be created in P3SM Then I can create a plan based on the selected template. AC2 Allow application of different templates dependent on the type of project (prospect, acquisition, services, internal etc) AC3 Allow creation of a project without a template (??)

P3SM_US_0102	Create Project/Service Plan from existing project	Must have	As a Project Support Officer I want to create a new Project / Service Plan based on an existing plan So that the plan can be used for planning projects or services.	Given a FWI that has been tagged for plan creation When I select an existing plan in P3SM Then I can create a plan based on the existing plan with the same structure, including metadata.
P3SM_US_0103	Manage Work Breakdown Structure (WBS)	Must have	As a Project Manager / Service ManagerI want to manage the Work Breakdown Structure in my PlanSo that the plan can be used for proper planning of project/service activities.	AC1Given a WBS inherited from the plan templatesWhen I try to change WBS elements inherited from the plan templates Then I get an error message and changing inherited elements is not allowed.AC2Given a WBS inherited from the plan templatesWhen I make changes to the WBSThen I can define a WBS unique to my project, with as many levels in the structure as required, provided that the inherited WBS elements are not modified.AC3 Once a WBS has been defined then I need to be able to roll up costs, dates, durations and resources at any level within the WBS constraints
P3SM_US_0132	Manage Deliverables and Acceptance Criteria	Should have	As a Project Manager / Service Manager I want to manage deliverables and acceptance criteria for project milestones So that delivery and milestone completion can be managed properly	Given a Project Plan When I define deliverables for each milestone in the project Then I can record the delivery of these and track the delivery/completion status of each milestone
P3SM_US_0143	Manage Tolerances	Must have	As a P3SM Administrator I want to define tolerances for cost and schedule So that Project/Service managers get a notification if tolerances are exceeded or are forecasted to be exceeded	Given any Project/Service Plan When I define tolerance on cost (in monetary units) and schedule (in time units) Then Project/Service Manager and Project Support Office get a notification if the plan forecasts a cost or schedule that goes beyond the tolerances, or if actual cost or schedule goes beyond the tolerances
P3SM_US_0145	Create Plan Template	Must have	As a Project Support Officer I want to create a variety of planning templates So that project managers can use project plans suitable for the type of project	
P3SM_US_0149	Manage Sub-projects	Should have	As a Project Manager I want to define sub-projects So that I can manage the complexity of a project plan by dividing it into sub-projects	AC1 Project milestones/timelines/cost affected by and dependent on sub-projects AC2 Financial transactions always happen at project level, whereas labour costs could be reported out of sub-projects as well

P3SM_US_0151	Manage Project Plan	Must have	As a Project Manager I want to plan or re-plan a project So that I can reflect changes in the project approach and see the effects in terms of cost or schedule	
P3SM_US_0153	Support Service Planning	Must have	As a Service Manager I want to create and manage a Service Plan So that I can support the high-level ITIL Service Management Planning process	Given a Service When I work on the Service Plan Then I can use the plan for resource planning or tracking purposes
P3SM_EP_0102	**Monitor Project**			
P3SM_US_0106	Support Earned Value Management	Must have	As a Project Manager / Service ManagerI want to use Earned Value Management (EVM) as an element of my P3SM capabilitySo that I can track and report project progress based on automated EVM metrics.	AC1Given a planned projectWhen I use the Earned Value approach in the project Then I can produce automated Earned Value metrics that are automated to the maximum extent and are available at all times to usersAC2Given a planned projectWhen I prepare Project Highlight Reports Then I can include EVM metrics in the PHR.AC3Given a planned projectWhen I prepare Exception Reports Then I can include EVM metrics in the Exception Report.
P3SM_US_0139	Track Project Performance	Must have	As a Project Stakeholder I want to track project performance against an official or normal project baseline So that project progress can be evaluated and acted upon	Performance might be measured in terms of schedule variances and cost variances against the baseline, using Milestones, Tasks or Products to report progress.
P3SM_US_0140	Track Work Package Performance	Should have	As a Project Stakeholder I want to track performance of a subset of the project (a Work Package) against an official or normal project baseline So that project progress can be evaluated and acted upon	Performance might be measured in terms of schedule variances and cost variances against the baseline, using Milestones, Tasks or Products to report progress.
P3SM_US_0141	Provide Read-Only Access to Plans	Must have	As a Project Stakeholder I want to have Read-Only access to any project plan So that I can see the schedule and resource allocations without making any changes to the plan	Given any Project/Service Plan When I open the plan in Read-Only Mode Then I can review any part of the plan but cannot make any changes to it.
P3SM_US_0142	Establish Schedule Dependency between Projects	Must have	As a Project Manager / Service Manager I want to link milestones between projects So that the effect of changes in one project will be immediately notified to the other linked projects	

P3SM_US_0147	Report Project Plan Quality Indicators	Must have	As a Project Manager I want to see Project Plan Quality Indicators So that I can improve the quality of the project plan	Best practice indicators such as Remaining Work in the past, resource balance for tasks, duration of individual tasks, tasks with no predecessors and successors etc.
P3SM_US_0148	Provide Task Status Update	Must have	As a Team Member I want to update the status of tasks I am assigned to So that the Project Manager can determine project performance and update the project plan.	AC1 Update task as completed AC2 Update task as % completed
P3SM_EP_0103	**Manage Project Dossier**			
P3SM_US_0104	Provide a Collaborative Project Workspace (CPW)	Must have	As a Project Manager / Service Manager I want to manage a Collaborative Project Workspace So that stakeholders to the project/service can collaborate and exchange information using this workspace	AC1: In the absence of a built-in CPW, integration with SharePoint is acceptable AC2: The CPW must provide versioning of data, along with check-in/check-out of documents AC3: The CPW must provide collaborative tools for editing documents AC4: The CPW must provide information about the project such as risk, schedule, cost etc.
P3SM_US_0127	Manage Change Log	Must have	As a P3SM Stakeholder I want to manage the Change Log at Project, Portfolio and Programme levels So that Change can be tracked at the right level	Given a Change to the Project, Portfolio or Programme When I create a Change Request at the right level Then I can edit, delete, assign, approve and escalate the Change request through a workflow
P3SM_US_0128	Quantify Change Impact and Cost	Must have	As a P3SM Stakeholder I want to quantify the impact and cost of a Change So that I can inform the decision on implementation of the Change	Given a Change Request on the Change Log When assign an impact and Cost information to the Change Request Then I can store the Change Request with this information and use this in dashboards/reports
P3SM_US_0129	Manage Lessons Learned Log	Must have	As a P3SM StakeholderI want to manage a Lessons Learned Log at Project, Portfolio and Programme levelsSo that Lessons can be identified and tracked at the right level	Given an identified Lesson at the Project, Portfolio or ProgrammeWhen I create a Lesson item at the right levelThen I can edit, delete, assign, approve and escalate the Lesson through a workflow
P3SM_US_0130	Quantify Lesson Impact and Cost	Should have	As a P3SM Stakeholder I want to quantify the impact and cost of a Lesson identified/learned So that I can inform the decision on implementation of the Lesson	Given a Lesson on the Lessons Learned Log When assign an impact and Cost information to the Lesson Then I can store the Lesson with this information and use this in dashboards/reports

P3SM_US_0131	Manage Project/Portfolio/Programme Log	Must have	As a P3SM Stakeholder I want to manage a customisable Project, Portfolio or Programme Log So that important actions, decisions or notes can be saved	Given note of importance at the Project, Portfolio or Programme level When I create a Log item at the right level Then I can edit, delete, assign, approve and escalate the note/actions/decisions through a workflow
P3SM_US_0133	Configure Project Meta-data	Must have	As a P3SM Administrator I want to define project meta-data items flexibly So that the meta-data can be used to convey additional information and filter projects based on various criteria during reporting	Given a project When I revise meta-data for the project Then I can define meta-data elements such as Title, Description, Start/Finish Dates, Customer, Customer References, Funding Type, Probability of Contracting, Status, Project Type, Categorisation, Priority, Portfolio, Service, Organisational Element etc.
P3SM_US_0144	Manage Products	Must have	As a Product Owner I want to define products and assign delivery to one or more projects So that the progress in the development/delivery of a product can be tracked	Given a Product Definition When I define a product and link it to one or more projects Then I can track the progress for the development/delivery of that product as information about the projects/programmes change
P3SM_US_0152	Manage Project Actions	Must have	As a Project Manager I want to use the Project Actions List to register and monitor actions assigned to the project team members So that I can prioritise, allocate and inform about the status of each action.	AC1: It is possible to filter the list to show only outstanding actions in the backlog AC2: Risk responses at the Project Level become part of the Project Actions List
P3SM_EP_0104	**Manage Project Schedule**			
P3SM_US_0112	Manage Project Schedule with graphical user interface	Must have	As a Project Manager / Service Manager I want to create and manage project schedules with a graphical user interface So that these schedules can be used by stakeholders in decisions	AC1 - all tasks are visible on the graphical presentation. AC2 - subset of task can be selected and presented as summary. AC3 - task can be filtered based on any of their properties. AC4 - graphical presentation can be exported AC5 - Tasks can be tailored for presentation. AC6 - Gantt Charts are supported AC7 - Timeline Views are supported AC8 - Network Views are supported
P3SM_US_0113	Manage Activity Dependencies	Must have	As a Project Manager / Service Manager I want to define dependencies between activities in a plan So that the scheduling of these activities follow the dependencies automatically	AC1 - clear visibility between dependency and plan. AC2 - critical path dependency view. AC3 - dependencies need to be visible on the GUI.

P3SM_US_0114	Manage Milestones	Must have	As a Project Manager / Service Manager I want to create and manage Milestones within my plan So that the plan can be tracked with respect to these milestones	AC1 - I am able to use the milestones provided in the project template. AC2 - I am able to create and manage new milestones as required.
P3SM_US_0115	Perform Critical Path Analysis	Must have	As a Project Manager / Service Manager I want to perform Critical Path Analysis on my plan So that I can determine the critical activities and slack for all activities, to use them in planning	AC1 - I need to be able to define the critical elements of the plan and then visualise it. AC2 - I need to be able to perform the critical path analysis highlighting key dependencies and risks.
P3SM_EP_0105	**Estimate Project Costs**		As a Project Manager / Service ManagerI want to define and modify the Latest Cost Estimate / Cost to Complete for my projectSo that it can be used for budgeting, forecasting and tracking purposes.	
P3SM_US_0134	Define Project Cost Estimate	Must have	As a Project Manager / Service Manager I want to define my project cost estimate including labour, investment, consultancy and travel costs So that the cost can be tracked and used throughout the project lifecycle	Given a project When I finalise the project plan Then I can estimate the Total Cost of the project to include all labour, investment, consultancy and travel costs and save it for future reference.
P3SM_US_0135	Submit Cost Budget	Must have	As a Project Manager / Service Manager I want to submit my project cost estimate including labour, investment, consultancy, travel costs and Reserves So that the cost can be the basis of a Cost Budget to be used for a Price Proposal and to be approved when the customer agrees	AC1: Given a project plan When I make changes in the project plan to cover labour, investment, travel and consultancy and save Then I can submit the revised project plan costs as a Cost Budget to be sent to EBA AC2: Given a Cost Budget in P3SM When I add Reserves to the Cost Budget then I can submit the Cost Budget with the Reserves not being available to the project directly, but being available upon explicit authorisation by the Project Board later. AC3 Cost Budgets shall be version controlled
P3SM_US_0137	Manage Baselines	Must have	As a Project Manager / Service Manager I want to create and manage multiple baselines So that progress can be tracked throughout project execution	AC1: Given a Project Plan When I create or update one or more baselines – with comments as required Then the baselines are saved and can be used later to track progress of project plan against the baseline(s). AC2: Project baselines should have metadata enabling filtering, sorting etc. AC3: Baselines track schedule and cost.

P3SM_US_0138	Manage Official Baselines	Must have	As a Project Support Officer I want to create and manage one or more official baselines So that progress can be tracked throughout project execution	Given a Project Plan When I create or update an official baseline while providing the reason for the baseline from a list of standard reasons Then the baseline is saved with versioning and cannot be updated by a non-privileged user.
P3SM_US_0146	Manage Contingency	Must have	As a Project Manager I want to define contingency reserves in my project So that I can use these as needed within the budget allocated to my project for planned or unplanned risk realizations	
P3SM_TH_0101	**Support Best Project Management Methodologies**		As a Project Manager / Service Manager I want to manage my project using a Best-Practice Project Management methodology So that I can follow best practices and manage my project/service effectively.	
P3SM_US_0105	Support the PRINCE2 Framework	Must have	As a Project Manager / Service ManagerI want to use the PRINCE2 process in the P3SM capabilitySo that I can adhere to the methodology the NCIA has selected to use for Project Management.	AC1Given a projectWhen I plan the project Then I can produce Project Highlight Reports (PHR) that are automated to the maximum extent.AC2Given a projectWhen I plan the project Then I can produce Exception Reports that are automated to the maximum extent.AC3Given a projectWhen I plan the project Then I can store the information about the Project Board (PB) and communicate with the PB members through an automated mechanism.AC4Given a projectWhen I plan the project Then produce Checkpoint (Status) Reports that are automated to the maximum extent.
P3SM_TH_0102	**Support Best Project Delivery Methodologies**		As a Project Manager / Service Manager I want to manage my project using a Best-Practice Project Delivery methodology So that I can follow best practices and deliver my project/service effectively.	
P3SM_US_0109	Use Kanban Cards	Should have	As a Project Manager / Team Manager I want to use Kanban cards to manage and track my proposal and project implementation So that I can effectively monitor and manage individual tasks assigned to Project/Team members and increase efficiency and effectiveness.	

P3SM_US_0110	Use Scrum	Should have	As a Project Manager / Team Manager I want to use Scrum to manage and track my project implementation So that I can effectively monitor and manage individual tasks assigned to Project/Team members.	AC1 - All elements required to implement the Scrum methodology are available to the Project Manager. AC2 - Ability to track and manage the Product Backlog, Sprint Backlog AC3 - Ability to draw burnup and burndown charts
P3SM_EP_0201	**Manage Resource Information**		As a P3SM Administrator I want to be able to manage a global resource pool So that I can enable the Project Managers to use correct resource information in their plans.	
P3SM_US_0201	Synchronize Labour Resources	Must have	As a P3SM AdministratorI want to synchronise with the Labour Resource information in EBASo that I can enable the Project/Service Managers to use correct labour resource information in their plans.	AC1Given a list of new IWC or Staff Member coming from EBAWhen I import the informationThen the resources are available to use in planning from periods on or after their date of arrivalAC2Given a list of IWC or Staff Members who leave at a certain date coming from EBAWhen I import the informationThen the resources are not going to be available to use in planning from periods after their date of departureAC3Given a list of Staff Members with a changed Grade coming from EBAWhen I import the informationThen the resources are going have a different cost for periods after their Grade change
P3SM_US_0202	Manage Generic Resources	Must have	As P3SM Administrator I want to be able to define Generic Resources based on skills or competency So that I can enable the Project Managers to use generic resources in their plans.	Given a new Generic Resource to define When I fill the information for a generic resource Then the resource can be used just like real resources subject to business rules
P3SM_US_0203	Manage Vacant Posts	Should have	As P3SM Administrator I want to synchronise with the Vacant Posts information in EBA So that I can enable the Resource Managers to use the information in Workforce Planning.	AC1 Given a new Vacant Post coming from EBA When I import the information Then the Vacant Post can be used for capacity planning AC2 Given information about a Vacant Post being filled coming from EBA When I import the information Then the Vacant Post can no longer be used for capacity planning

P3SM_US_0206	Manage Resourcing Workflow	Must have	As a Resource Manager I want to approve resource requests for my resources So that I can manage the resources effectively	AC1 Given a resource request coming from a Project Manager / Service Manager When I approve the resource request Then the resource assignment becomes permanent in the plan AC2 Given a resource request coming from a Project Manager / Service Manager When I reject the resource request Then the requesting person gets a notification and the assignment is cancelled AC3 Given a resource request coming from a Project Manager / Service Manager When I suggest an alternate resource Then the requesting person gets a notification and can cancel or agree with the proposed alternative AC4 Given a resource request that I can not provide resources for When I escalate it to the next level Then the resource request can be resolved a higher level of management
P3SM_US_0207	Manage Team Resources	Must have	As a Resource Manager I want to define "resource teams" which correspond to resources sharing common featuresSo that these teams can collectively work on a task and book time against it based on availability of the individuals	Given a team consisting of individuals with similar skillsWhen I define a "resource team" and add the individuals to the teamThen Project/Service Managers can assign these team resources to their project activities
P3SM_US_0210	Define Resource Loading Tolerances	Must have	As a Resource Manager I want to set lower and upper tolerances for resource loading So that these could be used to improve resource loading and utilization	Given my Resource Organisation When I set the tolerances for overloading and underloading (1 months, 3 months, 6 months) Then I can use these tolerances in workload analysis
P3SM_US_0211	Record Skills and Competencies	Should have	As a Resource Manager I want to record skills from a Skills and Competencies Catalogue against resources So that this information can be used in selecting resources for assignment	

P3SM_US_0212	Define Skills and Competencies	Should have	As P3SM Administrator I want to define and maintain a catalogue of Skills and Competencies, so that those can be associated to Named Resources, Generic Resources, Team Resources and Organizational Elements So that I can enable the Project Managers to select the skills and competencies to identify and select the Resource required	
P3SM_EP_0202	**Assign and Monitor Resources**			
P3SM_US_0204	Assign Selected Resources	Must have	As a Project Manager / Service Manager I want to select resources based on different criteria So that I can assign the best-fitting resources to my project / service plan	Given resources from the Global Resource Pool When I can filter the resources based on role, name, organisational element, grade, start date, skills and availability Then I can assign any resource that fits my criteria to a project and I can send my request to the relevant resource manager
P3SM_US_0205	Analyse Resource Profile	Must have	As a P3SM Stakeholder I want to select one or more projects and look at the resource usage So that I can determine if the resource assignments can be optimised	
P3SM_US_0208	Track Resource Assignments	Must have	As a Resource Manager I want to track actual resource assignments to projects and compare them to the current and previously approved assignments So that I can receive notifications if the assignment exceeds the approved levels outside a tolerance that can be defined	Given a resource-project pair When there are changes to the assignment so that the level of assignment goes above or below a tolerance range as compared to the approved level Then a notification is sent to the relevant Project Manager and the Resource Manager to resolve the issue
P3SM_US_0209	Display Resource Availability	Must have	As a Project / Service Manager I want to get a warning when I try to assign a resource which is overloaded So that I can search for alternative resources	Given a resource from the resource pool When I assign the resource to one or more activities in my project plan Then I get a warning if the resource is overloaded before the assignment or as a result of the assignment
P3SM_US_0213	Analyse Workload	Must have	As a P3SM Stakeholder I want to view the workload of one or more resources So that I can manage the workload of these resources	

P3SM_US_0214	Change Resource Allocation	Must have	As a Resource Manager I want to propose a change in one or more resource allocations So that current workloads and availability can be reflected to project plans	
P3SM_US_0215	Manage Resource Allocation Changes	Must have	As a Project Manager / Service ManagerI want to handle resource allocation changes received from Resource managersSo that my project plans stay realistic and executable	AC1Given a change request for the allocationWhen I accept the changeThen my project plan changes and adopts the new allocation for the resourceAC2Given a change request for the allocationWhen I reject the changeThen my project plan stays as it is
P3SM_US_0216	Level Resources	Must have	As a Project Manager I want to level my resources So that my project plan is feasible from a resource perspective and I can see the effect of holidays or other absences	AC1 Leveling must be based on already assigned projects, scheduled holidays, project priorities, administrative work and resource availability
P3SM_EP_0301	**Manage Bookings**			
P3SM_US_0301	Enable / Disable Time Booking	Must have	As a Project Manager / Service Manager I want to enable/disable time booking for activities in my project So that I can prevent premature booking on activities or booking after the activity is completed	AC1 Given an activity which can now be executed When I enable time recording for the activity Then resources assigned to that activity can book time to the activity AC2 Given an activity which should now be completed When I disable time recording for the activity Then resources assigned to that activity can not book time any more to the activity AC3 Given an activity and resources assigned to it When I enable time recording for one or more resources assigned to the activity Then only the resources I enabled can book time to the activity AC4 Given an activity and resources assigned to it When I disable time recording for one or more resources assigned to the activity Then the resources I disabled cannot book time any more to the activity

P3SM_US_0302	Approve/Reject Time Bookings	Must have	As a Project Manager / Service ManagerI want to approve or reject time resources have booked for activities in my projectSo that I can update actual effort and cost for my project	AC1Given an activity that has been booked time by a resource and is part of a submitted timesheetWhen I approve the time bookedThen the project plan is updated with that time as actualised and the approval is loggedAC2Given an activity that has been booked time by a resource is part of a submitted timesheetWhen I reject the time bookedThen the plan is not updated with the time and the originator of the booking gets a notification about the rejectionAC3Given an activity that has been booked time by a resource is part of a submitted timesheetWhen the total cumulative time for that resource including the latest booking goes above the planned time for the resourceThen I get a notification about the exception and can decide whether to approve or rejectAC4Given an activity that has been provided a progress indicator by a resource (percent completed)When I agree with the progress indicatorThen my task progress for that resource is updated with the value of the indicatorAC5Given an activity that has been provided a progress indicator by a resource (percent completed)When I do not agree with the progress indicatorThen I can provide my own estimate for the task progress for that resource
P3SM_US_0305	Open and Close Booking Periods	Should have	As a P3SM Administrator I want to open and close booking periods (minimum weekly) So that I can prevent earlier bookings to be changed as IPSAS rules mandate	AC1 Given a time period (minimum of a week) When I decide to close the time period for time booking Then no one can book time for that time period AC2 Given a time period (minimum of a week) When I decide to open the time period for time booking Then everyone can book time for that time period
P3SM_US_0306	Approve or Reject Timesheet	Must have	As a Resource Manager I want to review and approve timesheets So that I can manage the productive time of staff members and IWC	AC1 Given a filled timesheet from an Employee or IWC When I approve the timesheet Then the timesheet is saved with the Approved status and it is not possible to book to that period anymore; and project bookings are sent to the relevant Project/Service Managers for approval AC2 Given a filled timesheet from an Employee or IWC When I reject the timesheet with an explanation Then the timesheet stays as Open and it is still possible to book to that period; the owner of the timesheet gets the Rejected notification with my explanation

P3SM_US_0309	Restrict Booking Period	Should have	As a Project / Service ManagerI want to restrict resources booking time outside the period of performance as set for the activitySo that I can enforce the execution period for the activity	Given an activity with a planned period of performanceWhen I restrict time booking outside the period of performanceThen resources cannot book time outside the period of performance of that activity
P3SM_US_0311	Manage Delegation	Must have	As a Project Manager / Resource Manager I want to delegate approval of project time / timesheets to another person for a defined period of time and cancel as required So that approval activities can be done by delegates in my absence	AC1 Given a period of time when I will be absent When I choose a delegate for time / worksheet approval Then the delegate can do approvals on my behalf in that time period AC2 Given a period of delegation When I cancel the delegation or when the delegation period ends Then the approvals workflow brings those approvals to me and not to the delegate
P3SM_US_0312	Manage Official Holidays	Should have	As a P3SM Administrator I want to manage official holidays for multiple locations So that these can be automatically booked for all individuals working at those locations	
P3SM_EP_0302	**Book Time**			
P3SM_US_0303	Book Time	Must have	As an Employee / IWC I want to book time spent on projects, services or administrative tasks, including the progress of the task So that my timesheet is completed and progress on project tasks are recorded	AC1 Given a weekly timesheet pre-populated with relevant activities from projects/services that I'm a part of When I fill in the time spent for individual activities or administrative tasks Then the time can be saved temporarily, until I send my filled timesheet in AC2 Given a project I'm involved in When I fill in the time spent for any activities at the lowest level of the WBS Then I can book time, otherwise I'm not allowed

P3SM_US_0304	Book Time via Mobil Device	Should have	As an Employee / IWC I want to book time spent on projects, services or administrative tasks, including the progress of the task, via a mobile device So that my timesheet is completed and progress on project tasks are recorded	AC1 Given an approved mobile device When I fill in the time spent for individual activities on projects that I'm involved with or administrative tasks Then the time can be saved temporarily, until I send my filled timesheet in AC2 Given an approved mobile device When I fill in the time spent for any activities at the lowest level of the WBS on projects that I'm involved with Then I can book time, otherwise I'm not allowed
P3SM_US_0307	Submit Timesheet	Must have	As an Employee / IWC I want to submit the weekly timesheet that I have completed So that I can satisfy the requirements for timely booking of time	Given a weekly timesheet that has been completed When I provide comments and submit the timesheet Then the timesheet is sent for approval and notification and cannot be used for booking any more
P3SM_US_0308	Recall Timesheet	Must have	As an Employee / IWC I want to recall the timesheet that I have submitted So that I can correct time I booked	Given a timesheet that has been submitted When I recall the timesheet (only if this booking period is not closed) Then I can book time and/or correct earlier bookings to the timesheet period
P3SM_US_0310	Manage Absences	Must have	As a Employee - IWCI want to book absenceSo that I cannot be assigned to project activities on the days of absence and projects reflect the impact of absence	Given an administrative task corresponding to an absence category (Leave, Official Holiday, Training)When I book timeThen project plans reflect the absences
P3SM_US_0313	Provide Overallocation Warning	Must have	As a Project or Service manager I want to be notified when a resource is trying to book over the allocated hours before approval. So that…	AC1 - A warning notification is sent to me when a resource has booked more hours than allocated by the project or service. AC2 - The percentage of hours booked is related to the hours booked and not limited to 100%.
P3SM_EP_0401	**Define Portfolio**			
P3SM_US_0401	Manage Portfolio	Must have	As a P3SM Administrator I want to define multiple portfolios of Programmes and projects based on project meta-data So that portfolios can be managed	
P3SM_US_0405	Define Private Portfolio	Should have	As a P3SM Stakeholder I want to group projects in my private portfolio So that I can track and analyse a group of projects which are related without a permanent portfolio in place	AC1 - the Private Portfolio is only available to the user defining it AC2 - Private Portfolios can be used like real portfolios, namely any kind of report/chart/dashboard can be built on it

P3SM_US_0406	Receive Deliverable Oversight	Should have	As a Portfolio Manager I want to see and track all of the deliverables from the projects in my portfolio	
P3SM_US_0407	Manage Stakeholder Communications	Should have	As a Portfolio Manager I want to manage the stakeholders for all of the projects in my portfolio So that I can ensure consistent communication related to the portfolio and associated deliverables.	AC1 - the list of stakeholders per project is accessible. AC2 - the list of stakeholders per project can be made available as a merged list.
P3SM_US_0408	Manage Portfolio Pipeline	Must have	As a Portfolio Manager I want to manage information concerning planned and expected projects and Business Change Activities (BCA) So that long term planning can be performed (mainly in terms of a resource demand forecast).	
P3SM_US_0409	Prioritise Initiatives	Must have	As a Portfolio Manager I want to prioritise initiatives within portfolio (programmes, projects), register reasoning behind the prioritisation decision, and track changes to the prioritisation So that resource allocation to programmes and projects can be appropriately guided.	
P3SM_US_0410	Manage Portfolio Dossier	Must have	As a Portfolio Manager I want to have a Portfolio Dossier (Register of Programmes and Projects) where I can register and maintain all non-discrete data related to the programmes, projects and Business Change Activities (BCA), and present all the portfolio related information (eg. Escalated risks, dependencies within portfolio etc.), so that related data are easily accessible to the portfolio stakeholders	
P3SM_EP_0402	**Deliver Portfolio**			
P3SM_US_0402	Assess Staff Assignments to Portfolio	Must have	As a Portfolio Manager I want to assess the work assignments for resources across the Portfolio, drilling down to projects as required So that I can use the analysis in prioritisation, new project acceptance and similar processes	
P3SM_US_0403	Track Cost, Schedule and resources for Portfolio	Must have	As a Portfolio Manager I want to track the cost, schedule, progress and resources over the portfolio, drilling down to project level as required So that I can use the analysis in prioritisation, new project acceptance and similar processes	AC1 - Possibility to drill down into the projects belonging to the portfolio

P3SM_EP_0403	**Manage Portfolio Dashboard**			
P3SM_US_0404	Visualise Schedules across Portfolio	Must have	As a Portfolio ManagerI want to visualise the schedule of projects – including milestones -at Portfolio level in multiple formatsSo that I can use the analysis in prioritisation, new project acceptance and similar processes	
P3SM_US_0411	Maintain Portfolio Guidelines and Directives	Must have	As a Portfolio Manager I want to maintain (store, version, publish) Portfolio frameworks, templates, guidelines, recommendations. SOPs and directives applicable to Programmes, Projects and Business Change Activities (BCA) within the Portfolio So that a coherent and aligned approach to the P3M is ensured across the Portfolio.	
P3SM_EP_0501	**Define Programme**		As a Programme Manager I want to define and manage programmes So that outcomes and benefits associated with the Programme can be planned	
P3SM_US_0501	Create Programme	Must have	As a P3SM Administrator I want to define Programmes and Manage Metadata So that projects can be assigned to programmes and programmes can be managed	
P3SM_US_0502	Assign Projects to Programme	Must have	As a P3SM Administrator I want to assign projects to Programmes So that Programmes can be managed	Given A Programme When projects are defined to be part of the Programme and I add them to the Programme Then the projects and the Programme are associated with each other can be analysed and managed together
P3SM_US_0509	Manage Programme-Level Tolerances	Must have	As a P3SM Administrator / Programme Manager I want to set Programme Level cost and schedule tolerances for individual Programmes So that the Programme Manager, Project Support Office and other relevant stakeholders get a notification when tolerances are exceeded or projected to be exceeded	
P3SM_EP_0502	**Manage Programme**		As a Programme Manager I want to Manage Programmes So that outcomes and benefits associated with the Programme can be delivered on time and within cost	

P3SM_US_0510	Set and Maintain Programme Baselines	Must have	As a Portfolio/Programme Manager or P3SM Administrator I want to register and keep history of programme baseline(s) comprised of programmed projects' and Business Change Activity (BCA) budgets and timelines (main milestones), contingency budget and benefits, as derived from any formal baselining So that the programme baseline is available to assess programme performance (e.g. calculate programme performance KPIs) and report the programme performance against any programme baseline.	AC1: Baselines have defined metadata used for filtering, sorting etc. AC2: Baselines track schedule and cost.
P3SM_US_0511	Maintain Programme Dossier	Must have	As a Portfolio/Programme Manager I want to have a Programme Dossier to register and maintain throughout the programme lifecycle all the programme related documents (Boundary, Governance and Management) So that it is possible to provide all stakeholders with a single, authoritative and up-to-date source of advice on the programme	AC1: Given a Programme Dossier When a Stakeholder wants to collaborate using information available on the Dossier platform Then the whole Programme Team can be part of the collaboration
P3SM_US_0512	Manage Programme Actions	Must have	As a Portfolio/Programme ManagerI want to use the Programme Actions List to register and monitor actions assigned to the programme team membersSo that I can prioritise, allocate and inform about the status of each action.	AC1: It is possible to filter the list to show only outstanding actions in the backlogAC2: Risk responses at the Programme Level become part of the Programme Actions List
P3SM_US_0530	Manage Quality Register	Should have	As a Portfolio/Programme Manager I want to be able to use a Programme Quality Register, So that I can plan programme quality related activities (both: programme quality assurance over projects, and programme assurance) and resources, and register status and result of these activities	
P3SM_EP_0503	**Manage Programme Tranches**		As a Programme Manager I want to define programmatic tranches, activities and milestones So that I can integrate these with the project timelines	
P3SM_US_0505	Define Tranches	Must have	As a Portfolio/Programme Manager I want to, in the course of the Programme, to group projects, selected project tasks, Business Change Activities (BCA) and their products (outputs) into Tranches, and set a Tranche timeline (start and end date) So that I can manage, monitor and report on step progress in the capability and benefit delivery.	

P3SM_US_0513	Link Outcomes and Benefits to Tranche	Must have	As a Portfolio/Programme Manager I want to assign Outcome(s) to the Tranche and attribute the Tranche to one or more benefit So that I can manage, monitor and report on step progress in the capability and benefit delivery.	
P3SM_US_0514	Define and Manage Transition ~~Plan~~	Must have	As a Portfolio/Programme Manager I want to register (timelines) for the systems and services to be replaced or augmented by outputs of the programme's projects So that I can plan, manage and communicate the transition plans for the new capability per system, and per localisation.	
P3SM_US_0515	Export Programme Master Plan	Must have	As a Portfolio/Programme Manager I want to generate and export to MS Office® tools a graphical representation of the Programme Master Plan and selected tranche(s) plan representing all projects and business change activities, their main milestones and the main dependencies, outcomes and benefits So that I can use the Master Programme Plan for communication with all stakeholders.	
P3SM_EP_0504	**Manage Outcomes and Benefits**			
P3SM_US_0516	Baseline the Performance	Must have	As a Portfolio/Programme Manager I want to register performance characteristics and propose respective KPIs describing "as is" state to be improved by the programme So that I can use the baseline to measure improvement and to review benefits	
P3SM_US_0517	Register Outcomes	Must have	As a Portfolio/Programme Manager I want to define and keep history of changes of Outcome(s) of the Tranche So that I can further link Outcomes with tranches, establish relation between Outcomes and Benefits	

P3SM_US_0518	Register Benefits	Must have	As a Portfolio/Programme ManagerI want to register benefits profiles by providing the benefit description, how the benefit achievement will be measured (KPIs), attribution of the benefit (owner and operations area that will receive this benefit), link to respective OutcomesSo that I can link tranches and projects to respective benefits, monitor and report on benefit delivery	
P3SM_US_0519	Prepare Benefit Map	Must have	As a Portfolio/Programme Manager I want to create and export to MS Office tools a visual map that shows links between projects' outputs (products), Tranches' outcomes and Benefits. So that I can use the Benefit Map to determine the delivery sequence and timing, validate the programme design, use it as a reference for programme risk identification and assessment, and as a communication tool with the Programme Stakeholders.	
P3SM_US_0520	Define and Manage Benefit Realisation Plan	Must have	As a Portfolio/Programme Manager I want to plan and track benefit realisation by establishing timelines (plans) for benefit reviews and registering performance of the benefit realisation So that I can control if the Programme is on track.	
P3SM_EP_0505	**Manage Dependencies**			
P3SM_US_0503	Manage Schedule Dependencies within Programme	Must have	As a Portfolio/Programme Manager I want to define, or select if already defined, dependencies between project and Business Change Activity (BCA) milestones within Programme(s) So that schedule of the Programme can be analysed to support risk identification and change impact assessment.	
P3SM_US_0521	Visualise Schedule Dependencies	Must have	As a Portfolio/Programme Manager I want to be able to generate and export to MS Office format a graphical timeline representation of all or a subset of dependencies per Programme and per Tranche So that I can better monitor the Programme and Tranche plan (schedule) and be able to identify potential risks.	

P3SM_US_0522	Register Product (Output) Dependencies	Must have	As a Portfolio/Programme Manager / Project Manager I want to register Product Dependencies between projects and Business Change Activities (BCA) (title, description, attributes describing the dependency, date(s)) So that programme can gain better scope control.	
P3SM_US_0523	Manage Product (Output) Dependencies	Must have	As a Portfolio/Programme Manager / Project Manager I want to manage Product Dependencies between projects and Business Change Activities (BCA) by updating the title, the description, attributes describing the dependency (e.g. type of the dependency, status etc.), linking the dependency with relevant registered risks, issues, changes So that programme can gain better scope control.	
P3SM_US_0524	Register Non-Product Dependencies	Must have	As a Portfolio/Programme Manager / Project ManagerI want to register non-Product Dependencies (title, description, attributes describing the dependency, date(s)), such as events external to the project (e.g. exercises)So that programme can gain better scope control	
P3SM_US_0525	Visualise Asset Dependencies	Must have	As Portfolio/Programme Manager / Project Manager I want to visually present all or selected dependencies and use RAG indicator to show if the dependency is endangered So that the programme can gain better scope control	
P3SM_US_0526	Define and Manage Dependency Attributes	Must have	As P3SM Administrator I want to define attributes and values of attributes describing dependencies So that Portfolio/Programme/Project can use these attribute to gain better scope control	
P3SM_US_0532	Set Tolerances on Schedule Dependencies	Must have	As a Portfolio/Programme Manager I want to set tolerances for the time slack between dependent milestones and set early warning indicators for dependencies managed at the programme level So that the respective stakeholders can be informed about endangered or overdue dependences.	
P3SM_EP_0506	**Track Programme**			

P3SM_US_0507	Monitor Schedule and Cost of Programme and Tranches	Must have	As a Portfolio/Programme Manager I want to be able to track the cost, schedule and resources of a Programme, drilling down to Tranches, Projects and Business Change Activities (BCA) as required So that I can use the analysis in prioritisation, tracking and similar processes.	
P3SM_US_0527	Track Programme Resources	Must have	As a Portfolio/Programme Manager I want to be able to track allocation of resources in the programme, related projects and Business Change Activities (BCA) So that I can use the analysis in prioritisation and reporting	
P3SM_US_0528	Get Tolerance Exceeded Notification	Must have	As a Portfolio/Programme Manager I want to be warned of projects/ Business Change Activities (BCA) either at risk of exceeding cost or schedule tolerance or have already exceeded these tolerances So that Programme can better respond to the risk or issue.	
P3SM_US_0601	Update Project Expenditures	Must have	As a P3SM Administrator I want to update project plan actuals (non-labour) from EBA (procure-to-pay transactions) So that P3SM project plans reflect the correct overall actual cost for the project and these can be used in analysis or reporting	Given investment, travel or consultancy actualisations in EBA (excluding the Investment portion of NSIP projects) When a daily batch interface run is executed Then all projects in P3SM are updated with the correct overall actual cost for non-labour resources
P3SM_US_0602	Update Resource Information	Must have	As a P3SM Administrator I want to synchronise resource information with Microsoft Active Directory So that notifications, workflow items and authentication can be properly done within P3SM	
P3SM_US_0603	Update Labour Costs	Must have	As a P3SM AdministratorI want to update labour costs in EBA from P3SMSo that EBA projects reflect the correct overall actual cost for the project and these can be used in analysis or reporting	Given labour cost actualisations in P3SMWhen a daily batch interface run is executedThen all projects in EBA are updated with the correct overall actual cost for labour resources
P3SM_US_0604	Create Proposal from Service Request	Could have	As a P3SM Administrator I want to create proposals from new customer requests that have been raised in ITSM or SRTS So that project plans and costing for these proposals could be prepared	

P3SM_US_0605	Present Reports and Dashboards on Portal	Must have	As a P3SM Administrator I want to establish a link between a project/portfolio/programme in P3SM and a portal in Microsoft Sharepoint 2013 or Microsoft Sharepoint 2016 So that project information – in the form of reports and dashboards – can be shared with a wider stakeholder community	
P3SM_US_0606	Integrate with Microsoft Office	Should have	As a P3SM User I want to establish a link to Microsoft Office So that I can use Office tools with the data coming from P3SM more productively	AC1 Given projects that I'm a part of When I'm assigned to a project activity Then it is possible to see the activity as a Task in my MS Outlook AC2 Given projects that I'm a part of When I have a report or dashboard for the project Then it is possible export this in Office format to reuse in reports and briefings
P3SM_US_0607	Integrate with LEXONIS	Should have	As a P3SM Administrator I want to establish a link to LEXONIS So that skills data can be shared from LEXONIS to P3SM	
P3SM_EP_0701	**Conduct What-If Analysis**		As a Project Manager / Portfolio Manager / Programme Manager I want to be able to conduct What-If Analysis on a Project or a Portfolio of Projects or a Programme So that I can analyse the effect of changing timing, funding or other parameters to support early decision making and service prioritisation, taking into account any resource impact.	This epic is quite complex and will give rise to several user stories

P3SM_US_0701	Perform What-If analysis based on milestones	Must have	As a Project Manager / Service Manager / Portfolio Manager / Resource Manager / Programme Manager I want to change milestone information in a What-If Scenario So that I can see the impact of changing project/programme milestones on the overall resource availability and timelines, without impacting the current data	AC1 Given a snapshot for a What-If scenario When I make changes in project milestones for one or more plans Then I can see the impact of these changes on related projects/portfolios/programmes and on the overall resource availability and costs; when I leave the analysis, the data is unaffected. AC2 Given a snapshot for a What-If scenario When I make changes in project milestones for one or more plans Then I can export the results of the scenario to MS Office format for reporting and further analysis.
P3SM_US_0702	Perform What-If analysis based on resources	Must have	As a Project Manager / Service Manager / Portfolio Manager / Resource ManagerI want to be able to run what-if analysis based on resourcesSo that I can see the impact of changing resource availability on the project/portfolio/programme timelines, without impacting the current data	AC1Given a snapshot for a What-If scenario When I make changes in resource availabilityThen I can see the impact of these changes on related projects/portfolios/programme schedules and costsAC2Given a snapshot for a What-If scenario When I make changes in resource availabilityThen I can export the results of the scenario to MS Office format for reporting and further analysis.
P3SM_US_0703	Perform What-If analysis on a single project	Should have	As a Project Manager / Service Manager / Portfolio Manager I want to be able to run what-if analysis on a single project So that I can see the effect of multiple scenarios and select the preferred one to update the plan	Given a project When I create multiple what-if scenarios and make changes in the plan for each scenario Then I can compare these scenarios to each other and select one to make permanent, replacing the original project plan
P3SM_US_0714	Perform Trend Analysis	Should have	As a Project / Service Manager I want to run a Trend Analysis report So that I can see the development of the KPIs in a project through versions or baselines	
P3SM_EP_0702	**Manage Reporting**			
P3SM_US_0710	Create and Manage Dashboards	Must have	As a P3SM Stakeholder I want to prepare flexible dashboards So that I can track the cost, schedule, risk, scope, benefits as relevant at the project/portfolio/programme level and drill down as necessary	AC1: Dashboards can be created/monitored based on access privileges for each stakeholder

P3SM_US_0711	Define Key Performance Indicators	Must have	As a P3SM Stakeholder I want to define Key Performance Indicators (KPI) So that business can track the KPIs and make decisions based on these	AC1: KPIs can be created/monitored based on access privileges for each stakeholder
P3SM_US_0712	Export Reports to External Formats	Must have	As a P3SM User I want to export reports/charts/dashboards to MS Office and PDF formats So that these can be used in external reporting and communication	AC1: There should be no necessity to add content to the reports, namely they should already be complete before exporting
P3SM_US_0713	Run Automated Reports	Should have	As a P3SM Administrator I want to schedule reports to run at predefined intervals or when a certain condition is reached So that the effort to plan and run reports can be minimized	
P3SM_US_0715	Provide data to Business Intelligence	Should have	As a P3SM Administrator I want to provide P3SM data to a Business Intelligence capability So that P3SM data can be incorporated into the Corporate BI Data Store and used in analysis and reporting	
P3SM_US_0716	Audit Lifecycle Execution	Should have	As A Project Stakeholder I want to define against which action/step is possible to record a timestamp of the transactions. So to allow reporting and measuring against the key steps of the Planning and Execution of the Projects	
P3SM_US_0720	Define Flexible Report	Should have	As A Project Stakeholder I want to define a report by selecting data and attributes available So that I can get the exact report I need	
P3SM_TH_0701	**Prepare Report**		As a P3SM User I want to get a set of pre-defined reports So that I quickly get information about projects/portfolios/programmes	
P3SM_US_0704	Prepare Project Schedule Report	Must have	As a Project Manager / Service ManagerI want to prepare a Project Schedule ReportSo that I can track the progress of the project	Given a project that I'm interestedWhen I select the Official Baseline and/or any other project baselineThen I can get the project schedule report, including milestones and variance against the selected baselines

P3SM_US_0705	Prepare Project Cost Report	Must have	As a Project Manager / Service Manager I want to prepare a Project Cost Report So that I can track the expenditure of the project	Given a project that I'm interested When I select the Official Baseline and/or any other project baseline Then I can get the project cost report, including cost variance against the selected baselines
P3SM_US_0706	Prepare Project Baselines Report	Must have	As a Project Manager / Service Manager I want to prepare a Project Baselines Report So that I can compare the various baselines of the project against each other and against the current plan	Given a project that I'm interested When I select the Official Baseline and/or any other project baseline Then I can get the selected baselines and the current project plan on a comparative chart, with milestones included
P3SM_US_0707	Prepare Workload-Work Capacity Report	Must have	As a Resource Manager I want to prepare a Workload-Work Capacity Report So that I can track and manage the workload of the resources and the capacity for my organisational unit	Given my organisational unit When I select a period of analysis Then I can get the workload of the resources in that period and have comparative charts for workload against the unit capacity
P3SM_US_0708	Prepare Risk and Issue Report	Must have	As a P3SM Stakeholder I want to prepare a Risk and Issue Report So that I can track and manage the risks and issues of my project/portfolio/programme	
P3SM_US_0709	Prepare Lessons Learned Report	Must have	As a P3SM Stakeholder I want to prepare a Lessons Learned Report So that I can manage and report on Lessons Identified and Lessons Learned at project/portfolio/programme level	
P3SM_US_0717	Prepare Project Resource Execution Report	Must have	As a Resource Manager/Project Manager/Service Manager I want to review Resources Allocation Commitment against Projects and Services, So that I can track and manage the actual Resource execution of the Task versus the commitment	
P3SM_US_0718	Report Performance Against Baseline	Must have	As a Portfolio/Programme Manager I want to generate and export to MS Office® tools a report showing Programme, Tranche, Project/Business Change Activity (BCA) performance against any selected baseline So that corrective actions can be proposed if necessary	

P3SM_EP_0901	Manage Strategic Goals and Objectives		As an Executive Management Team Member I want to manage strategic goals and objectives So that we can link projects, portfolios, programmes and other P3SM entities to these goals and objectives to track and manage them efficiently	
P3SM_US_0901	Define Strategic Goals and Objectives	Should have	As an Executive Management Team Member I want to define Strategic Goals and Objectives for the Agency for a particular time period So that the whole Agency can have the same strategic direction and Agency activities can be aligned to these	Given a Strategic Goal and Objectives to achieve the goal When I enter these to the P3SM system Then they are available to all P3SM users to view and align
P3SM_US_0902	Align Project / Portfolio / Programme with Strategic Goals and Objectives	Should have	As a Project / Portfolio / Programme Manager I want to establish a link between my Project / Portfolio / Programme and one or more Strategic Goal or Objective So that the projects / portfolios / programmes linked to the Goal or Objective can be tracked and the realization of the Goal / Objective can be assessed	Given a Project / Portfolio / Programme When I link this to one or more Strategic Goal or Objective Then the realization Goal / Objective stores the list of projects, portfolios or programmes aligned with it.
P3SM_US_0903	Track Realization of Strategic Goals and Objectives	Should have	As an Executive Management Team MemberI want to track the realization of Strategic Goals and ObjectivesSo that steps can be taken if the Goal or Objective is not being achieved in the time frame anticipated	Given a Strategic Goal or ObjectiveWhen I request realization report of the Goal or ObjectiveThen the realization of the Goal / Objective can be assessed along with the possibility to drill down to the projects/portfolios/programmes aligned with them.
P3SM_US_1001	Log important changes	Must have	As a P3SM Administrator I want to enable logging for important changes to the data So that the user and timestamp information can be logged for major changes to P3SM data	
P3SM_US_1002	Work Off-line	Should have	As a P3SM User I want to work on project plans while disconnected from the network (off-line) So that I can work independently and synchronize with the server when I get connected again	
P3SM_US_1004	Archive Projects, Portfolios or Programmes	Must have	As a Project Administrator I want to archive projects, portfolios, programmes or other P3SM artefacts So that the active system database can still be performant	

P3SM_US_1005	Manage the Organization Breakdown Structure	Must have	As a P3SM Administrator I want to create and manage an Organizational Breakdown Structure (OBS) within P3SM So that metrics, reports and dashboards can be assigned to the elements of the OBS.	
P3SM_EP_1101	**Manage Issues and Risks**		As a P3SM Stakeholder I want to identify, assess and control Issues and Risks So that I can improve the ability of the project to succeed.	
P3SM_US_1101	Identify and Register Risk	Must have	As a P3SM Stakeholder I want to identify risks in Projects, Portfolios and Programmes So that these risks could be recorded in the Risk Register and can be used to improve the ability of the project to succeed	Given a Risk that is identified for a Project, Programme or Portfolio When the Risk is recorded in the Risk Register Then it has the mandatory information and can be managed within the Agency Risk Management process
P3SM_US_1102	Estimate Risk	Must have	As a P3SM Stakeholder I want to estimate risks in Projects, Portfolios and Programmes So that the probability, impact and proximity of these risks could be recorded in the Risk Register, analysed and mitigated	AC1 - All risks are registered in a risk register and properties can be defined. AC2 - this can be stored so that it can be used for further Risk Analysis
P3SM_US_1103	Evaluate Project/Portfolio/Programme Risk	Must have	As a P3SM Stakeholder I want to evaluate the total risk in Projects, Portfolios or Programmes So that the overall Risk Value for the Project, Portfolio or Programme can be calculated and recorded	Given one or more Risks for a particular Project, Programme or Portfolio in the Risk Register When the individual risks are assessed Then the total Risk Value for Project, Programme or Portfolio can be calculated.
P3SM_US_1104	Manage Risk Responses for Threats	Must have	As a P3SM Stakeholder I want to manage responses to Risks for Threats So that action to mitigate risks can be taken by the right stakeholders and in time	AC1: Given a Risk in the Risk Register When there is a Threat as part of the Risk Then I can enter and record Risk Responses corresponding the Avoid, Reduce, Fallback, Transfer, Share and Accept actions AC2: Risk responses become part of the Project Action List
P3SM_US_1105	Manage Risk Responses for Opportunities	Must have	As a P3SM Stakeholder I want to manage responses to Opportunities So that action to exploit opportunities can be taken by the right stakeholders and in time	Given a Risk in the Risk Register When there is a Opportunity as part of the Risk Then I can enter and record Risk Responses corresponding the Share, Exploit, Enhance and Reject actions

P3SM_US_1106	Produce Risk Matrix	Must have	As a P3SM StakeholderI want to produce a Risk MatrixSo that action to mitigate risks can be taken by the right stakeholders and in time	
P3SM_US_1107	Escalate Risk	Must have	As a P3SM Stakeholder I want to escalate a Risk from the Project to the Portfolio, Programme or Corporate level So that action to mitigate risks can be taken by the right stakeholders/organisational unit	
P3SM_US_1108	Manage Risk Dashboards and reports	Must have	As a P3SM Stakeholder I want to produce Risk Dashboards and reports So that risks can be effectively managed	
P3SM_US_1109	Link Risks to other P3SM elements	Should have	As a P3SM Stakeholder I want to link risks to project tasks, milestones, other projects and to other risks So that risks can be effectively managed	
P3SM_US_1110	Manage Issues	Should have	As a P3SM Stakeholder I want to manage Issues similar to risks, including conversion from and to Risks So that Issues can be managed to improve project success	
P3SM_US_1111	Manage Risk Thresholds	Should have	As a P3SM Stakeholder I want to manage Risk thresholds at Project, Portfolio or Programme levels So that tracking and alerting based on thresholds can be standardized at the right level	
P3SM_US_1112	Perform PERT Analysis	Should have	As a Project Manager I want to perform PERT analysis on my project plan So that I can get optimistic, pessimistic and most likely estimates on my project schedule	

ANNEX F.
Solution Demonstration

1. The Agency reserves the right to request a demonstration of the solution using the User Stories in ANNEX E.

2. In principle, these User Stories are most critical to the NCI Agency's core functions and are expected to be available in the COTS solution used for the P3SM.

3. Given the current global landscape, the demonstration will be delivered via video conferencing tool at the discretion of the Respondent.

Story ID	Story Name
P3SM_US_0101	Create Project/Service Plan from Template
P3SM_US_0102	Create Project/Service Plan from existing project
P3SM_US_0106	Support Earned Value Management
P3SM_US_0112	Manage Project Schedules with Graphical User Interface
P3SM_US_0114	Manage Milestones
P3SM_US_0137	Manage Baselines
P3SM_US_0139	Track Project Performance
P3SM_US_0147	Report Project Plan Quality Indicators
P3SM_US_0204	Assign Selected Resources
P3SM_US_0206	Manage Resourcing Workflow
P3SM_US_0208	Track Resource Assignments
P3SM_US_0209	Display Resource Availability
P3SM_US_0213	Analyse Workload
P3SM_US_0303	Book Time
P3SM_US_0304	Book Time via Mobile Device
P3SM_US_0306	Approve or Reject Timesheet
P3SM_US_0403	Track Cost, Schedule and Resources for Portfolio
P3SM_US_0507	Monitor Cost, Schedule and Resources for Programme
P3SM_US_0701	Perform What-If Analysis based on Milestones
P3SM_US_0702	Perform What-If Analysis based on Resources
P3SM_US_0707	Prepare Workload-Work Capacity Report
P3SM_US_0710	Create and Manage Dashboards

Table 2 – User Stories to be implemented for the Demonstration