**ANNEX A**

**Statement of Requirements for the Development of the DE&S Corporate Standardization Management Tool StanMIS**

**Overview of Requirement**

UK Defence Standardization (DStan) has developed a Through Life Standardization Management Toolset “**StanMIS**” to enable the implementation of processes described in JSP 920 “Standardization Management Policy”.

StanMIS is a .NET web application incorporating tools to conduct and manage a number of Standardization Management (SM) processes to meet UK MOD capability, including:

* Standardization Management Plan (SMP) tool
* Standards Requirement Verification (SRV) tool
* Interactive Defence Standard (Def Stan) drafting template
* Standards portfolio management
* Decision Support Tool to enable intelligent standards selection
* Ratification tool for the approval of NATO Standardization Agreements (STANAGs)
* Watchlist tool for monitoring standards configuration data
* Custom filtering and reporting tools

StanMIS is hosted on the MOD Intranet at <http://mou.isg-r.r.mil.uk/StanMIS/> and there is a “cut-down” internet version which will be hosted as part of the DStan website at <https://www.dstan.mod.uk/>.

There is a requirement to further develop the toolset to meet new and changing requirements in SM and to refine existing processes.

The management, searching and selection of historic (i.e. up-issued, withdrawn or superseded) needs to be incorporated for projects supporting legacy equipment and where project requirements cross multiple editions of the same standard.

Additionally, a tool is required to enable UK Defence Standardization to better meet its legal deposit requirements and to support licencing agreements with third party suppliers of standards.

Further improvements to existing processes are listed below.

**Scope of Work to be managed**

The following additional features shall be added to the toolset:

* A Defence Standards Portfolio Archive Management Tool.
* A Legal Deposit Management Tool.
* Improved Defence Standard drafting template and associated processes.
* Through life assurance process for SMPs.
* Improvements to report building and information sharing.
* Improved management of Operational Datasets in SMPs.
* Improvements to administration tools.
* Improved process management within existing tools to improve audit and record trails and to enable improved business analysis.
* A function for adding additional document types to the “standards” menu.

All additional features must be incorporated within the existing technical hosting environment and at no detriment to the existing performance and functionality of the StanMIS toolset.

Where applicable and by agreement with DStan, improved features shall also be added to the internet version of StanMIS.

The supplier shall liaise with hosting providers for both Intranet and Internet versions of StanMIS to ensure all changes are fully compatible and supported on their intended hosting environments.

The supplier shall provide a technical support service to the application throughout the development and implementation until 90 days after completion of the final deliverable to ensure its functionality continues to meet developing standardization management processes and policy and that all defects, bugs and technical issues are resolved.

**Detailed Requirement**

**1. Defence Standards Archive Tool**

This tool shall replicate the functionality and data structures of the Def Stan portfolio management section of StanMIS and shall support all current metadata fields.

The archive shall be initially created and populated by the supplier including a single record for all previous issues of existing “live” standards (i.e. Extant, Interim and Obsolescent). Thus if a Def Stan is currently Extant at Issue 4, records shall be created for Issues 1, 2 and 3.

The archive tool shall then enable DStan staff (those in programme manager or records manager roles) to populate additional fields with historic configuration information such as issue and status dates.

DStan staff shall be able to add additional records where necessary to capture amendment information.

The archive tool shall facilitate publishing of electronic versions of standards to websites using the same methods in place for extant standards.

The archive tool shall be integrated with existing tools within the system such that searching and selection for watchlists, SMPs and SRVs is enabled. Where an archived standard is selected to meet a project requirement this represents a risk in standard selection and shall trigger alerts and mitigation action within existing processes. More detail on alerts is listed under item 8 “Process and Audit Trail Improvements”.

**2. Legal Deposit Management (“Library Portal”)**

DStan has a legal requirement to deposit copies of all Def Stans to six major libraries in the United Kingdom and Ireland (see <http://www.bl.uk/aboutus/legaldeposit/introduction/> for further information). This process can be streamlined using the existing functionality of the toolset with some additional features.

The Library Portal shall be a tool and process available to DStan records managers which enables them to identify all documents awaiting deposit. It shall enable the records manager to package those documents and their supporting records in a suitable format (e.g. a zip file containing all Def Stan PDFs and a spreadsheet detailing content and configuration information) to meet the requirements for electronic deposits to the libraries. The tool shall record that deposit requirements have been met for all processed standards.

Additionally, this tool shall also support DStan’s requirement to distribute new standards to third party licenced distributors in accordance with existing licencing agreements using the same functionality.

**3. Defence Standard Drafting Template**

There are technical and formatting issues with the merging of authored content with the Def Stan drafting template which are delaying the full implementation of the template within the SRV process for developing standards.

The supplier shall investigate these issues and identify and implement a solution to ensure the template fulfils its role in the end to end drafting process. The supplier shall liaise with DStan’s Standard Programme Managers during testing of the template to ensure all issues are resolved.

**4. Standardization Management Assurance**

The SMP tool within StanMIS currently supports light touch assurance activities whereby SM maturity can be assessed at key milestones in a project lifecycle. However, this feature does not support more detailed analysis and recording of compliance with SM policy and processes.

The supplier shall propose a robust assurance recording mechanism within the SMP tool to enable DStan to conduct and record assurance activities through the life of an SMP and in particular supporting the Standardization Management review activities detailed in GEAR (Guide to Engineering Activities and Review) which form part of the DE&S Project Engineering Management Plan.

DStan shall provide an SM Assurance focal point to assist with ensuring that this feature fully meets review and assurance requirements.

**5. Report building and Information Sharing**

StanMIS currently has a number of tools which enable users to extract and share information to assist with standardization management activities and with standard development in support of DE&S projects. These features shall be enhanced to ensure all possible relevant data may be shared with other StanMIS users or exported to non-StanMIS users.

The Filter Builder tool is a powerful feature which provides access to key data from a number of database entities. However, where reports are required which identify relationships across a number of entities, it requires a data analyst to design and share information by manually querying the backend database.

An enhanced reporting tool shall enable the analyst to build cross-table queries and share them via a report bank accessible within the toolset. The supplier shall identify and propose options for implementation of this function and possible customisations of reports – enabling users to select fields and values from a shared report.

Additionally, the Standards lists within the toolset (Watchlists, DST lists, Operational Datasets) shall be enhanced to be shareable between users. This enhancement will enable, for example, all members of a project team or standards development committee to monitor the same standards without needing to recreate the lists.

A function shall be provided to enable DStan to target information at user groups via email alerts.

A function shall be provided to enable customers to provide feedback on the StanMIS tool via an online form. DStan shall receive notification of feedback via email alert and all feedback shall be recorded in the StanMIS database.

**6. Operational Data Sets**

Operational Data Sets (ODS) are lists of recommended best practice standards which may be applied to a project’s SMP.

The supplier shall propose options for improving the management and implementation of ODS including options for:

Nesting of Datasets, such that an overarching “cross-cutting” dataset may be incorporated in high level User Requirements datasets (e.g. for Fleet, Air, Land) and which in turn may be incorporated in System Requirements datasets (e.g. for tracked or wheeled vehicles). This would allow changes to top level data to be cascaded through all lists with minimal maintenance and administration.

Tracking of ODS usage in SMPs. Currently once an ODS is applied to an SMP those standards within it become part of the overall selection within that project requirement. Detailed analysis on project team assessment of those selected standards is therefore difficult as there is no record that a standard “arrived” in an SMP via ODS or manual selection. It is essential that DStan builds a body of data on ODS utility throughout SMP lifecycles. This will enable on-going refinement of lists to meet project requirements and minimise trading and tailoring in the development and manufacture phases of acquisition.

Reason for inclusion: the ODS list type will be expanded to include supporting information for a standard’s inclusion in a list. This shall be a selection list (drop-down) which may include such reasons as policy, legislation, safety, interoperability, etc. and shall be an administrable list. A text field shall also be provided to enable supporting information or references to be inserted. All SMP users shall have visibility of those reasons when importing and assessing those standards from an ODS.

**7. Toolset Administration**

Administration tools shall be enhanced to enable the administrators to delete records that are no longer required or that are created in error (e.g. users, SRV tasks, Ratification Tasks).

A function shall be made available to permit administrators to edit user names to allow logical transition of tasks where users change roles.

**8. Process and Audit Trail Improvements**

A number of outstanding issues to be addressed in the functionality of the StanMIS application were identified during the previous development phase and recorded in an issues log.

These issues mainly related to end-to-end standardization management processes or to roles and responsibilities and how activities were recorded.

DStan and the supplier shall analyse the issues log and prioritise fixes within the scope of the application support arrangements.

DStan and the Supplier shall also review the existing StanMIS roles and their tiered permissions and amend or create roles and permissions as required to meet business requirements.

DStan’s business systems analyst will liaise with the supplier and provide direction on required data capture within process improvements to support DStan’s reporting requirements.

**9. Document Types**

Civil Standards: MOD currently has a framework in place to provide MOD staff access to civil standards such as BS, BS EN and BS ISO documents via a service named Standards On-Line or SOL.

The supplier shall liaise with DStan and the SOL supplier to identify and implement options for integration of civil standards data to enable a high level (e.g. identifier, title and issue) search for and selection of civil standards within the StanMIS SMP, SRV and Decision Support tools. Options shall include a method for redirecting customers to appropriate sources for documents, e.g. via a smart link to the document on the SOL service and a method of keeping civil standards data up-to-date.

EDSTAR “Best Practice” standards: the supplier shall implement a new field to enable standards to be marked as recognised best practice on the EDA Standards Reference System EDSTAR. Those standards shall then be treated as preferential in all hierarchical search results within list management and creation and within SMPs.

Other standards and related documents: the “Standards” area in StanMIS currently provides access to UK Defence Standards and NATO standards. There are a number of other standards types in the military and civil arena that are regularly used in support of defence acquisition. The supplier shall propose options for adding a function to enable administrators to create new document types, to add generic field names and to select a unique identifier.

Additionally, the administrator shall be able to prioritise all document types in a selection hierarchy which will then be reflected in all searches.

**Technical Environment**

All elements of the Toolset shall be compatible with the hosting environment provided by DE&S CIO MIST on the Defence Intranet and with the Joint Server Farm (JSF) environment on the Defence Gateway. The supplier shall liaise with hosting providers on both platforms to ensure full technical compatibility and functionality.

The supplier shall ensure that the Internet version of StanMIS fully meets the penetration testing and cyber security requirements of the JSF.

The programming language for .NET web content shall be C#.NET (“C Sharp”).

**Technical Support**

The supplier shall detail proposals for supporting the application during development to ensure timely resolution of high priority issues. The proposal shall detail

* how issues will be recorded and prioritised
* timescales for resolution based on priority and
* a process for escalation of unresolved issues to find solutions

**Required Documentation**

The supplier shall provide a toolset technical specification fully describing the structures and functionality of all code within the application. The specification shall describe the rationale for design decisions and will provide a textual summary of the design. It will also include database schema diagrams, database table relationships, field descriptions, indexes and keys, etc. in a Data Dictionary.

All C# code shall be fully and extensively commented throughout to support future development and management of the system. All source code shall be supplied with the final deliverable.

An installation and administration guide document shall be provided.

**Scheduling**

This work is scheduled to run to end March 2019. New developments such as the archive tool and library portal shall be delivered by end February 2017. The supplier shall liaise with DStan to agree priorities and work schedules for all enhancements to take place until before end March 2019 and shall provide technical support to the application until 90 days beyond the final accepted deliverable.

A phased approach to development, testing, acceptance and release shall be used to ensure enhancements are available to users as early as possible in the development.

Throughout the development, DStan shall notify the Supplier of any changes to DStan’s services or processes which may impact development of the tools. DStan and the Supplier shall take an agile approach to this development to continue to prioritise work and resource ensuring the final deliverable reflects business practices and maximises business benefit.

**Deliverables**

* 1. StanMIS Intranet system compatible with DE&S CIO MIST hosting Environment including all new developments and enhancements detailed above.
  2. “Cut down” StanMIS Internet system compatible with MOD JSF environment on Defence Gateway with selected features removed as agreed between DStan and the Supplier
  3. Technical support of the applications through the life of the development task
  4. All required documentation
  5. MOD shall retain Intellectual Property on all deliverables.

**Project Acceptance Criteria**

The Supplier shall provide a testing environment throughout development to enable DStan and its stakeholders to rigorously test all enhancements before live release.

Following completion of the development process the toolset and its mirror will be deployed on the hosting environments. DStan will then conduct final trial and acceptance testing.

The supplier and DStan will agree criteria for an acceptance testing report which DStan shall sign-off following final testing.