Statement Of Requirement for the Warfare Signatures Database (WSD)

The core service of the WSD Contract shall consist of, but shall not be limited to the following:

1. Maintain the WSD service to the supported user systems by the provision of a problem investigation and problem solving facility. A supported user system is one from an agreed list of 12 trainers (as defined below under 'List of Supported Trainers'). The activities undertaken and the hours expended dealing with these investigations or problems and their outcomes, are to be recorded in the Quarterly Progress Reports culminating in an annual report. Examples of minor, medium and major investigations or problems are:

    a.   A minor investigation – An investigation of arcs of coverage

    b.   A medium problem solved – Produce a model of a SCAD

    c.   A major investigation – Clarification of RADAR issues.

    The number of these tasks required per annum are capped at 1 Major task; 2 Medium tasks and 7 minor tasks.

2. Modelling of 7 new vehicles per annum.

3. Support two annual two-day Group Validation Meetings (GVM) to be held during October and February. This will include vehicle validation and agreement of the decisions and actions (for further details see Terms of Reference from FLEET dated 24 May 18).

4. Support two annual half-day Database Working Group (DWG) meetings (for Terms of Reference and specific contractor responsibilities see letter from FLEET dated 24 May 18).

5. Support an annual half-day Database User Group (DUG) meeting (for Terms of Reference and specific contractor responsibilities see letter from FLEET dated 24 May 18).

6. Support an annual half-day Database Management Group (DMG) meeting (for Terms of Reference and specific contractor responsibilities see letter from FLEET dated 24 May 18).

7. Provide an annual issue of the WSD CD to the user systems either directly or via the MoD SIO (as appropriate) of validated models. As agreed by the ████████████████████, the issue of the EW Database is limited to specific supported user systems only. The other user systems are not permitted to receive the EW Database. As such two versions of the WSD shall be produced and issued as appropriate.

8. Maintenance and upkeep of the Change Proposal Form register under the Support Service.

9. Maintenance and upkeep of the WSD documentation (i.e. the Data Set as defined below under 'WSD Publications').

10. Provide Quarterly Project Reports to ██████ for which two per annum shall be followed by a Project Progress Meeting with ██████ at Abbey Wood. The Contractor shall produce the minutes of the Project Progress Meeting within 10 days of the meeting.

11. The following Options may be taken up during the Contract:

    a.   Additional WSD Service – This provides additional WSD service to the supported user systems as described in Item 1 above capped as follows:

    - 1 additional Major Task per annum

    - 2 additional Medium Tasks per annum

    - 7 additional Minor Tasks per annum

b. Enhanced Aural – Modelling and documentation to support updates to the Transient Data File (TDF) enhanced aural effects in the WSD.

c. Active Sonar Modelling – Modelling and documentation of Active Sonars to enhance the vehicle modelling in the WSD.

d. RADAR Modelling – Modelling and documentation of RADAR to enhance the vehicle modelling in the WSD.

e. Improved 'Real World' Vehicle Performance – Upgrade to the WSD structure and documentation to support improvements in 'real world' vehicle performance.

f. GFA – Update to the GFA that supports the working operating environment.

12. All changes to the WSD shall ensure that the WSD remains 'backwards compatible'.

13. Update existing GFA to maintain supportability of the working operating environment.

Constraints

1. All issues of the WSD and released models, including the supporting documentation, shall be suitably encrypted (see Encryption of Removable Storage Media, 13SA/2017/0025, Version 1.1, dated 15 Nov 17).

2. Provision, from MOD, of vehicle source data from ███ or alternative sources to support modelling.

3. The October GVM will be immediately followed by a DWG and then a DUG, where the DWG and DUG will be held on the same day. This sequence of meetings will be held at ███████.

4. The February GVM will be immediately followed by a DWG and then a DMG, where the DWG and DMG will be held on the same day. This sequence of meetings will be held at ███████.

5. Attendance of the GVM should include SME representatives from █████████, █████████, █████████, █████████████, ████ and ███████.

6. It is anticipated that a maximum of four vehicles can be validated at a GVM.

7. The outputs of the GVM will be communicated to the wider WSD stakeholders at the WGM.

8. The WSD Change Impact Assessment Procedure (CIAP) shall be followed for all additional tasking.

WSD Publications

Document number	Title	Classification	Useful description
55085	Version description document	Secret UKEO	Gives useful information about the new issue of the WSD. Lists the files that are on the issue CD and the documents that are there, including the version numbers for each. It details the changes that have been made to the WSD between the issue that is on the CD and the previous issue (changes include updates to existing vehicles, sonars etc. that have resulted in a new 'Build' in the WSD CD, as well as all new vehicles, sonars etc.). Lists the classification of each WSD entity in that issue.

Document number	Title	Classification	Useful description
90000	Overview document	Official Sensitive	Describes the structure of the database, the philosophy behind the WSD and the various publications available.
90001	VRN Database Structure and Modelling for ASW Trainers	Secret	Describes the data structure of the VRN (vehicle) database within the WSD, including a description of the C constants and implementation guidelines for use by trainers within their own simulations.
90002	Active Sonar (AS) Data Structure and Modelling for ASW Trainers	Secret	Describes the data structure of the active sonar database within the WSD, including a description of the A constants and implementation guidelines for use by trainers within their own simulations.
90003	Radar Emitter (RE) Data Structure and Modelling for ASW Trainers	Secret	Describes the data structure of the radar emitters database within the WSD, including a description of the R constants and implementation guidelines for use by trainers within their own simulations.
90004	Entity List	Secret UKEO	Provides a list of all entities (vehicles, radars, active sonars and transients) within the WSD, giving their number, name, build number, associated CGI number, release history and other information as appropriate. There is also an issue history giving dates for each of the issues of the WSD.
90009	Towed array modelling for ASW trainers	Secret	Describes the WSD mathematical model of towed array hydrodynamic behaviour for ASW trainers.
90010	Transient (TR) Database Structure and Modelling for ASW Trainers	Official Sensitive	Describes the different ways in which transients can be implemented in the WSD and a description of all the T constants in the transient data files. There are also implementation guidelines for use by trainers within their own simulations.
90012	Data Exchange Specification DES 2	Official Sensitive	Provides the specification for the WSD's output formats. Useful for Trainer Design Authorities who can use it as an unambiguous specification of the database data format.
90016	Passive Sonar (PS) data structure and modelling for trainers	Secret	The passive sonar database was added to the WSD as a result of a specific requirement generated by SMCS. This document provides a description of all the passive sonar constants used in the WSD
90020	Vehicle Build History	Secret	Comprehensive document detailing the build history of every vehicle within the WSD since control was handed to ▉▉▉▉ in ▉▉▉. Build histories include modifications to vehicles, updates to sonar and radar fits, changes to aurals etc..
90021	Maintained VRN Review	Official Sensitive	Document showing which vehicles are currently in –service (and therefore maintained in the WSD), as a result of cross-referencing with Jane's.
90025	Current CPFs report	Official Sensitive	Report detailing the current Change Proposal Forms at the time of the WSD issue, along with their agreed priority and status.

Document number	Title	Classification	Useful description
90026	Archived CPFs report	Official Sensitive	Report detailing the archived Change Proposal Forms at the time of the WSD issue.
90027	Vehicle Fit Report	Secret UKEO	Provides the top four Active Sonars and top four RADARS fitted to every Vehicle in the WSD.

List of Supported Trainers

Location	No.	System	AKA	Contact
██████████	1	AS1104	Veracity	████████████
	2	AS1118 CR	Thrasher	
	3	ASTUTE	Alert	████████████
████████	4	AS1117	Talisman	████████████
	5	MCTS	Devonport 1	
████████	6	AS1094 DO	AFACT	
	7	AS1095	SAINT (Raleigh 1)	
	8	AS1095	SAINT (Raleigh 2)	████████
	9	AS1082	DAT	
	10	SMCS	Submarine Command System	
	11	R2T2	Rapidly Reconfigurable Training Technology	████████
████████	12	MCTS	Collingwood 1	████████████
			Collingwood 2	

Note that:
- SMCS is not fully supported as it is only able to use a subset of the entities contained in Issue 10 of the WSD.