Schedule 2.3 - Lot 3

Standards

Version 4.0

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CHANGE HISTORY

Version No.	Date	Details of Changes included in Update	Author(s)	Document Number
4.0	12.11.15	Execution version	ESMCP	35938805.11

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1 General

1.1 Throughout the term of this Agreement, the Parties shall monitor and notify each other of any new or emergent standards which could affect the Supplier's provision, or the Authority's receipt, of the Services. Any changes to the Standards, including the adoption of any such new or emergent standard, shall be agreed in accordance with the Change Control Procedure.

1.2 Where a new or emergent standard is to be developed or used by the Supplier, the Supplier shall be responsible for ensuring that the potential impact on the Supplier's provision, or the Authority's receipt, of the Services is explained to the Authority as part of the relevant Impact Assessment (in the applicable timeframe in accordance with Paragraph 8 of Schedule 8.2 (Change Control Procedure), prior to the implementation of the new or emergent standard.

1.3 Where Standards referenced conflict with each other or with Good Industry Practice, then the later Standard or best practice shall be adopted by the Supplier. Any such alteration to any Standard(s) shall be agreed in accordance with the Change Control Procedure.

2 Technology and Digital Services Practices

2.1 The Supplier shall (when designing, implementing and delivering the Services) adopt the applicable elements of HM Government's Technology Code of Practice as documented at https://www.gov.uk/service-manual/technology/code-of-practice.html

3 Open Standards and Standards Hub

3.1 The Supplier shall comply to the full extent within its control with UK Government's Open Standards Principles as documented at https://www.gov.uk/government/publications/open-standards-principles as they relate to the specification of standards for software interoperability, data and document formats in the IT Environment.

3.2 Without prejudice to the generality of Paragraph 1.2, the Supplier shall, when implementing or updating a technical component or part of the Software or Supplier Solution where there is a requirement under this Agreement or opportunity to use a new or emergent standard, with the prior written approval of the Authority such approval not be unreasonably withheld or delayed, submit a Suggested Challenge compliant with the UK Government's Open Standards Principles (using the process detailed on Standards Hub and documented at http://standards.data.gov.uk/). Each Suggested Challenge submitted by the Supplier shall detail, subject to the security and confidentiality provisions in this Agreement, an illustration of such requirement or opportunity within the IT Environment, Supplier Solution and Government's IT infrastructure and the suggested open standard.

3.3 The Supplier shall ensure that all documentation published on behalf of the Authority pursuant to this Agreement is provided in a non-proprietary format (such as PDF or OpenDocument Format (ISO 26300 or equivalent)) as well as any native file format documentation in accordance with the obligation under Paragraph 4.1 to comply with the UK Government's Open Standards Principles, unless the Authority otherwise agrees in writing.

4 Technology Architecture and Design Standards

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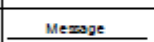
4.1 The Supplier shall use the following notations within its technical architecture and design documentation:

(a) In The Supplier's Technical Architecture Documents the Supplier uses the following notation:

Term	Symbol	Definition
Component		Defined functional block, comprising the main software, any supporting scripts, associated databases and the hardware (even if this is shared with other systems). The level used depends on the context. In some cases one system comprises a number of logical entities, to be further expanded in lower level documents. Typically, these will be entities as defined in the Component Catalogue
Interface		Functional connection between two systems/databases. This only considers the functional information, not the details of the different protocols involved; which are covered in the interface contracts. It does not show intermediate systems that only handle lower layer protocols or are not relevant to the context (e.g. routers or STPs). An interface does not include the supporting functions at either end; these form part of the systems.

The Architecture diagrams show the level of change for each system and interface. The key to the symbols used in attached to each of the overall architecture diagrams and a full definition is given below.

Marking of text only applies to new or removed parameters within a message in the flow diagrams for a changed message.

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Term	Symbol	Definition
New		Colour = RED, Stereotype = <<new>> Completely new system/database/interface, introduced to EE for the first time. This includes a new application built on existing technology.
Unchanged		Colour = GREEN, Stereotype = <<unchanged>> No changes required to the component/interface configuration or data held by the component/interface. Included to set the context of the overall architecture or explicitly to show that it doesn't change.
Configuration		Colour = PURPLE, Stereotype = <<config>> Component: Change to the data within a system or to the way it is set up. The changes can be applied to the system as it stands (e.g. operational configuration or other systems send different data). Interface: The content of the requests/responses used on the interface between the same pair of systems have changed, but the same set of requests/responses applies. This may require functional changes to the systems involved.
Functional		Colour = BLUE, Stereotype = <<func>> Component : Change to what the system does. This is basically a code change, including a new database schema, support for a new interface or something different to be delivered. Interface: Change to the set of requests/responses supported or an existing interface is reused between a different set of systems.

Term	Symbol	Definition
Remove		Colour = GREY, Stereotype = <<remove>> Component / interface to be removed as part of the project. This is in addition to the above where relevant (e.g. one phase may change something for it then to be removed in another).

The Supplier employs the widely used Sparx Enterprise Architect CASE tool;t he tool is capable of many forms of modelling but the Supplier has elected to adopt an UML approach to model components and their interfaces using sequence diagrams to record and represent sequences of interactions. The tool is used by architects and designers to communicate both the current state of deployment and planned states. The former is a major asset of the Supplier as it enables it to realise fully its world class Service Oriented Architecture through highly effective leveraging of assets. The Supplier applies best practice in configuration control when transitioning from current to planned states to preserve the integrity of the model.

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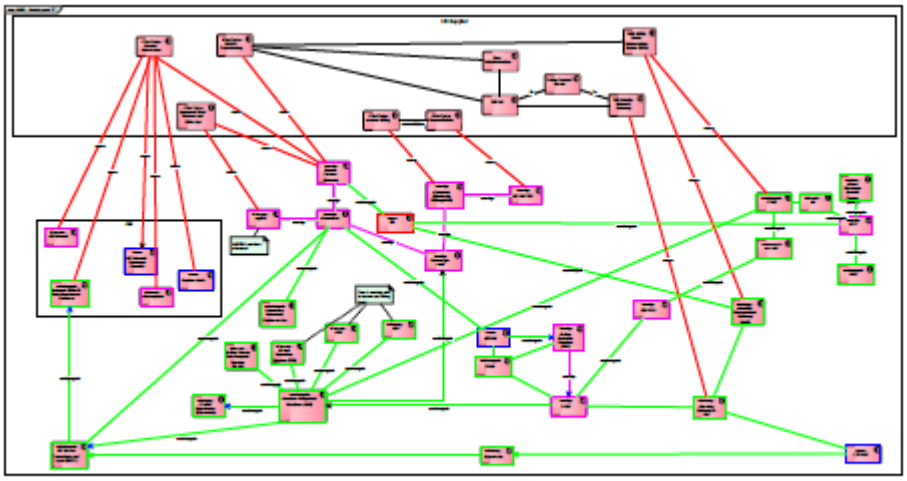

Example Sparx Enterprise Architecture diagram

The Supplier employs The Open Group Architecture Framework (TOGAF) architecture framework methodology.

(b) others by agreement with the Authority.

5 Accessible Digital Standards

5.1 The Supplier shall comply with (or with equivalents to):

(a) the World Wide Web Consortium (W3C) Web Accessibility Initiative (WAI) Web Content Accessibility Guidelines (WCAG) 2.0 Conformance Level AA;

(b) ISO/IEC 13066-1: 2011 Information Technology – Interoperability with assistive technology (AT) – Part 1: Requirements and recommendations for interoperability; and

(c) the Government's published "Digital by Default Service Standard" as documented at: https://www.gov.uk/service-manual/digital-by-default.

6 Telecommunication Standards

6.1 For all aspects of the Supplier Solution that provide or support voice and data communication services the Supplier shall use open global standards and specifications.

6.2 The Supplier Solution shall use the standards and specifications developed by the following Standards Development Organisations (SDO):

(a) (i) 3rd Generation Partnership Project (3GPP)

(ii) Groupe Speciale Mobile Association (GSMA)

(iii) International Telecommunication Union (ITU)

(iv) IPv6 Forum

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(v) IMS Forum

(vi) Small Cell Forum

(vii) Internet Engineering Task Force (IETF)

(viii) Open Mobile Alliance (OMA); and

(b) others by agreement with the Authority

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6.3 The Supplier shall ensure that the audio and video compression and transmission of voice and data services are provided using open global standards, which shall include but are not limited to those codecs produced by the Moving Picture Experts Group (MPEG) and 3GPP (e.g. AMR Speech Codec) and:

(a) International Telecommunication Union (ITU); and

(b) others by agreement with the Authority.

6.4 Data shall be provided in ESRI ASCII raster format compliant with the following standard (or replacement to be agreed from time to time with the Authority: http://resources.esri.com/help/9.3/arcgisengine/java/GP_ToolRef/spatial_analyst_tools/esri_ascii_raster_format.htm. OSGB national grid coordinates shall be used with an origin point of (0,0). The resolution of the data shall be 100mx100m. Each pixel shall be populated by the predicted signal level in dBm to the nearest 1 dB.

7 Telecommunications Equipment Standards

7.1 The Supplier shall ensure that all radio equipment and telecommunications terminal equipment provided as part of the Supplier Solution complies with the R&TTE (Radio equipment and telecommunications terminal equipment) Directive (1999/5/EC), or any subsequent replacement.

7.2 The Supplier shall follow the International Commission on Non-Ionizing Radiation Protection guidelines relating to the limitation of RF exposure.

7.3 The Supplier shall provide information on the IP ratings (as defined in EN 60529 or any equivalent) of all electrical enclosures. The IP ratings shall be appropriate to the environment and use of the equipment and shall be agreed with the Authority. Any subsequent changes to the Supplier Solution that affect the IP ratings shall first be agreed in writing with the Authority in accordance with the Change Control procedure.

8 Installation Standards

8.1 For all aspects of the Supplier Solution, the Supplier shall reference relevant industry and HM Government standards and best practice guidelines in regards to the installation of equipment and services.

9 Electrical Safety Standards

9.1 The Supplier shall ensure that all Electrical Standards and approved codes of practice are adopted. It is the responsibility of the Supplier to select and apply all applicable Standards based on the Supplier Equipment and Services being provided including without limitation the Electrical Standards referenced at www.hse.gov.uk/electricity/standards.htm.

9.2 For all aspects of the Services, the Supplier shall comply with relevant industry and HM Government standards and best practice guidelines in regards to electrical safety.

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9.3 The Supplier shall perform electrical safety checks in relation to all equipment and Goods used or supplied in the performance of the Service under this Agreement in accordance with applicable health and safety regulations and Good Industry Practice.

10 Service Management Software and Standards

10.1 Subject to Paragraphs 1 to 3 (inclusive), the Supplier shall reference relevant industry and HM Government standards and best practice guidelines in the management of the Services, including the following and/or their equivalents:

(a) ITIL v3 2011;

(b) ISO/IEC 20000-1 2011 “ITSM Specification for Service Management”;

(c) ISO/IEC 20000-2 2012 “ITSM Code of Practice for Service Management”;

(d) ISO 10007 “Quality management systems – Guidelines for configuration management”; and

(e) ISO/IEC 25010:2011 “Systems and software Quality Requirements and Evaluation (SQuaRE) -- System and software quality models”;

(f) BS25999-1:2006 “Code of Practice for Business Continuity Management” and, ISO/IEC 27031:2011, ISO 22301 and ISO/IEC 24762:2008 in the provision of “IT Service Continuity Strategy” or “Disaster Recovery” plans.

10.2 For the purposes of management of the Services and delivery performance the Supplier shall make use of Software that complies with Good Industry Practice including availability, change, incident, knowledge, problem, release & deployment, request fulfilment, service asset and configuration, service catalogue, service level and service portfolio management. If such Software has been assessed under the ITIL Software Scheme as being compliant to “Bronze Level”, then this shall be deemed compliant with Good Industry Practice.

11 Environmental Standards

11.1 The Supplier warrants that it has obtained ISO 14001 (or equivalent) certification for its environmental management (or will obtain this (or equivalent) before the Milestone Date for L3.21 - Mobilisation Complete and provide a documented strategy and assessment plan to achieve certification no later than 3 months after the Effective Date) and shall comply with and maintain certification requirements throughout the Term. The Supplier shall follow a sound environmental management policy, ensuring that any Goods and the Services are procured, produced, packaged, delivered, and are capable of being used and ultimately disposed of in ways appropriate to such standard.

11.2 The Supplier shall comply with relevant obligations under the Waste Electrical and Electronic Equipment Regulations 2006 in compliance with Directive 2002/96/EC and subsequent replacements (including those in compliance with Directive 2012/19/EU).

11.3 The Supplier shall (when designing, procuring, implementing and delivering the Services) comply with Article 6 and Annex III of the Energy Efficiency Directive 2012/27/EU and subsequent replacements.

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11.4 The Supplier shall comply with the EU Code of Conduct on Data Centres' Energy Efficiency. The Supplier shall ensure that any data centre used in delivering the Services are registered as a Participant under such Code of Conduct.

11.5 The Supplier shall comply with the Authority and HM Government's objectives to reduce waste and meet the aims of the Greening Government: IT Strategy contained in the document "Greening Government: ICT Strategy issue (March 2011)" at https://www.gov.uk/government/publications/greening-government-ict-strategy.

12 Environmental Standards for Equipment

12.1 The Supplier shall ensure compliance of all equipment to all relevant industry and HM Government standards and Good Industry Practice as regards to environmental regulations and standards.

12.2 The Supplier shall comply with The Batteries and Accumulators and Waste Batteries and Accumulators Directive (2006/66/EC) or any subsequent replacement.

12.3 The Supplier shall comply with the Eco-design for Energy-related Products Regulations 2010 (SI 2010 No. 2617) or any subsequent replacement, to improve the environmental performance of products throughout the Term.

12.4 The Supplier shall ensure compliance to The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) Directive (2011/65/EU) or subsequent replacements.

13 Hardware Safety Standards

13.1 The Supplier shall comply with those BS or other standards relevant to the provision of the Services, including (but not limited to) the following or their equivalents:

(a) any new hardware required for the delivery of the Services (including printers), shall conform to BS EN 60950-1:2006+A12:2011 or subsequent replacements. In considering where to site any such hardware, the Supplier shall consider the future working user environment and shall position the hardware sympathetically, wherever possible;

(b) any new audio, video and similar electronic apparatus required for the delivery of the Services, shall conform to the following standard: BS EN 60065:2002+A12:2011 or any subsequent replacements;

(c) any new laser printers or scanners using lasers, required for the delivery of the Services, shall conform to either of the following safety Standards: BS EN 60825-1:2007 or any subsequent replacements; and

(d) any new apparatus for connection to any telecommunication network, and required for the delivery of the Services, shall conform to the following safety Standard: BS EN 41003:2009 or any subsequent replacements.

14 Project and Programme Management

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14.1 Subject to Paragraphs 1 to 3 (inclusive), the Supplier shall implement HM Government standards and best practice guidelines in the management of projects and programmes, specifically:

(a) PRINCE2™, any subsequent replacements and/or equivalents as agreed by the Authority such as AGILE to support the delivery of projects;

(b) Managing Successful Programmes (MSP®) framework guidelines, or any subsequent replacements, shall be used to support the delivery of programmes.

(c) Suppliers shall be accredited to ISO 9001:2008 Quality Management standard, or equivalent.

14.2 The Authority acknowledges the benefits of collaborative working. Suppliers shall be cognisant and have expertise in the principles of collaborative business relationships standard BS 11000 (or equivalent) in the supply of the Services.

14.2.1 The Authority recognises the benefits of BS 11000 and managing relationships through a relationship management plan of which the Supplier will need to demonstrate knowledge of the same standards.

15 Financial Reporting

15.1 The Supplier, and all its Sub-contractors, shall ensure adherence to all International Financial Reporting Standards (IFRS).

16 Compatibility with GS1

16.1 The Supplier, and all its Sub-contractors, shall ensure that the Services, including without limitation the supply and procurement of any Goods are categorised and compatible with GS1 and the Supplier shall at the request of the Authority provide comprehensive product information relating to each category of Goods which shall be placed by the Supplier into a GS1 certified data pool. Once product information relating to the Services including without limitation the supply of Goods is placed by the Supplier into a GS1 certified data pool, the Supplier shall, during the Term, keep such information updated with any changes to the product data relating to the Services including without limitation the supply of Goods.

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