

VENDOR ENGAGEMENT PRE-READ

TECHNOLOGY SERVICES

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Version 1.0 Final

21 August 2017

Revision History

Version	Date of Issue	Status	Change Summary	Author
0.1	27 July 2017	Draft	Initial Draft	Catherine Cousins
0.2	31 July 2017	Draft	Review of Draft	Christian Harris
0.3	8 August 2017	Draft	Review of Draft	Rod Glover
0.4	8 August 2017	Draft	Amended Version	Catherine Cousins
0.5	14 August 2017	Draft	Amendments with Communication Protocol	Christian Harris
0.6	15 August 2017	Draft	Final Version with Comments incorporated	Catherine Cousins
0.6AR	21 August 2017	Draft	Amendment to Background	Adrian Rudd
1.0	21 August	Final	Sign off	Adrian Rudd

COMMUNICATION PROTOCOL

All communication with the Alt HAN Company (Alt HAN Co) on the Technology Services procurement must be submitted via e-mail to AltHANProcurement@gemserv.com. Any query, email, telephone call or any other communication method to any other individual(s) will not be accepted nor answered. Vendors who contact any individuals representing Alt HAN Co, other than the above named designated individual, may be disqualified from consideration.

Please note that throughout the procurement process all questions, and Alt HAN Co's response, will be shared with all vendors who have expressed an interest in the Technology Services procurement. The identity of the organisation and person raising the query will be kept confidential. Where Alt HAN Co receives similar or identical queries, Alt HAN Co reserves the right to consolidate those questions when making its response.

As part of the vendor engagement event, please note that a list of all vendors in attendance (information to include company, name, job title) will be distributed to vendors that Express an Interest in attending the event (including those vendors unable to attend) for transparency.

Please contact us if you would like to opt out from having your attendance details shared.

1. Background

The UK Government requires that energy suppliers install smart electricity and gas meters in all their residential and small business customer premises within Great Britain (GB) by the end of 2020. Within the customer's premises, these devices will communicate with each other via a Home Area Network (HAN), as defined by the Smart Metering Equipment Technical Specifications (SMETS 2). The standard HAN will operate in the harmonised frequency bands around 2.4GHz and 868MHz.

The Department for Business, Energy & Industrial Strategy (BEIS) estimates this HAN technology to be suitable to provide the communication links between smart metering equipment in approximately 96.5% of GB premises. However, it is anticipated that the remaining 3.5%¹ of GB premises will require additional equipment to extend the range of the HAN to connect all the smart metering devices. Alternative (Alt) HAN² is the generic name given to the technological solution(s) that are necessary to extend the range of the standard 2.4GHz or 868MHz HAN. Installation and use of Alt HAN technological solution(s) will allow all smart metering devices to communicate.

In February 2016 BEIS established Alt HAN Co as a special purpose company to allow GB energy suppliers to deliver Alt HAN technological solutions. A Request for Information (RFI) was subsequently issued in August 2016 to commence the procurement process of necessary Alt HAN technologies. However, the RFI underlined that currently there is a lack of fully mature solutions available to achieve this outcome. Alt HAN Co is now seeking to work with vendors to develop and deliver effective and cost-efficient Alt HAN technologies and services.

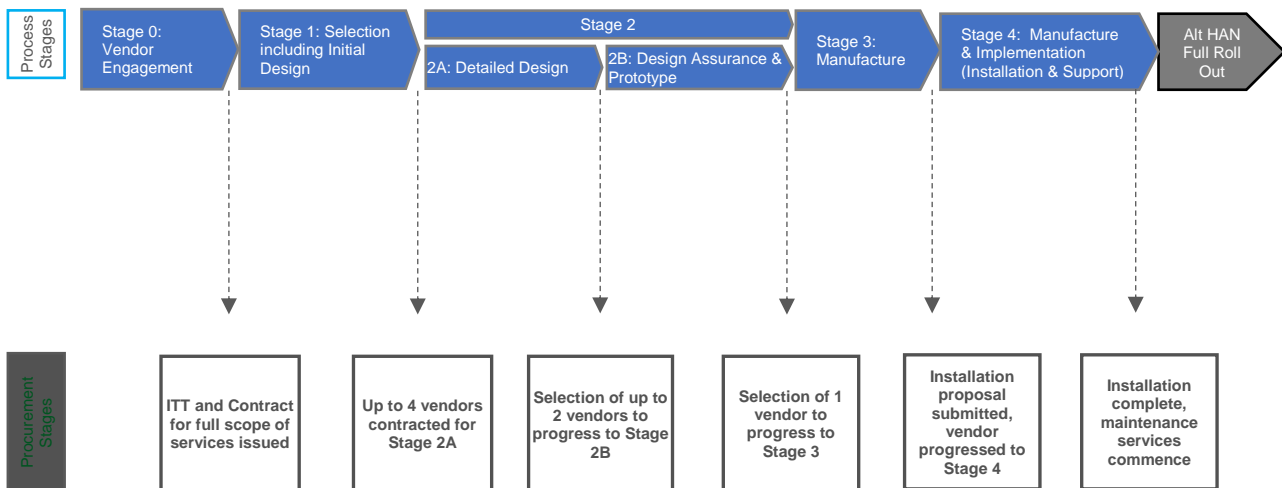
¹ The 3.5% estimate is largely determined by the performance of dual band communications hubs. Recent information disclosed by the Data and Communications Company suggests that the performance assumption may not be met. Results of formal testing are due to be published by BEIS soon. The impact to the size of the Alt HAN market will be provided to vendors on receipt.

² For further detailed information on the composition of buildings and premises in GB that may require Alt HAN technological solutions see: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/486058/Ofcom_Smart_Meter_HAN_868MHz_RF_Coverage_Campaign.pdf

2. Procurement Approach

The current intention is for Alt HAN Co to enter into a partnership agreement with one or more vendors to work the development of design through to installation of the specialist solutions.

The stages for the procurement process and delivery of services will be as follows:



3. High Level Requirements

Key requirements for each stage of the procurement process are set out below:

STAGE 1: SELECTION INCLUDING INITIAL DESIGN

All vendors responding to the ITT will be required to provide an overall plan for the technology designs and a procedure for the control of the design process. The plan must specify the design and development stages, activities and tasks, responsibilities, timeframe and resources, specific tests, validations and reviews, and outcomes.

Design and development requirements will be provided by Alt HAN Co, and vendors will be required to provide evidence that these have been addressed. The initial designs will include confirmation of selected HAN communication technology or technologies and mapping to Alt HAN building and premise use cases, descriptions of the proposed technological solution(s) including initial drawings and performance assumptions, outline designs for the technological solution(s), its manufacture, installation, commissioning, maintenance, de-commissioning and disposal. A high-level approach to testing and technical assurance will also be required.

STAGE 2A: DETAILED DESIGN

Vendors will be required to provide detailed design information for each technology, including full details of design drawings and supporting information, designs for manufacture and installation including packaging and transport logistics, and details on commissioning, operating, maintenance, de-commissioning and disposal.

Vendors will also be required to provide evidence of the design review process undertaken during the design stage. This will include technical assurance results and audit trails of issue resolution; and provide full details of the verification process to demonstrate that the technologies can be manufactured as designed and reconcile with design and development input from Alt HAN Co. Documentary evidence demonstrating vendor capability, systems to manufacture the technology and ability to source all necessary components will also be required.

STAGE 2B: DESIGN ASSURANCE AND PROTOTYPING

The technology designed will need to be subjected to conditions of actual use. This should cover trials and tests within Alt HAN candidate premises and associated results. Alt HAN Co will be conducting piloting activity in partnership with the vendor selected to provide Alt HAN services for this purpose. Output of the piloting activity will be used to validate that the technology meets the specified requirements and use cases.

The vendor will be required to submit its own methods of design validation that could include simulation techniques, prototype build and evaluation, comparison to similar proven designs, beta testing and field evaluations. The design and development change process will need to be detailed.

STAGES 3 AND 4: MANUFACTURE AND IMPLEMENTATION (INSTALLATION AND SUPPORT)

At both these stages vendors will be required to submit proposals demonstrating how they will manufacture, install (or support energy suppliers to install), where relevant operate and then support/maintain the technologies in the most effective and cost-efficient manner. Proposals will include detailed implementation plans, documented quality management procedures and details on controls and reporting.

4. Next Steps

The vendor engagement event on 30th August will provide further details on the scope of services, timescales and approach, and be an opportunity for vendors to ask questions and provide feedback to Alt HAN Co. This event will inform the formal procurement process and influence its subsequent implementation - which will commence with the process of identifying potential vendors capable of designing, manufacturing, installing and operating Alt HAN technological solutions.