



Request For Information

Project Title: Supply and Delivery of Smart Water Meter

EXPRESSION OF INTEREST DETAILS	
RFI reference number:	DSTN/RFI-01/2019
RFI issue date:	27 th February 2019
RFI coordinator:	Saliza Manaf
RFI closing date and time:	11 th March 2019, 11am
Place of lodgement:	DST Headquarters

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1 Introduction

1.1 Invitation

- a) This RFI is conducted to explore product availability for a propose Smart Water Meter.
- b) This RFI to be provided in accordance with, and subject to, the conditions contained in this document.

2 Scope and objectives

2.1 Scope

- a) DST has been appointed as a Smart Meter Managed Service Provider for Utilities in Brunei Darussalam.
- b) This RFI is prerequisite of **The Supply and Delivery of Smart Water Meter**.
- c) The Responder must provide all necessary information and credentials those relates to the supply and delivery of Smart Water Meter on the technical perspectives but not limited to the requirement as stated in **Clause 6 – Basic Technical Requirement**.

2.2 Objectives

DST's objective in issuing this RFI is to understand:

- i Current Smart Water Meter market product offering;
- ii How the water meter can be integrated to the Smart Electrical Meter and USMS (Headend System)

3 Communication with DST

- 3.1 Responses should direct any questions arising during the RFI Process to:

USMS@dst.com.bn

DST NETWORK SDN BHD

DST HEADQUARTERS, JALAN TUNGKU-LINK

Negara Brunei Darussalam

OR

Project coordinator at 8758758

- 3.2 Despite the foregoing, DST is not obliged to answer any inquiries or requests for clarification or additional information.

4 Conditions of RFI

- 4.1 All copies must be identical to the original. In the event of discrepancy between the original and any of the copies, the original will take precedence.
- 4.2 Lodgement of RFI
- a) Responses must be lodged on or before **11th March 2019 at 11am (RFI Closing Date and Time)**.
- 4.3 The responses can be deposited in the Tender Box provided at the following address:

**Chairman of Tender Committee
DataStream Technology Sdn Bhd
DST Headquarters
Jalan Tungku Link
Bandar Seri Begawan BE3619
Brunei Darussalam**

Email in PDFT format to: usms@dst.com.bn

not later than the **RFI Closing Date and Time**.

- 4.4 Responder must be enclosed in a sealed envelope or other sealed container and clearly marked on the outside with:
- i. the RFI reference number;
 - ii. title of the RFI; and
 - iii. the RFI Closing Date and Time.

the above also applies to correspondence from Responders informing of non-participation in this RFI

[The Responder's name must not be written anywhere on the outside of the sealed envelope or container]

- 4.5 There is **no commercial submission** for this RFI.

5 Matters concerning responses

5.1 Language of Responses

The response including all attachments and supporting material, is to be written in English with definitions provided for any industry terms used. Unless otherwise specified, measurement is to be expressed in the legal units of measurement used in Brunei.

6 Basic Technical Requirement

6.1 Compulsory Requirement

- a) The Smart Water Meter shall have a capability to transmit the meter reading to the USMS (Headend system).
- b) Must be **ULTRASONIC** typed of Smart Water Meter.
- c) Must support a **Wireless M-BUS topology with 433MHz** to communicate with the Smart Electrical Meter.
- d) The responders shall propose the water meter types follow the sizes approved by the Water Department Services (DWS), Brunei Darussalam as below:

i) Residential/Commercial/Industrial Meters

Water Meter Sizes (mm)							
15	20	25	40	50	80	100	150

(Details in **Appendix 1 – Part 1.1 Expected minimum performance**)

ii) Bulk/ Zone Meters

Water Meter Sizes (mm)									
100	150	200	250	300	350	400	450	500	600

(Details in **Appendix 1 – Part 1.2 Bulk meter preference**)

6.2 Technical Data

Responders to include:

- a) Mechanical data such as protection class, flow sensitivity, climate environment, water temperature, storage temperature, meter accuracy etc.
- b) Electrical data such as battery lifetime, etc.
- c) Frequency settings for 433MHz such as Mode, Wireless M-BUS standard compliance such as DLMS/COSEM etc.

6.3 Features

Responders to explore all the features come with their proposed smart water meter including the temperature measurements, volume measurement, data function and communication, flow measurement (Maximum and minimum flow), transmission, display function, other possible connectivity option such as 3G and 4G, etc.

Appendix 1

Part 1.1: Expected minimum performance

Meter Size (mm)	15	20	25	40	50	80	100	150
Nominal Flow rate (m³/h) qn±2%	1.5	2.5	3.5	10.0	30	60	80	
Maximum flow rate (m³/h) qmax±2%	3.0	5.0	7.0	20.0	11	25	36.4	455
Transitional flow rate (l/h) qt±2%	22.5	37.5	52.5	150.0	0.18	0.27	0.45	3.41
Minimum flow rate (l/h) qmin±5%	15.0	25.0	35.0	100.0	12.5	29.6	40	
Starting flow approximately (l/h)	5.7	9.5	13.2	37.5	40	64	110	1060
Head loss at qmax (bar)	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Head loss at qn (bar)	0.25	0.25	0.25	0.25	10	100	100	100
Meter resets to zero at (m³)	100000	100000	100000	100000	1	10	10	100
Minimum indicated digit value (litre)	0.1	0.1	1.0	1.0	1	1	1	10

Part 1.2 Bulk meter preference

Meter Size (mm)	100	150	200	200	250	300	350	400	450	500	600
Flow Meter Bore Size	100	150	150	200	250	300	350	200	450	500	400