Invitation for Pre-Qualification
For Offshore Drilling Services for Methane Hydrate Research and Development Project in 2022 and 2023
(No. JMH-22-003)

Japan Methane Hydrate Operating Co., Ltd.

15th April 2022

1. INTRODUCTION

Japan Methane Hydrate Operating Co., Ltd. (JMH) is a member of the MH21-S R&D consortium (MH21-S) having conducted the research and development project for the pore-filling type of methane hydrate to achieve an objective of the Japanese government's Plan for the Development of Marine Energy and Mineral Resources under the supervision and finance of theMinistry of Economy, Trade and Industry (METI).

JMH, being tasked with searching for viable candidate sites for future long term production test of methane hydrate offshore Japan, plans to conduct exploratory drilling operations in Japanese Fiscal Year (FY) 2022 (hereinafter called "FY2022 Operations") and, although not yet approved, drilling operations accompanied by a short term production test in Japanese FY 2023 (hereinafter called "FY2023 Operations"). Summary of the Operations is provided in Section 3 below.

This Invitation for Pre-Qualification is the invitation to participate in the first stage of tender process for selection of a drilling contractor or contractors for FY2022 and FY2023 Operations.

2. INVITATION

2.1 JMH invites entities which can provide offshore drilling services for FY2022 and FY2023 Operations with a drill ship or drill ships having a capacity to conform with the requirements specified in Section 4 and being available in the specified time windows to participate in this pre-qualification stage.

2.2 Entities which intend to participate are requested to submit the documents specified in Section 5 in the manner and by the date specified in the same.

2.3 Entities which cannot propose a drill ship or drill ships for both of FY2022 and FY2023 Operations but for either of the Operations may be pre-qualified for the single of the Operations if deemed to satisfy the requirements for that single of the Operations.

2.4 JMH intends to invite the pre-qualified entities to submit tender proposals for both of or either of FY2022 and FY2023 Operations as appropriate to the pre-qualification result.

3. OPERATIONS SUMMARY

3.1 FY2022 Operations

Well type	LWD hole	Geotechnical coring
Water depth	Approx. 1,000 to 1,600m	
Number of well(s)	2	1
TD (below seabed)	+/- 700m	+/- 650m
Activities	• LWD measurements to TD • Wireline formation pressure testing in one well	• Wireline coring from 0 to 100m and 30m continuous coring above TD
Hole size	8-1/2" to TD	10-5/8" to TD
Drilling riser & BOP	Not used	

Time window and estimated operation days	October to November 2022 for approx. 24 days in total

3.2 FY2023 Operations

Well type	Production test hole
Water depth	Approx. 1,000 to 1,600m
Number of wells	2
TD (below seabed)	Maximum +/- 650 m
Activities	• LWD measurements to TD • Jetting 50m x 24" conductors • Use of dual channel drill pipes as production riser and unconventional and unique subsea wellhead and production test system
Hole(CSG) size	(24") / 12-1/4" (9-5/8") / 8-1/2"
Drilling riser & BOP	Not used
Time window and estimated operation days	June to August 2023 for approx. 70 days in total

4. TECHNICAL REQUIREMENTS FOR DRILL SHIP

Refer to the attachment "Questionnaires to Contractor" Forms 2 and 3.

5. SUBMISSION FOR PRE-QUALIFICATION

5.1 Documents to be submitted

(i) A letter to declare intention to participate in the tender process
(ii) Corporate outline: a brochure and/or other explanatory documents
(iii) Technical specification sheet for the proposed drill ship
(iv) Answers to "Questionnaires to Contractor" forms: download and use a Excel file so named to answer. Completed forms shall be submitted in Excel format and PDF format.

JMH may request provision of further information and additional documents which it deems necessary for the pre-qualification after receipt of the above documents.

5.2 Closing Date and Time

Documents specified above in Sub-section 5.1 shall be delivered to JMH via email to the address: tender.admin@jmh.co.jp, not later than 28th April 2022 15:00 hours JST.

6. REQUEST FOR CLARIFICATION

Questions and requests for clarification on this Invitation to Pre-Qualification shall be submitted in writing via email to the address: tender.admin@jmh.co.jp, not later than 22nd April 2022 15:00 hours JST.

7. COST OF PARTICIPATION

Participants shall bear all costs and expenses incurred for preparation and submission of the required documents in this pre-qualification stage and tender proposals in the following tender stage.

8. ATTACHMENT

No.	Title	Pages
1	Questionnaires to Contractor (Forms 1 thru 4)	6

End of document

Questionnaires to Contractor: Form 1

CONTRACTOR'S INFORMATION

	Contractor Answers
Legal entity name	
Establishment in (Year)	
Country of establishment	
Registered address	
Contact person, name	
Contact person, mailing address (not PO box number)	
Contact person, email address	
Contact person, telephone no.	

Questionnaires to Contractor: Form 2

MAIN FEATURES OF MODU AND CONFORMANCE WITH JMH REQUIREMENTS
(FY2022 Operations)

	JMH Requirements	Contractor Answers
GENERAL INFORMATION		
Contractor name		
Contractor previous experience in Japan waters		
Poposed unit previous experience in Japan waters		
RIG DATA		
Unit name		
Unit owner		
Unit type	Drill ship	
Unit design		
Year of unit construction	Built later than 2000	
Upgrading info		
Rig class certification		
Unit location		
Actual unit status	Not cold stacked nor brand new	
Availabily for JMH operations (specify period)	Available from Oct. to Nov. 2022	
Firm/potential contract preceding JMH operations, area of operation		
Firm/potential contract preceding JMH operations, expiry		
Firm/potential contract preceding JMH operations, option		
OPERATING PARAMETERS		
Maximum water depth capability	1,600m or more	
Minimum water depth capability		
Maximum drilling depth capability	2,500m or more	
Cruising speed		
Variable deck load, drilling and transit mode		
Crane types an capacities		
STATION KEEPING SYSTEM		
Type	Dynamic positioning	
Description of main features		
DRILLING SYSTEM		
Max. static hook load		
Motion compensator system, description		
Motion compensator system, rated capacity compensated		
Motion compensator system, rated capacity locked		
MUD SYSTEM		
Mud pump, total installed		
Mud pump, make-type		

	JMH Requirements	Contractor Answers
Mud pump, fluid end working pressure		
Solid control system, description		
CEMENTING UNIT		
Make-type		
Working pressure		
Owner		
TUBULARS		
Data of drill pipes available		
HELICOPTER DECK		
Accommodable helicopters		
ACCOMODATION		
Total persons capacity		
Beds reserved to Company	Min. 50	
WIRELINE UNIT		
Wireline unit, make-type		
Wireline unit, maximum cable lenght		
Wireline unit, owner		
Active heave compensator, make-type		
Active heave compensator, owner		
ROV		
Vehicle, make-type		
Vehicle, owner		
Launch & recovery system, make-type		
Launch & recovery system, owner		
WIRELINE CORING		
Capability to provide wireline coring tools and coring services	MUST	
Core labratory facilities on board for core handling, measuement, observation, packing	MUST	
OTHER REQUIREMENTS		
Storage capacity of production water	(Not required)	
Rotary table opening		
Electric power supply for ESP	(Not required)	
Conformity with Japanese applicable laws and regulations	MUST	
FUEL CONSUMPTION		
Type of fuel		
Consumption in transit (KL/day)		
Consumption in opration (KL/day)		
Fuel storage capacity		

Questionnaires to Contractor: Form 3

MAIN FEATURES OF MODU AND CONFORMANCE WITH JMH REQUIREMENTS
(FY2023 Operations)

	JMH Requirements	Contractor Answers
GENERAL INFORMATION		
Contractor name		
Contractor previous experience in Japan waters		
Poposed unit previous experience in Japan waters		
RIG DATA		
Unit name		
Unit owner		
Unit type	Drill ship	
Unit design		
Year of unit construction	Built later than 2000	
Upgrading info		
Rig class certification		
Unit location		
Actual unit status	Not cold stacked nor brand new	
Availabily for JMH operations (specify period)	Available from Jun. to Aug. 2023	
Firm/potential contract preceding JMH operations, area of operation		
Firm/potential contract preceding JMH operations, expiry		
Firm/potential contract preceding JMH operations, option		
OPERATING PARAMETERS		
Maximum water depth capability	1,600m or more	
Minimum water depth capability		
Maximum drilling depth capability	2,500m or more	
Cruising speed		
Variable deck load, drilling and transit mode		
Crane types an capacities		
STATION KEEPING SYSTEM		
Type	Dynamic positioning	
Description of main features		
DRILLING SYSTEM		
Max. static hook load		
Motion compensator system, description		
Motion compensator system, rated capacity compensated		
Motion compensator system, rated capacity locked		
MUD SYSTEM		
Mud pump, total installed		
Mud pump, make-type		

	JMH Requirements	Contractor Answers
Mud pump, fluid end working pressure		
Solid control system, description		
CEMENTING UNIT		
Make-type		
Working pressure		
Owner		
TUBULARS		
Data of drill pipes available		
HELICOPTER DECK		
Accommodable helicopters		
ACCOMODATION		
Total persons capacity		
Beds reserved to Company	Min. 90	
WIRELINE UNIT		
Wireline unit, make-type		
Wireline unit, maximum cable lenght		
Wireline unit, owner		
Active heave compensator, make-type		
Active heave compensator, owner		
ROV		
Vehicle, make-type		
Vehicle, owner		
Launch & recovery system, make-type		
Launch & recovery system, owner		
WIRELINE CORING		
Capability to provide wireline coring tools and coring services	(Not required)	
Core labratory facilities on board for core handling, measuement, observation, packing	(Not required)	
OTHER REQUIREMENTS		
Storage capacity of production water	3,000KL or more	
Rotary table opening	Min. 60.5 inches	
Electric power supply for ESP	Approx. 340KVA - 440V(AC)	
Conformity with Japanese applicable laws and regulations including the Mine Safety Act	MUST	
FUEL CONSUMPTION		
Type of fuel		
Consumption in transit (KL/day)		
Consumption in opration (KL/day)		
Fuel storage capacity		

Questionnaires to Contractor: Form 4

5-YEAR EXPERIENCE RECORD

Contractor name	
Unit name	

Contractor is requeted to fill in the following table with the drilling record of the proposed unit in the last 5 years.

Duration from	to	Operator	Country/Area	No. of well(s)	Water depth	Total Depth	Major incidents	Remarks