

<b>Reference Number</b>	
<b>Package Title</b>	<b>Offshore Operations Australia - Drilling &amp; Completions Materials and Services</b>
<b>Package Description</b>	<p><b>Background:</b> Woodside has a range of projects that may require materials and services to support Australian offshore drilling and completion operations.</p> <p><b>General Scope of Supply:</b> The scope of work is for the provision of equipment, materials and services for Australian offshore drilling and completions operations as detailed below (including but not limited to):</p> <ul style="list-style-type: none"> <li>• Drilling and Completion Fluids Equipment, Materials and Services</li> <li>• Cement, Cementing Chemicals and Services</li> <li>• Well Completion Equipment and Installation Services</li> <li>• Controlled Mud Level Services</li> </ul> <p><b>Pre-Qualification Requirements:</b></p> <ul style="list-style-type: none"> <li>• Must have a minimum 5 years' relevant experience in supply to the oil and gas industry for the purpose of well construction, well repair or maintenance, and/or well abandonment.</li> <li>• Must have a list of past project experience and preferably in delivering to offshore Projects in Australian waters.</li> <li>• Must have an ISO quality system and OSHAS or similar certifications.</li> <li>• Must have storage capability for the manufactured products.</li> </ul> <p><b>General Requirements:</b></p> <ul style="list-style-type: none"> <li>• Provision of materials and services to support possible multiple operations in Australia for an extended period;</li> <li>• Full provision of back-up and spares;</li> <li>• Qualified, fully competent and experienced onshore and field service personnel to: <ul style="list-style-type: none"> <li>○ Run, test and operate equipment;</li> <li>○ Service, repair and maintain all equipment and tools provided by Contractor;</li> <li>○ Provide advice and assistance in connection with equipment, tools and services provided by Contractor; and</li> <li>○ Assist with related operations.</li> </ul> </li> <li>• All necessary workshop container or Toolbox complete with spare parts, hand tools and consumables to service and maintain Contractor's equipment in field;</li> <li>• Equipment calibration, inspections, testing, qualification and certification;</li> <li>• Full set(s) of drawings, documentation and service manuals, including running and operating procedures as applicable;</li> <li>• Computer simulations to aid in design and engineered solutions relating to contractor operations and equipment;</li> <li>• Data acquisition, technical analysis and accurate job reports detailing all aspects of operations relating to contractor's equipment and operations;</li> <li>• Project management, procedural input and technical advice during the planning, design and preparation phases of each project in connection with all equipment and services to be provided by the Contractor.</li> </ul> <p><b>Material and Service Specific Requirements:</b></p> <ul style="list-style-type: none"> <li>• <b>Drilling and Completions Fluids Equipment, Materials and Services</b> <ul style="list-style-type: none"> <li>- Drilling and completion fluids (WBM and/or NWBM), together with suitable bulk, sacked or drummed chemicals necessary to maintain or alter fluid properties;</li> <li>- Bulk storage facilities at WPL's designated wharf including barite / bentonite and</li> </ul> </li> </ul>

bulk mud storage for support of offshore operations;

- Offshore equipment for specialist testing of drilling and completions fluids;
  - A fully equipped 24hr onshore mud testing laboratory with full back-up facilities to enable all WPL required physical and chemical testing of fluids and pilot testing or proposed treatments;
  - Engineering service including, but not limited to:
    - o Daily chemical and physical testing;
    - o Monitoring and recommendations;
    - o Daily product concentration sheets;
    - o Daily material balance reports;
    - o Chemical stock inventory control and re-ordering;
    - o Daily mud specification tracking (graphical outputs);
    - o Production of end of well reconciliation reports;
    - o Provision of full onshore technical support during design, planning, execution and post-well analysis.
  - Drill fluids equipment;
  - Fluid spillage cleaning equipment;
  - Brine filtration package;
  - Shaker screens.
- **Cement, Cementing Chemicals and Services**
    - Full technical service, including cement slurry design and proposals for suitable cementing techniques and cement job computer simulations;
    - Full cementing service, including mixing and pumping of cement slurries and all other pumping associated with the placement of cement in the wellbore;
    - Full inventory of cementing tools (cement heads, swedges, plugs, packers, retainers, stage collars, floats, darts, external casing packers and casing accessories);
    - Full pumping service, including all pumping associated with well control operations, lost circulation and well testing;
    - Pressure testing including, but not limited to, BOPs, choke manifold, wellhead equipment, kill lines, casing and liners.
    - Continuous monitoring of variables (pressure, density, flow rate, cumulative volume) with the ability to display and plot each variable in real time display;
    - Full reports on all cement jobs, and on all pressure test and leak off test to include both graphical and numerical representation of data;
    - Daily inventory reporting and post-job reconciliation of chemicals utilised;
    - Cement job computer simulations;
    - Technical support and field supervision.
  - **Well Completion Equipment and Installation Services**
    - Provision of well completion equipment, materials and personnel including, but not limited to:
      - o General lower completion requirements
        - Downhole sand control including verification of sand control integrity;
        - Inflow control methods;
        - Integration of monitoring equipment (eg tracers);
        - Packers, tiebacks and hangers;
        - Reservoir isolation;
        - Tubulars;
        - Sliding sleeves;
      - o General upper completion requirements
        - Downhole monitoring equipment;
        - Packers;
        - Reservoir isolation;

	<ul style="list-style-type: none"> <li>▪ Multilateral junctions and associated equipment;</li> <li>▪ Artificial lift;</li> <li>▪ Downhole safety valve;</li> <li>▪ Tubulars;</li> <li>▪ Provisions for future well intervention;</li> <li>○ Wellbore cleanout and displacement.</li> </ul> <ul style="list-style-type: none"> <li>• <b>CML (Controlled Mud Level) Services</b> <ul style="list-style-type: none"> <li>- Provision of CML (Controlled Mud Level) equipment, materials and personnel including, but not limited to:           <ul style="list-style-type: none"> <li>○ Full technical service including CML design, installation and computer simulations.</li> <li>○ Full CML service, including all required pumping control requirements, equipment deployment and retrieval.</li> <li>○ Continuous monitoring of riser hydrostatic pressure and pump variables (pressure, flow rate) with the ability to display and plot each variable in real time display;</li> <li>○ Full post job reports on all CML operations, to include both graphical and numerical representation of data;</li> <li>○ Technical support and field supervision.</li> </ul> </li> </ul> </li> </ul>
<b>Standards</b>	Compliance with National, International and Industry Standards, Australian and WA Regulatory requirements.
<b>Delivery Place</b>	Offshore Australia Onshore support base / facility based in Perth and/or Dampier and/or Broome
<b>Supplier EOI Instructions</b>	<p>Supplier(s) are invited to express interest by registering on <a href="#">ICN Gateway</a> where competency and previous positive experiences of similar systems can be demonstrated.</p> <p>When submitting Full scope interest registrants will be asked to complete an expression of interest document. Partial scope registrants will be asked to complete three questions. The registrant's response will form their Expression of Interest (EOI) for material and services.</p> <p>Suppliers will only be considered for Prequalification to tender if deemed suitably qualified based on criteria, including but not limited to, HSSE, Quality management, Financial standing, Onshore / Offshore and Workload availability.</p> <p>Please note this is an Expression of Interest (EOI) only, the content of this work is subject to change pending project demand and timelines.</p>
<b>Contact</b>	All initial enquiries should be made through the Industry Capability Network Western Australia (ICNWA).
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<b>URL</b>	For more information about Woodside Energy please refer to the Woodside Energy Ltd. website <a href="http://www.woodside.com.au">www.woodside.com.au</a>
<b>Full Scope EOI Closing Date</b>	20 <sup>th</sup> March 2020