Serving The Industry . Serving The Nation

Oil & Gas HR Round Table (HRRT)
## Today’s Agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Topic</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.30 – 9.00</td>
<td>Registration &amp; Networking</td>
<td>MOGSC</td>
</tr>
<tr>
<td>9.00 – 9.15</td>
<td>Welcome Remarks</td>
<td>MOGSC</td>
</tr>
<tr>
<td>9.15 – 10.00</td>
<td>HRRT Objectives</td>
<td>MOGSC</td>
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<tr>
<td>10.00 – 10.30</td>
<td>Overview of HR Challenges in Oil &amp; Gas Industry</td>
<td>MOGSC</td>
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<tr>
<td>10.30 – 11.00</td>
<td>Break</td>
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<tr>
<td>11.00 – 12.30</td>
<td>Brainstorm &amp; Discussion on HR Challenges</td>
<td>Everyone</td>
</tr>
<tr>
<td>12.30 – 1.00</td>
<td>Finalize Action Items and Wrap Up</td>
<td>MOGSC</td>
</tr>
</tbody>
</table>
Safety Moment - 2 Second Glance
Presentation Topics

• Overview of MOGSC
• Objectives of HRRT
• Roles, Responsibilities, and Focus of HRRT
• Current MOGSC/Industry Initiatives on HR
Introduction to MOGSC

- To represent the interests of Malaysian Oil & Gas Service Providers, promote their core competencies and expertise and raise their profile and visibility.
- To encourage and promote the growth of local players.
- To engage and collaborate with all industry stakeholders for the benefit of Malaysian Oil & Gas Industry.
- To promote and position Malaysia as a centre of excellence and regional hub for resources, products and services.
- To contribute towards nation-building and the national economy through positive participation in the overall development of the Malaysian Oil & Gas Industry.

MOGSC Members as of 20th October 2017 is 513
MOGSC Activities

Seminars, Forums, Workshops
- MGA & MOGSC Tea Talk – An Industry in Transition – 17th Feb
- Trade Talk on New Business Opportunities in Iran – 5th Apr
- Measurement & Allocation Forum – 24th Aug
- IMHH Forum – 7th Sept
- Big Data, IoT & Cloud Seminar – 14th Dec
- Decommissioning Workshop – 7th Feb

Competency & Development
- TVET Talk – 19th Feb
- ILB Forum KL – 5th Oct
- ILB Forum Johor – 12th Oct
- ILB Forum Kuantan – 19th Oct
- ILB MyPPT Program – 26th Oct
- Development of NOSS

Major Events
- 3rd Malaysia Oil & Gas Services Exhibition and Conference (MOGSEC 2016)
- MGA-MOGSC Industry Gala Dinner

- CORAL 2.0 Gallery Walk – 19th Feb
- MOGSC Industry Update at PACs CORAL – 1st Mar
- PIC EPCC Meet MOGSC Members – 3rd Mar
- Briefing on MPM New Structure – 27th Jun
- CORAL 2.0 Industry Advisory Committee – 28th June & 24th Oct
- CORAL 2.0 Engineering Integrated Digital Solutions Workshop – 22nd Jul
- Updates on PRPC Projects – 17th Aug
- PD&T Engagement with the Industry – 26th Oct
- PETRONAS Gas Engagement with the Industry – 16th Nov
- RAPID and Angkasa Johor Presentation – 21st Nov
- Site Visit to PIC and Pengerang Deepwater Terminal – 22nd Nov
- MOGSC/OSVM Dialog with PETRONAS GP – 01st Dec
MOGSC Working Groups

1. Small Medium Enterprise Working Group
2. HSE Working Group
3. Asset Integrity Working Group
4. Decommissioning Working Group
5. Subsurface & Drilling Working Group
6. Engineering Working Group
   a) Measurement & Allocation Working Group
7. Digital ICT Working Group
8. Competency & Training Working Group
9. Manufacturer & Fabricator Working Group
10. Technology & Innovation Working Group
11. Marine & Logistics Working Group
12. International Sector
13. Johor Sector
14. Sabah Sector
15. Sarawak Sector

<table>
<thead>
<tr>
<th>Working Groups</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>WG Meetings</td>
</tr>
<tr>
<td>CTWG</td>
<td>28</td>
</tr>
<tr>
<td>MLWG</td>
<td>17</td>
</tr>
<tr>
<td>MFWG</td>
<td>11</td>
</tr>
<tr>
<td>HSEWG</td>
<td>40</td>
</tr>
<tr>
<td>AIMWG</td>
<td>1</td>
</tr>
<tr>
<td>DecomWG</td>
<td>6</td>
</tr>
<tr>
<td>EWG / MAWG</td>
<td>7</td>
</tr>
<tr>
<td>DIGICTWG</td>
<td>12</td>
</tr>
<tr>
<td>SDWG</td>
<td>5</td>
</tr>
<tr>
<td>SMEWG</td>
<td>7</td>
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<tr>
<td>TIWG</td>
<td>8</td>
</tr>
<tr>
<td>Johor Sector</td>
<td>7</td>
</tr>
<tr>
<td>Sarawak Sector</td>
<td>2</td>
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</tbody>
</table>
Vision
To establish an industry platform for Oil & Gas industry to discuss and address issues related to Human Resource Challenges & Opportunities to ensure sustainable competency and capability development

Mission
Bring together key industry players, service companies and operators, to collectively brainstorm ideas and solutions to address industry Human resource issues

Goals
1. Identify common issues facing the Oil & Gas industry
2. Setup Task Force to develop initiatives & solutions to address these issues
3. Develop roadmap to ensure sustainable competency and capability for future workforce
4. Liaise as the Focal Point for Industry Matters on Human resource
HRRT Composition

**CHAIRMAN (Joint)**

<table>
<thead>
<tr>
<th>Government (4 Reps)</th>
<th>Malaysian Service Companies (6 Reps)</th>
<th>Operators (5 Reps)</th>
<th>Intl Service Companies (4 Reps)</th>
</tr>
</thead>
</table>

**MEMBERS**

<table>
<thead>
<tr>
<th>PETRONAS</th>
<th>MOGSC</th>
</tr>
</thead>
</table>

**Rules of Engagement**

1. Senior Representation by Each Company (CEO/CHRO)
2. Annual or Bi-Annual Committee Meeting
3. A few Task Force Groups To be Created to focus on specific Initiative
4. Each Member proposing team members to be part of the Task Force
5. Task Force to report to Committee during Committee Meeting and decision to be made at the Committee
Members

<table>
<thead>
<tr>
<th>Government</th>
<th>Malaysian Service Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. MPRC</td>
<td>1. Petra</td>
</tr>
<tr>
<td>2. JPK</td>
<td>2. Uzma</td>
</tr>
<tr>
<td>3. HRDF</td>
<td>3. Dialog</td>
</tr>
<tr>
<td>4. TALENTCORP</td>
<td>4. Olio</td>
</tr>
<tr>
<td></td>
<td>5. Solar Alert</td>
</tr>
<tr>
<td></td>
<td>6. Sapura</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operators</th>
<th>Intl Service Companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SHELL</td>
<td>1. Schlumberger</td>
</tr>
<tr>
<td>2. PETRONAS</td>
<td>2. TechnipFMC</td>
</tr>
<tr>
<td>3. ExxonMobil</td>
<td>3. Halliburton</td>
</tr>
<tr>
<td>4. Murphy Oil Corporation</td>
<td>4. GE</td>
</tr>
<tr>
<td>5. Enquest</td>
<td></td>
</tr>
</tbody>
</table>
MOGSC HR Initiatives

- Occupational Assessment and Skills Identification (NOSS)
- Certification & Qualification for Oil & Gas (MBOT)
- Training Matrix
- INSTEP MOU
- HRDF INBASE PROGRAM
- Oil & Gas SmartBook for Secondary School Students
- 2018 Oil & Gas Career Fair
- Newsletter & Information Update

MOGSC Oil & Gas Industry Lead Body

- Expert Management
- Competency Management
- Certification Management
- Training and Development
- Market Research and Update
- Knowledge and Change Management

Government | Industry Players | Academic Institution
Occupational Assessment and Skills Identification (NOSS)

- Collaboration with JPK for Occupational Assessment and Skills Definition
- Development of NOSS for 8 Skills Area

### Subsectors

<table>
<thead>
<tr>
<th>Sub Sector</th>
<th>Area</th>
<th>Job Area</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UPSTREAM</strong></td>
<td><strong>OFF &amp; GAS</strong></td>
<td><strong>DEVELOPMENT &amp; PRODUCTION</strong></td>
</tr>
<tr>
<td><strong>LEVEL 8</strong></td>
<td><strong>GENERAL MANAGER</strong></td>
<td><strong>WELL DRILLING</strong></td>
</tr>
<tr>
<td><strong>LEVEL 7</strong></td>
<td><strong>SENIOR MANAGER</strong></td>
<td><strong>WELL COMPLETION ENGINEER</strong></td>
</tr>
<tr>
<td><strong>LEVEL 6</strong></td>
<td><strong>DRILLING ENGINEER</strong></td>
<td><strong>WELL TESTING ENGINEER</strong></td>
</tr>
<tr>
<td><strong>LEVEL 5</strong></td>
<td><strong>SENIOR DRILLING TECHNICIAN</strong></td>
<td><strong>PIPELINE ENGINEER</strong></td>
</tr>
<tr>
<td><strong>LEVEL 4</strong></td>
<td><strong>DRILLING TECHNICIAN</strong></td>
<td><strong>STRUCTURAL ENGINEER</strong></td>
</tr>
<tr>
<td><strong>LEVEL 3</strong></td>
<td><strong>JUNIOR DRILLING TECHNICIAN</strong></td>
<td><strong>STRUCTURAL DESIGNER</strong></td>
</tr>
<tr>
<td><strong>LEVEL 2</strong></td>
<td><strong>NO LEVEL</strong></td>
<td><strong>STRUCTURAL SUPERVISOR</strong></td>
</tr>
<tr>
<td><strong>LEVEL 1</strong></td>
<td><strong>NO LEVEL</strong></td>
<td><strong>ECONOMIC</strong></td>
</tr>
</tbody>
</table>

### Example 1:

- **Area**: Exploration
  - **Job Area**:
    - **Exploring**
    - **Surveying & Assessment**
    - **Reservoir Engineering**
    - **Surveillance Engineering**
    - **Production Technology**
    - **Well Completion Engineering**
    - **Well Testing**
    - **Economic**

### Example 2:

- **Area**: Drilling
  - **Job Area**:
    - **Pipeline**
    - **Structure**
    - **Mechanical Engineering**
    - **Instrumentation & Control**
    - **Electrical Engineering**
    - **Material & Corrosion**
    - **Process**
    - **Commissioning (H&C)**
    - **Quality**
    - **Platform Operation & Maintenance**
    - **Platform Inspection**
    - **Storage & Distribution**
Skills Development Cycle

- 700+ Skills Definition requirements
- 80+ Skills Definition Completed
- Current Challenges
  - No Skill Development Loop Completed
  - Disconnect in the Loop
  - Absence of lead in the O&G Industry on Skills Development Standardization
Certification and Qualification (MBOT)

The Parliament of Malaysia has enacted the Technologists and Technicians Act 2015 (Act 768), an act to provide for the establishment of Malaysia Board of Technologists (MBOT), in line with other professional bodies in Malaysia.

MBOT is responsible for the registration of graduate technologists and qualified technicians as well as to recognise professional technologists and certified technicians.

MBOT promotes education and professional training in the related technology and technical fields.

MBOT recognises technological careers and empowering technical and vocational education and training (TVET).

MBOT will strive to be a signatory to international accords in the field of technology and technical to ensure the technologists and technicians produced in the country meet the international standards and ability to compete globally.

- MBOT – Malaysian Board of Technologies established to provide national level recognition to professional technologists and technicians
- Covers 21 sectors
- MOGSC – ILB for Oil & Gas
Responsibility Matrix Between MBOT & MOGSC

<table>
<thead>
<tr>
<th>MBOT</th>
<th>MOGSC</th>
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</thead>
<tbody>
<tr>
<td>Regulatory Body for Registration and Certification of Technologists and Technicians</td>
<td>Professional Association in the Oil &amp; Gas sector to promote and develop Malaysian Oil &amp; gas sector</td>
</tr>
<tr>
<td>Governed by Parliament Act: Technologists and Technicians Act 2015 (Act 768)</td>
<td>Governed by Registrar of Society (ROS) and its Constitution</td>
</tr>
<tr>
<td>Address technologists and technicians across 21 sectors</td>
<td>Focuses on technologists and technicians in Oil &amp; Gas only</td>
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</tbody>
</table>
MOGSC-MBOT Key Objectives

**2017/18**
- Formation of Fast-Tracking Professional Technologists for Technology Expert Panel (TEP)
- Identification of Oil & Gas Technical & Technology Domains and Qualification Criteria
- Registrations of Oil & Gas Technologists & Technicians as well as Professional Technologists and Certified Technicians

**2018/19**
- Alignment of Oil & Gas Technologist and Technicians with JPK CIAST & DPIN
- Formulation for Oil & Gas specific Academic Accreditation and Standard & Professional Assessment Modules
- Promotion of Oil & GAS MBOT Accreditation internationally

**Next Steps**
- Agreement with MBOT (Formal MOU)
- MOGSC To seek support from Industry players at Oil & Gas HRRT
- MOGSC/MBOT to set a date in January for TEP
- MOGSC to invite & Nominate Members to TEP
- First TEP in January 2018
## Training Matrix

<table>
<thead>
<tr>
<th>Sub Sector</th>
<th>Area</th>
<th>Job Area</th>
<th>Basic (Level 1)</th>
<th>Intermediate (Level 2)</th>
<th>Advance (Level 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Upstream</td>
<td>Exploration</td>
<td>Prospecting</td>
<td>Oil &amp; Gas Exploration Overview</td>
<td>Petroleum Exploration</td>
<td>Advanced Exploration Geology</td>
</tr>
<tr>
<td>I. Upstream</td>
<td>Exploration</td>
<td>Prospecting</td>
<td>Basic Seismic</td>
<td>Operations Geology</td>
<td></td>
</tr>
<tr>
<td>I. Upstream</td>
<td>Exploration</td>
<td>Prospecting</td>
<td>Geospatial Analysis in Malaysia</td>
<td>Play-Based Exploration</td>
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<tr>
<td>I. Upstream</td>
<td>Midstream</td>
<td></td>
<td>Overview of Oil &amp; Gas Exploration</td>
<td>Prospect Waterfacing</td>
<td></td>
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<tr>
<td>I. Upstream</td>
<td>Downstream</td>
<td></td>
<td>The Beauty of Bath Modelling</td>
<td>Critical Thinking</td>
<td></td>
</tr>
<tr>
<td>I. Upstream</td>
<td></td>
<td></td>
<td></td>
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<td>I. Upstream</td>
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<tr>
<td>I. Downstream</td>
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<tr>
<td>I. Downstream</td>
<td></td>
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<tr>
<td>I. Midstream</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>I. Midstream</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>I. Soft Skills</td>
<td></td>
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<td></td>
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<tr>
<td>I. Soft Skills</td>
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<tr>
<td>I. Total</td>
<td></td>
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**Total Number of companies that are mapped**: 25

**Total Number of training Courses that are listed in the matrix**
- Upstream: 444 courses
- Midstream: 109 courses
- Downstream: 215 courses
- Soft Skills: 54 courses
- **Total**: 822 courses

**Total no of Job levels that were mapped**
  a. Upstream: 25
  b. Midstream: 7
  c. Downstream: 23
  d. Total: 55 Jobs

Please note that the job level was based on the OA.
INSTEP MOU

Objectives of Collaborations

- Promote INSTEP within the Service Industry
- Market INSTEP Courses to Industry
- Maximize INSTEP Facilities Utilization
- Develop New Courses that Benefit Service Industry
- Becomes INSTEP Industry Partner
- Lead Competency Development in the Industry as ILB
- Enhance Service Industry Competency Level
- Develop Opportunities for MOGSC Members

COLLABORATION PERIOD: 3 YEARS
Areas of Collaborations

Scope of Collaboration

Marketing of INSTEP
- Marketing of INSTEP Public Courses
- Participation of INSTEP during O&G Career Fair

Joint Courses
- Production Facilities Maintenance
- Flow Measurement Training
- Geosciences & Reservoir Engineering
- Field Exposure (Fieldtrip)
- Vibration Monitoring & Management

Special Projects
- Drilling Solutions Integrated Competency Dev. Program
- NOSS Development
InBase (with HRDF)

**SCOPE**

INBASE programme is one of the strategic initiatives by using **the 30% Pool Fund** under Special Fund for Industrial Association Programme to provide industry based training and certification courses.

The main purpose of the fund is:

- To support the National agenda to attain a **35% of Malaysian skilled workforce** by Year 2020.
- To enhance the knowledge and skills of the current workforce of HRDF registered employers and industry.

**BENEFITS**

- Promote the enhancement and improvement of technical skills, expertise and capabilities of employees.
- Provide employers with high skilled Malaysian workforce.
- Engage and encourage industry to keep abreast on the latest technology and innovations in competency and training areas.
- Provide platform to employers covered under HRDF to accelerate skills of Malaysian employees.
MOGSC Application for InBase

<table>
<thead>
<tr>
<th>Application Details</th>
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</thead>
<tbody>
<tr>
<td>No Of Companies</td>
<td>7</td>
</tr>
<tr>
<td>No Of Training Courses</td>
<td>48</td>
</tr>
<tr>
<td>Date of Proposal Submission</td>
<td>11th August 2017</td>
</tr>
<tr>
<td>No of Participants</td>
<td>3650</td>
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<tr>
<td>Value of InBase Training</td>
<td>RM32m</td>
</tr>
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</table>

**Current Status:**
- Request by HRDF to reduce/justify no of Training courses (responded by reduction in ½)
- Expected Results in mid November
To reach out to High School Students to provide knowledge and guide for students to enter Oil & Gas profession

To provide encouragement and guide for everyone on what jobs are available in Oil & Gas including skills development path and learning and development opportunities

To support Government/MOHR objective to increase Malaysian competencies and skills in key sectors
Content of Oil & Gas SmartBook

Proposed Content

- INITIATIVE by government to promote TVET as the first choice for school leavers (ministry effort, certification frameworks, growing industries, 12 KEKA)
- EVENT related to SKILLS (Worldskills Competition, Anugerah Tangan Emas)
- INTERVIEW of Success People (Chef Wan, Jimmy Choo, etc)
- SHARING of graduates of SKILLS (testimonials & occupational experience)
- Other RELATED information (employability skills, motivational)
- ILIB PROJECTS and INITIATIVES
- Skills Training FUNDING
- LISTING of SKILLS institutes, colleges and department

Career Guidance that benefit students, counselors, parents, youths and working adults

1. Salary scale (government, private, MNS, entrepreneur)
2. Years of experience required before moving to next level
3. Job scope will be defined based on international standard
4. Competencies well defined
Oil & Gas Career & Competency Exhibition

Goals and Objective

- Open up opportunities for public to be aware of career in Oil and Gas, Engineering and Maritime Industry.
- To introduce fresh graduates and students to careers related to their course work and to help them identify the key skills needed in order to become as successful professional;
- To develop relationships with area employers, which could lead to student internships, class visits, service-learning projects, and other work-based learning partnerships;
- Opportunity to interact one-on-one with employers of interest
- Establish professional relationships and gather contact information from employers
- Presentation and Talking Sessions will be given to exhibitors who wants to pick a topic and speak in selected slots, during the 1 Day event.

TARGET: mid 2018
Newsletter & Information Update
Summary

• MOGSC 500+ members represent the largest population of Service Companies in Malaysia
• MOGSC ILB status position itself as the Right Driver for Industry Change
• HRRT is a Game Changing Platform for the Industry to collaborate and develop Malaysia Oil & Gas Competency Landscape
• Many Key Initiatives in the MOGSC HR Roadmap can be leveraged to achieve the above goal
Thank You

14 years
Serving The Industry. Serving The Nation