

## 2 STRATEGY AND PERFORMANCE

## ASSET INTEGRITY, MAINTENANCE & COST MANAGEMENT

SBM Offshore's approach to Asset Integrity is to ensure asset preservation with optimal life cycle costing. Some important steps were undertaken in 2016:

- Computerized maintenance management system upgrade program to further enhance Process Safety, while optimizing maintenance activities. A pilot program was put in place on an operating FPSO offshore Brazil
- Remote process monitoring for most units, allowing real time assistance from onshore teams and event analysis for appropriate response and future improvements
- Application of technologies for inspections and maintenance activities onboard, to improve efficiency while reducing safety risks; including diver-less hull inspections, non-intrusive onstream inspection for pressure vessels, in situ hull repair techniques without hot work
- SBM Offshore's Digital FPSO project was
  launched in September to embrace the latest
  digital technologies across the entire product life
  cycle to improve performance of the current
  fleet, lower the cost of products through more
  efficient execution and create a strategic
  direction towards a fully digital future
- Planned maintenance shutdowns on FPSOs were improved with implementation of a standard approach to maximize efficiency and effectiveness of inspections, repairs and upgrades during shutdown windows.
   Performance feedback will be used for further improvement. Planned maintenance shutdowns on five FPSOs were completed in 2016
- The fleet-wide asset upgrade program continued and completion is targeted for 2017

#### **2.3.3 TURNKEY**

#### MANAGEMENT APPROACH

This year saw the Company's turnkey order book shrink, reflecting a reality in the industry as the

depressed market for projects continues. SBM Offshore had foreseen this and has been actively optimizing its designs and engaging with clients, transforming its product offering, by leveraging its position as market and technology leader in offshore mooring systems since developing the first mooring systems almost 60 years ago.

Going forward the Company's strategy is to standardize elements of its designs and to leverage lessons learnt to bring solutions to the table that better fit the constraints of a CAPEX-limited climate.

#### **2016 PERFORMANCE**

From a delivery perspective for SBM Offshore's turnkey division, the year represents a very active and productive year with two complex turret mooring systems progressing towards successful delivery to clients. Within the context of industry performance, this number is significant and cements SBM Offshore's reputation as a leader in EPCI for the turret market.

#### **FUTURE**

The Company is investing in its capacity in the turnkey division in order to be ready for when the market picks up.

# 2.4 HEALTH, SAFETY & SECURITY

#### **MANAGEMENT APPROACH**

It is SBM Offshore's top priority to ensure the Health, Safety and Security (HSS) of its employees, subcontractors and assets. The Company embraces its 'Duty of Care' regarding all HSS matters by adhering to industry best practices. SBM Offshore's Management is pleased to report that the roll out of the Safety Leadership Program to all the Regional Centers has been completed and the safety culture journey strengthened through initiating further cascading engagement with

<sup>&</sup>lt;sup>5</sup> Ichthys and Prelude turrets.

employees. In addition, working closely with clients facilitates a powerful synergy on safety.

The Company's overall objective is to offer an incident-free workplace and minimize the risks to the health and safety of all its personnel. Working in the oil and gas industry and operating in areas categorized as 'high risk' locations requires a clear strategy to manage exposure to health, safety and security hazards and risks. The HSSE policy (also dealing with environment), procedures and controls are designed to achieve this objective by providing an appropriate level of protection wherever the Company operates in the world.

#### **2016 PERFORMANCE**

HSS performance is tracked, consolidated on a monthly basis and disclosed annually. The results are compared to the previous years as well as benchmarked against the IOGP averages. The results are recorded and reported in accordance with the IOGP and GRI guidelines. All incidents with an actual or a potential consequence for the health, safety or security of personnel are reported and communicated to the relevant parties within the organization and corrective measures are taken.

In 2016, the Company was not able to improve on its robust 2014 and 2015 safety performance. In terms of injuries the Company ended the year not meeting its target related to pursuing its objective of preventing harm to people. However, there were bright spots. Overall the performance in 2016 led to a Total Recordable Injury Frequency Rate (TRIFR) of 0.31, which can be broken down into two main elements – an outstanding performance on turnkey with a TRIFR of 0.06 and a stable performance from 2015 to 2016 for the fleet with the challenges of the additional three FPSOs.

#### Key achievements

In 2016, the Company continued to expand its initiatives around health, safety and security with a specific focus on the:

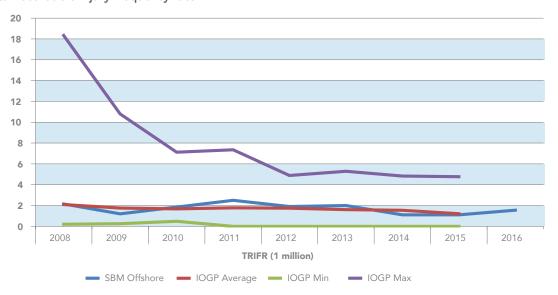
- Maintenance of all safety and security certifications on marine units and shorebases (OHSAS18001, ISPS and ISM)
- 2016 edition of the annual, Company-wide Life
   Day on the theme: Value Tomorrow, Care Today
- Safety leadership 'Make the Difference' program
  that was rolled out in all Regional Centers to
  raise awareness and develop competencies of
  senior management . A second phase of the
  program has been designed to cascade the SBM
  Offshore safety vision throughout the entire
  organization
- Engagement with all staff through monthly campaigns covering a broad scope of subjects including health and hygiene, road safety, impact of non-quality on HSSE
- Set up of a new process and tool to increase visibility on the feedback from senior management onsite visits
- Security awareness sessions, which were completed across all SBM Offshore locations
- Safe completion of the High Risk operations in Nigeria
- Country security assessments carried out in Nigeria, China, Angola, Brazil, Malaysia and South Korea for 2016

### Key results

In order to pursue its commitment to the objectives of 'No Harm, No Leaks and No Shortcuts', the Company had set the target for 2016 for a TRIFR to be below 0.27.

## **2 STRATEGY AND PERFORMANCE**

#### Total recordable injury frequency rate



The graph above shows SBM Offshore's Total Recordable Injury Frequency Rate (for this graph normalized per 1 million exposure hours) compared to the International Association of Oil and Gas Producers (IOGP) Contributing Members (maximum, average, minimum) since 2008. Across that time period, SBM Offshore remained around the IOGP average. However, despite the continuous improvement in safety since 2011, the Company did not reach its 2016 target, in spite of an outstanding performance in the turnkey segments.

The following Health, Safety and Security performance has been recorded in 2016:

While Operations safety performance remained stable compared to 2015, SBM Offshore's overall Total Recordable Injury Frequency Rate (TRIFR) increased from 0.22 in 2015 to 0.31 in 2016. This increase is mainly due to the limited volume of onshore activities giving more weight to the Operations offshore, which tend to have throughout the oil and gas industry a higher incident frequency rate compared to onshore construction activities. The fact that SBM Offshore added three additional units to its Operations fleet in 2016 puts this increase in context.

- Operations have been able to maintain their safety performance for the second consecutive year with a Total Recordable Incident Frequency Rate of 0.50 (same as in 2015). However, this negatively impacted the overall Company's HSS performance compared to last year.
- Occupational Illness Frequency Rate (OIFR) for employees increased from 0.00 in 2015 to 0.11 in 2016 with seven minor cases reported falling under this classification (heat stress, multiple gastric disorders offshore, back strain and symptoms of prolonged anxiety).
- Frequency of incidents with high potential to harm people has increased from 0.07 in 2015 to 0.11 in 2016 compared to 2015. This increase is also due to the limited volume of onshore activities. In fact the number of high potential incidents offshore has reduced compared to 2015 despite three additional units.
- Nine 'work-related' security incidents have been reported across the entire organization. None of these incidents resulted in any actual injury or physical harm to SBM Offshore personnel.

 Despite increased security risk levels around the world, SBM Offshore security performance indicates that an appropriate level of controls was applied.

**FUTURE** 

Although in 2016 the Company was not able to maintain the continuous improvement achieved since 2011 in safety performance, the overall high standards that SBM Offshore aspires to are being upheld. Given the deterioration in the 2016 safety performance and the fact that on-going activities in 2017 will be mainly offshore, Management has decided to renew its plan for improvements of the performance with a target of a Total Recordable Injury Frequency Rate (TRIFR) to be better than 0.32 in 2017.

The following strategy has been endorsed for 2017 to meet the objectives of continuous improvement and to achieve the goals of 'No Harm, No Leaks and No Shortcuts':

- The leadership program 'Make the Difference'
  will be extended to the entire workforce at
  shorebase and unit level since safety
  performance in 2017 will be largely influenced by
  the offshore Operations
- Maintain focus on leadership and safety culture programs, with a specific focus on line managers and supervisors
- Launch multi-disciplinary Life 365 campaigns and Life Day, including for example Quality, Regulatory Management and Operational Excellence
- Verify the implementation and application within the organization of the improvement actions identified during the International Sustainability Rating System (ISRS) maturity assessment
- Launch and roll out of the new HSSE onboarding and training program for project personnel
- With security threat levels increasing and business opportunities identified in high risk countries, monitor closely changing or emerging

threats and establish security plans and associated controls as early as possible

#### 2.5 ENVIRONMENT

#### **MANAGEMENT APPROACH**

For SBM Offshore, managing environmental impact goes beyond compliance to environmental protection and refers to environmentally friendly innovations in the operations of its FPSOs. The Company sees clients' expectations and requirements being directed by environmental considerations. Within SBM Offshore Operations, anticipating these expectations and managing the Company's footprint go hand-in-hand with maintaining good operating practices.

The Company endeavours to operate in an environmental and sustainable manner, in order to minimize damage to local ecosystems as well as proactively protect the environment, paying attention to three key environmental aspects:

- Oil spills by strictly following set procedures in operations and ensuring measures are in place
- Unnecessary flaring or emissions into the air or discharges into sea – through prevention when possible
- Excessive use of energy and waste by encouraging reduced consumption, recycling and re-use

Environmental data are tracked on a daily basis, evaluated on a monthly basis and consolidated/disclosed annually. The results are compared with the previous years. In addition, SBM Offshore's environmental data are benchmarked against the IOGP averages. The results are recorded and reported in accordance with the IOGP and GRI guidelines.

## 2016 PERFORMANCE

In 2016, the Company continued to expand its environmental initiatives by enhancing existing programs and development of new ones including: