

# Safety & Environment Statistics for IMCA Members

## Report for the period 1 January – 31 December 2014

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### 1 Introduction

IMCA produces an annual report of safety and environment statistics (covering fatalities, injuries and environmental indicators) supplied by contractor members. This information note reports detailed annual statistics for 2014. A short summary of the figures for 2014 is being prepared and will be published also.

Safety and environment statistics remain a useful insight into the performance of a company and industry sector in the areas of health, safety and environment. The purpose of these statistics is to record the safety and environment performance of IMCA contractor members each year and to enable IMCA members to benchmark their performance. Statistics were provided by 264 companies and organisations, representing around 60% of the contractor membership, excluding drilling contractors and contractors who report as part of a greater group. 62 contractors took part for the first time. IMCA would like to thank all those who took part in this important annual benchmarking exercise.

Full definitions of the leading and lagging indicators calculated from statistics collected from IMCA members can be found in full at Appendix 3 and 4. The definition of injuries used is that of the U.S Occupational Safety and Health Administration (OSHA).

### 2 Executive Summary

The 2014 dataset is drawn from 264 IMCA contractor members, based upon 798 million man-hours of work overall (558 million man-hours offshore). Environmental data of one form or another was provided by 59% of members.

This year IMCA contractor members' lagging safety indicators have worsened very slightly, though the "flatline" tendency has continued in the longer term. There were fewer fatalities (6) this year than last year (9).

Discovery (and subsequent correction) of errors in the number of offshore man-hours reported by a number of contractors in 2013 has meant that the overall man-hours for 2013 has been reduced, with consequent change to the main IMCA indicators for 2013 – shown in brackets.

	2014	2013 (revised)	2013 (original)
Overall Lost Time Injury Frequency Rate (overall LTIFR)	<b>0.54</b>	0.54	0.37
Overall number of Lost Time Injuries	<b>424</b>		474
Overall Total Recordable Injury Rate (TRIR)	<b>2.18</b>	2.12	1.47
Overall Fatal Accident Rate (FAR)	<b>0.75</b>	1.00	0.69
Offshore Lost Time Injury Frequency Rate (offshore LTIFR)	<b>0.65</b>	0.57	0.35
Offshore Total Recordable Injury Rate (TRIR)	<b>2.60</b>	2.27	1.37
Offshore Fatal Accident Rate (FAR)	<b>0.72</b>	1.15	0.69
Onshore Lost Time Injury Frequency Rate (onshore LTIFR)	<b>0.28</b>	0.46	0.46
Onshore total recordable injury rate (TRIR)	<b>1.18</b>	1.81	1.81

Table 1: Summary of IMCA safety statistics for 2014 (last year's figures in brackets)

For the purposes of comparison, the safety statistics recorded here by IMCA members are consistent with those of other main industry trade associations, International Association of Oil & Gas Producers (IOGP) and International Association of Drilling Contractors (IADC).

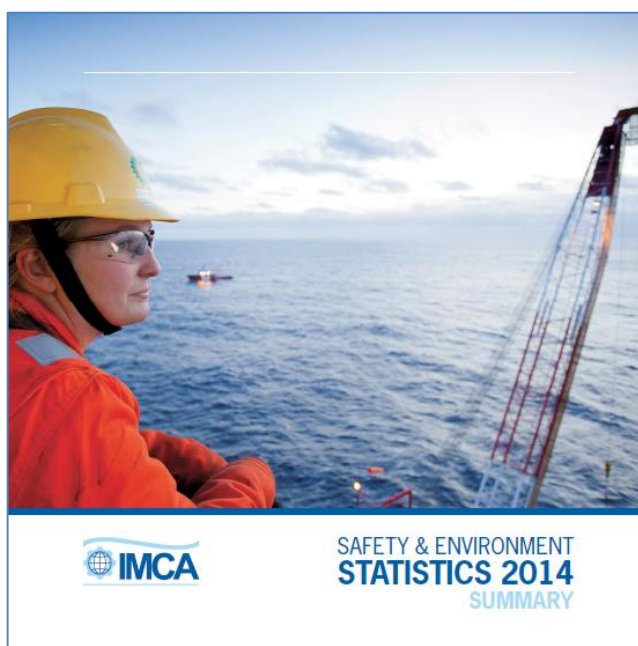
Comparison of Overall Total Recordable Injury Frequency Rates (TRIR) between Trade Associations										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
<b>IMCA</b>	5.41	4.14	4.38	2.50	2.54	2.74	2.40	1.93	2.12	2.18
<b>IOGP</b>	3.05	2.92	2.68	2.08	1.75	1.68	1.76	1.74	1.60	1.54
<b>IADC</b>	11.71	10.85	10.24	9.11	6.12	6.55	4.17	4.41	4.03	3.76*

Table 2: Comparison of trade association TRIR

\*Q4 results only

Although IMCA encourages all contractor members to take part in this safety statistics exercise, doing so is not mandatory, and statistics are submitted on a voluntary basis on the understanding of complete anonymity. IMCA is pleased that members feel able to report incidents, injuries and fatalities, and will continue to share through safety flashes appropriate anonymous information from incidents and fatalities in the offshore and marine sectors.

This year, IMCA will publish a short summary leaflet or downloadable report summarising the 2014 statistics, whilst continuing to publish this detailed statistical analysis of the safety data in this separate information note. As in previous years, data are separated into offshore and onshore activity to improve consistency in the data collected. The offshore statistics cover offshore work only, whereas the inclusion of onshore work covers such areas as fabrication yards and office work. For the purposes of these safety statistics, "inshore" work (for example in the renewables sector) is considered to be offshore rather than onshore.



The statistics over the past eighteen years have been as follows:

	Overall						Offshore						Onshore					
	Contractors	Million hours worked	LTI's	LTI/FR	Fatalities	Fatal Accident Rate	Recordable injuries	TRIR	Million hours worked	LTI's	LTI/FR	Fatal Accident Rate	Recordable injuries	TRIR	Million hours worked	LTI/FR	Fatal Accident Rate	TRIR
1997	23	47.6	236	4.96	3	6.3												
1998	32	52.9	257	4.86	2	3.8												
1999	28	52.8	196	3.72	4	7.6												
2000	31	65.6	227	3.46	5	7.6				4.25	10.1				1.05			
2001	32	54.5	162	2.97	4	7.3				3.77	10.1				0.86			
2002	32	197	244	1.24	3	1.52		62		2.96	4.83			135	0.44	0		
2003	31	200	198	0.99	5	2.49		66	133	2	6.03			134	0.49	0.75		
2004	36	145	164	1.13	3	2.06	645	72	120	1.65	2.75		8.87	72	0.61	1.39		
2005	51	160	189	1.18	6	3.13	864	5.42	102	172	1.69	3.93	742	58	0.29	1.73	2.1	
2006	74	221	226	1.02	6	2.72	914	4.14	186	196	1.06	3.23	807	35	0.86	0	3.05	
2007	100	310	339	1.09	6	1.94	1356	4.38	252	315	1.25	2.38	1180	58	0.42	0	3.05	
2008	129	612	433	0.72	7	1.14	1531	2.5	465	341	0.74	1.08	1176	2.53	148	0.64	1.35	2.4
2009	152	602	395	0.67	6	1.00	1530	2.54	474	340	0.73	1.27	1291	2.72	127	0.43	0	1.88
2010	172	547	393	0.73	7	1.28	1499	2.74	389	328	0.86	1.29	1240	3.19	158	0.43	1.27	1.64
2011	195	583	370	0.64	3	0.51	1400	2.40	431	303	0.71	0.70	1133	2.63	152	0.44	0.00	1.76
2012	227	945	467	0.51	14	1.69	1825	1.93	655	357	0.57	2.14	1274	1.95	291	0.39	0.69	1.90
2013	245	901	474	0.54	9	1.00	1837	2.12	607	341	0.57	1.15	1378	2.27	293	0.46	0.68	1.81
2014	<b>264</b>	<b>798</b>	<b>423</b>	<b>0.54</b>	<b>6</b>	<b>0.75</b>	<b>1736</b>	<b>2.18</b>	<b>558</b>	<b>358</b>	<b>0.65</b>	<b>0.72</b>	<b>1453</b>	<b>2.60</b>	<b>239</b>	<b>0.28</b>	<b>0.84</b>	<b>1.18</b>

Table 3: Summary of IMCA safety statistics 1997-2014

### 3 Distribution of Contributors

#### 3.1 By Geographical Region

IMCA's regional section meetings enable members to communicate at a regional level, sharing good practice, networking and co-ordinating discussions with local client and regulatory bodies. IMCA members join one of five geographical regions, based roughly around time-zones, depending on where their primary areas of operations are based. It should be noted that the regional breakdown of statistics here refers to the office location of the member company submitting statistics, and may only broadly correspond to the actual location of operations.

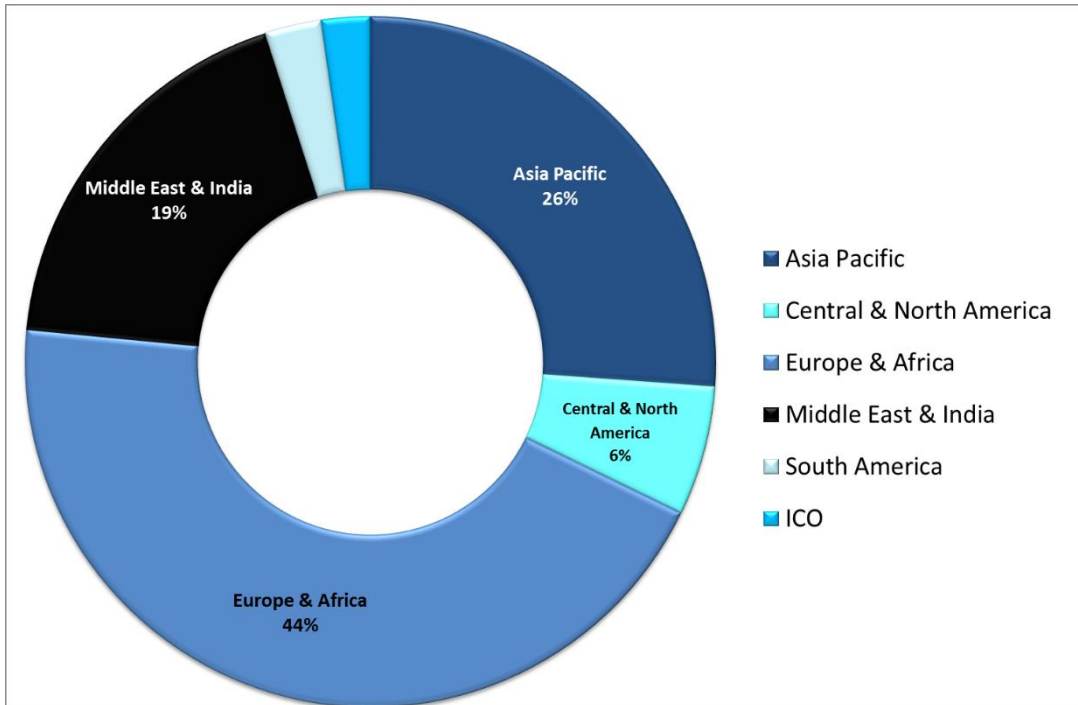


Figure 1: Contributors by IMCA geographical region

Key (Please refer to the Appendix for further definition of these rates and acronyms)	
FAR	Fatal Accident Rate
TRIR	Total Recordable Injury Rate
LTIFR	Lost Time Injury Frequency Rate
RAL	Reporting Activity Rate
SOFR	Safety Observation Frequency Rate
MVR	Management Visit Rate
LLR	Lessons Learnt Ratio

IMCA region	Contributors
Asia-Pacific (AP)	69 (62)
Central & North America (CNA)	16 (13)
Europe & Africa (EA)	117 (108)
Middle East & India (MEI)	49 (51)
South America (SA)	7 (5)
International Contractors (ICO)	6 (6)

Table 4: Number of contributors by region (last year in brackets)

	Offshore			Overall			Onshore		
	FAR	LTIFR	TRIR	FAR	LTIFR	TRIR	FAR	LTIFR	TRIR
AP	1.39	0.53	2.43	0.98	0.41	2.09	0.00	0.13	1.27
CNA	0.00	0.30	1.41	0.00	0.33	1.68	0.00	0.44	2.77
EA	0.00	0.74	3.12	0.61	0.64	2.59	2.48	0.31	0.95
MEI	3.03	0.86	2.53	2.44	0.82	2.47	0.00	0.62	2.24
SA	2.45	0.44	1.66	2.21	0.49	1.70	0.00	0.91	2.04
GCO	0.00	0.73	2.86	0.00	0.40	1.60	0.00	0.19	0.81

Table 5: Lagging safety indicators by geographical region

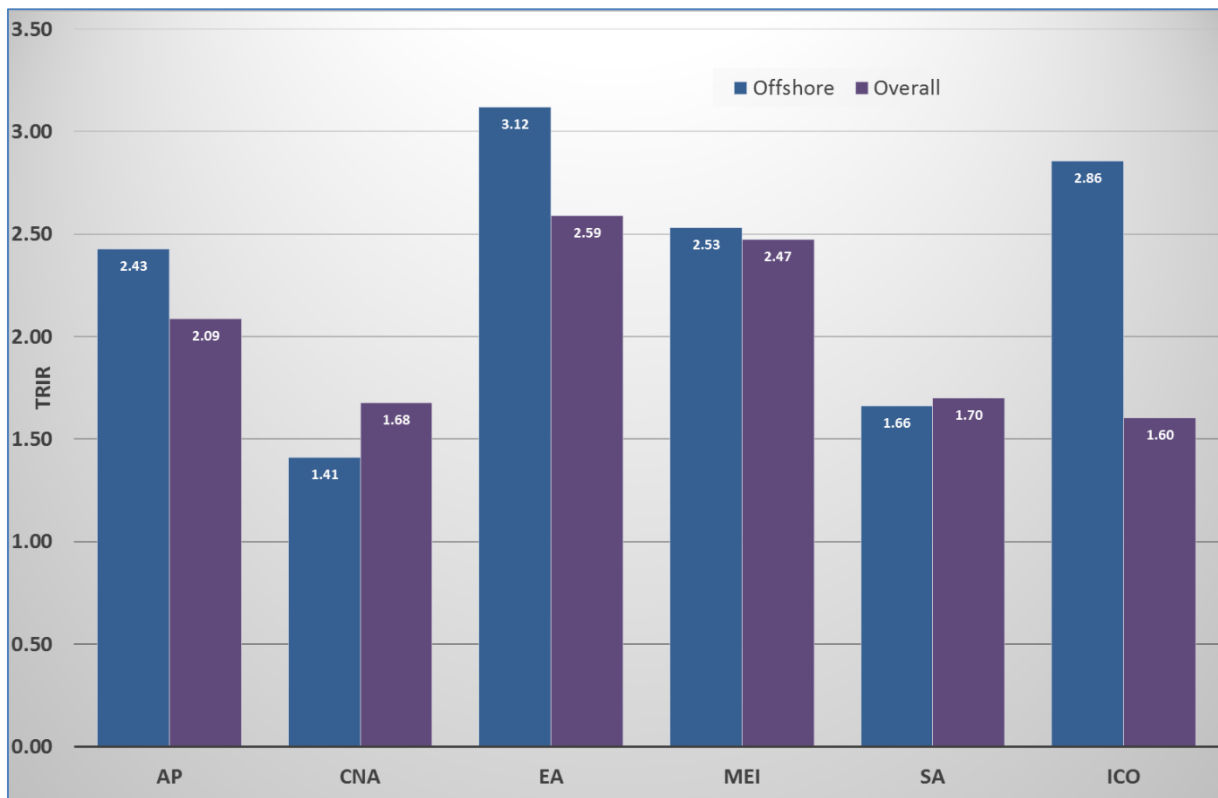


Figure 2: Overall and Offshore TRIR by geographical region

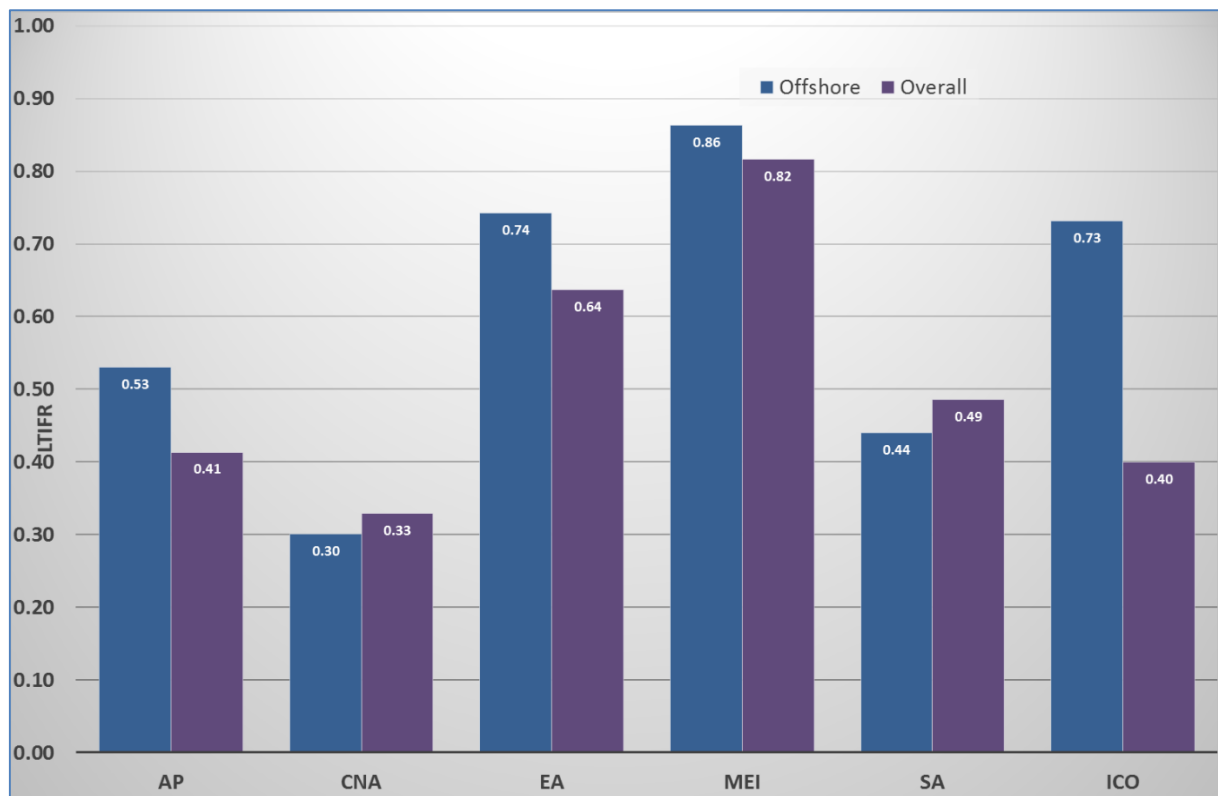


Figure 3: Overall and Offshore LTIFR by geographical region

The change to IMCA structure allowing for Global Contractor (GCo) members only occurred at the end of 2014 and hence is not reflected here.

### 3.2 By IMCA Technical Division

IMCA members join one or more of the four technical divisions, Diving, Marine, Offshore Survey, and Remote Systems & ROV, depending on the work they are conducting. ICo members belong to all four technical divisions as they tend to conduct work in all four technical disciplines.

It is not possible, owing to the fact that members can join in one or more of the four technical divisions, to draw any conclusions about the safety performance of members in different divisions.

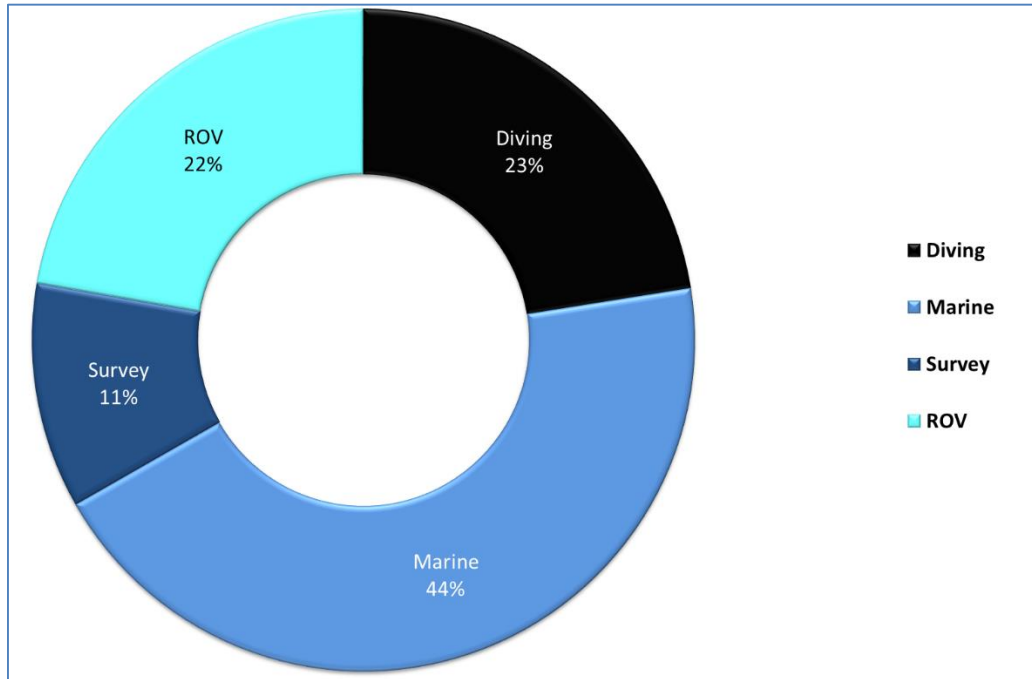


Figure 4: Contributors by IMCA technical division

## 4 Environmental Indicators

This is the third year that IMCA has collected information from contractor members on their environmental performance. Listed or publically traded companies are in many cases required to provide annual information of this sort for their stockholders.

The information we have sought to collect has been broadly based on [IMCA SEL 010 – Guidelines for the use of environmental performance indicators](#). We have collected data to allow us to calculate environmental performance indicators as follows:

- ◆ Number of oil spills per million man-hours worked;
- ◆ Litres of oil spilt per million man-hours worked;
- ◆ Bunkers used (either in tonnes or in cubic metres) per million offshore man-hours worked;
- ◆ Megawatt-hours (not kilowatt-hours) electricity used per million onshore man-hours worked;
- ◆ Tonnes (not kilogrammes) of non-hazardous waste per million overall (offshore and onshore) man-hours worked;
- ◆ Tonnes (not kilogrammes) of hazardous waste per million overall (offshore and onshore) man-hours worked.

Given the quantities being reported, all weights reported are taken to be in tonnes (1000 kg) rather than the US short ton (907 kg) or the UK long ton (1016 kg).

A number of contractors continue to misunderstand the units required for reporting; where clarification and correction has not been possible, these data have been excluded from the IMCA calculations. In some cases, particularly in the context of bunkers used, electricity consumed and waste generated, contractors have submitted data that is clearly three orders of magnitude too large – that is, 1000 x greater than the reality – and this has been corrected. See below for further details.

#### 4.1 Oil Spills (Offshore)

88 contractors (78 last year) reported having spilt oil, and 77 (73 last year) reported the quantity spilt. IMCA members reported a total of 674 oil spills (682 last year). "Oil" is not at this stage more closely defined – hydraulic oil, engine oil, any non-aqueous petroleum-based fluid.

#### 4.2 Bunkers (Offshore)

Amount of bunkers used was reported by 160 contractors (155 last year), of whom 12 reported by both weight and volume. Some of the data was reported in different units to that required, leading to indications that bunkers used were one, two or even three orders of magnitude (1000x) greater than what was likely given the number of offshore man-hours involved and the possible number of vessels involved. On this basis, data from 9 contractors were omitted from the calculations used to derive an IMCA indicator.

#### 4.3 Electricity Consumed (Onshore)

Data on onshore electricity consumption was provided by 129 contractors (109 last year). 17 contractors supplied a figure for electricity consumed but provided no onshore man-hours against which to calculate a rate. 16 contractors supplied data in kWh rather than MWh – these figures were corrected to kWh and included where possible.

#### 4.4 Waste Disposal (Overall)

155 contractors reported the amount of non-hazardous waste disposed of (138 last year), and 106 contractors reported the amount of hazardous waste disposed of (98 last year). 106 reported both. Two contractors reported numbers which were thought to be kilograms rather than tonnes – these were corrected to kilograms.

	Spills	Amount spilt	Bunkers (volume)	Bunkers (weight)	Electricity (MWh)	Non-hazardous waste	Hazardous waste
No. of contributors	88	77	96	74	129	155	106
Minimum	0.00	0.000	3.04	2.98	0.67	0.16	0.01
Maximum	90.22	4728.5	558523	558523	63274	7670	2070
Average	7.03	239.7	25435.0	27958.5	2824.6	515.4	128.5
<b>IMCA</b>	<b>0.76</b>	<b>218.6</b>	<b>358563.6</b>	<b>19978.1</b>	<b>12960.8</b>	<b>894.7</b>	<b>106.5</b>

Table 6: Environmental indicators, 2014

See Appendix 2 for further details.

## 5 Lost Time Injury Frequency Rate (LTIFR)

The overall LTIFR for 2014 has remained the same – 0.54 as in 2013. It was originally reported as 0.37 last year, but discovery of incorrect offshore man-hours reported by several contractors has led to a fall in the reported offshore man-hours for 2013, leading to an increase in IMCA’s offshore and overall indicators for 2013.

The offshore LTIFR has worsened slightly to 0.65 from 0.57 in 2013. There is no significant alteration in the overall “flat line” trend seen since 2008, as can be seen in Figures 7 and 8.

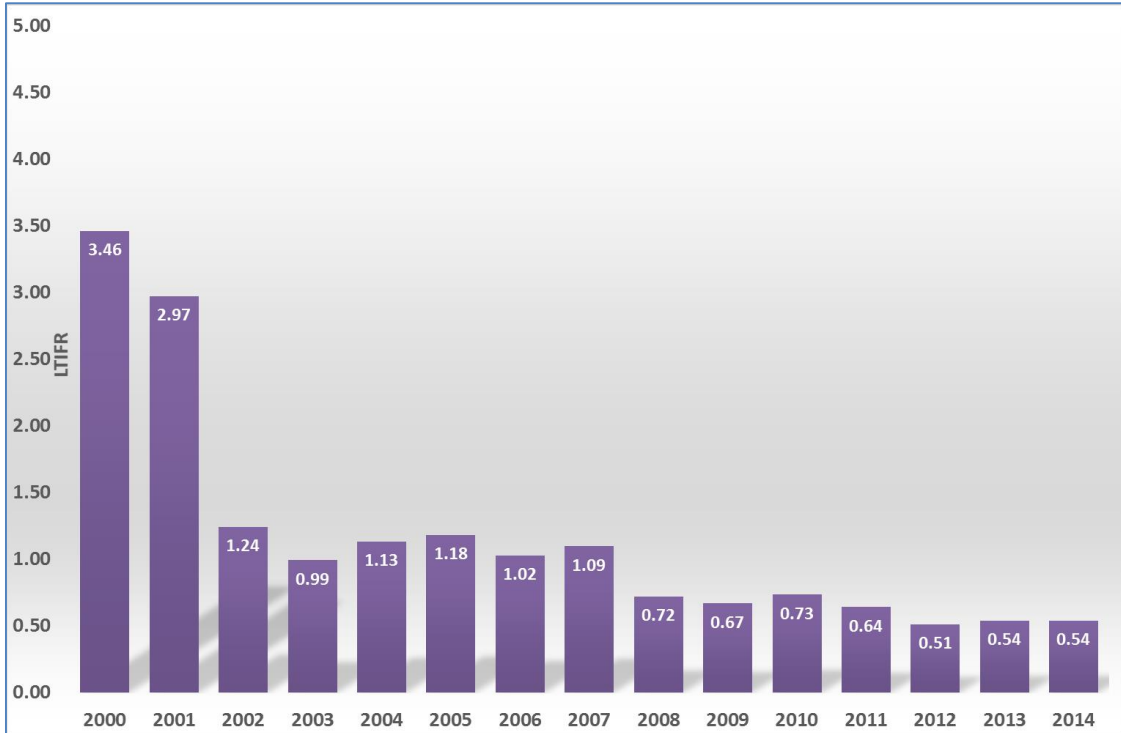


Figure 7: Overall LTIFR

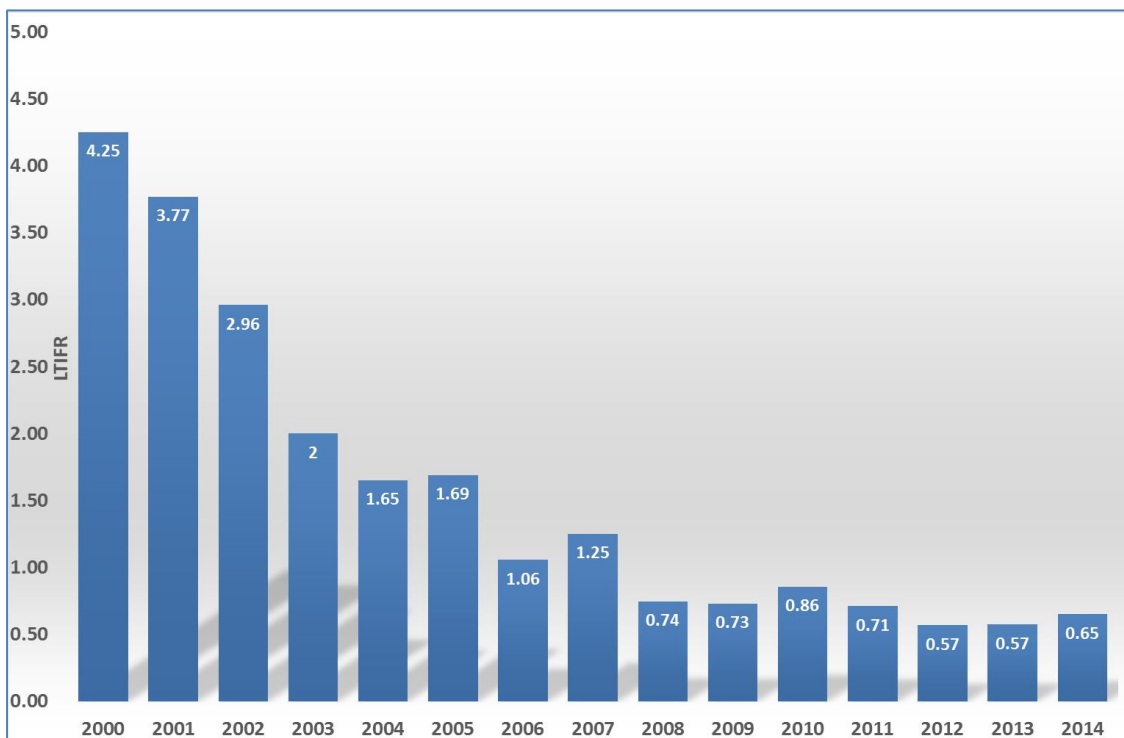


Figure 8: Offshore LTIFR



## 5.1 Direct causes of Lost Time Injuries

IMCA categorises information on the direct causes of Lost Time Injuries (LTIs) into 12 categories agreed by the SEL Core Committee, as tabulated below.

LTI Category	No of LTIs						Total
	AP	CNA	EA	MEI	SA	ICO	
A) Falls from height	7	1	13	6	1	5	33
B) Falls on the same level (including slips & trips)	10	8	53	8	2	7	88
C) Struck against	1	2	20	7	5	2	37
D) Struck by moving/falling objects	11	4	56	16	7	16	110
E) Exposure to mechanical vibration	0	0	1	1	0	0	2
F) Exposure to sound	0	0	0	0	0	0	0
G) Muscle stress and repetitive movement	3	4	14	5	0	4	30
H) Contact with electricity	0	0	1	0	0	0	1
I) Contact/exposure to heat/cold	0	1	5	0	0	0	6
J) Contact/exposure with hazardous substances	1	0	3	1	3	0	8
K) Entrapment	1	3	4	5	1	20	34
L) Asphyxiation	0	0	0	0	0	0	0
M) None given	7	7	38	16	2	5	75
<b>TOTAL</b>	<b>41</b>	<b>30</b>	<b>208</b>	<b>65</b>	<b>21</b>	<b>59</b>	<b>424</b>

Table 7: Causes of LTIs by IMCA geographical region

Key			
AP	Asia-Pacific	A-band	<300,000 man-hours
CNA	Central & North America	B-band	300,000-1,200,000 man-hours
EA	Europe & Africa	C-band	1,200,000-3,000,000 man-hours
MEI	Middle East & India	D-band	>3,000,000 man-hours
SA	South America		See section 8 for more details on company bands

There were 424 LTIs recorded by IMCA members this year. “Struck by moving or falling objects” was the most common immediate cause of LTIs with 26% of recorded LTIs. The second most common cause this year with 21% of all reported LTIs is “Falls on the same level”.

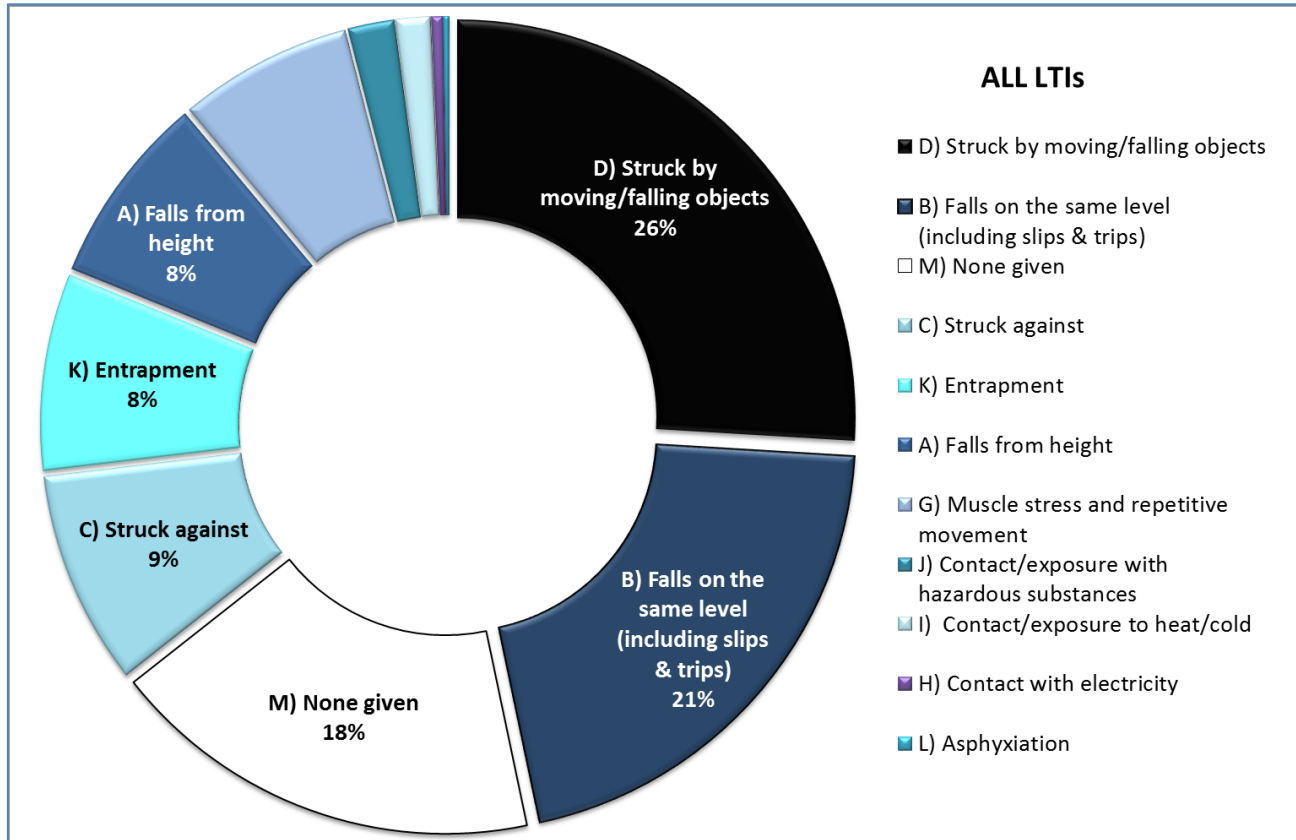


Figure 9: Direct causes of all reported Lost Time Injuries

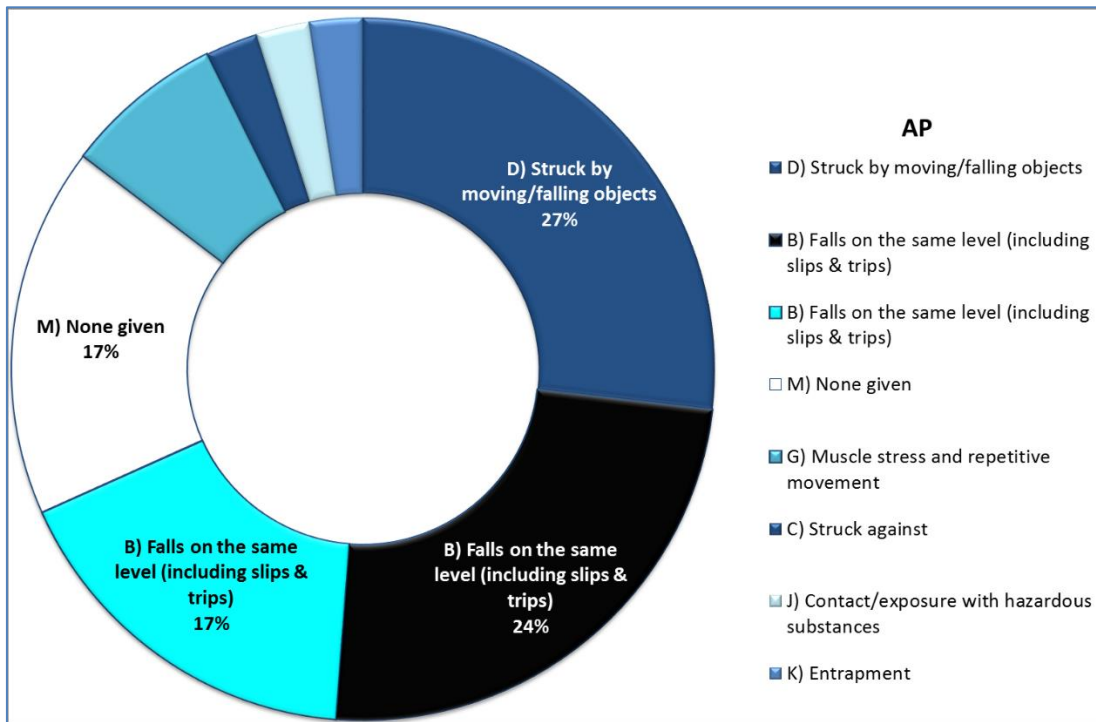


Figure 10: Causes of LTIs in Asia-Pacific region

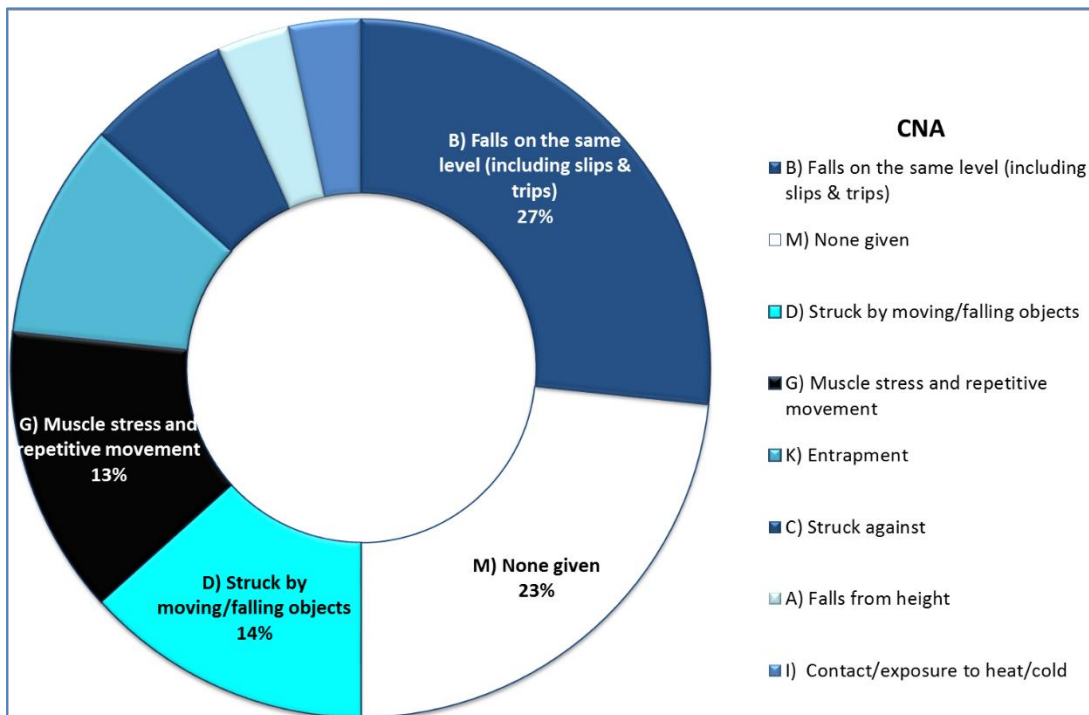


Figure 11: Causes of LTIs in Central & North America region

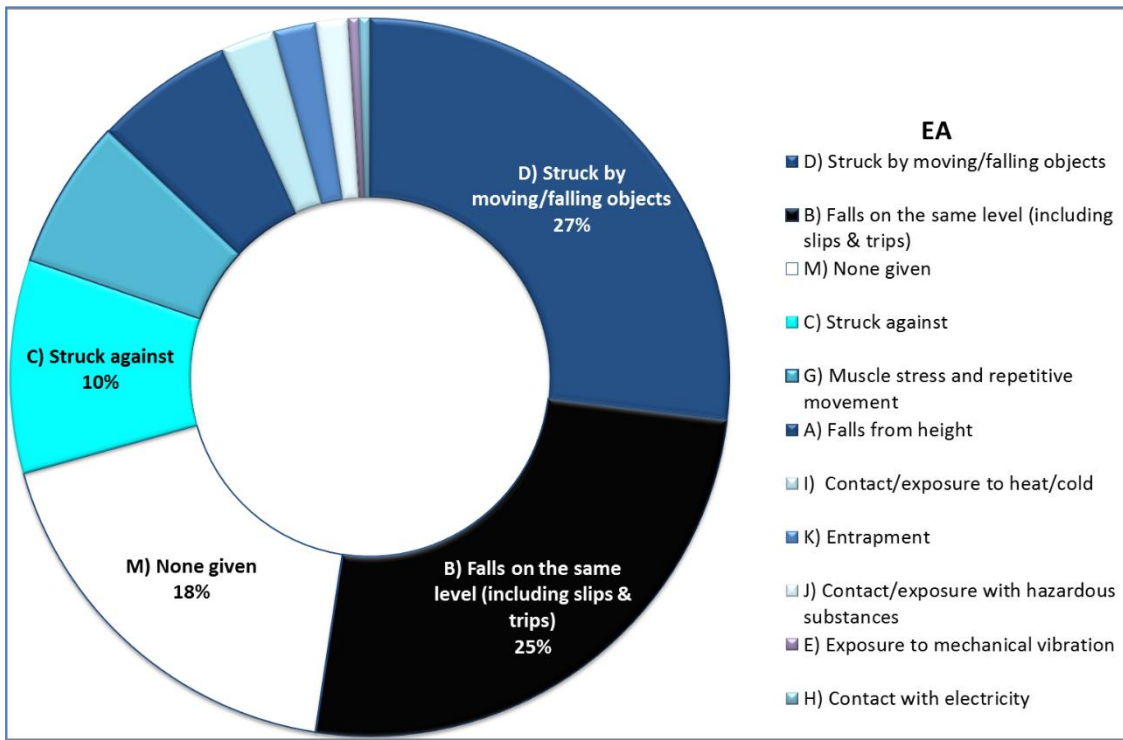


Figure 12: Causes of LTIs in Europe & Africa region

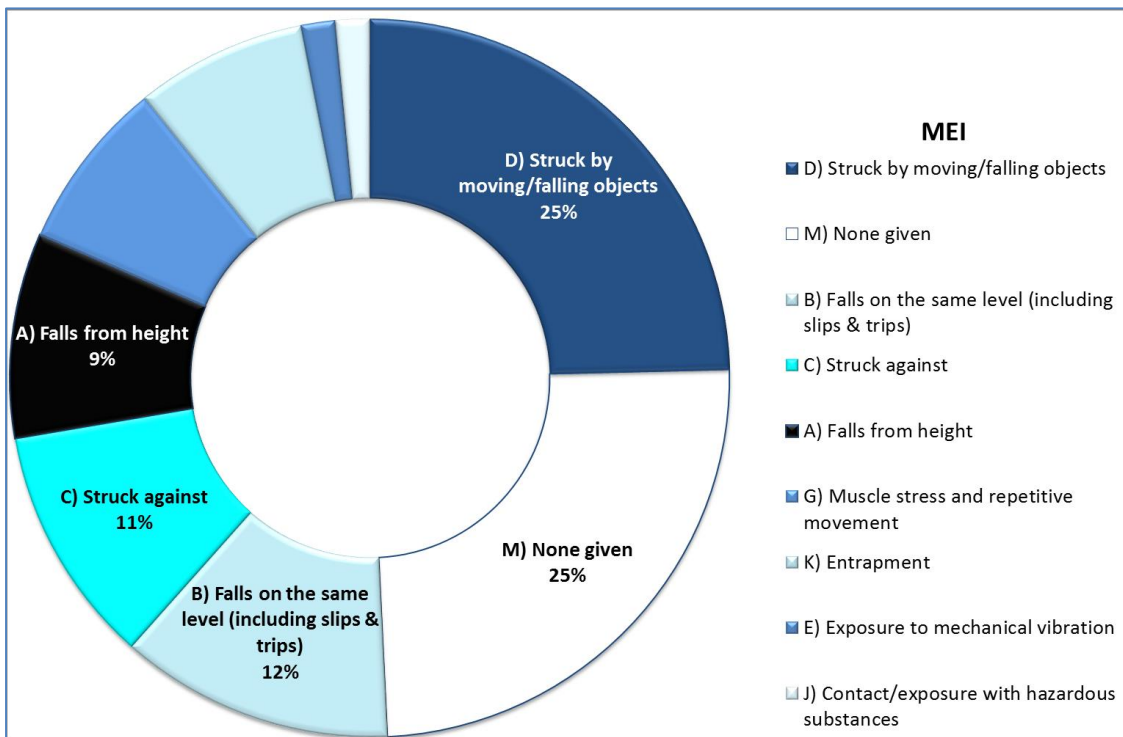


Figure 13: Causes of LTIs in Middle East & India region

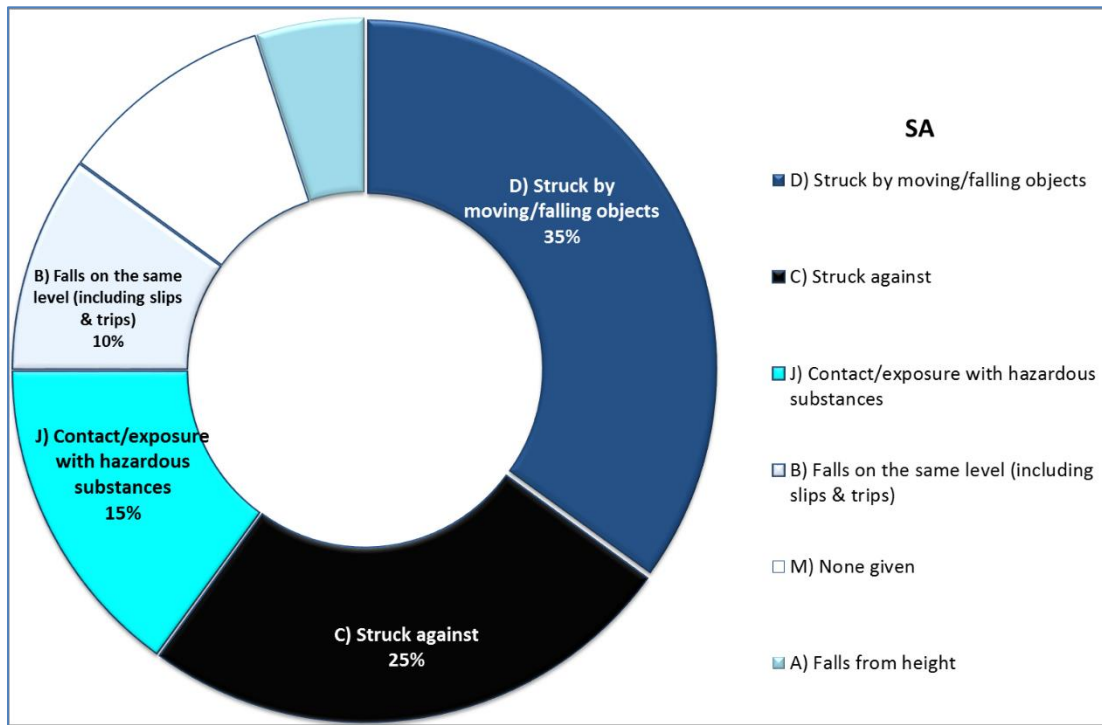


Figure 14: Causes of LTIs in South America region

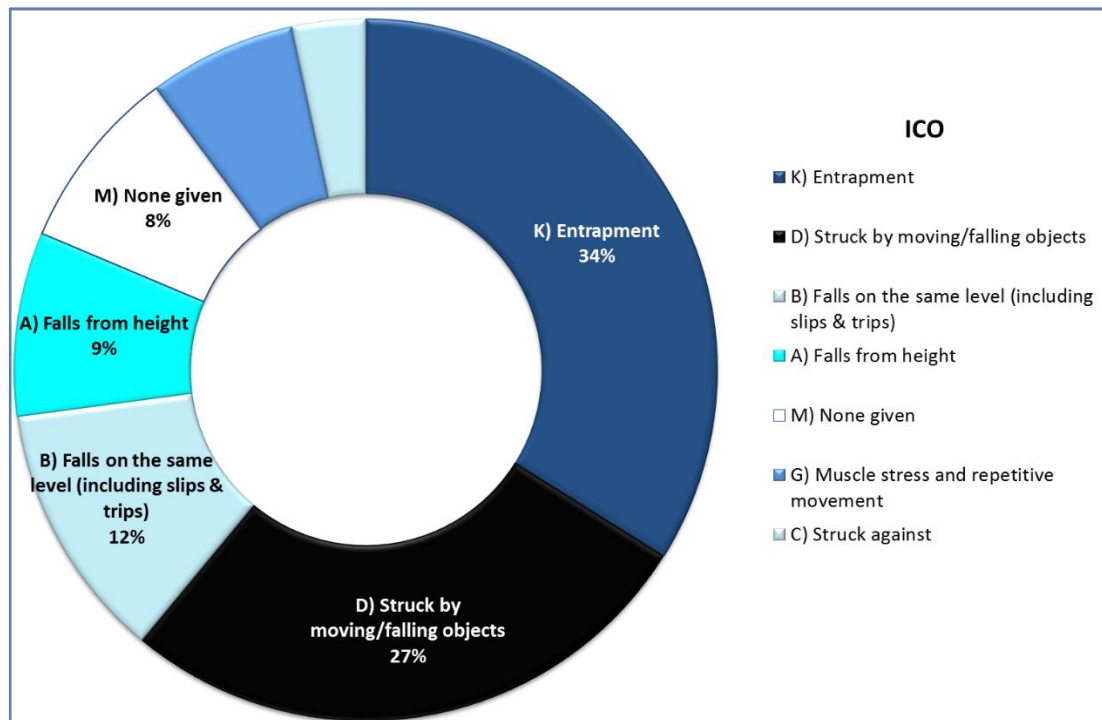


Figure 15: Causes of LTIs amongst ICO members

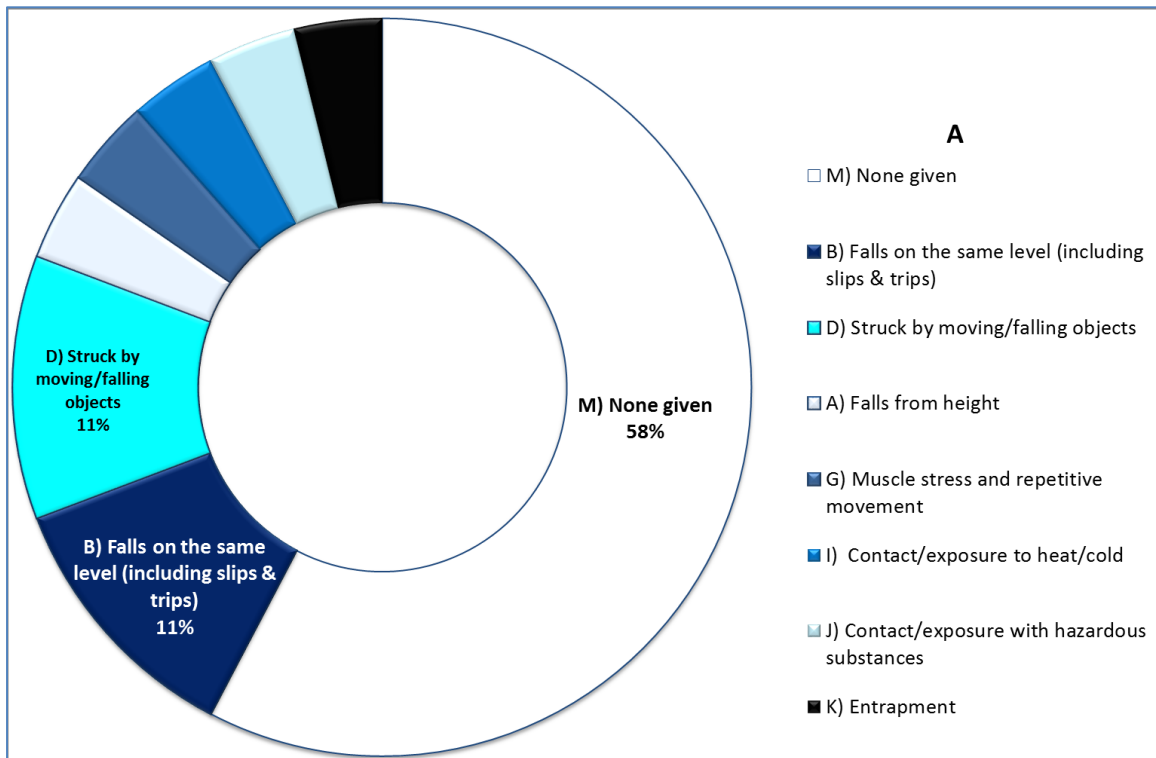


Figure 16: Causes of LTIs in A-band members

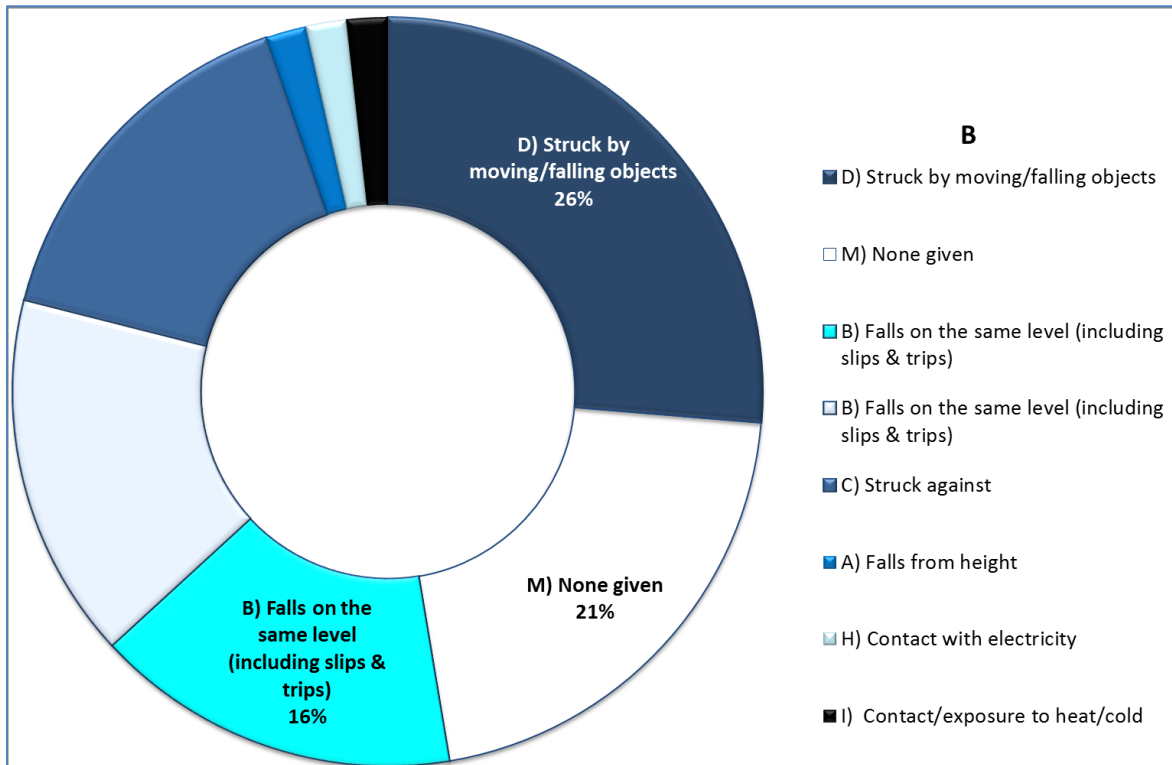


Figure 17: Causes of LTIs in B-band members

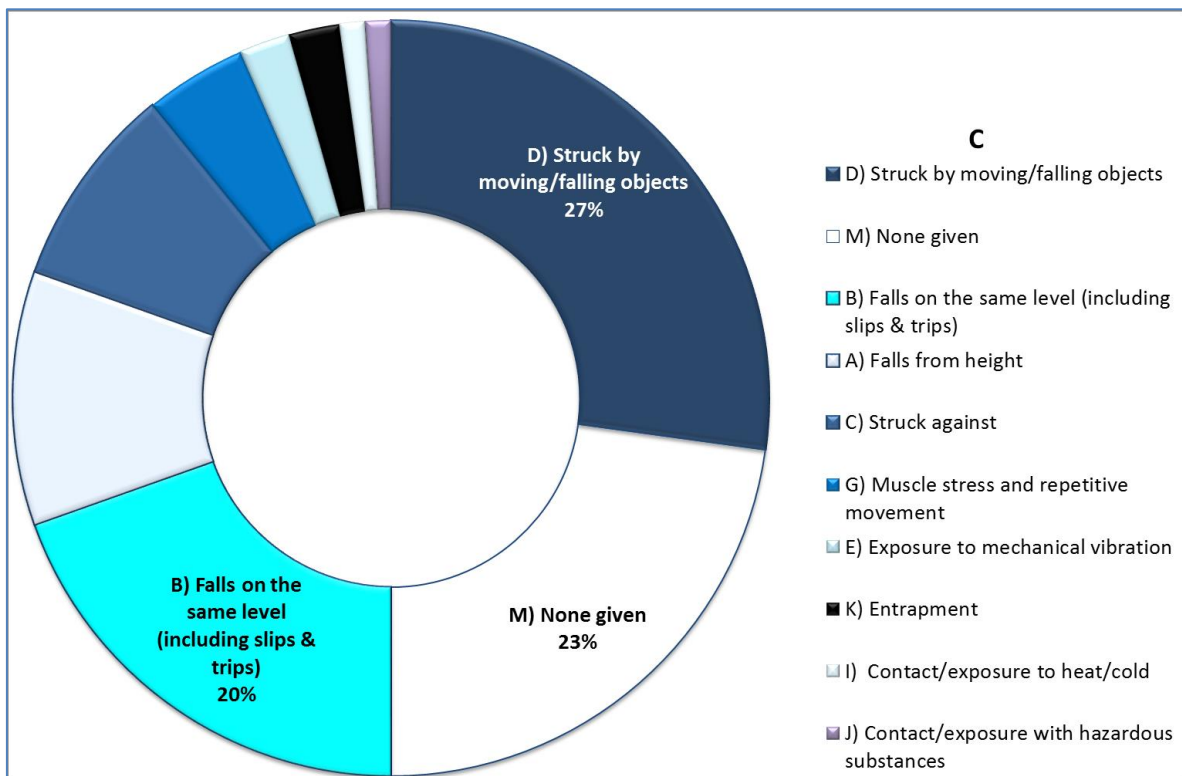


Figure 18: Causes of LTIs in C-band members

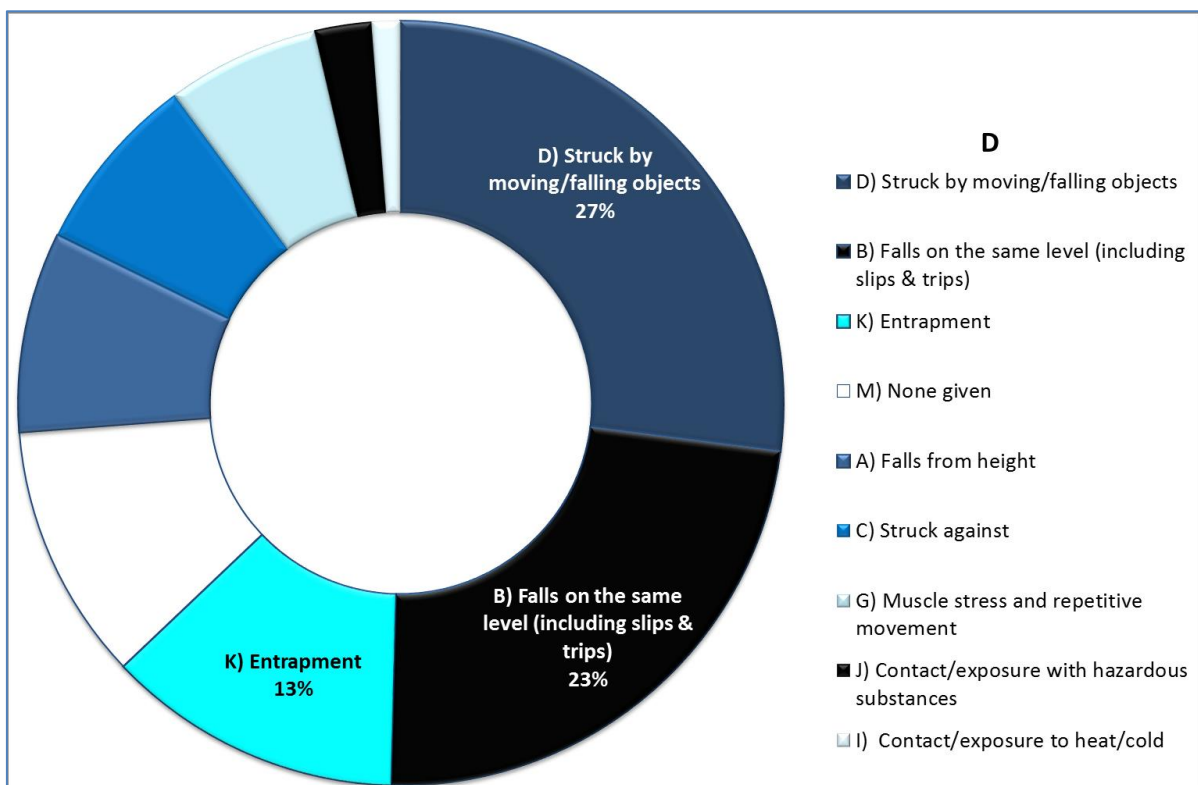


Figure 19: Causes of LTIs in D-band members

## 6 Total Recordable Injury Rates (TRIR)

Total Recordable Injuries have been tracked for many years as they are considered to be a more reliable pointer to safety in the industry. In 2014, the **overall TRIR** was 2.18 (2.27 in 2013). The **offshore TRIR** was 2.60, which is not as good as the 2013 figure of 2.12.

Year	Overall TRIR	Offshore TRIR	Onshore TRIR
2004		8.87	
2005	5.42	7.29	2.10
2006	4.14	4.35	3.06
2007	4.38	4.68	3.05
2008	2.50	2.50	2.40
2009	2.54	2.72	1.88
2010	2.74	3.19	1.64
2011	2.40	2.63	1.76
2012	1.93	1.95	1.95
2013	2.27	2.12	1.81
2014	2.18	2.60	1.18

Table 8: Total Recordable Injury Rates (TRIR) 2004-2014

Year	Overall					Offshore				
	First aid	Medical treatment	RWC	Lost time injuries	Fatalities	First aid	Medical treatment	Lost time injuries	RWC	Fatalities
2004				164	3			120		2
2005	1812	521	148	189	5	1703	436	172	130	4
2006	2072	492	190	226	6	1772	434	196	171	6
2007	3752	730	281	339	6	3200	607	315	252	6
2008	3877	745	345	433	7	2991	581	341	249	5
2009	4919	747	382	395	6	3911	631	340	314	6
2010	3759	831	378	393	7	2869	610	328	317	5
2011	4027	671	356	370	3	3077	542	303	285	3
2012	4319	843	499	467	16	3104	578	357	325	14
2013	4562	963	462	474	9	3497	688	341	342	7
2014	4379	858	448	424	6	3599	719	358	372	4

Table 9: Recordable injuries, medical treatment and first aid cases 2004-2014

## 7 Fatal Accident Rate (FAR)

IMCA contractor members reported 6 fatalities during 2014. Whilst all incidents should be seen as avoidable, it is important that companies are able to report incidents, injuries and fatalities without fear of commercial or other repercussions. IMCA continues to work closely with its members and other trade associations to ensure that all marine contracting industry work- place fatalities are properly recorded. Our focus remains on lessons learnt and information sharing, to ensure that these incidents never recur. To this end, IMCA is publishing brief and anonymous information on each of the fatality incidents reported this year.

Basic information on fatalities – 2014
Cardio/respiratory failure
Crewman hit by a blind flange & died of injuries
Vessel master swept overboard by a parting rope and drowned
Crewman hit in neck and fatally injured by snapping taut wire
Man overboard - drowned
Crewman killed when nearby crane boom struck by lightning

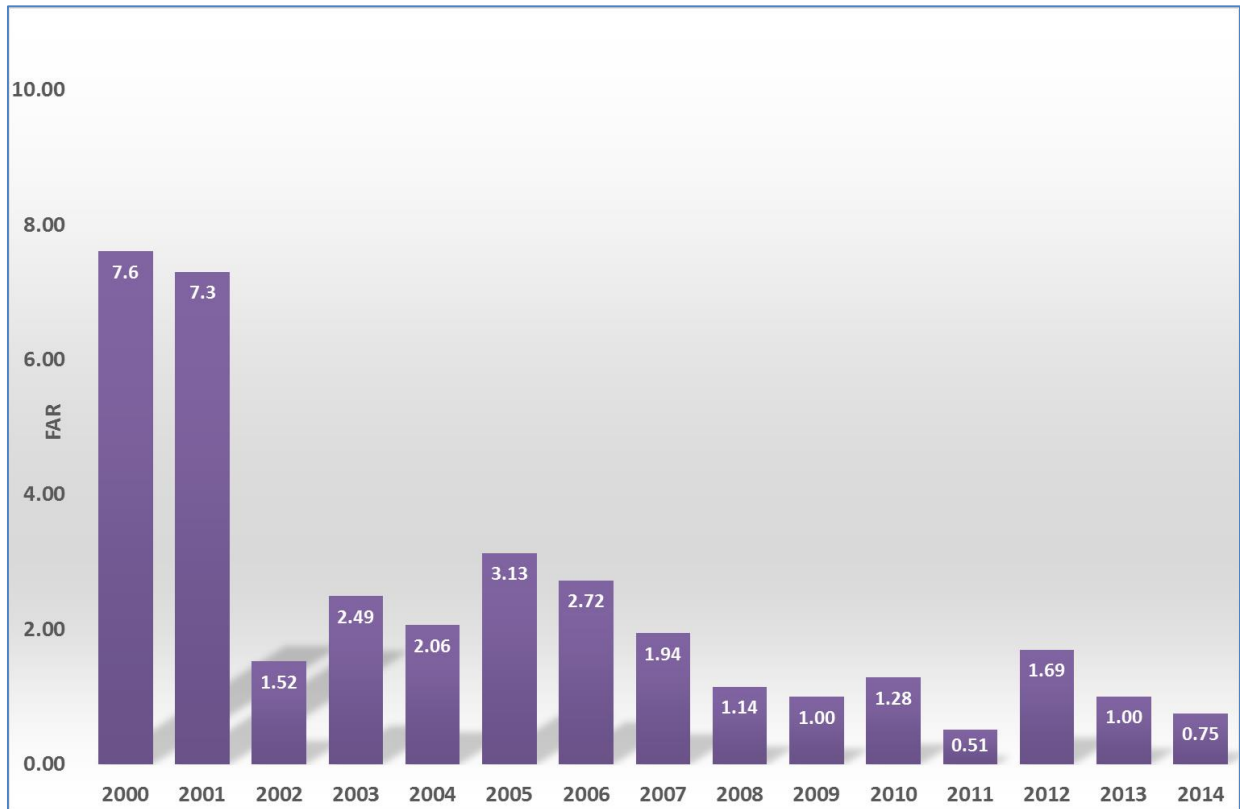


Figure 20: Overall FAR 2000-2014

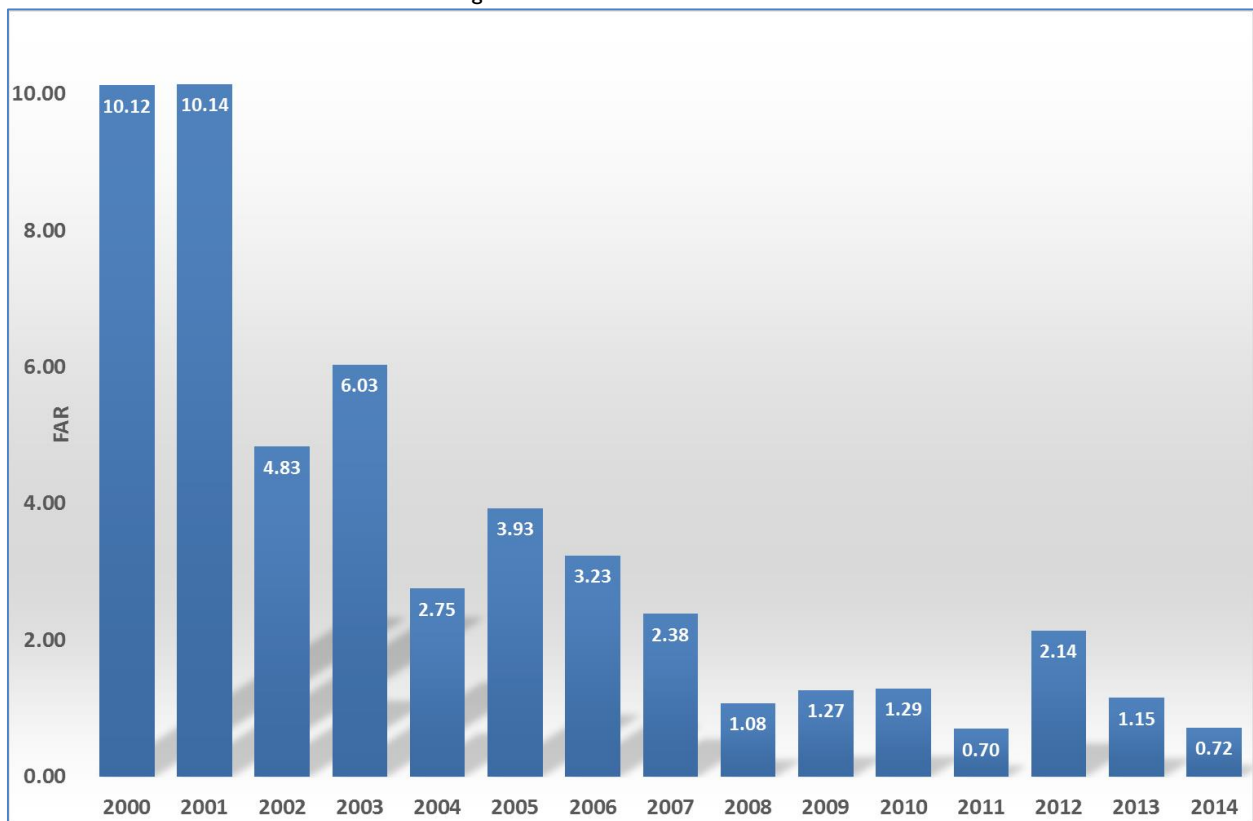


Figure 21: Offshore FAR 2000-2014



## 8 Hours Worked Banding

In order for members to identify how their company compares to others of similar size, contributing contracting companies have been divided into four bands, according to the overall man-hours reported. There has always been an imbalance in the sizes of the bands – as can be seen in table 10. This year the boundaries have been adjusted to cause a more equal and balanced number of companies to fall into each band. That does imply small changes to LTIFR and TRIR for each band, but these changes are in the second decimal place and consequently have not been calculated out fully.

Year	Hours worked			
	Band A <500,000	Band B 500,000-1,000,000	Band C 1,000,000-5,000,000	Band D >5,000,000
2004	15	3	11	7
2005	17	9	16	9
2006	27	13	21	13
2007	33	18	30	19
2008	44	13	47	25
2009	64	17	42	29
2010	69	25	52	26
2011	74	27	68	26
2012	86	25	80	36
2013	90	31	88	36
	<b>Band A</b> <b>&lt;300,000</b>	<b>Band B</b> <b>300,000-1,200,000</b>	<b>Band C</b> <b>1,200,000-3,000,000</b>	<b>Band D</b> <b>&gt;3,000,000</b>
<b>2014</b>	<b>75</b>	<b>72</b>	<b>61</b>	<b>56</b>

Table 10: No. of companies in each band, noting changes for 2014

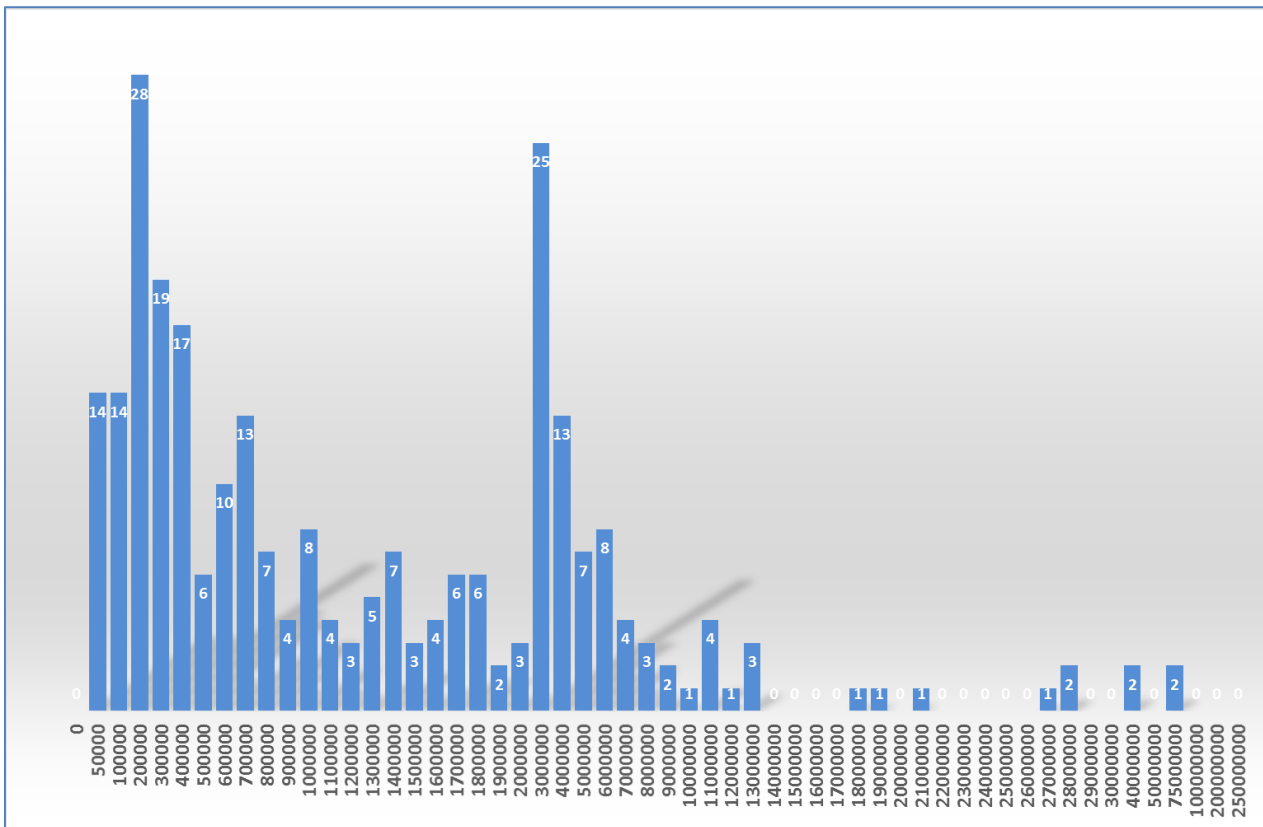


Figure 22: No. of companies against size (overall man-hours), 2014

## 8.1 Indicators and Statistics by Company Bands

Key (Please refer to the Appendix for further definition of these rates and acronyms)			
<b>FAR</b>	Fatal Accident Rate	<b>RWC</b>	Restricted Workday cases
<b>TRI</b>	Total Recordable Injury	<b>TRIR</b>	Total Recordable Injury Frequency Rate
<b>LTI</b>	Lost Time Injury	<b>LTIFR</b>	Lost Time Injury Frequency Rate
<b>SOFR</b>	Safety Observation Frequency	<b>RAL</b>	Reporting Activity Level
<b>MVR</b>	Management Visit Ratio	<b>Med trt</b>	Medical Treatment Cases
<b>LLR</b>	Lessons Learnt Ratio		

		Overall man-hours	FAR	LTIFR	TRIR	LTI	TRI	RWC	Medical treatment	First Aid
<b>Offshore</b>	<b>Band A</b>	7281777	0.00	2.61	9.20	19	67	8	40	104
	<b>Band B</b>	36592380	2.73	1.48	7.54	53	276	40	182	528
	<b>Band C</b>	102462088	0.98	0.81	3.09	82	317	70	164	701
	<b>Band D</b>	411908413	0.49	0.50	1.93	204	793	254	333	2266
<b>Onshore</b>	<b>Band A</b>	3274827	0.00	2.44	5.80	8	19	6	5	30
	<b>Band B</b>	10221187	0.00	0.39	2.45	4	25	5	16	98
	<b>Band C</b>	14329784	0.00	0.70	1.95	10	28	3	15	58
	<b>Band D</b>	211623164	0.95	0.22	1.00	44	211	62	103	594
<b>Overall</b>	<b>Band A</b>	10556603	0.00	2.56	8.15	27	86	14	45	134
	<b>Band B</b>	46813567	2.14	1.24	6.43	57	301	45	198	626
	<b>Band C</b>	116791871	0.86	0.80	2.95	92	345	73	179	759
	<b>Band D</b>	623531577	0.64	0.40	1.61	248	1004	316	436	2860

Table 11: Lagging indicators and statistics by company band 2014 (actual numbers of fatal accidents have been omitted to assist with preserving anonymity.)

	Safety Obs	SOFR	RAL	Management Visits	MVR	Safety Bulletins	LLR
Band A	11549	269.02	149.66	689	16.05	485	11.30
Band B	102910	517.40	154.35	1977	9.94	894	4.49
Band C	225177	405.57	59.37	4475	8.06	914	1.65
Band D	951112	340.74	34.68	15981	5.73	3994	1.43
<b>Total/IMCA</b>	<b>1290748</b>	<b>662.62</b>	<b>85.68</b>	<b>23122</b>	<b>11.87</b>	<b>6287</b>	<b>3.23</b>

Table 12: Leading indicators and statistics by company band 2014

## 8.2 Overall LTIFR and TRIR in Company Bands

Table 13 shows the overall LTIFR and TRIR of companies within the defined bands of number of hours worked.

	LTIFR				TRIR			
	Band A	Band B	Band C	Band D	Band A	Band B	Band C	Band D
2001	8.91	3.13	4.37	2.15				
2002	5.14	5.15	1.75	1.1				
2003	3.88	0.96	0.92	0.87				
2004	3.87	2.71	1.65	1.53				
2005	2.85	3.07	1.59	0.83	11.0	11.3	6.02	4.57
2006	2.64	2.02	1.37	0.74	10.16	8.29	5.08	3.19
2007	2.21	1.34	1.44	0.94	11.74	7.86	6.07	3.42
2008	3.29	1.62	1.19	0.56	9.76	6.29	3.79	2.02
2009	2.14	1.39	1.42	0.44	6.86	4.86	4.66	1.91
2010	3.36	1.24	1.02	0.52	11.81	5.13	3.62	2.01
2011	2.63	1.55	1.1	0.35	10.54	5.04	3.58	1.52
2012	2.95	1.71	0.99	0.31	8.75	4.46	3.06	1.43
2013	2.83	1.56	0.75	0.24	10.00	4.18	3.03	0.98
<b>2014</b>	<b>2.56</b>	<b>1.24</b>	<b>0.80</b>	<b>0.40</b>	<b>8.15</b>	<b>6.43</b>	<b>2.95</b>	<b>1.61</b>

Table 13: Overall LTIFR and TRIR by company band, 2001-2014

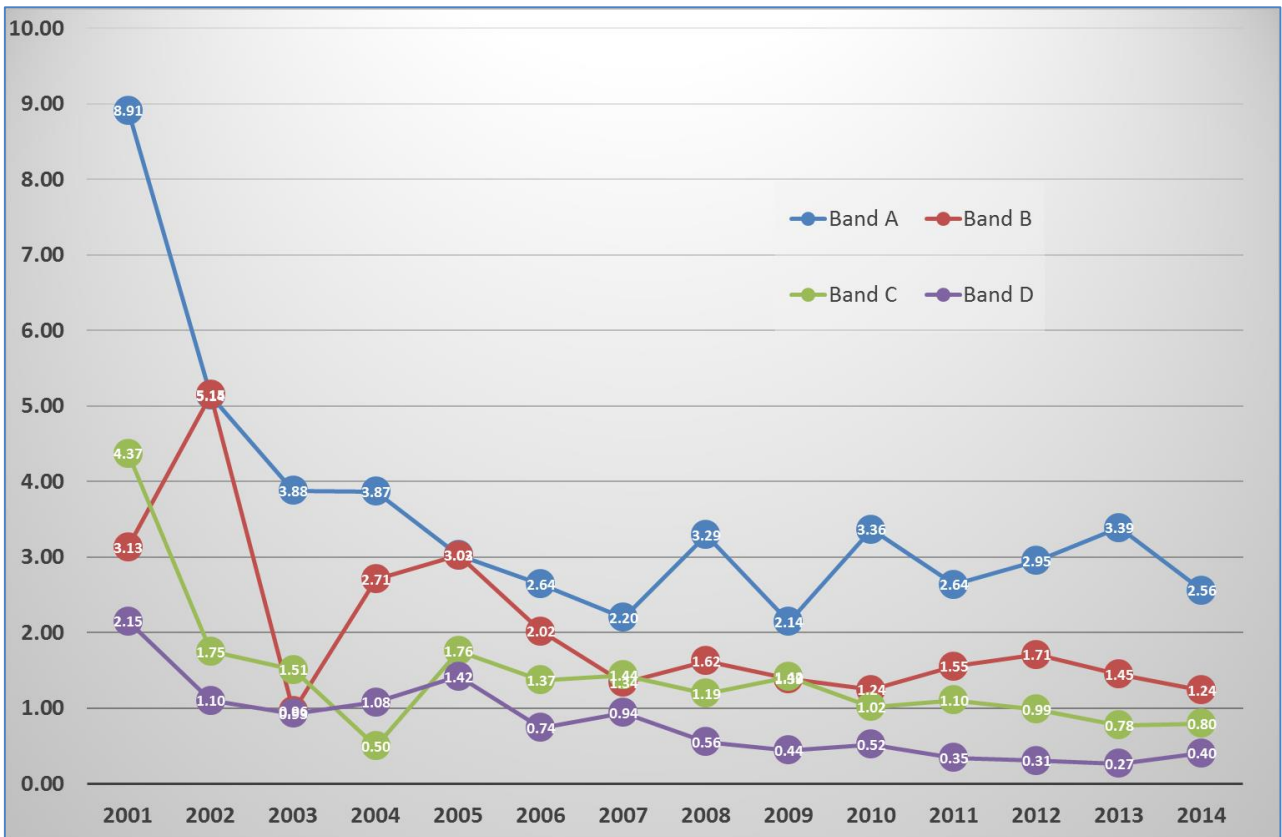


Figure 23: Overall LTIFR for company bands

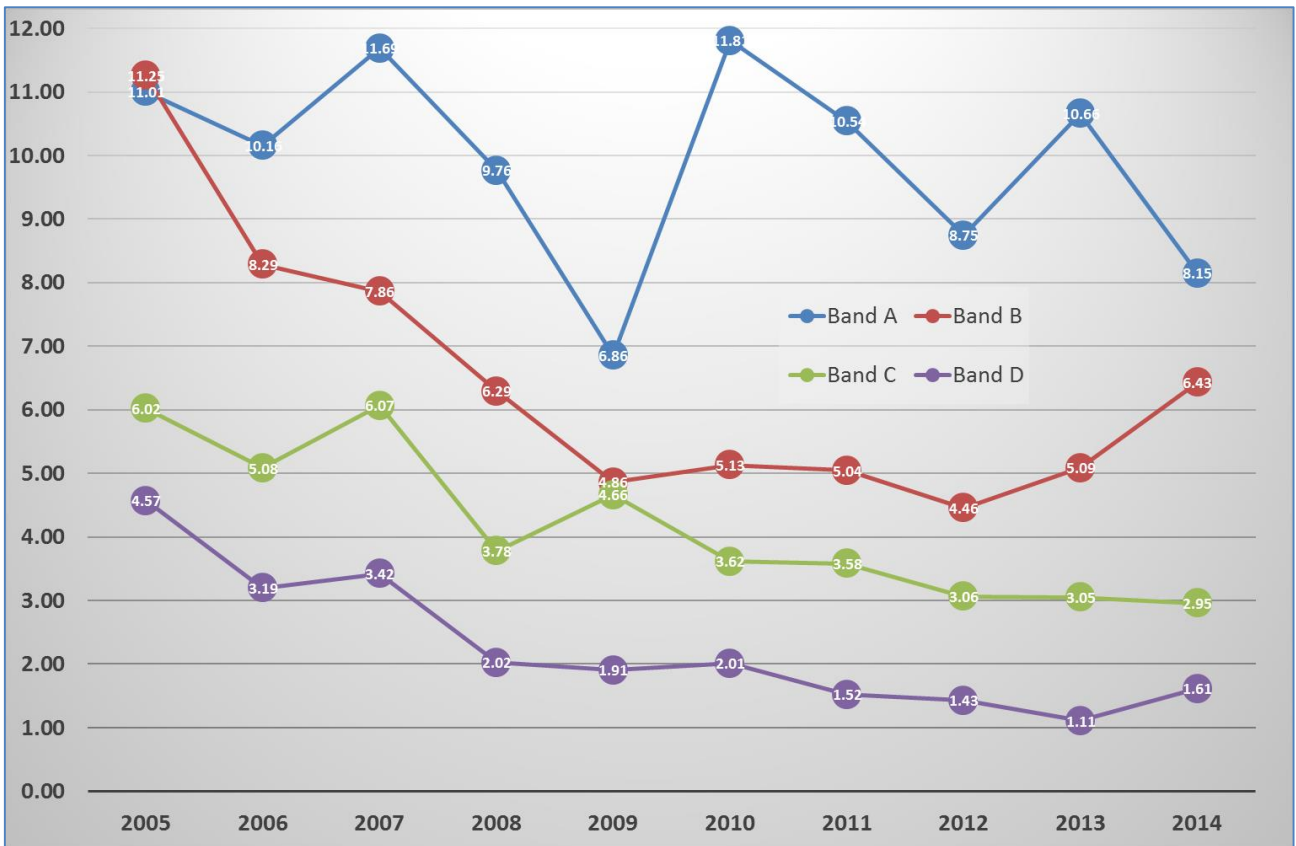


Figure 24: Overall TRIR for company bands

## 9 Leading Performance Indicators

### 9.1 Overall

IMCA has been collecting Leading Performance Indicator data for twelve years. The table below shows how the Leading Performance Indicators have changed over that time.

	SOFR	RAL	MVR	LLR
2003	160.95	160.65	2.25	0.36
2004	160.44	113.80	4.27	0.66
2005	190.19	70.14	7.32	2.29
2006	159.49	51.11	3.46	1.70
2007	153.02	67.30	4.10	2.27
2008	216.63	28.92	6.31	1.77
2009	209.25	39.84	13.61	1.29
2010	258.39	41.67	13.59	1.61
2011	265.20	30.79	5.81	1.23
2012	312.34	19.78	6.92	1.42
2013	213.43	29.39	4.74	0.67
2013*	328.80	45.28	7.30	1.04
2014	359.71	46.51	6.44	1.75

Table 14: Leading Performance Indicators 2003-2014

\*Amended figures following change to 2013 man-hours (see Section 2 and Section 6)

	SOFR	RAL	MVR	LLR
AP	471.27	40.00	5.59	2.12
CNA	344.23	45.49	3.64	0.22
EA	350.12	50.26	4.65	1.06
MEI	352.78	49.90	8.30	1.99
SA	147.97	21.82	3.52	13.05
ICO	408.06	48.27	13.78	0.21
IMCA	359.71	46.51	6.44	1.75

Table 15: Leading safety indicators (overall) by region

### 9.2 Safety Observation Frequency Rate (SOFR)

Safety Observations are defined as reports identifying at-risk behaviour, unsafe conditions or similar, e.g. STOP cards, and were provided by 251 of the 264 contributing contractors. We continue to see widely variant interpretations of the definition of a “safety observation”. Data from four contractors were omitted from the IMCA calculation, as being a highly improbable number of safety observations given the man-hours reported, or possibly due to the very small size (less than 100,000 man-hours) of the organisation skewing the results.

SOFR is a rate that should rise year on year – whilst working to create an accident-free and injury-free workplace, there will always be room for improvement and subsequent reporting of that improvement. It is this positive and proactive reporting that needs to be encouraged.

No.	Safety Obs	SOFR	No.	Safety Obs	SOFR	No.	Safety Obs	SOFR	No.	Safety Obs	SOFR
1	3419	230.63	67	10	12.18	133	1068	570.64	199	13675	709.36
2	1651	581.97	68	87	61.79	134	234	20.37	200	553	256.12
3	2572	97.87	69	5944	570.90	135	459	42.40	201	136	27.73
4	2	24.10	70	151	12.89	136	434	1223.50	202	96769	727.38
5	4125	1277.12	71	44	24.91	137	145	292.87	203	6106	274.51
6	0	0.00	72	4776	203.86	138	540	581.43	204	22457	842.47
7	1	0.47	73	52201	808.79	139	16	82.34	205	1120	160.88
8	164	126.93	74	33	133.37	140	2114	315.84	206	3575	105.62
9	28441	3415.16	75	12	152.75	141	111	857.28	207	7	10.79
10	35306	197.94	76	1501	148.25	142	372	131.63	208	3392	503.74

No.	Safety Obs	SOFR	No.	Safety Obs	SOFR	No.	Safety Obs	SOFR	No.	Safety Obs	SOFR
11	53187	391.57	77	8	5.89	143	2378	873.82	209	51	48.57
12	8	19.23	78	222	119.26	144	1309	248.44	210	2506	554.83
13	567	190.22	79	0	0.00	145	323	120.65	211	8223	578.92
14	0	0.00	80	15	68.49	146	367	236.34	212	0	0.00
15	6500	1048.44	81	6682	1353.95	147	279	40.74	213	6	42.23
16	709	448.58	82	23383	1367.94	148	74629	236.27	214	13992	3556.83
17	303	15.30	83	1098	85.93	149	480	41.27	215	85952	268.48
18	150	117.10	84	11556	213.40	150	240	100.02	216	1100	315.12
19	2493	332.78	85	752	422.60	151	799	134.69	217	11335	829.98
20	62	314.24	86	0	0.00	152	44527	1767.96	218	1108	317.77
21	3534	146.70	87	24	12.14	153	201	17.55	219	71	161.66
22	0	0.00	88	10256	75.46	154	1061	807.46	220	200	1984.13
23	12	11.16	89	149	258.60	155	2983	562.91	221	215	231.48
24	18683	1357.54	90	7577	874.85	156	6240	571.57	222	7329	3054.51
25	52	80.43	91	1417	178.01	157	1064	285.39	223	18607	4019.03
26	268	321.71	92	180	21.98	158	185	62.99	224	23528	629.49
27	149	47.58	93	0	0.00	159	2388	306.64	225	18442	743.47
28	204	22.88	94	0	0.00	160	29	43.90	226	180	18.30
29	42	24.50	95	680	274.04	161	1049	385.50	227	11	10.88
30	5824	547.26	96	27718	4280.05	162	242	86.33	228	273	2531.88
31	168	139.09	97	7183	730.15	163	758	527.05	229	1194	2573.05
32	0	0.00	98	32	189.13	164	10740	3551.23	230	5068	396.71
33	7919	2658.94	99	451	57.24	165	62204	3260.36	231	75	8.37
34	1464	672.17	100	663	63.21	166	236	13.51	232	8119	248.76
35	10	24.20	101	4	8.93	167	0	0.00	233	471	651.72
36	4	7.38	102	854	108.65	168	3025	771.91	234	327	121.91
37	5022	204.70	103	3164	735.24	169	8	8.62	235	9298	275.02
38	4	12.51	104	830	396.63	170	381	54.39	236	26	33.06
39	3	46.38	105	3248	221.34	171	0	0.00	237	58	13.16
40	295	181.88	106	11	24.90	172	628	67.45	238	221	63.95
41	2519	384.55	107	25	55.93	173	378	8.42	239	48	52.29
42	216	28.24	108	7969	597.12	174	1590	232.28	240	322	803.63
43	2838	260.07	109	18	11.08	175	5831	231.53	241	27398	983.84
44	1068	56.33	110	3218	168.11	176	0	0.00	242	48	41.31
45	8393	557.66	111	2	42.60	177	1263	22.29	243	1043	1489.50
46	5210	468.31	112	537	25.49	178	5	0.56	244	48	61.94
47	7	9.07	113	800	72.75	179	27120	4049.60	245	7961	531.71
48	694	105.89	114	3800	326.15	180	18	104.96	246	3212	241.43
49	661	23.69	115	738	1869.87	181	1315	662.88	247	2	1.39
50	611	133.98	116	4630	127.64	182	16	15.40	248	9241	451.86
51	422	121.17	117	35348	1972.36	183	255	1641.88	249	11	29.89
52	19	0.45	118	0	0.00	184	1629	1079.95	250	0	0.00
53	44	24.91	119	330	50.95	185	13516	274.77	251	2106	645.30
54	819	383.44	120	8	6.29	186	3105	328.78	252	0	0.00
55	567	1303.27	121	130	39.41	187	2271	387.29	253	352	3570.70
56	4629	452.37	122	185	105.46	188	0	0.00	254	132	1474.53
57	143	116.60	123	255	174.37	189	125	18.38	255	594	210.42
58	603	31.44	124	24100	384.27	190	543	829.21	256	450	64.13
59	4689	77.25	125	26612	1146.94	191	2814	1331.98	257	1410	223.82
60	24	24.00	126	121	1.39	192	20972	1306.48	258	205	6.81
61	1038	119.36	127	1543	350.29	193	1605	612.65	259	70	168.79
62	1542	773.72	128	144	18.66	194	26	78.19	260	17	5.72
63	24	16.14	129	1317	128.86	195	18356	2985.76	261	401	136.88
64	15451	350.32	130	0	0.00	196	101	528.56	262	916	670.70
65	4200	151.84	131	561	128.08	197	1420	260.52	263	1931	412.66
66	289	3.20	132	13072	695.85	198	118	210.19	264	0	0.00
<b>IMCA</b>	<b>1290748</b>	<b>359.71</b>									

Table 16: Safety Observation Frequency Rate (SOFR) 2014

### 9.3 Reporting Activity Level (RAL)

The Reporting Activity Level, designed as an indicator of how good a company's "reporting culture" is, is calculated as a rate. The number of hours over which it is normalised changed in 2009 from 1,000,000 to 200,000 to maintain consistency with the other leading indicators. The definition of FNMR, MTR and RWIR can be found in the Appendix 4. The number of man-hours used in the calculation depends on whether the contractor states that leading indicators are based on overall (combined offshore and onshore) man-hours, or on offshore man-hours.

**Reporting Activity Level (RAL) = ((5 × FNMR) + (20 × MTR) + (100 × RWIR)).** In the past this has been calculated per million man-hours; it is now calculated per **200,000 man-hours** and the results from previous years have been recalculated.

Co	First Aid	Med trt	RWP	RAL	Co	First Aid	Med trt	RWP	RAL	Co	First Aid	Med trt	RWP	RAL
1	22	0	1	36.43	90	3	0	1	18.47	179	1	0	0	2.99
2	0	0	1	35.25	91	2	0	0	5.03	180	1	1	0	145.77
3	30	3	0	23.40	92	4	0	0	9.77	181	3	0	0	30.25
4	1	0	0	241.02	93	49	12	9	30.90	182	0	0	2	192.52
5	12	0	0	74.31	94	20	0	5	134.39	183	0	0	0	0.00
6	6	1	1	1101.00	95	8	4	7	354.64	184	0	0	0	0.00
7	0	0	0	0.00	96	7	2	0	23.16	185	47	7	4	27.95
8	0	0	0	0.00	97	31	5	4	106.22	186	14	1	2	51.35
9	6	0	2	38.43	98	0	0	0	0.00	187	54	3	0	186.74
10	171	8	20	30.61	99	20	1	0	51.41	188	0	0	0	0.00
11	93	21	12	23.30	100	31	0	5	106.78	189	10	0	0	29.40
12	6	0	2	769.05	101	0	1	0	11.16	190	1	0	0	30.54
13	4	0	3	127.49	102	3	0	1	20.36	191	3	0	0	28.40
14	0	1	2	14.66	103	10	1	5	163.82	192	30	1	5	68.84
15	8	0	2	58.07	104	26	0	3	391.85	193	4	0	0	30.54
16	17	1	1	281.55	105	10	3	1	21.47	194	1	0	0	60.15
17	3	3	5	29.04	106	2	0	0	90.54	195	16	2	2	86.21
18	0	0	1	78.07	107	0	0	0	0.00	196	2	0	0	209.33
19	2	0	0	5.34	108	2	0	4	32.97	197	3	1	0	11.93
20	5	0	1	1013.68	109	5	0	0	61.55	198	3	0	5	997.53
21	2	0	2	9.96	110	127	8	14	207.92	199	16	2	2	27.49
22	9	1	5	137.08	111	0	0	0	0.00	200	170	0	6	1852.57
23	18	1	9	1176.53	112	0	3	1	5.46	201	11	0	8	207.97
24	13	2	0	19.62	113	12	5	1	33.19	202	139	6	19	35.40
25	4	0	1	278.40	114	15	4	13	139.04	203	50	4	6	72.83
26	2	0	0	48.02	115	3	0	0	152.02	204	8	0	0	6.00
27	7	2	8	303.35	116	4	0	0	2.21	205	0	0	2	28.73
28	1	0	0	2.24	117	35	4	7	79.23	206	16	2	7	30.43
29	0	2	1	64.16	118	1	2	1	72.07	207	2	0	0	61.65
30	2	2	1	14.09	119	11	2	3	81.83	208	1	0	2	32.67
31	2	0	1	115.91	120	6	0	0	94.34	209	0	0	0	0.00
32	32	3	1	438.32	121	4	0	0	24.25	210	0	0	0	0.00
33	2	0	0	13.43	122	0	0	0	0.00	211	29	1	5	76.39
34	1	0	0	9.18	123	1	0	0	13.68	212	0	0	0	0.00
35	0	2	0	24.20	124	28	9	8	22.40	213	0	0	0	0.00
36	0	0	0	0.00	125	15	4	4	31.03	214	26	0	2	183.03
37	33	4	9	64.40	126	30	0	2	9.16	215	149	32	24	17.30
38	0	0	0	0.00	127	5	0	0	22.70	216	0	0	0	0.00
39	0	0	0	0.00	128	39	0	4	152.87	217	55	3	3	103.61
40	2	0	0	24.66	129	1	0	1	11.74	218	0	0	0	0.00
41	9	0	5	103.81	130	0	0	0	0.00	219	0	0	0	0.00
42	5	0	4	65.36	131	0	0	1	22.83	220	1	0	0	198.41
43	22	0	12	150.29	132	46	2	5	76.12	221	2	0	0	43.07
44	3	0	10	55.90	133	0	0	0	0.00	222	11	0	7	383.43
45	5	1	2	20.27	134	8	0	0	13.92	223	1	0	1	25.92
46	26	0	0	46.74	135	18	0	2	51.73	224	92	3	9	73.71
47	0	0	0	0.00	136	0	0	0	0.00	225	94	9	4	93.73
48	10	2	0	32.04	137	0	0	0	0.00	226	1	0	0	2.03
49	7	0	2	12.19	138	1	0	0	21.53	227	1	0	0	19.78

Co	First Aid	Med trt	RWP	RAL	Co	First Aid	Med trt	RWP	RAL	Co	First Aid	Med trt	RWP	RAL
50	2	0	4	96.48	139	4	0	0	411.69	228	1	0	0	185.49
51	5	0	2	86.14	140	23	5	3	117.28	229	0	0	1	215.50
52	0	0	0	0.00	141	0	0	0	0.00	230	9	0	1	21.92
53	5	1	1	116.05	142	0	0	0	0.00	231	19	0	9	142.79
54	4	0	0	37.45	143	1	0	0	7.35	232	3	3	3	11.49
55	0	0	1	229.85	144	20	9	1	103.44	233	2	1	1	200.64
56	37	8	5	125.09	145	4	3	4	184.90	234	0	1	1	39.14
57	14	0	0	228.31	146	0	0	0	0.00	235	105	3	9	89.18
58	3	0	2	13.55	147	16	1	5	120.46	236	0	0	2	254.30
59	71	14	8	37.73	148	247	18	51	32.07	237	2	1	1	32.89
60	0	0	0	0.00	149	0	1	1	9.03	238	0	0	100	2893.52
61	10	1	4	69.57	150	1	0	1	50.01	239	1	0	1	130.72
62	12	2	0	125.44	151	9	0	2	64.06	240	0	0	0	0.00
63	21	1	2	420.40	152	58	15	8	80.80	241	20	4	3	25.85
64	48	7	6	36.16	153	4	0	1	15.71	242	1	0	0	17.21
65	9	1	3	17.53	154	0	0	0	0.00	243	0	0	0	0.00
66	2	0	1	1.55	155	4	0	0	15.10	244	0	0	4	516.20
67	1	0	1	146.11	156	20	0	1	45.80	245	2	0	0	2.67
68	1	0	0	14.21	157	10	1	4	162.27	246	23	0	2	49.61
69	0	3	2	20.65	158	0	0	3	102.15	247	0	0	0	0.00
70	3	0	10	90.46	159	6	1	3	54.57	248	114	8	5	137.89
71	5	1	1	116.05	160	2	0	0	60.55	249	0	0	0	0.00
72	19	3	6	42.47	161	4	1	2	104.74	250	0	0	0	0.00
73	188	10	13	79.17	162	14	2	2	174.80	251	2	0	0	12.26
74	5	0	0	404.14	163	7	0	1	166.88	252	1	0	3	24242.42
75	1	0	1	1527.49	164	0	0	0	0.00	253	0	0	0	0.00
76	25	5	18	229.64	165	71	2	4	95.92	254	0	0	0	0.00
77	3	0	2	191.49	166	25	0	0	28.62	255	7	1	0	51.37
78	0	0	0	0.00	167	0	0	0	0.00	256	24	5	4	128.97
79	6	0	0	66.67	168	4	0	0	20.41	257	15	6	1	68.26
80	0	0	0	0.00	169	0	0	0	0.00	258	58	12	21	110.30
81	4	0	1	36.47	170	1	1	4	60.68	259	4	0	1	434.03
82	30	11	2	50.02	171	8	0	1	227.43	260	1	0	0	6.73
83	17	11	9	101.35	172	8	1	2	39.20	261	1	0	0	6.83
84	49	9	15	46.63	173	3	0	11	25.85	262	7	1	1	179.39
85	1	0	1	67.44	174	7	0	5	93.50	263	26	0	4	196.61
86	0	0	0	0.00	175	20	1	5	35.93	264	5	0	0	5807.20
<b>87</b>	<b>87</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>10.12</b>	<b>176</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>IMCA</b>	<b>4148</b>	<b>418</b>	<b>818</b>	<b>46.51</b>
<b>88</b>	<b>88</b>	<b>176</b>	<b>21</b>	<b>26</b>	<b>45.80</b>	<b>177</b>	<b>0</b>	<b>0</b>	<b>0</b>					
<b>89</b>	<b>89</b>	<b>1</b>	<b>1</b>	<b>0</b>	<b>43.39</b>	<b>178</b>	<b>1</b>	<b>0</b>	<b>2</b>					

Table 17: Reporting Activity level (RAL) 2014

Contributors can choose whether their leading indicators are applicable to overall man-hours or to offshore man-hours. This means that the number of man-hours and the total number first aid cases, remedial work cases and medical treatments used to calculate the IMCA Reporting Activity Level will fall somewhere between the total offshore figure and the total overall figure. This is why the IMCA total data reported here differs from that in Table 9.

#### 9.4 Management Visit Ratio (MVR)

**Management Visit Ratio (MVR) = No. of Managerial Visits per 200,000 man-hours.**

Management visit data was provided by 236 of 264 contractors. Data from 12 contractors has been excluded from the IMCA calculation as somewhat improbable or possibly due to the very small size (less than 100,000 man-hours) of the organisation skewing the results. If the number of management visits reported greatly exceeds the number of people working offshore for the contractor (based nominally on 180 days per year and 12 hour days) the data have been excluded. The criteria for management visits are repeated here:

- ◆ The visiting manager has commercial or production responsibility for the company (e.g. Managing Director);
- ◆ The visiting manager is directly responsible for the conduct of the project (e.g. Project Manager);

- ◆ The visiting manager is directly responsible for the operational or service support activities of the particular offshore barge or ship (e.g. Operations Manager);
- ◆ The visiting manager has responsibility for health, safety and environmental processes or other key process within the company;
- ◆ The visits should be made offshore during operational activities and be of at least 24 hours duration;
- ◆ The visit must include a safety briefing or presentation to the majority of the offshore people;
- ◆ The visit may also involve the manager making a safety performance check of the site with the people who manage or supervise the activities.

Co	Management visits	MVR	Co	Management visits	MVR	Co	Management visits	MVR	Co	Management visits	MVR
1	326	21.99	67	7	8.52	133	6	3.21	199	219	11.36
2	168	59.22	68	25	17.76	134	68	5.92	200	31	14.36
3	195	7.42	69	3	0.29	135	25	2.31	201	30	6.12
4	0	0.00	70	30	2.56	136	7	19.73	202	5549	41.71
5	10	3.10	71	96	54.35	137	5	10.10	203	215	9.67
6	0	0.00	72	70	2.99	138	12	12.92	204	79	2.96
7	2	0.94	73	471	7.30	139	0	0.00	205	60	8.62
8	44	34.05	74	7	28.29	140	149	22.26	206	50	1.48
9	67	8.05	75	0	0.00	141	1	7.72	207	14	21.58
10	0	0.00	76	0	0.00	142	34	12.03	208	68	10.10
11	633	4.66	77	36	26.51	143	95	34.91	209	6	5.71
12	2	4.81	78	8	4.30	144	20	3.80	210	14	3.10
13	15	5.03	79	0	0.00	145	6	2.24	211	21	1.48
14	85	6.08	80	12	54.79	146	3	1.93	212	23	11.80
15	62	10.00	81	21	4.26	147	0	0.00	213	2	14.08
16	0	0.00	82	84	4.91	148	1992	6.31	214	60	15.25
17	105	5.30	83	10	0.78	149	10	0.86	215	597	1.86
18	12	9.37	84	26	0.48	150	20	8.33	216	180	51.56
19	51	6.81	85	32	17.98	151	2	0.34	217	6	0.44
20	0	0.00	86	35	74.22	152	106	4.21	218	12	3.44
21	6	0.25	87	12	6.07	153	35	3.06	219	14	31.88
22	0	0.00	88	554	4.08	154	14	10.65	220	2	19.84
23	20	18.60	89	14	24.30	155	10	1.89	221	11	11.84
24	50	3.63	90	66	7.62	156	60	5.50	222	0	0.00
25	6	9.28	91	137	17.21	157	27	7.24	223	74	15.98
26	5	6.00	92	2	0.24	158	18	6.13	224	111	2.97
27	15	4.79	93	409	6.52	159	17	2.18	225	213	8.59
28	94	10.54	94	46	6.87	160	1	1.51	226	4	0.41
29	13	7.58	95	15	6.05	161	12	4.41	227	2	1.98
30	375	35.24	96	94	14.51	162	180	64.21	228	0	0.00
31	3	2.48	97	336	34.15	163	8	5.56	229	6	12.93
32	0	0.00	98	12	70.92	164	19	6.28	230	48	3.76
33	10	3.36	99	145	18.40	165	226	11.85	231	66	7.36
34	5	2.30	100	515	49.10	166	86	4.92	232	244	7.48
35	4	9.68	101	24	53.58	167	0	0.00	233	6	8.30
36	2	3.69	102	11	1.40	168	33	8.42	234	12	4.47
37	0	0.00	103	62	14.41	169	6	6.47	235	45	1.33
38	2	6.25	104	24	11.47	170	12	1.71	236	4	5.09
39	3	46.38	105	10	0.68	171	0	0.00	237	6	1.36
40	9	5.55	106	52	117.71	172	6	0.64	238	0	0.00
41	29	4.43	107	4	8.95	173	10	0.22	239	16	17.43
42	21	2.75	108	6	0.45	174	25	3.65	240	2	4.99
43	37	3.39	109	0	0.00	175	160	6.35	241	222	7.97
44	98	5.17	110	86	4.49	176	20	22.29	242	6	5.16
45	6	0.40	111	4	85.20	177	80	1.41	243	6	8.57
46	33	2.97	112	4	0.19	178	36	4.03	244	16	20.65
47	0	0.00	113	18	1.64	179	180	26.88	245	17	1.14
48	133	20.29	114	62	5.32	180	6	34.99	246	47	3.53
49	12	0.43	115	7	17.74	181	12	6.05	247	5	3.46
50	38	8.33	116	75	2.07	182	100	96.26	248	168	8.21
51	30	8.61	117	0	0.00	183	2	12.88	249	3	8.15
52	5	0.12	118	0	0.00	184	12	7.96	250	0	0.00



Co	Management visits	MVR	Co	Management visits	MVR	Co	Management visits	MVR	Co	Management visits	MVR
53	96	54.35	119	38	5.87	185	500	10.16	251	4	1.23
54	0	0.00	120	33	25.94	186	137	14.51	252	0	0.00
55	3	6.90	121	12	3.64	187	40	6.82	253	2	20.29
56	38	3.71	122	2	1.14	188	0	0.00	254	0	0.00
57	6	4.89	123	35	23.93	189	211	31.02	255	24	8.50
58	52	2.71	124	381	6.07	190	4	6.11	256	30	4.28
59	0	0.00	125	531	22.89	191	2	0.95	257	8	1.27
60	2	2.00	126	144	1.65	192	163	10.15	258	398	13.22
61	53	6.09	127	90	20.43	193	17	6.49	259	1	2.41
62	13	6.52	128	13	1.68	194	0	0.00	260	0	0.00
63	19	12.78	129	166	16.24	195	8	1.30	261	15	5.12
64	321	7.28	130	0	0.00	196	7	36.63	262	4	2.93
65	4	0.14	131	60	13.70	197	96	17.61	263	12	2.56
66	18	0.20	132	101	5.38	198	2	3.56	264	0	0.00
<b>IMCA</b>	<b>23122</b>	<b>6.44</b>	<b>23122</b>								

Table 18: Management visit ratio (MVR) data 2014

## 9.5 Lessons Learnt Ratio (LLR)

240 of 264 contractors contributed data on safety bulletins.

**Lessons Learnt Ratio (LLR)** = Number of bulletins issued per **200,000** man-hours. In the past this has been calculated per 100,000 man-hours; it is now calculated per 200,000 man-hours and the results from previous years have been recalculated.

Co	Safety Bulletins	LLR	Co	Safety Bulletins	LLR	Co	Safety Bulletins	LLR	Co	Safety Bulletins	LLR
1	1	0.07	67	0	0.00	133	19	10.15	199	1	0.05
2	106	37.36	68	39	27.70	134	13	1.13	200	5	2.32
3	8	0.30	69	0	0.00	135	4	0.37	201	0	0.00
4	0	0.00	70	10	0.85	136	4	11.28	202	41	0.31
5	0	0.00	71	12	6.79	137	2	4.04	203	24	1.08
6	0	0.00	72	10	0.43	138	33	35.53	204	16	0.60
7	0	0.00	73	67	1.04	139	8	41.17	205	2	0.29
8	0	0.00	74	0	0.00	140	0	0.00	206	12	0.35
9	4	0.48	75	12	152.75	141	2	15.45	207	1	1.54
10	0	0.00	76	3	0.30	142	6	2.12	208	0	0.00
11	4	0.03	77	1	0.74	143	10	3.67	209	0	0.00
12	12	28.84	78	0	0.00	144	44	8.35	210	0	0.00
13	0	0.00	79	0	0.00	145	26	9.71	211	12	0.84
14	0	0.00	80	12	54.79	146	0	0.00	212	0	0.00
15	62	10.00	81	12	2.43	147	0	0.00	213	2	14.08
16	211	133.50	82	0	0.00	148	0	0.00	214	7	1.78
17	58	2.93	83	2	0.16	149	0	0.00	215	29	0.09
18	12	9.37	84	24	0.44	150	0	0.00	216	26	7.45
19	0	0.00	85	0	0.00	151	0	0.00	217	10	0.73
20	0	0.00	86	10	21.20	152	46	1.83	218	6	1.72
21	13	0.54	87	0	0.00	153	12	1.05	219	0	0.00
22	0	0.00	88	47	0.35	154	8	6.09	220	19	188.49
23	14	13.02	89	0	0.00	155	10	1.89	221	0	0.00
24	46	3.34	90	57	6.58	156	0	0.00	222	28	11.67
25	4	6.19	91	24	3.02	157	0	0.00	223	0	0.00
26	7	8.40	92	4	0.49	158	12	4.09	224	131	3.50
27	0	0.00	93	0	0.00	159	24	3.08	225	0	0.00
28	15	1.68	94	0	0.00	160	5	7.57	226	12	1.22
29	31	18.08	95	0	0.00	161	6	2.20	227	1	0.99
30	0	0.00	96	22	3.40	162	0	0.00	228	39	361.70
31	0	0.00	97	10	1.02	163	28	19.47	229	3	6.46
32	0	0.00	98	0	0.00	164	25	8.27	230	242	18.94
33	28	9.40	99	0	0.00	165	20	1.05	231	5	0.56
34	12	5.51	100	65	6.20	166	13	0.74	232	24	0.74
35	21	50.81	101	12	26.79	167	0	0.00	233	0	0.00
36	0	0.00	102	0	0.00	168	28	7.14	234	4	1.49

Co	Safety Bulletins	LLR	Co	Safety Bulletins	LLR	Co	Safety Bulletins	LLR	Co	Safety Bulletins	LLR
37	17	0.69	103	0	0.00	169	5	5.39	235	0	0.00
38	2	6.25	104	0	0.00	170	34	4.85	236	15	19.07
39	0	0.00	105	6	0.41	171	0	0.00	237	19	4.31
40	0	0.00	106	0	0.00	172	0	0.00	238	0	0.00
41	30	4.58	107	28	62.64	173	8	0.18	239	3	3.27
42	13	1.70	108	5	0.37	174	19	2.78	240	24	59.90
43	17	1.56	109	0	0.00	175	174	6.91	241	0	0.00
44	2580	136.07	110	0	0.00	176	0	0.00	242	0	0.00
45	9	0.60	111	1	21.30	177	34	0.60	243	3	4.28
46	0	0.00	112	110	5.22	178	46	5.16	244	0	0.00
47	0	0.00	113	0	0.00	179	0	0.00	245	0	0.00
48	31	4.73	114	1	0.09	180	3	17.49	246	25	1.88
49	36	1.29	115	2	5.07	181	5	2.52	247	3	2.08
50	2	0.44	116	3	0.08	182	12	11.55	248	32	1.56
51	44	12.63	117	9	0.50	183	17	109.46	249	4	10.87
52	12	0.28	118	0	0.00	184	0	0.00	250	0	0.00
53	12	6.79	119	0	0.00	185	0	0.00	251	0	0.00
54	6	2.81	120	0	0.00	186	2	0.21	252	15	1136.36
55	4	9.19	121	0	0.00	187	0	0.00	253	0	0.00
56	0	0.00	122	4	2.28	188	0	0.00	254	1	11.17
57	0	0.00	123	11	7.52	189	12	1.76	255	14	4.96
58	3	0.16	124	19	0.30	190	0	0.00	256	20	2.85
59	12	0.20	125	124	5.34	191	9	4.26	257	9	1.43
60	3	3.00	126	48	0.55	192	40	2.49	258	0	0.00
61	2	0.23	127	14	3.18	193	4	1.53	259	2	4.82
62	0	0.00	128	7	0.91	194	19	57.14	260	0	0.00
63	19	12.78	129	0	0.00	195	32	5.21	261	22	7.51
64	73	1.66	130	0	0.00	196	13	68.03	262	0	0.00
65	5	0.18	131	0	0.00	197	10	1.83	263	0	0.00
66	0	0.00	132	0	0.00	198	10	17.81	264	10	580.72
<b>IMCA</b>	<b>6287</b>	<b>1.75</b>									

Table 19: Lessons learnt ratio (LLR) data 2014

## Individual Company LTIFR and TRIR Statistics

The following tables show the important statistical rates for each of the 264 companies with an identifying number and a letter indicating the band into which they fall.

In order for members to identify how their company compares to others of like size, four bands are used for contributing contracting companies, categorised by their annual amount of overall working hours.

Band	Hours worked
A	<300,000
B	300,000-1,200,000
C	1,200,000-3,000,000
D	>3,000,000

Table 20: Hours worked bands

A letter has accompanied this report addressed to each contributing member which lets each recipient know only its own identifying number.

Co	Banding	Offshore LTIFR	Onshore LTIFR	Overall LTIFR	Offshore TRIR	Onshore TRIR	Overall TRIR
<b>IMCA</b>		<b>0.65</b>	<b>0.28</b>	<b>0.54</b>	<b>2.60</b>	<b>1.18</b>	<b>2.18</b>
1	C	1.78	1.40	1.69	1.78	2.80	2.02
2	B	0.00	0.00	0.00	1.76	0.00	1.40
3	D	0.57	0.00	0.56	1.14	0.00	1.11
4	A	0.00	0.00	0.00	0.00	0.00	0.00
5	B	0.00	0.00	0.00	0.00	0.00	0.00
6	A	0.00	0.00	0.00	48.93	0.00	10.09
7	B	0.00	0.00	0.00	0.00	0.00	0.00
8	A	0.00		0.00	0.00		0.00
9	C	0.00	0.00	0.00	1.28	0.00	1.20
10	D	0.03	0.00	0.03	0.81	0.00	0.76
11	D	0.22	0.00	0.18	1.56	0.48	1.40
12	A	12.02	0.00	7.92	36.05	0.00	23.77
13	B	0.00	0.00	0.00	4.36	7.26	5.03
14	C	0.36		0.36	1.43		1.43
15	C	0.81	0.00	0.79	2.42	0.00	2.38
16	B	4.63	0.00	3.16	13.89	0.00	9.49
17	D	0.76	4.67	1.14	2.78	9.34	3.42
18	A	3.90	0.00	3.53	7.81	0.00	7.06
19	C	1.33		1.33	1.33		1.33
20	A	0.00	0.00	0.00	25.34	0.00	18.19
21	D	0.00	0.00	0.00	0.42	0.00	0.42
22	C	1.00	0.00	0.82	7.00	0.00	5.72
23	A	4.65		4.65	51.15		51.15
24	D	0.00	0.00	0.00	0.73	0.00	0.66
25	A	7.73	0.00	6.74	15.47	0.00	13.47
26	B	0.00	0.00	0.00	0.00	8.97	5.99
27	B	0.00	0.00	0.00	15.97	0.00	15.41
28	C	0.00		0.00	0.00		0.00
29	B	2.92		2.92	11.67		11.67
30	C	0.00	0.00	0.00	1.41	0.00	1.27
31	A	0.00	0.00	0.00	6.62	0.00	4.14
32	B	5.81		5.81	17.42		17.42
33	B	0.00	0.00	0.00	0.00	11.30	1.46
34	B	0.00	0.00	0.00	0.00	6.01	1.66
35	A	26.09	0.00	24.20	52.19	0.00	48.39
36	A	0.00	0.00	0.00	0.00	0.00	0.00

Co	Banding	Offshore LTIFR	Onshore LTIFR	Overall LTIFR	Offshore TRIR	Onshore TRIR	Overall TRIR
<b>IMCA</b>		<b>0.65</b>	<b>0.28</b>	<b>0.54</b>	<b>2.60</b>	<b>1.18</b>	<b>2.18</b>
37	D	0.82	0.00	0.40	3.46	0.97	2.19
38	A	0.00	0.00	0.00	0.00	0.00	0.00
39	A	0.00		0.00	0.00		0.00
40	B	3.08		3.08	3.08		3.08
41	C	1.53	0.00	1.45	5.34	0.00	5.06
42	C	0.65	0.00	0.44	3.27	1.37	2.66
43	C	1.37	0.00	1.34	6.87	0.00	6.69
44	D	0.26	16.08	0.52	2.90	16.08	3.11
45	D	0.00	0.00	0.00	1.00	0.00	0.93
46	C	0.45	0.00	0.43	0.45	0.00	0.43
47	B	0.00	0.00	0.00	0.00	0.00	0.00
48	C	2.22	0.00	1.53	4.44	0.00	3.05
49	D	0.00		0.00	0.36		0.36
50	B	6.58	0.00	6.55	10.96	0.00	10.91
51	B	0.00	0.00	0.00	3.09	0.00	2.87
52	D	0.00		0.00	0.00		0.00
53	B	2.83		2.83	8.49		8.49
54	B	0.00	0.00	0.00	0.00	0.00	0.00
55	A	0.00	0.00	0.00	11.49	0.00	5.46
56	C	0.98	0.00	0.94	7.33	0.00	7.03
57	B	0.00	0.00	0.00	0.00	0.00	0.00
58	D	1.04	0.00	1.02	1.56	0.00	1.53
59	D	1.07		1.07	2.88		2.88
60	A	0.00	0.00	0.00	0.00	0.00	0.00
61	C	0.00	0.00	0.00	4.16	0.00	2.87
62	B	0.00	0.00	0.00	5.02	0.00	2.97
63	B	0.00	0.00	0.00	10.09	2.78	6.09
64	D	0.57	0.00	0.55	2.04	0.00	1.98
65	D	0.36	0.00	0.36	1.08	0.00	1.08
66	D	0.00	0.00	0.00	0.06	0.00	0.05
67	A	12.18	0.00	10.67	18.26	0.00	16.00
68	A	0.00	0.00	0.00	0.00	0.00	0.00
69	C	0.00	0.00	0.00	2.40	0.00	2.10
70	C	0.00	0.00	0.00	4.27	0.00	4.12
71	B	2.83		2.83	8.49		8.49
72	D	1.71	0.55	1.39	3.63	0.55	2.77
73	D	0.46	0.14	0.27	2.25	0.52	1.18
74	A	0.00		0.00	0.00		0.00
75	A	63.65	12.15	20.40	127.29	72.88	81.60
76	C	0.49	0.00	0.48	11.85	0.00	11.43
77	B	0.00	0.00	0.00	7.36	0.00	6.52
78	B	0.00	0.00	0.00	0.00	0.00	0.00
79	B	5.56		5.56	5.56		5.56
80	A	0.00	25.04	16.17	0.00	37.56	24.26
81	B	0.00	0.00	0.00	1.01	0.00	0.88
82	D	1.17	0.00	0.90	4.97	2.89	4.49
83	D	1.96	0.00	1.34	9.78	0.00	6.68
84	D	0.55		0.65	2.77		2.86
85	B	0.00	0.00	0.00	5.47	0.00	2.81
86	A	0.00	0.00	0.00	0.00	12.50	5.74
87	B	0.00	0.00	0.00	0.00	0.00	0.00
88	D	0.42	0.55	0.48	0.97	3.60	2.21
89	A	0.00	0.00	0.00	30.94	0.00	8.68
90	C	0.00	0.00	0.00	0.68	0.00	0.58
91	C	0.72	0.00	0.63	0.72	0.00	0.63
92	C	0.00	0.00	0.00	0.00	0.00	0.00
93	D	0.77	0.92	0.80	2.60	1.84	2.47
94	C	0.75	0.00	0.59	4.48	0.00	3.54
95	B	8.06	0.00	6.77	30.23	42.37	32.17
96	C	0.00	0.00	0.00	1.54	0.00	1.04
97	C	1.52	0.00	1.39	6.10	0.00	5.56
98	A	0.00		0.00	0.00		0.00

Co	Banding	Offshore LTIFR	Onshore LTIFR	Overall LTIFR	Offshore TRIR	Onshore TRIR	Overall TRIR
<b>IMCA</b>		<b>0.65</b>	<b>0.28</b>	<b>0.54</b>	<b>2.60</b>	<b>1.18</b>	<b>2.18</b>
99	C	0.00	0.00	0.00	0.63	0.00	0.61
100	C	0.48		0.48	2.86		2.86
101	A	0.00	0.00	0.00	11.16	66.56	25.08
102	C	1.27		1.27	1.91		1.91
103	B	2.32	0.00	2.10	9.30	0.00	8.38
104	B	2.39	0.00	1.66	9.56	0.00	6.64
105	C	0.00		0.00	1.36		1.36
106	A	0.00		0.00	0.00		0.00
107	A	0.00	0.00	0.00	0.00	0.00	0.00
108	C	0.37	0.00	0.37	1.87	0.00	1.87
109	B	3.08	0.00	2.09	3.08	0.00	2.09
110	D	2.09		2.09	7.84		7.84
111	A	119.56	0.00	106.50	119.56	0.00	106.50
112	D	0.00	0.00	0.00	0.95	0.00	0.95
113	C	0.00	0.00	0.00	2.73	0.00	2.37
114	C	2.18	0.00	2.15	9.61	0.00	9.44
115	A	0.00	0.00	0.00	0.00	0.00	0.00
116	D	0.00	0.00	0.00	0.00	0.00	0.00
117	D	0.28		0.28	3.35		3.35
118	B	0.00		0.00	8.32		8.32
119	C	0.77		0.77	4.63		4.63
120	A	0.00	0.00	0.00	0.00	0.00	0.00
121	B	1.52	0.00	1.16	1.52	0.00	1.16
122	B	0.00	0.00	0.00	0.00	0.00	0.00
123	A	0.00	38.24	13.68	0.00	38.24	13.68
124	D	0.24		0.24	1.59		1.59
125	D	0.24	0.00	0.22	2.18	0.00	1.94
126	D	0.12	0.00	0.11	0.23	0.00	0.23
127	B	10.33	2.52	6.81	10.33	2.52	6.81
128	C	2.59	0.00	2.47	5.18	0.00	4.95
129	C	0.58	0.00	0.49	1.16	0.00	0.98
130	A	0.00	6.74	6.68	0.00	6.74	6.68
131	B	1.14		1.14	2.28		2.28
132	D	0.27	0.00	0.19	2.13	0.00	1.55
133	B	0.00		0.00	0.00		0.00
134	C	1.31		1.31	1.31		1.31
135	C	0.92	0.00	0.85	1.85	0.00	1.69
136	A	0.00	0.00	0.00	0.00	0.00	0.00
137	A	0.00		0.00	0.00		0.00
138	A	0.00	0.00	0.00	0.00	0.00	0.00
139	A	0.00	0.00	0.00	0.00	0.00	0.00
140	C	0.00	0.00	0.00	10.00	4.81	5.98
141	A	0.00		0.00	0.00		0.00
142	B	3.54	0.00	3.09	3.54	0.00	3.09
143	B	0.00	0.00	0.00	0.00	0.00	0.00
144	B	3.80		3.80	13.29		13.29
145	B	3.74	0.00	2.08	16.81	0.00	9.35
146	B	3.22	0.00	2.68	3.22	0.00	2.68
147	C	12.45	3.10	5.84	19.91	6.20	10.22
148	D	0.55	0.30	0.40	2.45	0.91	1.49
149	C	0.00	0.00	0.00	1.24	0.00	0.86
150	B	0.00	0.00	0.00	2.08	0.00	1.72
151	C	0.00	0.00	0.00	1.69	1.86	1.74
152	D	1.19	0.00	1.09	5.76	0.00	5.26
153	C	0.87	0.00	0.85	1.31	0.00	1.28
154	A	0.00	0.00	0.00	0.00	0.00	0.00
155	B	0.00	0.00	0.00	0.00	0.00	0.00
156	C	0.00	0.00	0.00	0.56	0.00	0.46
157	B	0.00	0.00	0.00	6.71	0.00	4.59
158	B	0.00	0.00	0.00	0.00	8.63	5.11
159	C	0.00	0.00	0.00	2.57	0.00	2.38
160	A	7.57	0.00	5.52	7.57	0.00	5.52

Co	Banding	Offshore LTIFR	Onshore LTIFR	Overall LTIFR	Offshore TRIR	Onshore TRIR	Overall TRIR
<b>IMCA</b>		<b>0.65</b>	<b>0.28</b>	<b>0.54</b>	<b>2.60</b>	<b>1.18</b>	<b>2.18</b>
161	B	0.00	0.00	0.00	5.51	0.00	3.30
162	B	0.00	0.00	0.00	7.13	0.00	5.98
163	B	6.95	0.00	6.37	10.43	0.00	9.55
164	B	0.00	0.00	0.00	0.00	0.00	0.00
165	D	1.87	0.00	1.57	3.74	0.00	3.14
166	D	2.99	1.10	2.00	2.99	1.10	2.00
167	A	0.00	0.00	0.00	0.00	0.00	0.00
168	B	0.00	0.00	0.00	0.00	0.00	0.00
169	A	16.09	0.00	10.78	16.09	0.00	10.78
170	C	0.00	0.00	0.00	3.25	4.19	3.57
171	A	4.37	0.00	3.61	8.75	0.00	7.23
172	C	1.61	0.00	1.52	3.22	0.00	3.04
173	D	0.56		0.56	1.78		1.78
174	C	0.98	2.88	1.46	3.91	8.65	5.11
175	D	0.41	0.00	0.40	1.65	0.00	1.59
176	A	0.00	0.00	0.00	0.00	0.00	0.00
177	D	0.00	0.00	0.00	0.00	0.00	0.00
178	C	0.00	0.00	0.00	1.12	0.00	1.08
179	C	0.00	0.00	0.00	0.00	0.00	0.00
180	A	0.00	0.00	0.00	29.15	0.00	12.54
181	B	0.00	0.00	0.00	0.00	0.00	0.00
182	A	0.00	0.00	0.00	9.63	0.00	8.59
183	A	0.00	0.00	0.00	0.00	0.00	0.00
184	B	0.00	0.00	0.00	0.00	0.00	0.00
185	D	0.10	0.00	0.10	1.22	0.00	1.14
186	C	0.00	0.00	0.00	1.59	0.00	1.59
187	C	0.00	0.00	0.00	2.56	0.00	2.49
188	A	0.00	0.00	0.00	0.00	0.00	0.00
189	C	6.62	3.38	6.04	6.62	3.38	6.04
190	A	0.00	0.00	0.00	0.00	0.00	0.00
191	B	2.37		2.37	2.37		2.37
192	D	2.18	0.00	2.10	4.05	0.00	3.91
193	B	0.00	0.00	0.00	0.00	0.00	0.00
194	A	0.00	0.00	0.00	0.00	0.00	0.00
195	C	1.63	0.00	1.28	4.88	0.00	3.85
196	A	0.00	0.00	0.00	0.00	0.00	0.00
197	B	0.00	0.00	0.00	0.92	0.00	0.86
198	A	28.36	0.00	8.91	170.18	0.00	53.44
199	D	0.32	0.00	0.26	1.60	0.00	1.30
200	B	0.00	0.00	0.00	13.89	0.00	12.47
201	B	0.00	1.48	1.02	3.26	11.87	9.18
202	D	0.37	0.05	0.11	1.67	0.90	1.05
203	D	2.02	0.00	1.61	4.27	1.76	3.76
204	D	0.38	0.00	0.36	0.38	0.00	0.36
205	C	0.00	0.00	0.00	1.44	0.00	1.29
206	D	0.00	0.00	0.00	0.34	2.11	1.33
207	A	0.00	0.00	0.00	0.00	0.00	0.00
208	C	1.49		1.49	2.97		2.97
209	A	0.00		0.00	0.00		0.00
210	B	0.00	0.00	0.00	0.00	0.00	0.00
211	C	1.76	0.00	1.74	3.87	0.00	3.82
212	B	0.00		0.00	0.00		0.00
213	A	0.00		0.00	0.00		0.00
214	B	3.81	0.00	3.13	6.36	0.00	5.21
215	D	0.54	0.19	0.23	4.07	0.72	1.11
216	B	4.30	0.00	3.92	4.30	0.00	3.92
217	D	0.00	0.00	0.00	2.20	0.00	1.78
218	B	1.43	0.00	1.29	1.43	0.00	1.29
219	A	0.00		0.00	0.00		0.00
220	A	0.00		0.00	0.00		0.00
221	A	0.00		0.00	0.00		0.00
222	B	6.25	0.00	3.95	20.84	0.00	13.17

Co	Banding	Offshore LTIFR	Onshore LTIFR	Overall LTIFR	Offshore TRIR	Onshore TRIR	Overall TRIR
<b>IMCA</b>		<b>0.65</b>	<b>0.28</b>	<b>0.54</b>	<b>2.60</b>	<b>1.18</b>	<b>2.18</b>
223	D	0.00	0.05	0.05	1.08	0.97	0.97
224	D	0.94		0.94	2.54		2.54
225	D	2.77	0.00	1.81	5.85	1.75	4.43
226	C	0.00	0.00	0.00	0.00	0.00	0.00
227	A	0.00		0.00	0.00		0.00
228	A	0.00	0.00	0.00	0.00	0.00	0.00
229	A	0.00	0.00	0.00	10.77	0.00	8.70
230	C	0.00		0.00	0.39		0.39
231	C	5.56	2.48	2.79	38.89	4.34	7.81
232	D	0.16	0.00	0.15	1.13	0.00	1.07
233	A	0.00		0.00	13.84		13.84
234	B	3.73		3.73	7.46		7.46
235	D	1.33	0.30	0.99	3.11	0.59	2.27
236	A	0.00	0.00	0.00	12.43	13.01	12.72
237	B	0.00	0.00	0.00	2.27	0.00	1.96
238	B	0.00	0.00	0.00	144.68	0.00	135.83
239	A	5.45	0.00	5.15	10.89	0.00	10.31
240	A	0.00	0.00	0.00	0.00	0.00	0.00
241	D	0.90	0.00	0.66	2.15	0.00	1.58
242	A	0.00	0.00	0.00	0.00	0.00	0.00
243	A	0.00	0.00	0.00	0.00	0.00	0.00
244	A	19.36	0.00	16.97	45.17	0.00	39.60
245	D	0.00	0.00	0.00	0.00	0.00	0.00
246	C	0.38	0.00	0.36	1.13	0.00	1.08
247	A	0.00	0.00	0.00	0.00	0.00	0.00
248	D	1.47		1.47	4.65		4.65
249	A	0.00	0.00	0.00	0.00	0.00	0.00
250	A	0.00		0.00	0.00		0.00
251	B	0.00	0.00	0.00	0.00	0.00	0.00
252	A	0.00		0.00	1136.36		1136.36
253	A	0.00		0.00	0.00		0.00
254	A	0.00	0.00	0.00	0.00	0.00	0.00
255	B	0.00	0.00	0.00	1.77	0.00	1.53
256	C	4.28		4.28	10.69		10.69
257	C	0.00		0.00	5.56		5.56
258	D	1.00	1.76	1.06	6.48	1.76	6.07
259	A	0.00		0.00	12.06		12.06
260	B	0.00	3.37	3.37	0.00	3.37	3.37
261	B	0.00		0.00	0.00		0.00
262	A	0.00	0.00	0.00	6.79	7.94	7.32
263	B	0.00		0.00	4.27		4.27
264	A	0.00	0.00	0.00	0.00	0.00	0.00
<b>IMCA</b>		<b>0.65</b>	<b>0.28</b>	<b>0.54</b>	<b>2.60</b>	<b>1.18</b>	<b>2.18</b>

Table 21: Individual Company LTIFR and TRIR Statistics 2014

## IMCA Environmental Performance Indicators

The following tables show the new IMCA environmental performance indicators as supplied by those companies that were able to do so. More information is available in Section 5.

Co	Spills	Amount spilt	Bunkers (volume)	Bunkers (weight)	Onshore MWh	Non-Hazardous waste	Hazardous waste
<b>IMCA</b>	<b>0.76</b>	<b>218.6</b>	<b>358563.6</b>	<b>19978.1</b>	<b>12960.8</b>	<b>895.0</b>	<b>175.4</b>
1							
2			34192.01		552.75	946.73	
3	0.57	5.71	5576.69	4851.72			
4					2083.33	43.21	5.40
5				19291.50		858.74	21.79
6					1220.60	454.15	30.28
7							
8			58060.52	49895.52		149.76	1.55
9							
10	0.56						
11	1.22	11.99	24068.83		434.10	900.00	170.36
12			9712.45		1256.60	819.99	
13	2.18	15.27	8686.46		1437.43	4.19	1.17
14				10228.92		188.89	
15			8595.60		2614.38	1755.31	
16				314.92	1006.61	284.71	63.27
17					1596.10		
18			53854.98		0.67	88.23	352.93
19			1444.26			464.74	10.53
20				5321.84	450.74	363.70	
21	0.00			305.12	5555.56	11.13	30.40
22	1.00	0.40					
23				11288.60		232.51	3.72
24	0.73	3.09		69633.30	12167.30	1216.72	
25			11437.45		433.15	201.44	7.41
26					299.05	9.98	
27	3.19	3193.15					
28							
29				25963.84		1052.23	542.05
30				6708.85	1230.08	1147.61	14.62
31							
32				14316.57		647.32	731.50
33			18735.83			935.96	
34							
35							
36							
37	1.43	55.23		15340.30	438.30		
38							
39			2300.56			79.16	13.91
40			26788.44			672.97	
41	1.53	3.09	5219.65		2097.41	256.12	52.22
42			3388.27		533.53	62.31	20.90
43							
44							
45			7327.19		48.75	177.78	266.66
46	27.86	1541.77		15149.39	7241.89	95.83	302.64
47				49440.08		983.41	
48				5891.00	1877.75	200.49	18.74
49	0.18	0.09					
50	1.10	438.56					
51			5930.85		3239.59	390.22	155.34
52			1069.41			1.71	0.09
53	2.83						
54			28503.01	24512.59		753.30	



Co	Spills	Amount spilt	Bunkers (volume)	Bunkers (weight)	Onshore MWh	Non-Hazardous waste	Hazardous waste
<b>IMCA</b>	<b>0.76</b>	<b>218.6</b>	<b>358563.6</b>	<b>19978.1</b>	<b>12960.8</b>	<b>895.0</b>	<b>175.4</b>
55							
56				0.00		0.00	
57				6115.46	62.39	116.10	6.19
58			3626.44			113.86	
59	0.33	701.81		4203.86		219.44	3.11
60					1274.87		
61	4.16	239.22					
62	10.04	15.05			3207.70	18.55	0.74
63				662.55	1527.86	47.21	
64	2.38	174.70	19880.32		3.38	209.40	11.24
65			4382.00				
66			0.00			36.98	111.53
67			3.04		3787.88	26.67	2.67
68			6953.03		730.66	35.51	4.62
69			1341.78	0.00	460.20	0.00	0.01
70	0.43	8.53	21804.06		2469.14	206.22	20.62
71	2.83						
72			27389.77				
73	5.42	233.18	14555.70		1444.44	550.94	17.18
74				505.17		10.10	
75							
76	2.96		0.00	0.00	3908.70		
77			11967.89		6525.19	65.19	
78					4.92		
79							
80					1073.36		
81	8.11	202.63	14606.36		721.63	103.27	12.89
82	0.29	234.01	23354.65		307.68	262.02	349.74
83	0.78	15.65		72677.50	214.44		
84	0.28			771.58		53.33	668.92
85			2282.73	2715.19	623.50	206.80	187.70
86					1499.87	37.29	4.30
87	2.53	5.06	3484.97			1136.79	
88	4.86	80.31		7365.21		139.10	5.52
89					891.93	146.39	2.63
90			13608.69		4219.53	4.04	2.31
91							
92			2940.17		4083.26	221.78	18.68
93	0.29	9.64	777.24		1600.86	686.74	233.01
94	2.24	0.00	15497.00				
95					381.36	253.95	
96	3.86	13.13					
97	4.07	28.97	35016.50			1449.70	774.89
98							
99				43888.54	2994.17		
100	4.77	27.17		9765.51			
101							
102	1.27	0.64		3307.89		333.97	
103	2.32	22.08	49052.14		30825.03	650.69	
104				21393.34		33.22	
105			9419.54			327.10	
106			3891.08			509.30	9.05
107				3959.73	2929.35	36.72	
108			26225.48	25989.45	1000.00	673.88	43.05
109				0.00			
110	1.57	57.47	14513.88			643.36	81.24
111							
112	0.24	0.47					
113	0.45	0.45				30.76	19.32
114	1.75	174.74		49401.99		605.95	42.91
115			0.00		160.85		

Co	Spills	Amount spilt	Bunkers (volume)	Bunkers (weight)	Onshore MWh	Non-Hazardous waste	Hazardous waste
<b>IMCA</b>	<b>0.76</b>	<b>218.6</b>	<b>358563.6</b>	<b>19978.1</b>	<b>12960.8</b>	<b>895.0</b>	<b>175.4</b>
116							
117	1.12	37.11		12869.08		511.42	162.83
118							
119	8.49	540.36					
120					1375.00	19.65	
121							
122			5037.43			3.61	
123			18651.00	0.00			
124				38173.68			
125	0.48	9.68	20049.82		1019.40	343.52	3.44
126							
127			0.00		353.94	22.33	19.37
128	1.30	4728.55	41628.04		2795.96	1752.48	1.42
129			672.46	1448.64		300.87	7.83
130						6.68	
131	3.42			22697.70			
132	5.06	10.65		20174.72	1790.97		
133	0.00	0.00					
134						15.67	4.35
135	0.46	2.31		83948.80	3264.46	650.49	2070.47
136					1199.46	57.74	
137						2.02	2.02
138							
139							
140				139558.67	448.66	71.71	17.93
141	38.62	1.93	992.43	80.32		100.40	34.75
142				17999.50	2705.91		
143					678.61	44.33	
144	0.95	4.74		11189.50		1576.93	111.98
145				653.70	35.11	55.06	
146				2131.55	21471.71	331.71	564.45
147	2.49	4.98	15739.59		396.65		
148	0.13	33.64		7038.22	1111.49	3383.37	228.40
149			2822.20			191.39	27.21
150							
151	1.69	1.69					
152	1.19	70.28		2709.89	1348.37	1898.78	90.76
153	0.87						
154							
155			11056.74		1230.42	364.20	94.73
156	3.37	73.04		9436.17	1305.55	132.82	67.32
157	10.73	291.69	15854.60			198.11	3.66
158					71.10	326.88	
159							
160			5676.23		1430.47	55.13	54.26
161							
162	3.57	44.59	46907.11		307.41	273.69	14.21
163	6.95	17.38	42977.33	0.00	492.87	207.00	1.59
164			6692.50	5690.90	21.83	552.73	73.14
165							
166						4.01	0.57
167					1306.95		
168			29513.69		21066.90	532.21	156.23
169							
170				4215.27	2152.81	15.33	0.25
171				0.00			
172	1.07	42.96	24439.86			837.27	700.51
173							
174				12154.49	624.31	43.10	54.78
175	0.62	1.03	5917.84			55.99	39.71
176					3215.10	7.86	

Co	Spills	Amount spilt	Bunkers (volume)	Bunkers (weight)	Onshore MWh	Non-Hazardous waste	Hazardous waste
<b>IMCA</b>	<b>0.76</b>	<b>218.6</b>	<b>358563.6</b>	<b>19978.1</b>	<b>12960.8</b>	<b>895.0</b>	<b>175.4</b>
177				677.71	15488.94	1.68	
178			5.96		249.53	0.16	
179				4506.00		138.12	20.91
180				74991.25	1157.65	2257.96	56.45
181				0.00	1312.02	0.00	25.99
182	4.81	240.65					
183			5183.18		1190.93	7.98	
184				8303.50	1126.03	182.76	
185							
186			33080.90		63274.26	2797.08	
187	3.41	619.56	45595.73				
188				0.00			
189			782.88		1787.06	249.18	75.35
190					38.13	120.99	1.81
191							
192	3.11	89.71		17137.13	2602.05	960.28	10.11
193			2378.06			22.72	163.38
194	90.22	451.10			842.60	27.12	20.11
195	0.81	32.53	9666.81		449.37		
196	26.17	0.24					
197				11624.45		114.09	
198							
199	1.28	8.98					
200			20897.02	0.00	5463.60	380.26	17.45
201					285.64	19.57	0.51
202	0.19	7.40	56805.41		1373.19	1462.89	234.31
203	11.01	82.05	6266.36		1589.60	286.45	39.25
204							
205				0.00			
206	0.67	0.34	2519.55			507.86	943.18
207				0.00		0.00	
208							
209			18185.29			35.24	8.10
210							
211	7.04	510.77	20272.75		5651.65	69.17	28.50
212			24344.57			800.37	
213			558523.37	558523.37		8.80	
214							
215	0.41	143.91		78872.30	169.39		
216			20499.95		1503.98	316.35	
217							
218	5.74	286.79	27767.28				
219				6944.44		1075.02	89.94
220							
221			6707.31			2099.48	107.67
222	6.25	12.50				368.65	30.28
223			28879.72			217.08	
224				19671.24		7669.68	378.85
225	1.23	616.66	3484.98				
226				0.00	374.18	5.08	
227							
228							
229	43.10	26.94	48163.95			233.03	19.22
230			30891.08			158.28	677.38
231	83.33	833.33		2594.44	854.41	100.40	3.35
232							
233			42258.20			2718.97	
234				18072.33		372.81	93.20
235	6.66	189.42	73221.98		1050.63	1828.90	221.89
236							
237				0.00	300.21	2201.27	

Co	Spills	Amount spilt	Bunkers (volume)	Bunkers (weight)	Onshore MWh	Non-Hazardous waste	Hazardous waste
<b>IMCA</b>	<b>0.76</b>	<b>218.6</b>	<b>358563.6</b>	<b>19978.1</b>	<b>12960.8</b>	<b>895.0</b>	<b>175.4</b>
238							
239				59150.33	134.10	1546.07	
240			3706.20		388.08		
241	0.54	0.00	0.00		730.05	11.54	4.45
242				0.00		0.00	
243							
244							
245				2153.64	1761.14	59.88	35.84
246	1.50						
247							
248	0.73	56.23					
249							
250				18601.19			
251			3207.65	2.98	831.99	2.91	2.14
252			0.00			2272.73	
253	50.72		16154.39			10.01	
254					597.82		
255				8147.71	918.13	277.82	
256	2.14	35.63		61475.51			
257	11.91	7.14					
258	0.83	17.77	22802.88		1852.77	744.92	
259	0.00						
260			210483.87		244.41	18.52	3.87
261			12288.03	4340.06			
262	47.55	244.53					
263	2.14	32.06	23466.68			2297.30	245.76
264			0.00	0.00	791.72	192.46	
<b>IMCA</b>	<b>0.76</b>	<b>218.6</b>	<b>358563.6</b>	<b>19978.1</b>	<b>12960.8</b>	<b>895.0</b>	<b>175.4</b>

Table 22: IMCA Environmental performance indicators, 2014

## Definitions – Lagging Safety Statistics

In order to compile meaningful statistics, it is important that standard, consistent, well defined terms are used. For the purposes of compiling the IMCA statistics the following definitions are used:

### Hours Worked

- ◆ for offshore operations – the ‘actual hours worked’ based on a 12-hour day;
- ◆ for onshore operations – the actual hours worked, including overtime hours.

**Number of Fatalities** – the total number of employees and others who died as a result of an incident in the workplace.

**Fatal Accident Rate (FAR)** – number of fatalities per 100,000,000 hours worked

**Number of Lost Time Injuries (LTIs)** – comprises all accidental injuries (including fatalities and lost work day cases but excluding restricted work day cases) where:

- ◆ A lost work day case is any work-related accidental injury other than a fatal injury which results in a person being unfit for work on the next shift/day; and
- ◆ A restricted workday case is any work-related injury other than a fatality or lost work day case which results in a person being unfit for full performance of a regular job on the shift/day after the injury. Work might be:
  - an assignment to a temporary job;
  - working in the regular job but not performing all the usual duties of the job
  - NB Where no meaningful restricted work is being performed, the incident should be recorded as a lost work day case.

**Lost Time Injury Frequency Rate (LTIFR)** – analysed separately as offshore, onshore and overall statistics

$$\frac{\text{Lost time injuries} \times 1,000,000}{\text{hours worked}}$$

**Total Recordable injury Rate (TRIR)** – the number of injuries and/or illnesses per 100 full-time workers and is calculated as:

$$\frac{\text{total number of recordable injuries} \times 1,000,000}{\text{total hours worked}}$$

### Occupational Safety and Health Administration definition of ‘total recordable injuries’

from the American Bureau of Labor Statistics – [www.bls.gov/iif/oshdef.htm](http://www.bls.gov/iif/oshdef.htm)

#### Work-related injuries and illnesses

Work-related injuries and illnesses are events or exposures in the work environment that caused or contributed to the condition or significantly aggravated a pre-existing condition.

#### Recordable cases

Recordable cases include work-related injuries and illnesses that result in:

- ◆ Death
- ◆ Loss of consciousness
- ◆ Days away from work
- ◆ Restricted work activity or job transfer
- ◆ Medical treatment (beyond first aid)
- ◆ Significant work related injuries or illnesses that are diagnosed by a physician or other licensed health care professional. These include any work related case involving cancer, chronic irreversible disease, a fracture or cracked bone, or a punctured eardrum.
- ◆ Additional criteria that can result in a recordable case include:
  - Any needlestick injury or cut from a sharp object that is contaminated with another person's blood or other potentially infectious material.
  - Any case requiring an employee to be medically removed under the requirements of an OSHA health standard.
  - Tuberculosis infection as evidenced by a positive skin test or diagnosis by a physician or other licensed health care professional after exposure to a known case of active tuberculosis.
- ◆ Days away from work, days of restricted work activity or job transfer
- ◆ Days away from work, days of restricted work activity or job transfer are cases that involve days away from work, or days of restricted work activity or job transfer, or both.
- ◆ Cases involving days away from work are cases requiring at least one day away from work with or without days of job transfer or restriction.
- ◆ Job transfer or restriction cases occur when, as a result of a work-related injury or illness, an employer or health care professional keeps, or recommends keeping an employee from doing the routine functions of his or her job or from working the full workday that the employee would have been scheduled to work before the injury or illness occurred.

#### Total Recordable injury Rate (TRIR)

Total Recordable injury Rate (TRIR) is the number of injuries and/or illnesses per 100 full-time workers and is calculated as:  $(N/EH) \times 200,000$  where:

N = total number of recordable injuries - injuries and/or illnesses

EH = total hours worked by all employees during the calendar year

200,000 = base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year).

**NB the primary difference between the IMCA TRIR and that of OSHA is that IMCA follows the practice of referencing Recordable injuries against one million man-hours rather than 200,000 man-hours.**

## Definitions – Leading Safety Statistics

IMCA's Leading Performance indicators have been developed by members of the SEL Committee and have been subject to periodic update and review since their initial development in 2002. The most recent change, made last year, was to harmonise all the Leading Performance Indicators with the Safety Observation Frequency and calculate them using 200,000 man-hours. Prior to 2010, the various leading indicators were calculated with a number of different baselines.

### Safety Observations Frequency Rating (SOFR)

If we are to eliminate injuries, damage or near miss incidents, we need to focus on at-risk acts and unsafe conditions, which have not yet caused loss or harm but have the potential to. Thus we need a systematic approach to observing, correcting and recording such at-risk behaviour or unsafe situations.

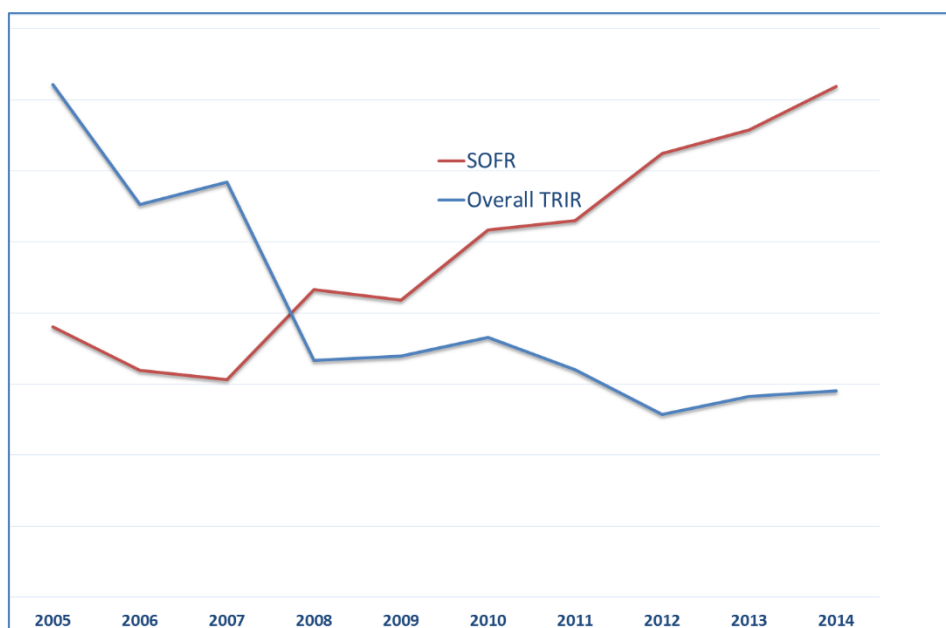


Figure 25 – SOFR and TRIR, 2005-2014

This is generally called safety observation (or hazard observation). The expected result is that by increasing safety observation, there would be a reduction in injuries, damage or near misses – the undesired events. We have thus far always shown a nominal or theoretical graph of this relationship, but it is now possible to demonstrate that IMCA contractor members' data follows this relationship in practice. See Figure 25.

The measure used by IMCA is based on the number of safety observation records made over the course of 12 months. The measure is directly related to operational work man-hours and as such the measure should be based on frequency. The definitions for the determination of operational work man-hours are defined in information note IMCA SEL 38/02.

Since pro-active worksites are expected to generate a high level of reporting (perhaps several hundred in a year) the frequency basis shall be:

$$\begin{aligned} \text{SOFR} &= \text{Number of Safety Observation per 200,000 man hours} \\ &= \frac{\text{Number of Safety Observations} \times 200,000}{\text{Total Man-hours}} \end{aligned}$$

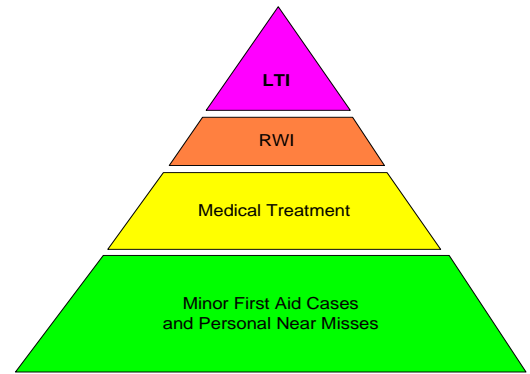
#### Definitions

SOFR	Safety observation frequency rating
Safety observation	Report identifying at-risk behaviour, or an unsafe condition to prevent loss or harm e.g. STOP card.
Observational work man-hours	for onshore operations – 'actual' hours worked, including overtime hours for offshore operations – the hours worked, based on a 12-hour exposure day

## Injury Events Reporting Level

In a mature safety culture, where all injuries, damage or near misses (undesired events) get reported, regardless of their severity, it would be expected that there would be a much greater number of non-serious events for every serious event.

Ultimately we do not want any form of undesired event and those companies with low numbers of actual injuries, damage events or near miss incidents should not be penalised because they have a low number of reports per man-hours worked. In addition we need to consider the case where all events are not reported. The balance in straight numbers of events shown in the diagram below is not a fair comparison.

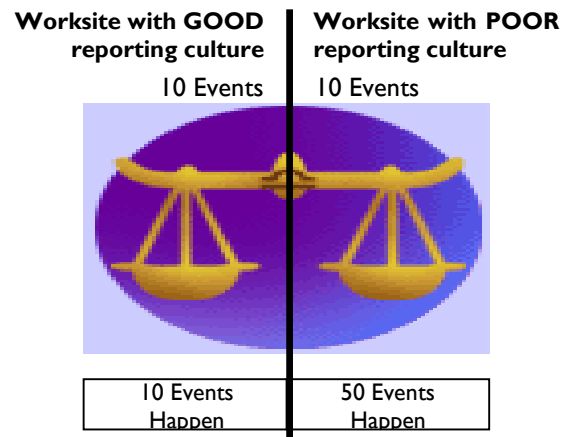


It may cause a degree of controversy that a leading indicator measure should be based on a series of lagging indicators but in order to demonstrate that a mature culture exists, we need to assure ourselves that every undesired event is being reported. We cannot equate one company which reports everything and has suffered a certain number of injuries with another company where few injuries are reported to achieve the same number.

Thus to show an active worksite, the basis of the reporting level could be a ratio of less serious events to serious events. This can be converted to a number, which expresses the activity level from sums of “weighted” products representing injury severity and is defined as shown below:

$$\text{RAL} = ((5 \times \text{FNMR}) + (20 \times \text{MTR}) + (100 \times \text{RWIR})) \text{ per } 200,000 \text{ man-hours}$$

The number of hours over which the RAL is referenced is 200,000. The definition of FNMR, MTR and RWIR remain unchanged.



### Definitions

RAL	Reporting activity level.
FNMR	Number of first aid injuries and personal near-miss reports.
MTR	Number of medical treatment reports.
RWIR	Number of restricted work injury reports.
First aid injury	A one-time treatment for the purpose of dealing with minor scratches, cuts, burns, splinters etc. which do not ordinarily require medical care.
Medical treatment injury	Is work related injury, which requires attention from a medical practitioner (not necessarily a doctor) but does not result in either a lost time injury or a restricted work injury.
Restricted work injury	Is a work related injury, which causes the injured person to be assigned to another job on a temporary basis or to work at his normal job less than full time or not necessarily undertaking all of the normal duties
Lost time injury (LTI)	A work related injury which causes the injured person to be absent from work for at least one normal shift* after the event because he is unfit to perform any duties. * This should take into account travel time in attending the doctor to assess the injury



## Line Management Visits Rating (MVR)

Line managers have overall accountability for the safety of people and the protection of equipment on their worksites. They are responsible for ensuring a safe system of work but are equally responsible for listening to people's concerns with regard to safety and to then act on them. It is also accepted that managerial leadership in demonstrating their interest and involvement in issues is a key factor in improving general behavioural aspects.

Thus a measure of a pro-active safety culture is seen to be adequate qualitative visits by relevant managers to their operational worksites. The measure should not only be related to the operational man-hours expended on the site but should also link to management focus on serious undesired events. After all, sites where serious events happen, should expect a higher number of visits to correct such situations.

Thus the measure proposed is:

**MVR = No. of Managerial Visits per 200,000 man-hours**

### Criteria

- ◆ The visiting manager has commercial or production responsibility for the company (e.g. Managing Director);
- ◆ The visiting manager is directly responsible for the conduct of the project (e.g. Project Manager).
- ◆ The visiting manager is directly responsible for the operational or service support activities of the particular offshore barge or ship (e.g. Operations Manager);
- ◆ The visiting manager has responsibility for health, safety and environmental processes or other key process within the company;
- ◆ The visits should be made offshore during operational activities and be of at least 24 hours duration;
- ◆ The visit must include a safety briefing or presentation to the majority of the offshore people;
- ◆ The visit may also involve the manager making a safety performance check of the site with the people who manage or supervise the activities.

### Definitions

MVR  
MV

Managerial visit rating.

Managerial visits may be counted if the managers meet the criteria provided below. The visits should be made offshore during operational activities and be of at least 24 hours duration. (Management visits during port visits are seen as routine). The visit must include a safety briefing or presentation to the majority of the offshore people. It may also involve the manager making a safety performance check of the site with the people who manage or supervise the activities.

## Lessons Learnt Rating (LLR)

As a result of reporting undesired events, accident investigations, findings from managerial visits and inspection/audits, actions will be identified to improve safety performance. Sites where safety is given high priority or focus will be keen to see such events closed within a reasonable timescale and to pass on the lesson to others.

The lessons learnt from a series of similar events or from a more serious injury or near miss is usually notified to other worksites via a safety bulletin or safety flash. A simple measure of activity is therefore the number of bulletins issued. To be included in the IMCA leading safety performance indicator, the bulletin must have been issued to IMCA. IMCA safety flashes covering more than one subject count as a single bulletin. The lessons learnt rating is defined as:

**LLR = Number of bulletins issued per 200,000 man-hours**

### Definitions

LLR Lessons learnt rating.