

Safety & Environment Statistics for IMCA Members

Report for the period 1 January – 31 December 2015

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1 Introduction

IMCA produces an annual report of safety and environment statistics (covering fatalities, injuries, leading indicators and environmental indicators) supplied by contractor members. This information note reports detailed annual statistics for 2015. A short 'glossy' executive summary will also be published.

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 251 companies and organisations, representing around 55% of the contractor membership, excluding drilling contractors and contractors who report as part of a greater group. A further nine contractors responded noting that they had no safety data to provide.

Thirty-six 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 Appendices 3 and 4. The definition of injuries used is that of the US Occupational Safety and Health Administration (OSHA).

2 Executive Summary

The 2015 dataset is drawn from 251 IMCA contractor members, based upon 720 million man-hours of work overall (483 million man-hours offshore). Environmental data of one form or another was provided by 62% of members that took part.

The total size of the dataset and the number of contractors submitting data, has fallen slightly owing to the slow-down in the offshore industry which began before the start of 2015. We may anticipate a further fall in the size of the dataset next year, representing the current state of the industry in 2016.

Apart from a distressing increase in fatalities, of which it must be said more than half of which were down to one single incident, the safety data remain broadly similar or slightly improved on the previous year.

Overall lost time injury frequency rate (overall LTIFR)	0.51	0.54
Overall number of lost time injuries	352	424
Overall total recordable injury rate (TRIR)	2.17	2.18
Overall fatal accident rate (FAR)	2.22	0.75
Offshore lost time injury frequency rate (offshore LTIFR)	0.61	0.65
Offshore total recordable injury rate (TRIR)	2.51	2.60
Offshore fatal accident rate (FAR)	3.31	0.72
Onshore lost time injury frequency rate (onshore LTIFR)	0.30	0.28
Onshore total recordable injury rate (TRIR)	1.46	1.18

Table 1 – Summary of IMCA safety statistics for 2015 (2014 figures to the right)

For the purposes of comparison, the safety statistics recorded here by IMCA members are consistent with those of other main industry trade associations, IOGP and IADC.

Comparison of Overall Total Recordable Injury Frequency Rates (TRIR) between Trade Associations											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
IMCA	5.41	4.14	4.38	2.50	2.54	2.74	2.40	1.93	2.12	2.18	2.17
IOGP	3.05	2.92	2.68	2.08	1.75	1.68	1.76	1.74	1.60	1.54	1.21
IADC	11.71	10.85	10.24	9.11	6.12	6.55	4.17	4.41	4.03	3.76	2.47*

*Table 2 – Comparison of trade association TRIR (*Q4 results only)*

IMCA encourages all contractor members to take part in this safety statistics exercise, although doing so is not mandatory. 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.

As last year, IMCA will publish a short summary leaflet or downloadable report which will summarise the results. The detailed statistical analysis of the safety data in this separate information note will continue. 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 statistics, 'inshore' work (for example in the renewables sector) is considered to be offshore rather than onshore.

The statistics over the past nineteen 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	7.29	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	4.35	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	4.68	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	264	798	423	0.54	6	0.75	1736	2.18	558	358	0.65	0.72	1453	2.60	239	0.28	0.84	1.18
2015	251	720	352	0.51	16	2.22	1561	2.17	483	280	0.61	3.31	1215	2.51	237	0.0	0.00	1.46

Table 3 – Summary of IMCA safety statistics 1997-2015

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.

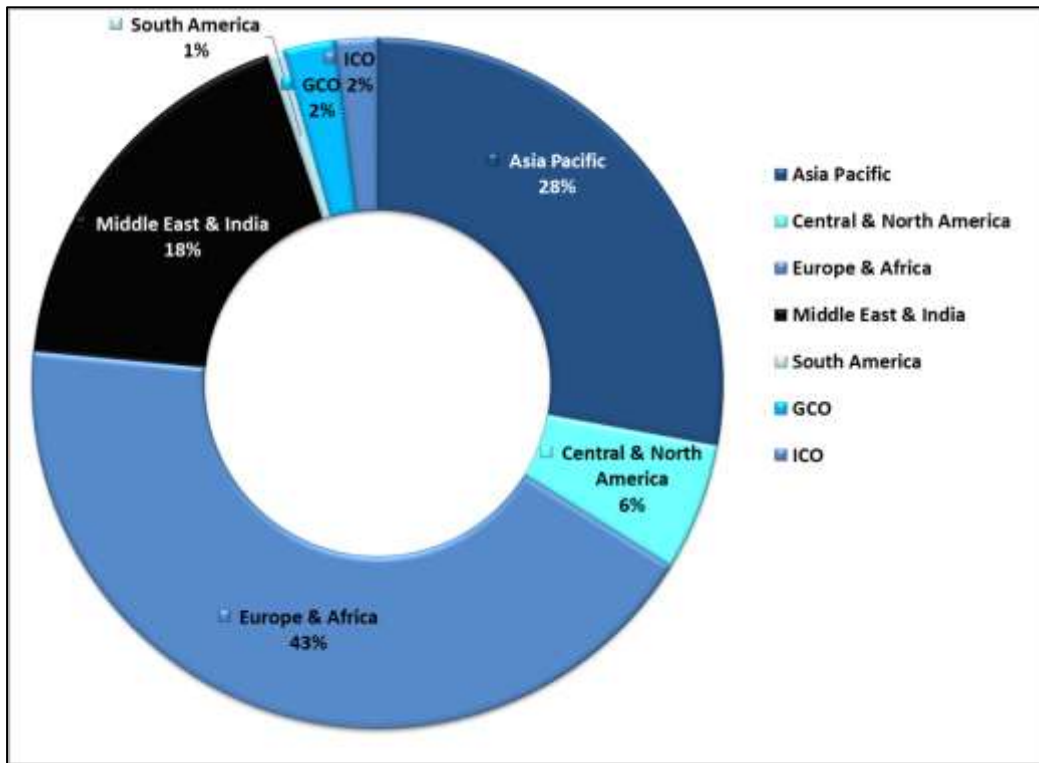


Figure 1 – Contributors by IMCA geographical region

Key (please refer to Appendices 3 and 4 for further definition of these rates and acronyms)

FAR	Fatal accident rate	SOFR	Safety observation frequency rate
TRIR	Total recordable injury rate	MVR	Management visit rate
LTIFR	Lost time injury frequency rate	LLR	Lessons learnt ratio
RAL	Reporting activity rate		

IMCA Region	Contributors
Asia Pacific (AP)	70 (69)
Central & North America (CNA)	15 (16)
Europe & Africa (EA)	107 (117)
Middle East & India (MEI)	46 (49)
South America (SA)	2 (7)
Global Contractors (GCo)	6 (6)
International Contractors (ICo)	5

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	0.39	1.50	0.96	0.32	1.26	0.00	0.15	0.71
CNA	0.00	0.24	0.99	0.00	0.21	1.23	0.00	0.12	1.95
EA	1.11	0.75	2.96	0.99	0.74	2.97	0.00	0.66	3.08
MEI	0.00	0.62	3.45	0.00	0.60	3.21	0.00	0.57	2.88
SA	0.00	1.59	5.46	0.00	1.46	4.56	0.00	0.92	0.92
GCo	3.10	0.45	2.28	1.32	0.30	1.39	0.00	0.20	0.73
ICo	22.48	0.92	2.72	13.66	0.63	1.96	0.00	0.19	0.79

Table 5 – Lagging safety indicators by geographical region

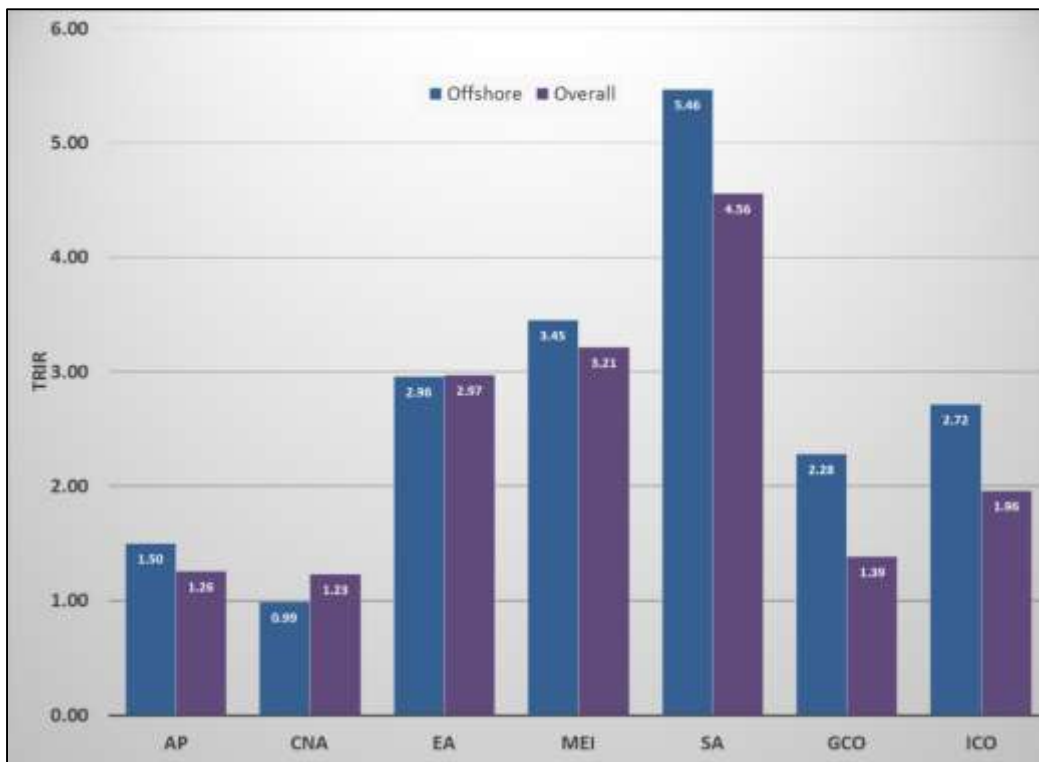


Figure 2 – Overall and offshore TRIR by geographical region

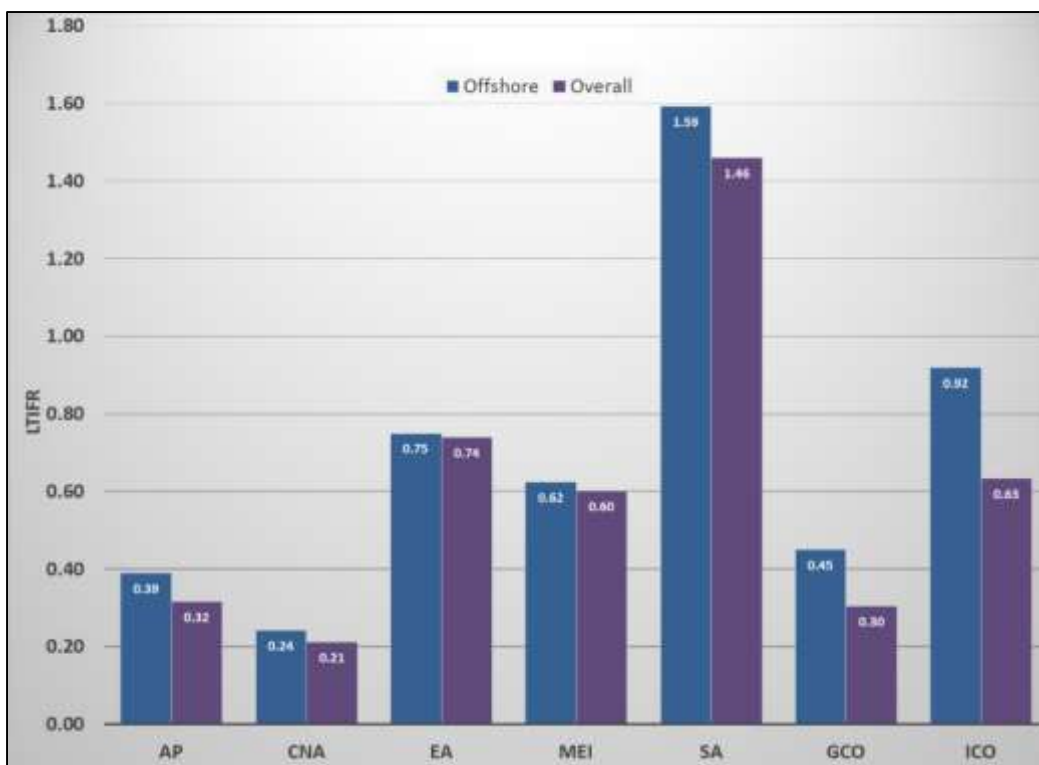


Figure 3 – Overall and offshore LTIFR by geographical region

The change to IMCA membership structure allowing for GCo or Global Contractor members, is reflected here for the first time, although the change occurred at the end of 2014.

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. GCo and 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.

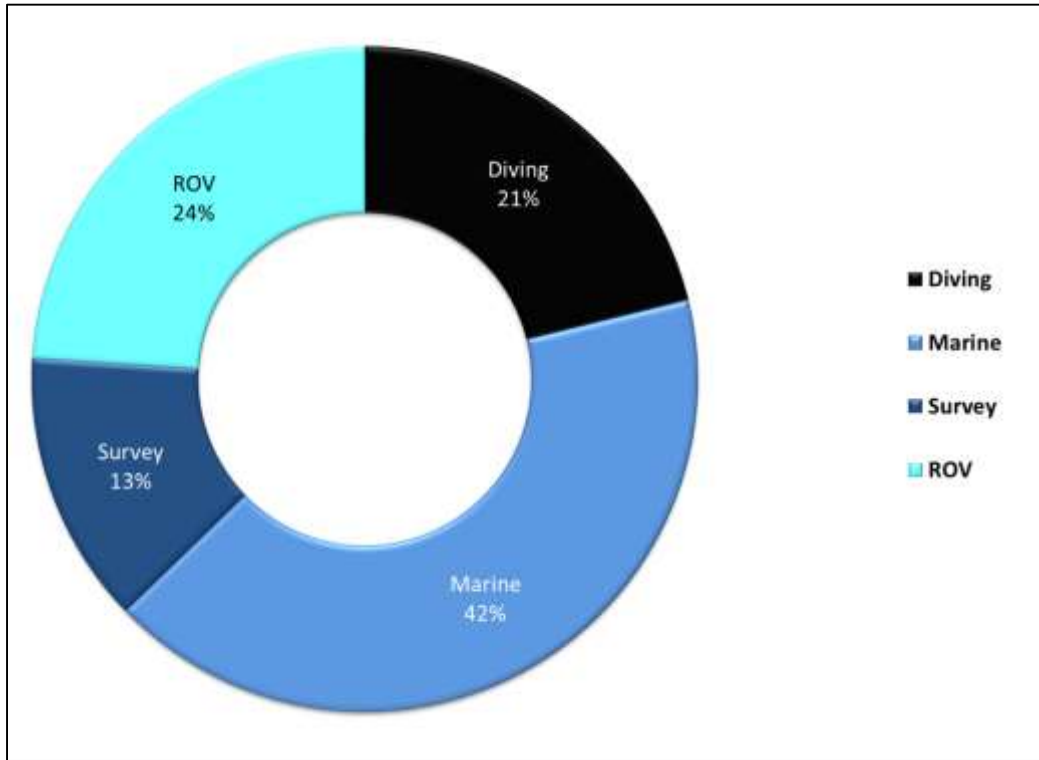


Figure 4 – Contributors by IMCA technical division

4 Environmental Indicators

This is the third year that IMCA has collected comprehensive 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 three orders of magnitude too large – that is, 1000 x greater than the reality – and where this is clear, it has been corrected. See below for further details.

4.1 Oil Spills (Offshore)

Eighty-three contractors (88 last year) reported having spilt oil, and 77 (77 last year) reported the quantity spilt. IMCA members reported a total of 565 oil spills (674 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 169 contractors (160 last year). Some data were reported in different units to that required, leading to indications that bunkers used were one, two or even three orders of magnitude (1000 x) greater than what was likely given the number of offshore man-hours reported. On this basis, data from six contractors has been omitted from the calculations used to derive an IMCA indicator.

4.3 Electricity Consumed (Onshore)

Data on onshore electricity consumption was provided by 136 contractors (129 last year). Six contractors supplied a figure for electricity consumed but provided no onshore man-hours against which to calculate a rate. Twelve contractors supplied data in kWh rather than MWh – these figures were corrected and included where possible.

4.4 Waste Disposal (Overall)

One hundred and fifty-six contractors reported the amount of non-hazardous waste disposed of (156 last year), and 112 contractors reported the amount of hazardous waste disposed of (106 last year). Five contractors reported numbers which were thought to be kilogrammes rather than tonnes – these were corrected.

	Spills	Amount spilt	Bunkers (volume)	Bunkers (weight)	Electricity (MWh)	Non-hazardous waste	Hazardous waste
No. of contributors	83	77	91	78	136	156	112
Minimum	0.00	1.163	33.77	1.01	0.23	0.02	0.01
Maximum	252.53	6432.6	178588	86072	14680	20935	1180
Average	9.54	340.1	23847.3	20397.5	1820.0	533.2	122.5
IMCA	1.17	128.6	7706.7	6723.7	781.47	455.5	78.5

Table 6 – Environmental indicators, 2015

See Appendix 2 for further details.

5 Lost Time Injury Frequency Rate (LTIFR)

The overall LTIFR for 2015 has improved slightly to 0.51 (0.54 in 2014). The offshore LTIFR has likewise improved from 0.65 in 2014 to 0.61 in 2015. Again there is no significant alteration in the overall ‘flat line’ trend seen since 2008, as can be seen in Figures 5 and 6.

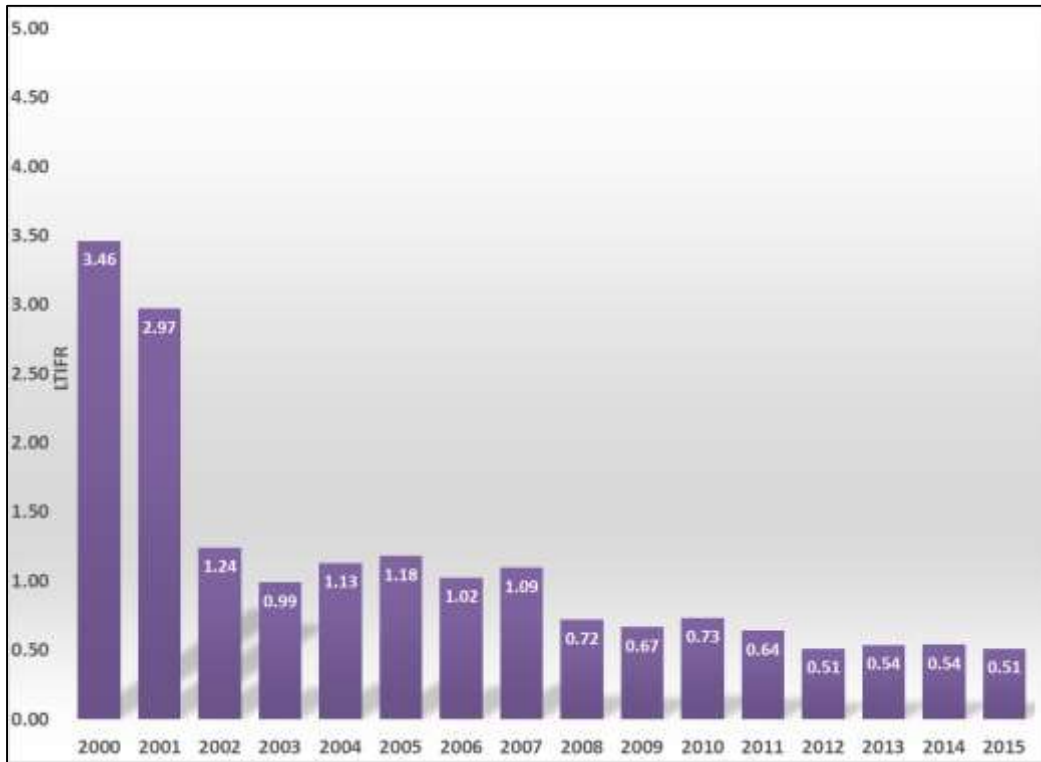


Figure 5 – Overall LTIFR

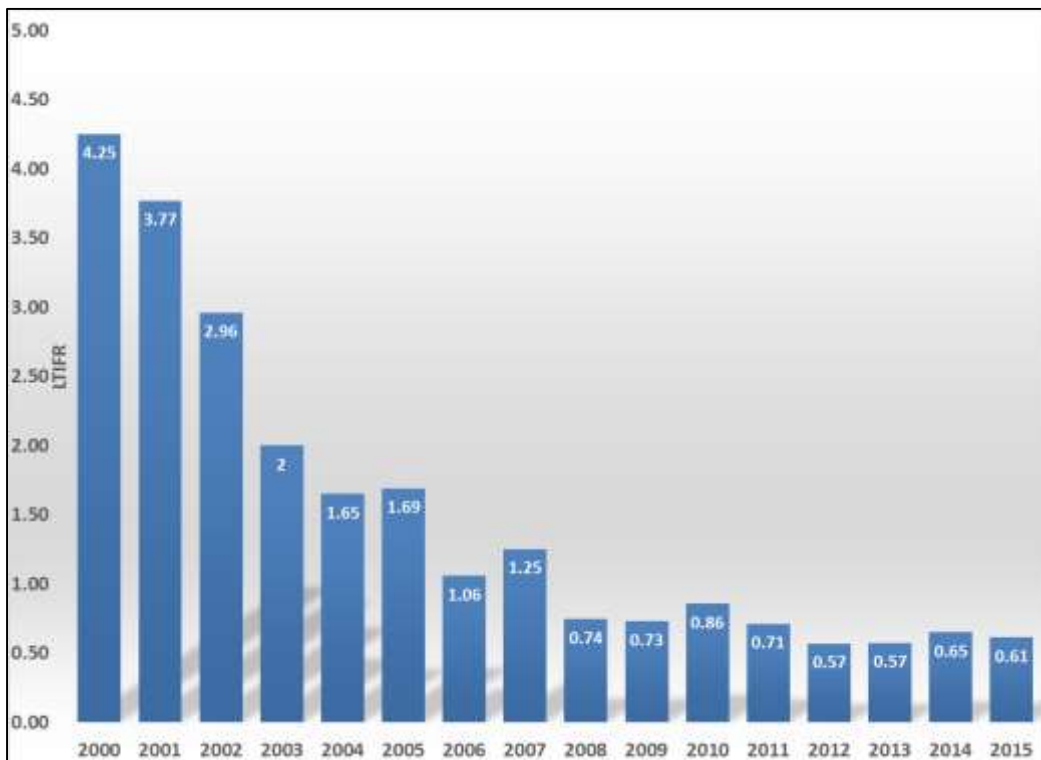


Figure 6 – Offshore LTIFR

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	Number of LTIs							Total
	AP	CNA	EA	MEI	SA	GCo	ICo	
A) Falls from height	4	1	9	4	0	5	0	23
B) Falls on the same level (including slips & trips)	3	3	38	14	4	9	10	81
C) Struck against	4	0	9	9	2	0	2	26
D) Struck by moving/falling objects	10	2	18	17	2	14	10	73
E) Exposure to mechanical vibration	1	0	0	0	0	0	0	1
F) Exposure to sound	0	0	0	0	0	0	0	0
G) Muscle stress and repetitive movement	1	1	14	6	0	1	2	25
H) Contact with electricity	1	0	0	0	0	0	0	1
I) Contact/exposure to heat/cold	3	0	3	0	0	0	0	6
J) Contact/exposure with hazardous substances	1	0	4	1	0	0	0	6
K) Entrapment	0	5	10	5	0	11	1	32
L) Asphyxiation	0	0	0	1	0	0	1	2
M) None given	4	2	43	9	0	4	14	76
TOTAL	32	14	148	66	8	44	40	352

Table 7 – Immediate causes of LTIs by IMCA geographical region

Key			
AP	Asia Pacific	EA	Europe & Africa
CNA	Central & North America	MEI	Middle East & India
GCo	Global Contractor (formerly ICO)	SA	South America
ICo	International Contractor		

There were 352 lost time injuries recorded by IMCA members this year. The most common immediate cause of reported LTIs in 2015 was 'Falls on the same level', with 23%. The second most common cause this year with 21% of all reported LTIs was 'Struck by moving or falling objects'; 22% of the reported LTIs were reported with no immediate cause given.

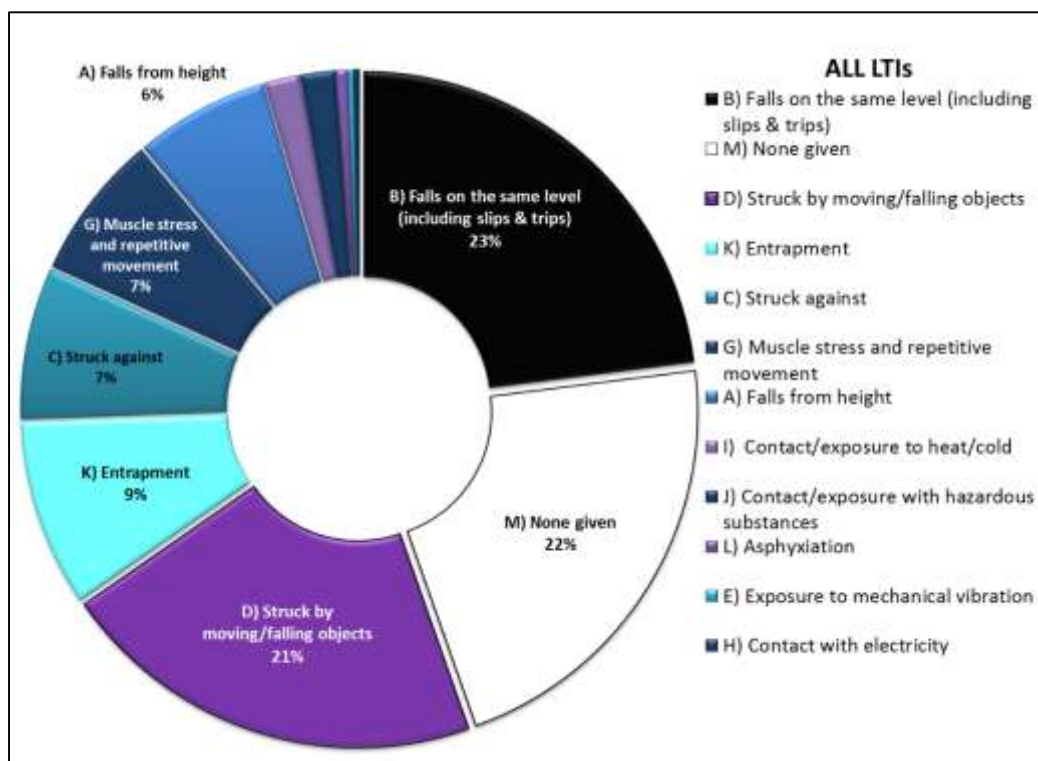


Figure 7 – Direct or immediate causes of all reported lost time injuries, 2015

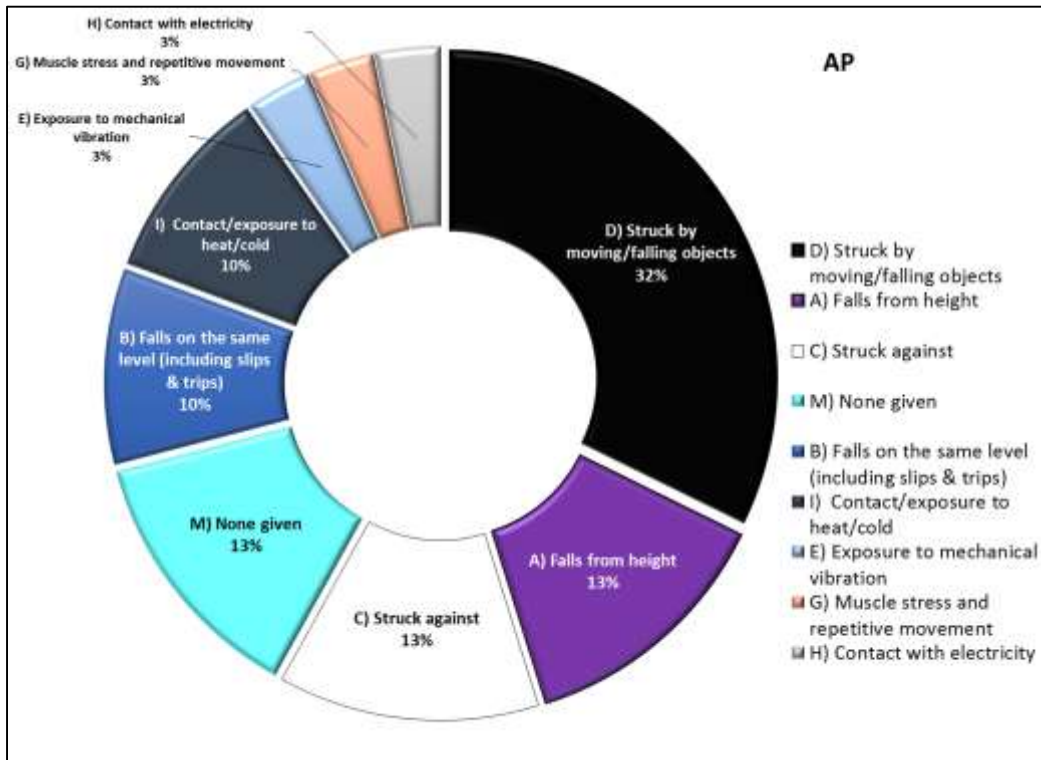


Figure 8 – Direct or immediate causes of LTIs in Asia Pacific region

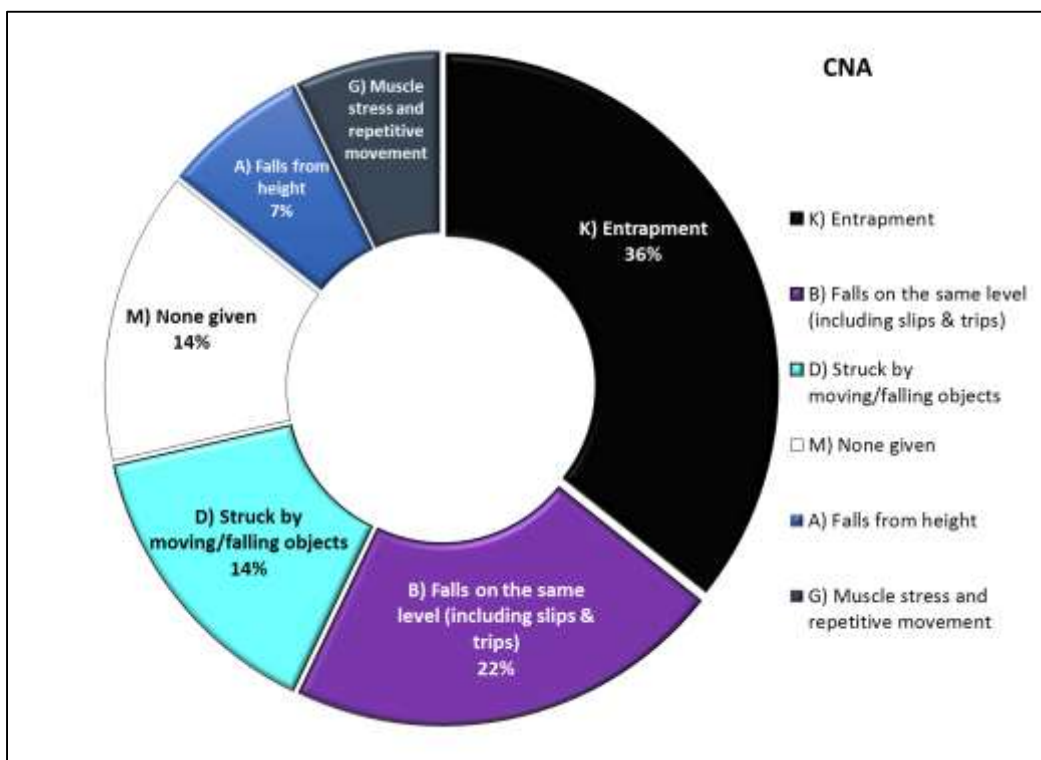


Figure 9 – Direct or immediate causes of LTIs in Central & North America region

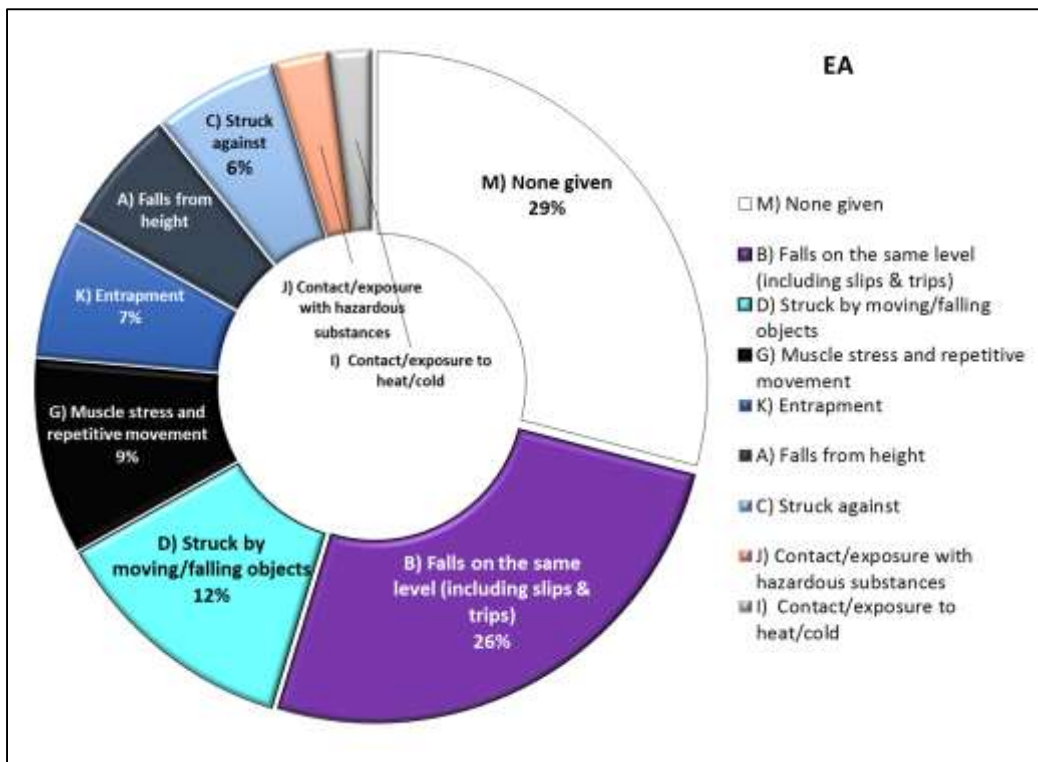


Figure 10 – Direct or immediate causes of LTIs in Europe & Africa region

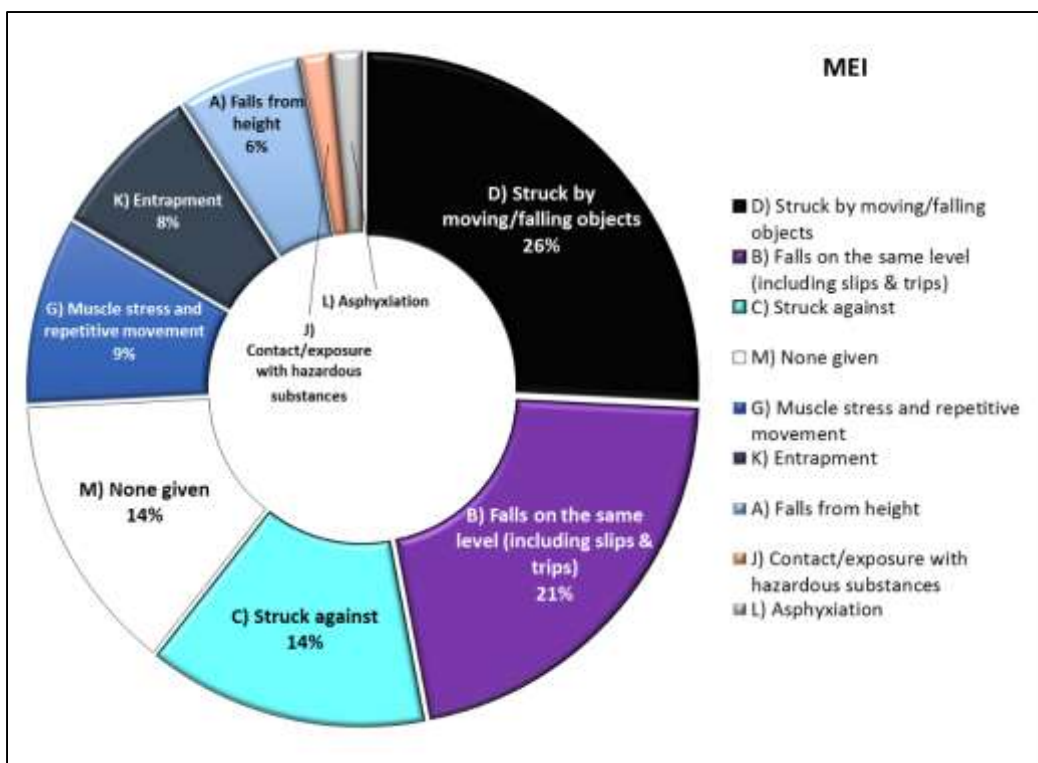


Figure 11 – Direct or immediate causes of LTIs in Middle East & India region

As there were only eight recorded LTIs from members in the IMCA South America section, a pie chart is unnecessary and is omitted.

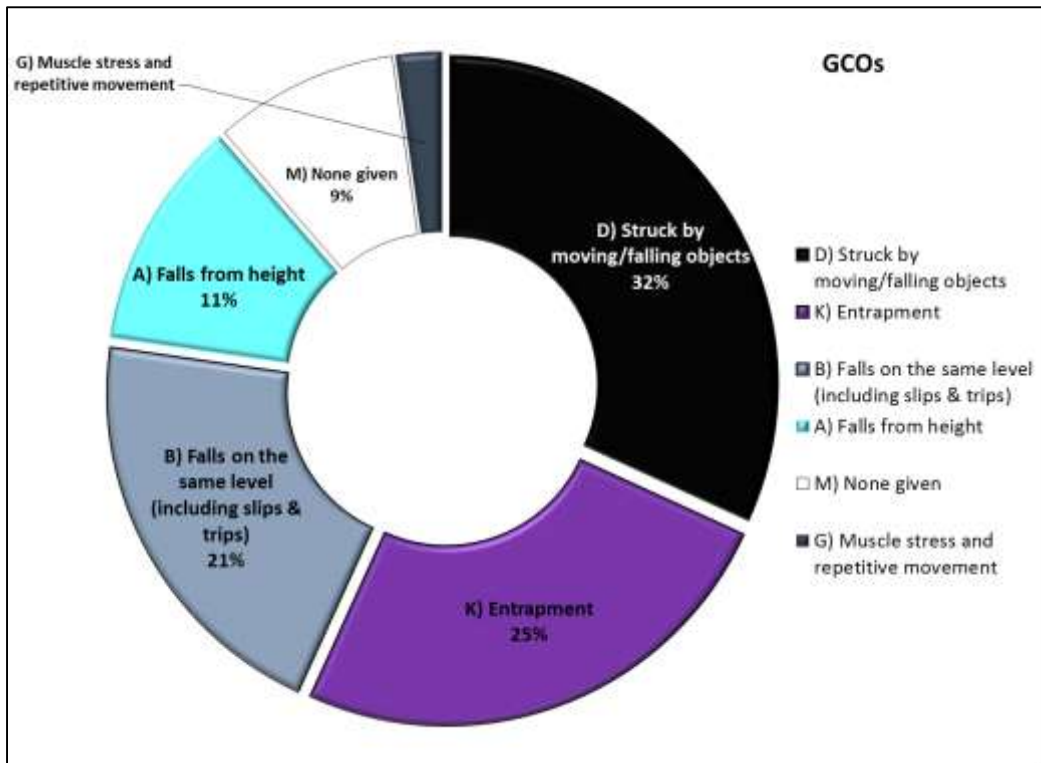


Figure 12 – Direct or immediate causes of LTIs amongst GCo members

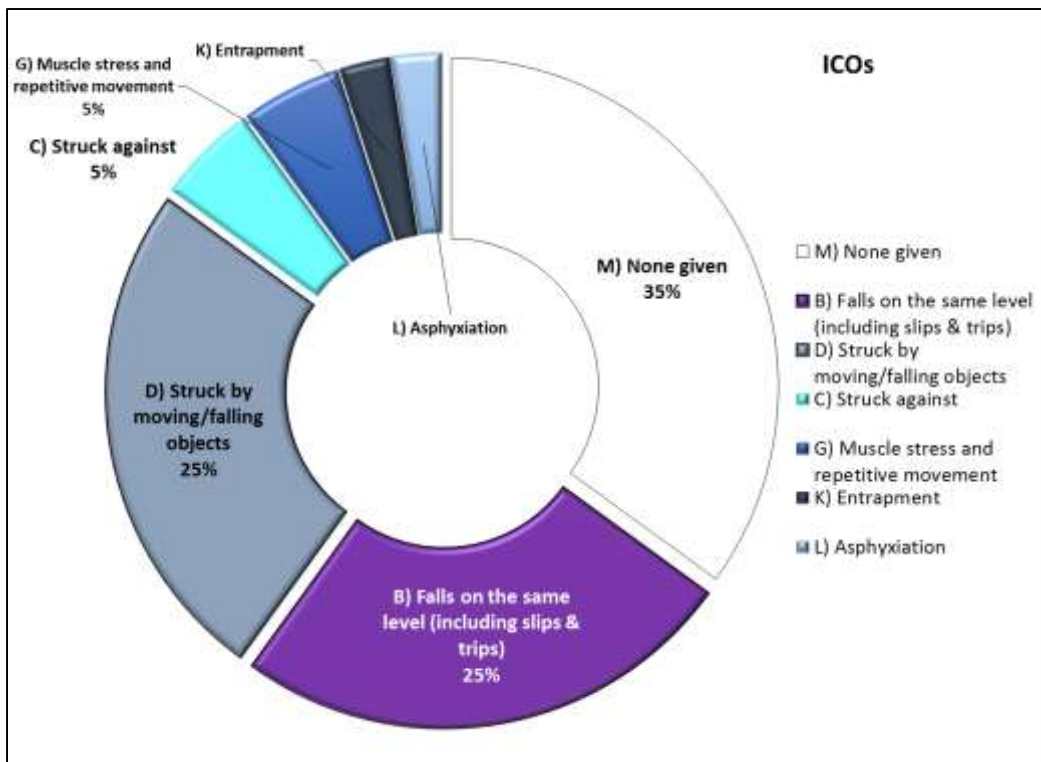


Figure 13 – Direct or immediate causes of LTIs amongst ICo members

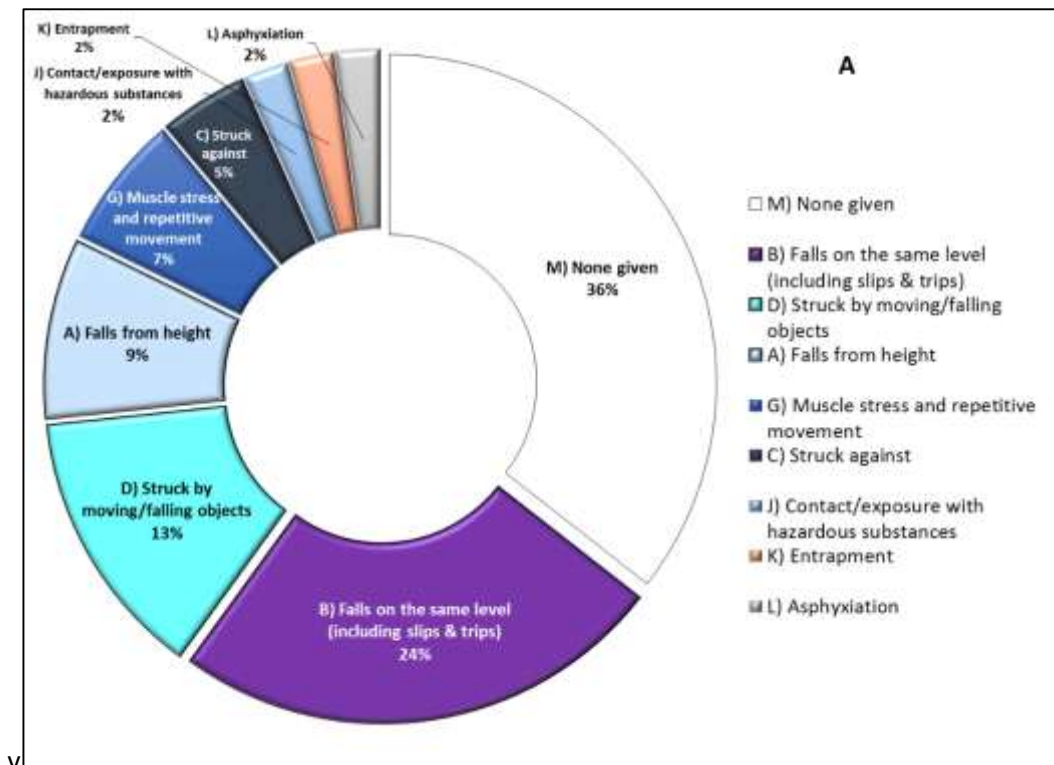


Figure 14 – Direct or immediate causes of LTIs in A-band members

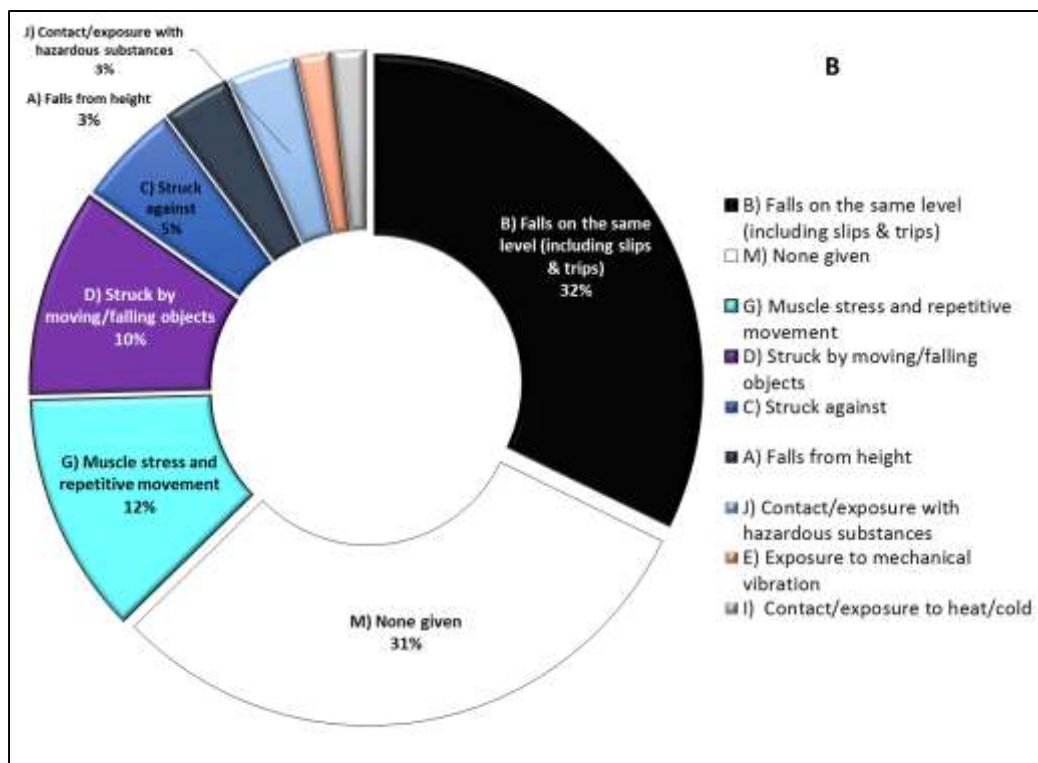


Figure 15 – Direct or immediate causes of LTIs in B-band members

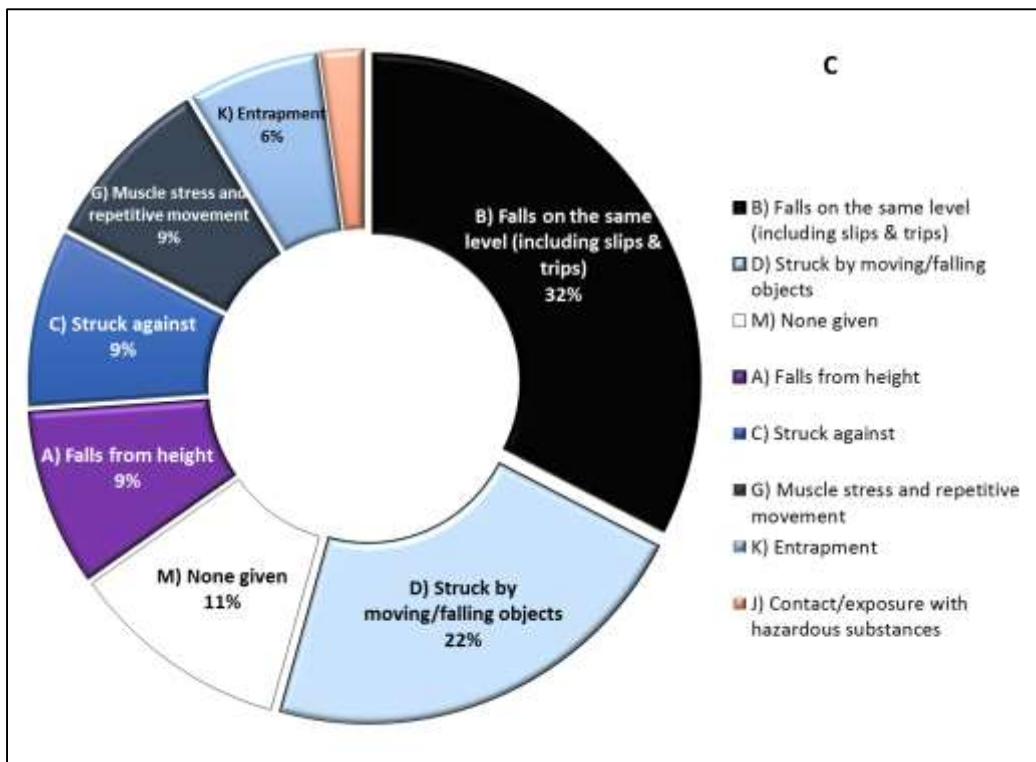


Figure 16 – Direct or immediate causes of LTIs in C-band members

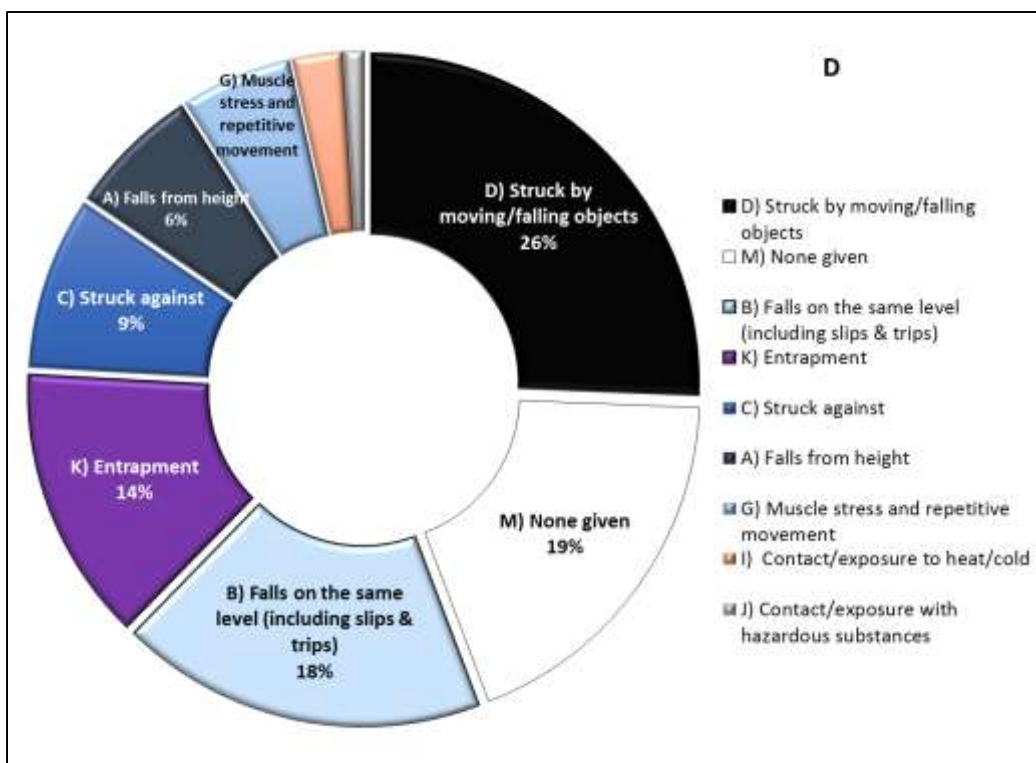


Figure 17 – Direct or immediate causes of LTIs in D-band members

6 Total Recordable Injury Rates (TRIR)

Total recordable injuries are tracked as they have been considered to be a more reliable pointer to safety in the industry. In 2015, the **overall TRIR** was 2.17 (2.18 in 2014). The **offshore TRIR** was 2.53 (2.60 in 2014).

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
2015	2.17	2.51	1.46

Table 8 – Total recordable injury rates (TRIR) 2004-2015

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
2015	4050	770	423	352	16	3191	622	280	297	16

Table 9 – Recordable injuries, medical treatment and first aid cases 2004-2015

7 Fatal Accident Rate (FAR)

IMCA contractor members reported sixteen fatalities during 2015. Nine of these fatalities were the result of one single incident. 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.

Basic, brief and anonymous information on fatalities – 2015

Crew member died as a result of head injury after being struck by snatch-block during sea-fastening operations
 Crew member sustained crush fatal injuries whilst moving heavy object
 Crew member crushed during cargo securing operations in heavy weather
 Nine crew members killed following gas leak, explosion and fire
 Crew member crushed between two pipes during pipe laying operations
 Saturation diver suffered fatal crush injuries during diving operations
 Crew member caught and fatally crushed during mooring operations
One further fatality occurred and no information was provided

Members will note that five of these incidents leading to a fatal injury have, as an immediate cause, a person was 'caught between' and sustained fatal crush injuries. Members may wish to address this trend in their own internal safety campaigns.

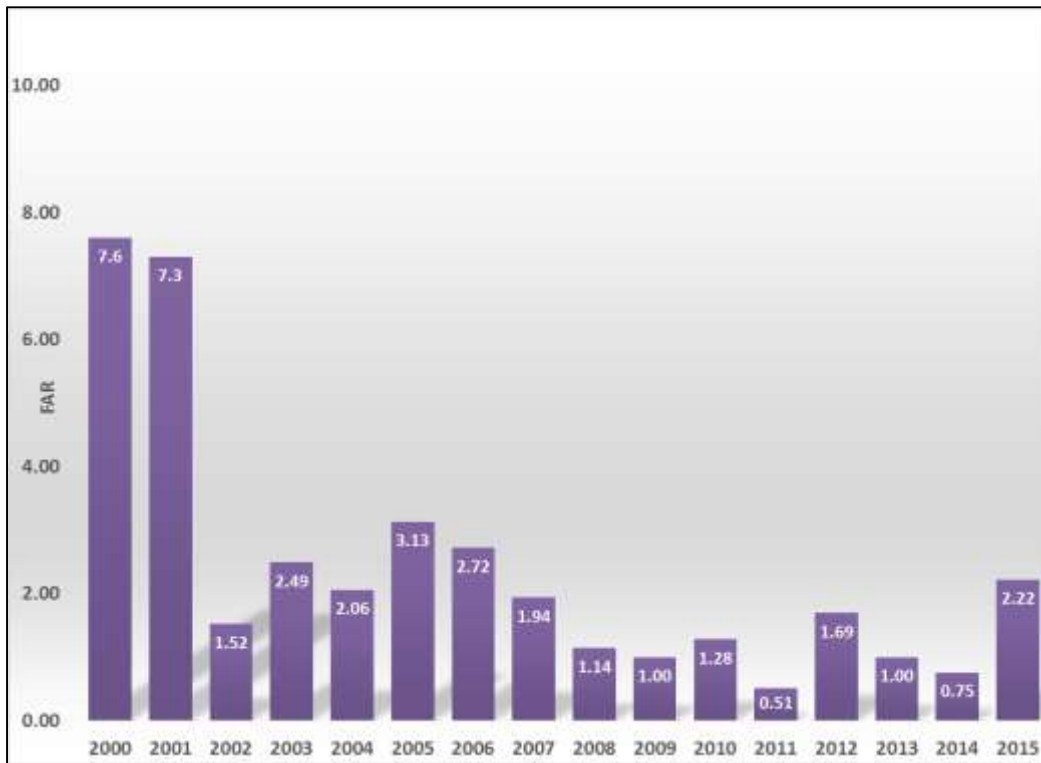


Figure 18 – Overall FAR 2000-2015

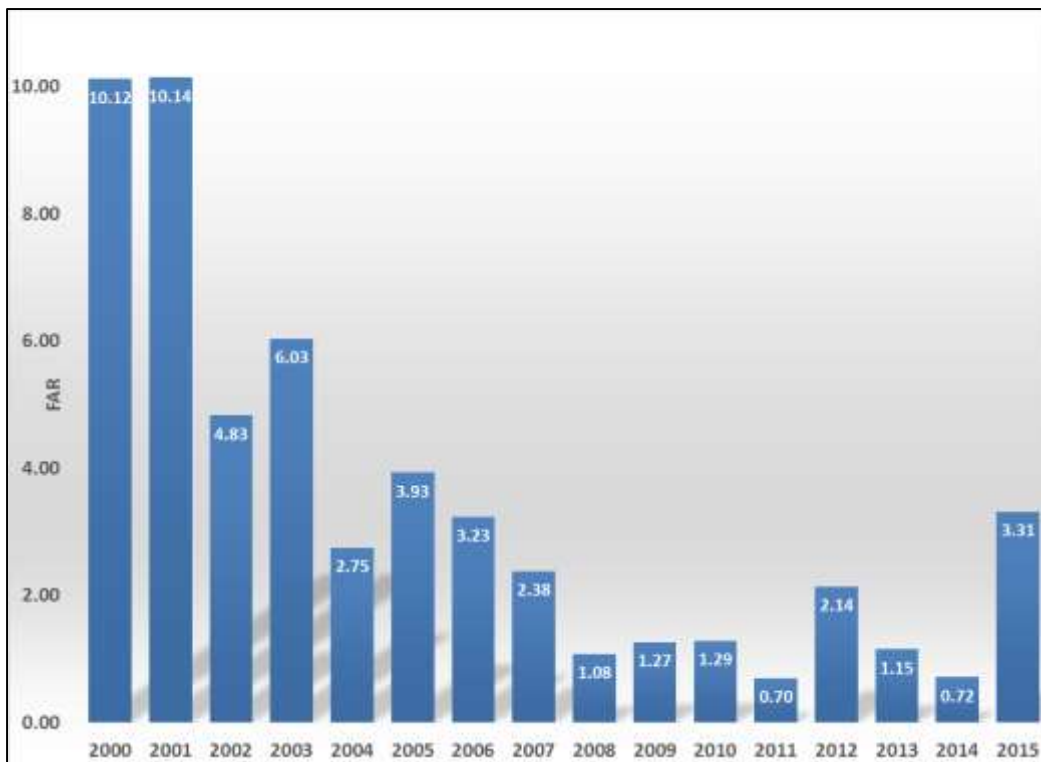


Figure 19 – Offshore FAR 2000-2015

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. Last year the boundaries of these bands were adjusted to cause a more equal and balanced number of companies to fall into each band. (From 2004-2013, the bands were as follows: Band A: <500,000; Band B: 500,000-1,000,000; Band C 1,000,000-5,000,000; Band D: >5,000,000.)

Year	Hours worked			
	Band A <300,000	Band B 300,000-1,200,000	Band C 1,200,000-3,000,000	Band D >3,000,000
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
2014	75	72	61	56
2015	79	77	47	48

Table 10 – Number of companies in each band

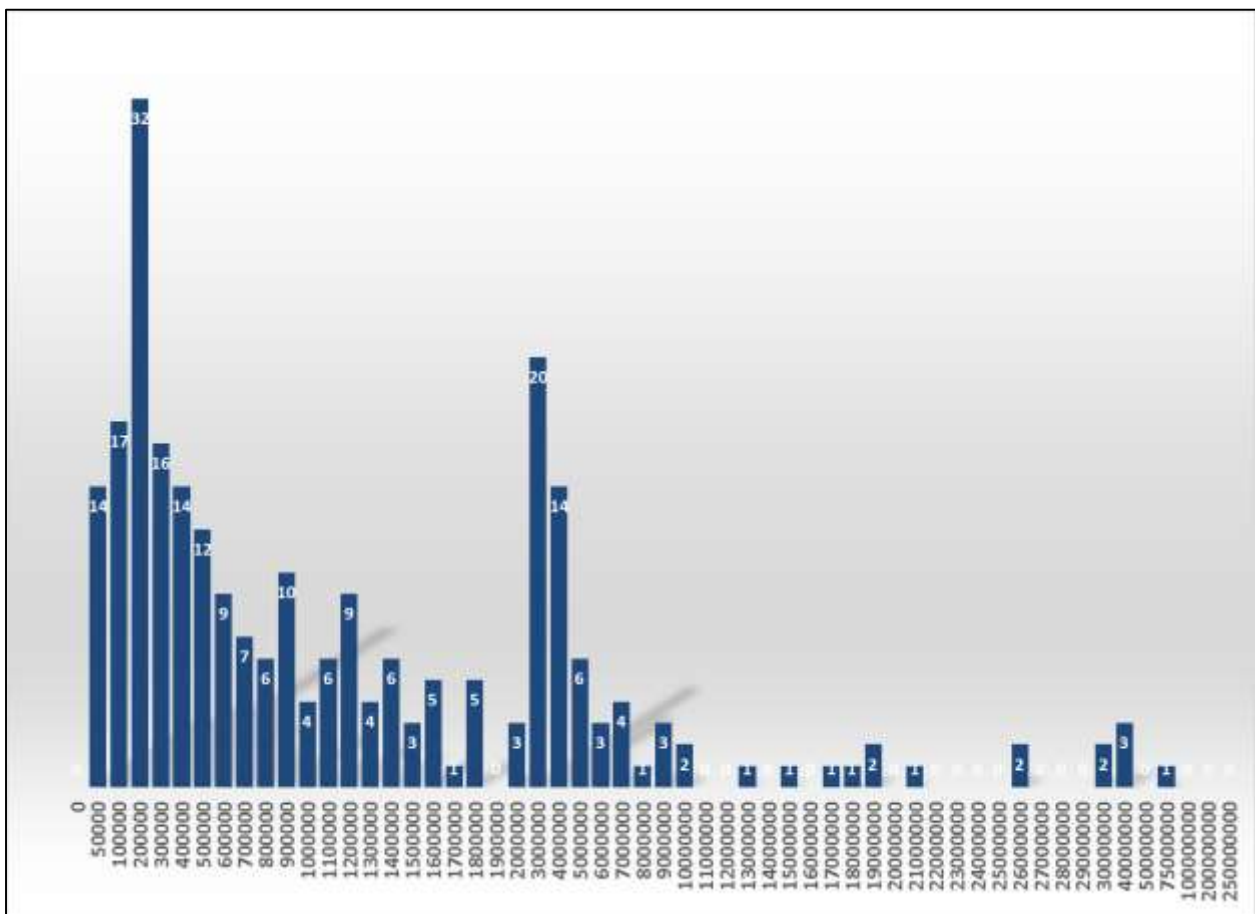


Figure 20 – Number of companies against size (overall man-hours), 2015

8.1 Indicators and Statistics by Company Bands

Key (please refer to Appendices 3 and 4 for further definition of these rates and acronyms)										
FAR	Fatal accident rate				RWC	Restricted workday cases				
TRI	Total recordable injury				TRIR	Total recordable injury frequency rate				
LTI	Lost time injury				LTIFR	Lost time injury frequency rate				
SOFR	Safety observation frequency				RAL	Reporting activity level				
MVR	Management visit ratio				Med trt	Medical treatment cases				
LLR	Lessons learnt ratio									

		Man-hours	FAR	LTIFR	TRIR	LTI	TRI	RWC	Medical treatment	First Aid
Offshore	Band A	7315212	0.00	4.92	9.84	36	72	4	32	91
	Band B	41218771	0.00	1.14	5.68	47	234	32	155	487
	Band C	75647203	1.32	0.54	2.50	40	189	55	93	580
	Band D	359061482	4.18	0.48	2.01	157	720	206	342	2033
Onshore	Band A	2973559	0.00	3.03	6.05	9	18	4	5	30
	Band B	12018387	0.00	1.08	5.41	13	65	4	48	143
	Band C	16281270	0.00	0.37	5.16	6	84	67	11	207
	Band D	205512458	0.00	0.00	0.87	44	179	51	84	479
Overall	Band A	10288771	0.00	4.37	8.75	45	90	8	37	121
	Band B	53237157	0.00	1.13	5.62	60	299	36	203	630
	Band C	91928473	1.09	0.51	2.97	46	273	122	104	787
	Band D	564573940	2.66	0.38	1.59	201	899	257	426	2512

Table 11 – Lagging indicators and statistics by company band 2015

	Safety Obs	SOFR	RAL	Management Visits	MVR	Safety Bulletins	LLR
Band A	15291	305.04	64.23	792	15.80	567	11.31
Band B	122603	465.89	61.48	2081	7.91	1341	5.10
Band C	212938	467.71	61.37	4663	10.24	730	1.60
Band D	853264	313.95	27.59	15738	5.79	1069	0.39
Total/IMCA	1204096	345.37	22.20	23274	6.68	3707	1.06

Table 12 – Leading indicators and statistics by company band 2015

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
2014	2.56	1.24	0.80	0.40	8.15	6.43	2.95	1.61
2015	4.37	1.13	0.51	0.38	8.75	5.62	2.97	1.59

Table 13 – Overall LTIFR and TRIR by company band, 2001-2015

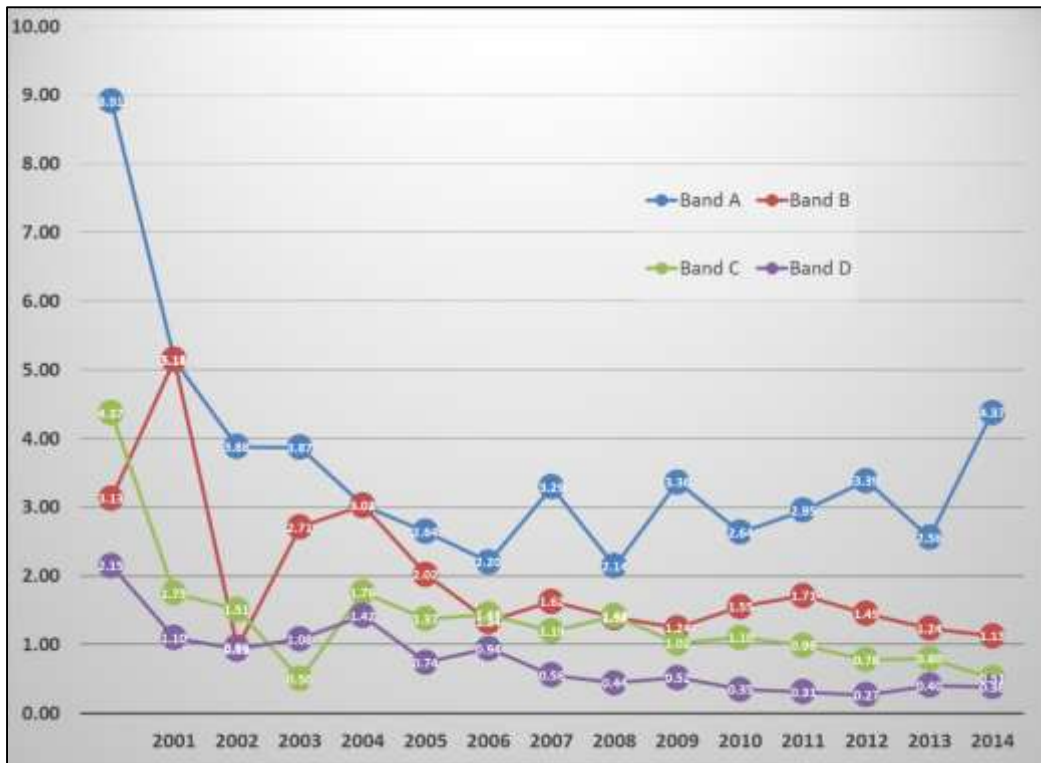


Figure 21 – Overall LTIFR for company bands

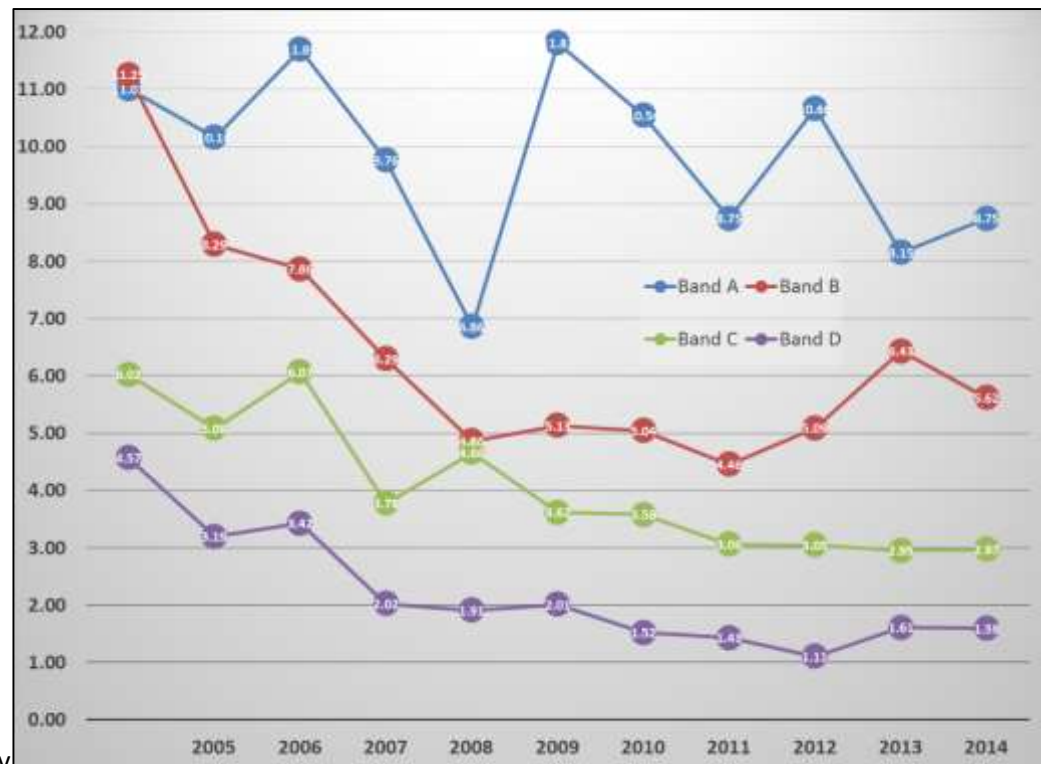


Figure 22 – Overall TRIR for company bands

9 Leading Performance Indicators

9.1 Overall

Table 14 shows how the IMCA leading performance indicators have changed over time. Discovered errors in the calculation for IMCA reporting activity level have led to a full recalculation of all figures back to 2005.

	SOFR	RAL	MVR	LLR
2005	190.19	45.39	7.32	2.29
2006	159.49	35.94	3.46	1.70
2007	153.02	39.72	4.10	2.27
2008	216.63	22.48	6.31	1.77
2009	209.25	25.88	13.61	1.29
2010	258.39	26.68	13.59	1.61
2011	265.20	23.88	5.81	1.23
2012	312.34	19.78	6.92	1.42
2013	328.80	17.39	7.30	1.04
2014	359.71	22.27	6.44	1.75
2015	345.37	22.20	6.68	1.06

Table 14 – Leading performance indicators 2005-2015

	SOFR	RAL	MVR	LLR
AP	397.08	28.58	4.26	1.67
CNA	239.50	41.50	3.63	0.48
EA	382.85	60.93	6.15	1.57
MEI	260.10	55.87	10.31	1.79
SA	989.16	58.37	1.20	5.58
GCo	329.93	31.57	9.81	0.14
ICo	386.13	37.76	2.51	0.07
IMCA	345.37	22.20	6.68	1.06

Table 15 – Leading safety indicators (overall) by region, 2015

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 235 of the 251 contributing contractors. We continue to see widely variant interpretations of the definition of a 'safety observation'. Data from five contractors were omitted from the IMCA calculation, as being an improbably high number of safety observations given the man-hours reported; data from a further three contractors data was left in, as being right at the edge of the probable.

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	192	42.8	64	43	85.7	127	19008	1266.0	190	1104	193.8
2	5462	1789.7	65	1726	258.1	128	430	995.0	191	32673	198.2
3		0.0	66	382	12.9	129	325	172.3	192	1174	1282.2
4	3844	625.0	67	2458	114.5	130	661	161.5	193	6620	435.5
5	2706	181.8	68	1401	731.0	131	750	58.8	194	8158	64.9
6	10235	276.3	69	111	17.0	132	26292	364.7	195	1873	300.4
7	611	51.2	70	15012	4109.6	133	94679	269.2	196	17248	1059.4
8		0.0	71	98	53.2	134	5092	108.3	197	191	39.1
9	71	38.8	72	407	317.6	135	27906	438.1	198		0.0
10		0.0	73	13914	2441.7	136	268	106.7	199	12	8.8
11	132	25.7	74	1753	458.8	137	173	41.9	200	60	343.6

No.	Safety Obs	SOFR	No.	Safety Obs	SOFR	No.	Safety Obs	SOFR	No.	Safety Obs	SOFR
12	1514	432.5	75	25605	4365.6	138	1501	231.2	201	3517	597.8
13	28422	866.0	76	259	127.3	139	21	12.2	202	20	32.0
14		0.0	77	652	133.7	140	3629	504.8	203	1090	1391.3
15	42035	1941.9	78	1051	101.3	141	5693	530.5	204	42	44.2
16		0.0	79	129	26.9	142	14238	2083.4	205	30	29.9
17	278	21.2	80	101	60.9	143	2221	198.5	206	1387	2146.9
18	20	52.2	81	529	371.8	144	3608	513.4	207	12	11.7
19	56	173.0	82	364	222.4	145	21	12.0	208	23	138.6
20	181	32.6	83	77	0.8	146	1453	243.4	209	1283	187.7
21	523	36.2	84	6561	143.0	147	5	31.6	210		0.0
22	32735	1199.4	85	68	118.6	148	61	113.8	211	11742	618.8
23	2838	517.7	86	227	92.1	149	48339	4132.6	212	0	0.0
24	1789	380.0	87	196	74.5	150	61	74.1	213	174	397.9
25	3	3.0	88	4079	708.7	151	5290	383.2	214	7046	468.5
26	34864	375.4	89	22	57.8	152	49256	393.5	215	15	372.6
27	15	7.0	90	792	132.5	153	19	111.1	216	505	246.8
28	54	40.4	91	3562	1098.5	154	8	2.4	217	19	6.3
29	9	8.1	92	112	182.6	155	2715	100.8	218	194	83.4
30	11307	271.2	93	111	142.1	156	12	10.3	219	540	588.4
31	1236	367.2	94	1372	516.2	157	12342	147.9	220	4711	135.2
32	22654	1541.3	95	374	143.0	158	15	15.1	221	185	208.4
33	42	77.9	96	467	30.2	159	100	65.5	222	7093	1740.4
34	1	2.2	97	147	640.7	160	448	161.1	223	498	14.9
35	116	168.7	98	1258	606.9	161	2	3.7	224	203	47.7
36	867	322.9	99	42322	285.0	162		0.0	225	15	22.2
37	3171	925.1	100		0.0	163	17	76.0	226		0.0
38	595	823.3	101	779	230.8	164	400	50.5	227	1920	528.8
39	131	175.8	102	21342	481.3	165	15	11.1	228	700	237.5
40		0.0	103	209	145.0	166	2134	243.9	229	130	1.5
41	1499	5414.7	104	1299	145.0	167	178	73.6	230	915	42.3
42	3478	453.4	105	17791	2361.1	168	204	21.3	231		0.0
43	1407	1170.7	106	307	159.0	169	6934	377.3	232	26	16.6
44	2335	373.6	107	228	33.6	170	12	7.9	233	129	244.5
45	41	59.0	108	6106	1613.6	171	264	22.0	234	743	550.4
46	2630	525.4	109	6	80.6	172	214	56.7	235	780	189.5
47	12	11.1	110	1133	155.2	173	26855	2749.7	236	710	160.4
48	2	1.5	111	941	119.7	174	1092	792.2	237	300	16.7
49		0.0	112	3715	277.5	175	673	326.1	238	6069	677.1
50	531	197.5	113	79197	505.0	176	17635	864.9	239	835	76.8
51	29	22.3	114	280	456.2	177	92996	636.0	240	8284	268.8
52	812	2665.5	115	6704	845.2	178	591	105.4	241	222	96.3
53	13	33.5	116	1081	1617.1	179	134	148.1	242	1659	91.2
54	177	533.3	117	2990	594.7	180	1001	163.3	243	997	245.6
55	2794	1308.6	118	678	391.6	181	774	304.2	244	250	152.1
56	7115	382.6	119	25831	1255.3	182	5873	514.5	245	5176	596.2
57	43	56.7	120	4897	942.7	183	302	503.7	246	218	493.9
58	598	137.2	121	4	1.1	184	73	98.8	247	140	409.3
59	423	53.4	122	5770	139.9	185	305	44.6	248	89	220.4
60	184	1447.3	123	40	128.6	186	2	4.0	249	59	103.7
61		0.0	124		0.0	187	1589	121.2	250	4863	403.5
62	11871	69.3	125		0.0	188	6511	408.6	251	927	169.1
63	6068	328.9	126	5137	256.6	189	100	7.2	IMCA	1204096	345.37

Table 16 – Safety observation frequency rate (SOFR) 2015

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 definition of FNMR, MTR and RWIR can be found in 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. Companies reporting relatively low man-hours may find they have a reporting activity level that is anomalously high. The overall (IMCA) figure for all years was recalculated this year after discovery of errors in the arithmetic. The data for individual companies in previous years remains unchanged.

Reporting activity level (RAL) = ((5 x FNMR) + (20 x MTR) + (100 x RWIR)). For consistency with the other leading indicators, this is calculated per **200,000 man-hours**.

No.	First Aid	Med trt	RWP	RAL	No.	First Aid	Med trt	RWP	RAL	No.	First Aid	Med trt	RWP	RAL
1	19	3	1	56.9	85	0	0	0	0.0	169	41	7	0	18.8
2	19	0	0	31.1	86	11	4	1	95.3	170	4	5	0	79.2
3	0	4	0	8.2	87	7	1	0	20.9	171	46	1	1	29.1
4	3	1	2	38.2	88	4	2	0	10.4	172	4	0	1	31.8
5	0	2	0	2.7	89	4	0	0	52.6	173	5	2	0	6.7
6	68	6	3	20.5	90	15	3	0	22.6	174	0	0	0	0.0
7	20	1	1	18.4	91	0	0	0	0.0	175	6	0	0	14.5
8	2	1	0	2.0	92	0	0	0	0.0	176	7	8	1	14.5
9	3	5	1	117.5	93	0	0	0	0.0	177	152	14	12	15.3
10	14	5	0	10.3	94	10	0	0	18.8	178	10	1	0	12.5
11	1	3	0	12.7	95	0	4	0	30.6	179	0	0	0	0.0
12	159	61	0	575.6	96	20	13	5	55.7	180	12	2	2	48.9
13	16	10	2	14.6	97	0	0	0	0.0	181	0	1	0	7.9
14	28	4	0	15.4	98	0	0	0	0.0	182	16	1	0	8.8
15	54	4	10	62.4	99	89	18	5	8.8	183	2	0	0	16.7
16	14	0	0	104.1	100	12	0	0	14.2	184	0	0	0	0.0
17	6	1	2	19.1	101	4	0	3	94.8	185	0	4	0	11.7
18	0	0	0	0.0	102	40	7	3	14.4	186	1	1	0	50.5
19	0	0	0	0.0	103	3	0	0	10.4	187	20	2	1	18.3
20	8	5	1	43.2	104	0	1	0	2.2	188	0	3	0	3.8
21	1	4	1	12.8	105	36	1	3	66.4	189	14	5	0	12.2
22	29	7	0	10.4	106	5	0	0	12.9	190	1	0	1	18.4
23	2	2	0	9.1	107	0	0	0	0.0	191	122	10	3	6.7
24	3	0	0	3.2	108	2	2	0	13.2	192	1	0	0	5.5
25	1	1	1	127.0	109	0	0	0	0.0	193	2	3	0	4.6
26	136	22	12	25.0	110	6	3	0	12.3	194	264	12	27	33.9
27	1	0	0	2.3	111	1	2	0	5.7	195	7	2	0	12.0
28	3	2	0	41.1	112	11	1	0	5.6	196	33	5	3	34.7
29	2	1	0	27.1	113	91	15	16	15.0	197	4	1	0	8.2
30	27	8	0	7.1	114	0	2	1	228.1	198	0	0	0	0.0
31	3	0	0	4.5	115	13	1	0	10.7	199	8	0	0	29.4
32	9	0	1	9.9	116	2	0	0	15.0	200	0	0	0	0.0
33	0	0	0	0.0	117	3	0	1	22.9	201	42	2	1	59.5
34	0	0	0	0.0	118	2	0	1	63.5	202	0	0	0	0.0
35	1	0	0	7.3	119	52	5	7	51.5	203	3	1	0	44.7
36	3	4	0	35.4	120	16	1	1	38.5	204	0	0	0	0.0
37	0	0	0	0.0	121	0	2	0	10.9	205	0	0	0	0.0
38	0	0	0	0.0	122	1	0	0	0.1	206	0	0	0	0.0
39	9	5	0	194.6	123	0	0	0	0.0	207	0	0	0	0.0
40	12	0	0	85.5	124	152	4	64	722.5	208	0	0	0	0.0
41	0	0	0	0.0	125	0	0	0	0.0	209	0	0	5	73.2
42	1	0	2	26.7	126	84	6	10	76.9	210	1	0	0	50.3
43	0	0	0	0.0	127	16	1	6	46.6	211	8	2	0	4.2
44	26	0	0	20.8	128	0	0	0	0.0	212	0	0	0	0.0
45	11	12	0	424.6	129	1	0	0	2.7	213	0	0	0	0.0
46	2	1	0	6.0	130	2	1	1	31.8	214	36	1	0	13.3

No.	First Aid	Med trt	RWP	RAL	No.	First Aid	Med trt	RWP	RAL	No.	First Aid	Med trt	RWP	RAL
47	4	1	0	36.9	131	3	2	1	12.2	215	0	1	1	2980.6
48	9	2	0	64.4	132	26	12	6	13.5	216	9	1	0	31.8
49	0	0	0	0.0	133	185	39	20	10.5	217	0	0	0	0.0
50	5	2	0	24.2	134	167	5	17	56.1	218	0	0	0	0.0
51	0	0	0	0.0	135	108	11	3	16.6	219	1	0	0	5.4
52	1	0	0	16.4	136	15	0	0	29.8	220	53	6	10	39.8
53	0	0	0	0.0	137	3	0	0	3.6	221	1	0	0	5.6
54	0	0	0	0.0	138	10	3	1	32.3	222	0	1	0	4.9
55	4	0	2	103.0	139	5	0	0	14.6	223	66	15	11	51.6
56	0	2	0	2.2	140	4	7	0	22.3	224	0	0	0	0.0
57	1	0	0	6.6	141	28	5	5	69.0	225	0	0	0	0.0
58	10	0	1	34.4	142	36	1	0	29.3	226	0	0	0	0.0
59	13	4	2	43.6	143	14	4	1	22.3	227	0	0	0	0.0
60	3	0	0	118.0	144	0	0	0	0.0	228	0	0	1	33.9
61	0	0	0	0.0	145	72	60	6	1239.4	229	38	1	0	2.4
62	96	21	4	7.6	146	19	3	1	42.7	230	0	1	0	0.9
63	4	1	0	2.2	147	0	0	0	0.0	231	3	0	0	122.4
64	0	0	0	0.0	148	0	0	0	0.0	232	0	0	0	0.0
65	22	1	1	34.4	149	30	5	0	21.4	233	0	0	0	0.0
66	5	10	3	17.8	150	0	0	0	0.0	234	6	0	0	22.2
67	26	25	10	75.9	151	26	1	1	18.1	235	9	10	4	156.7
68	0	0	0	0.0	152	62	5	20	19.3	236	11	1	0	16.9
69	0	0	1	15.3	153	0	0	1	584.6	237	0	4	2	15.6
70	1	1	0	6.8	154	16	1	0	30.1	238	12	0	0	6.7
71	0	0	0	0.0	155	97	19	5	50.7	239	44	6	5	77.3
72	1	0	0	3.9	156	0	0	0	0.0	240	0	10	0	6.5
73	3	1	1	23.7	157	79	19	8	18.9	241	0	0	0	0.0
74	11	1	0	19.6	158	0	1	1	120.6	242	10	1	2	14.8
75	0	0	0	0.0	159	0	0	0	0.0	243	4	1	0	9.9
76	15	1	0	46.7	160	6	0	0	10.8	244	2	1	0	18.2
77	1	0	1	21.5	161	2	0	0	18.5	245	6	2	0	8.1
78	20	11	15	175.3	162	0	0	0	0.0	246	1	0	0	11.3
79	13	2	0	21.9	163	1	3	0	290.6	247	2	1	1	380.1
80	0	1	0	12.1	164	22	1	2	41.6	248	0	1	0	49.5
81	0	1	1	84.3	165	5	0	1	92.3	249	2	1	0	52.7
82	1	0	4	247.4	166	9	2	1	21.1	250	41	1	1	27.0
83	0	0	0	0.0	167	3	2	0	22.7	251	4	0	1	21.9
84	44	13	10	32.3	168	12	0	0	6.3	IMCA	4006	759	422	22.2

Table 17 – Reporting activity level (RAL) 2015

9.4 Management Visit Ratio (MVR)

Management visit ratio (MVR) = Number of managerial visits per **200,000** man-hours.

Management visit data was provided by 244 of 251 contractors. Data from 12 contractors were omitted from the IMCA calculation as somewhat improbable given the man-hours reported and criteria for a management visit which were stated in the guide to contributors. In general, 'improbable' means 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 hours days). 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.

No.	Management visits	MVR	No.	Management visits	MVR	No.	Management visits	MVR	No.	Management visits	MVR
1		0.0	64	7	14.0	127	50	3.3	190	17	3.0
2	76	24.9	65	153	22.9	128	5	11.6	191		0.0
3		0.0	66	110	3.7	129	32	17.0	192	2	2.2
4	70	11.4	67	156	7.3	130	85	20.8	193	413	27.2
5	81	5.4	68	76	39.7	131	20	1.6	194	750	6.0
6	54	1.5	69	164	25.1	132	387	5.4	195	20	3.2
7	22	1.8	70	92	25.2	133	2277	6.5	196	147	9.0
8	106	7.1	71	12	6.5	134	207	4.4	197	27	5.5
9	13	7.1	72	3	2.3	135	504	7.9	198	8	62.2
10	0	0.0	73	110	19.3	136	7	2.8	199	45	33.1
11	40	7.8	74	143	37.4	137	14	3.4	200	2	11.5
12		0.0	75	20	3.4	138	34	5.2	201	16	2.7
13	158	4.8	76	15	7.4	139	31	18.0	202	6	9.6
14		0.0	77	52	10.7	140	110	15.3	203	5	6.4
15	185	8.5	78	9	0.9	141	40	3.7	204	12	12.6
16		0.0	79	24	5.0	142	27	4.0	205	17	17.0
17	55	4.2	80	2	1.2	143	33	2.9	206	12	18.6
18	4	10.4	81	15	10.5	144	1	0.1	207	8	7.8
19	8	24.7	82	5	3.1	145	3	1.7	208		0.0
20	0	0.0	83	45	0.5	146	10	1.7	209	16	2.3
21	25	1.7	84	30	0.7	147	6	37.9	210		0.0
22	988	36.2	85	1	1.7	148	18	33.6	211	15	0.8
23	13	2.4	86	6	2.4	149	48	4.1	212		0.0
24	90	19.1	87	140	53.2	150	0	0.0	213	10	22.9
25	24	24.4	88	21	3.6	151	279	20.2	214		0.0
26	41	0.4	89		0.0	152	789	6.3	215		0.0
27	6	2.8	90	21	3.5	153		0.0	216	7	3.4
28	13	9.7	91		0.0	154	9	2.7	217	28	9.3
29	120	108.2	92	9	14.7	155	11	0.4	218	4	1.7
30	15	0.4	93	12	15.4	156	12	10.3	219	7	7.6
31	28	8.3	94	4	1.5	157	26	0.3	220	226	6.5
32	535	36.4	95	11	4.2	158	21	21.1	221	5	5.6
33	10	18.6	96	80	5.2	159	10	6.5	222	16	3.9
34	2	4.4	97		0.0	160	9	3.2	223	312	9.3
35	13	18.9	98	4	1.9	161	15	27.7	224	14	3.3
36	20	7.4	99	4660	31.4	162	12	23.2	225	23	34.1
37	13	3.8	100	35	8.3	163	10	44.7	226	0	0.0
38	1	1.4	101	65	19.3	164	11	1.4	227	12	3.3
39	7	9.4	102	169	3.8	165	18	13.3	228	25	8.5
40		0.0	103	16	11.1	166	128	14.6	229	184	2.1
41	3	10.8	104	277	30.9	167		0.0	230	4	0.2
42	87	11.3	105	35	4.6	168	62	6.5	231		0.0
43	12	10.0	106	14	7.2	169	72	3.9	232	10	6.4
44	56	9.0	107	12	1.8	170	45	29.7	233	1	1.9
45	1	1.4	108	7	1.8	171	56	4.7	234	9	6.7
46	10	2.0	109	4	53.8	172	9	2.4	235	14	3.4
47	6	5.5	110	100	13.7	173	110	11.3	236	60	13.6
48	9	6.8	111	60	7.6	174	2	1.5	237	12	0.7
49		0.0	112	12	0.9	175	127	61.5	238	64	7.1
50	28	10.4	113	422	2.7	176	1154	56.6	239	640	58.9
51	4	3.1	114	32	52.1	177	390	2.7	240	122	4.0
52	7	23.0	115	503	63.4	178	39	7.0	241	24	10.4

No.	Management visits	MVR	No.	Management visits	MVR	No.	Management visits	MVR	No.	Management visits	MVR
53	14	36.0	116	24	35.9	179	20	22.1	242	4	0.2
54	8	24.1	117	25	5.0	180		0.0	243	36	8.9
55	3	1.4	118		0.0	181	17	6.7	244	2	1.2
56	8	0.4	119	17	0.8	182	26	2.3	245	6	0.7
57	1	1.3	120	58	11.2	183	6	10.0	246	52	117.8
58	53	12.2	121	4	1.1	184	10	13.5	247	4	11.7
59	20	2.5	122	80	1.9	185		0.0	248	26	64.4
60		0.0	123	3	9.6	186	2	4.0	249		0.0
61		0.0	124	420	41.9	187	137	10.4	250	14	1.2
62	124	0.7	125	14	7.3	188	38	2.4	251	29	5.3
63	25	1.4	126	104	5.2	189	60	4.3	IMCA	23274	6.7

Table 18 – Management visit ratio (MVR) data 2015

9.5 Lessons Learnt Ratio (LLR)

229 of 251 contractors contributed data on safety bulletins.

Lessons learnt ratio (LLR) = Number of bulletins issued per **200,000** man-hours.

No.	Safety Bulletins	LLR	No.	Safety Bulletins	LLR	No.	Safety Bulletins	LLR	No.	Safety Bulletins	LLR
1	0	0.0	64	4	8.0	127	36	2.4	190	0	0.0
2	9	2.9	65	0	0.0	128	0	0.0	191	0	0.0
3		0.0	66	50	1.7	129	30	15.9	192	6	6.6
4	56	9.1	67	0	0.0	130	0	0.0	193	0	0.0
5	51	3.4	68		0.0	131	0	0.0	194	25	0.2
6	32	0.9	69	46	7.0	132	18	0.2	195	20	3.2
7	4	0.3	70	0	0.0	133	0	0.0	196	83	5.1
8		0.0	71	54	29.3	134	0	0.0	197	4	0.8
9	0	0.0	72		0.0	135	2	0.0	198	0	0.0
10	1	0.1	73	11	1.9	136	12	4.8	199	14	10.3
11	17	3.3	74	2	0.5	137	0	0.0	200		0.0
12		0.0	75	93	15.9	138	4	0.6	201	8	1.4
13	0	0.0	76	19	9.3	139	0	0.0	202	25	40.0
14		0.0	77	27	5.5	140	0	0.0	203	0	0.0
15	45	2.1	78	9	0.9	141	0	0.0	204	6	6.3
16		0.0	79	0	0.0	142	0	0.0	205	17	17.0
17	15	1.1	80	8	4.8	143	16	1.4	206	6	9.3
18	12	31.3	81	38	26.7	144	4	0.6	207		0.0
19	1	3.1	82	1	0.6	145	3	1.7	208	0	0.0
20	0	0.0	83		0.0	146	4	0.7	209	33	4.8
21	2	0.1	84	22	0.5	147	5	31.6	210		0.0
22	24	0.9	85	24	41.8	148	0	0.0	211	17	0.9
23	82	15.0	86	27	11.0	149	5	0.4	212	0	0.0
24	0	0.0	87	62	23.6	150	4	4.9	213	12	27.4
25	30	30.5	88	125	21.7	151	0	0.0	214		0.0
26	14	0.2	89	0	0.0	152	0	0.0	215		0.0
27	6	2.8	90	105	17.6	153	0	0.0	216	45	22.0
28	22	16.4	91		0.0	154	21	6.3	217	0	0.0
29	9	8.1	92	6	9.8	155	0	0.0	218	2	0.9
30	6	0.1	93	15	19.2	156	0	0.0	219	30	32.7
31	12	3.6	94	0	0.0	157	14	0.2	220	17	0.5
32	24	1.6	95	2	0.8	158		0.0	221	0	0.0
33	2	3.7	96	0	0.0	159	27	17.7	222		0.0
34	0	0.0	97	12	52.3	160	9	3.2	223	0	0.0
35	0	0.0	98	26	12.5	161	5	9.2	224		0.0
36	36	13.4	99	0	0.0	162	0	0.0	225	0	0.0
37	229	66.8	100	8	1.9	163	0	0.0	226	10	67.1
38	0	0.0	101	5	1.5	164	13	1.6	227	2	0.6

No.	Safety Bulletins	LLR	No.	Safety Bulletins	LLR	No.	Safety Bulletins	LLR	No.	Safety Bulletins	LLR
39	5	6.7	102	187	4.2	165	4	3.0	228	0	0.0
40		0.0	103	0	0.0	166	3	0.3	229	50	0.6
41	0	0.0	104	67	7.5	167	12	5.0	230	19	0.9
42	0	0.0	105	4	0.5	168	12	1.3	231	7	57.1
43	0	0.0	106	0	0.0	169	21	1.1	232	6	3.8
44	67	10.7	107	56	8.2	170	2	1.3	233	7	13.3
45	12	17.3	108	22	5.8	171	12	1.0	234	30	22.2
46		0.0	109	0	0.0	172	1	0.3	235	0	0.0
47	12	11.1	110	154	21.1	173	5	0.5	236	1	0.2
48	0	0.0	111		0.0	174	1	0.7	237	5	0.3
49		0.0	112	0	0.0	175	0	0.0	238	0	0.0
50	58	21.6	113	0	0.0	176	61	3.0	239	71	6.5
51		0.0	114	0	0.0	177	54	0.4	240	44	1.4
52	0	0.0	115	14	1.8	178	29	5.2	241	0	0.0
53	0	0.0	116	21	31.4	179	19	21.0	242	0	0.0
54	0	0.0	117	24	4.8	180		0.0	243	4	1.0
55	4	1.9	118	0	0.0	181	0	0.0	244	43	26.2
56	4	0.2	119	120	5.8	182	0	0.0	245	0	0.0
57	48	63.3	120	0	0.0	183	0	0.0	246	4	9.1
58	0	0.0	121	2	0.5	184	32	43.3	247	23	67.2
59	1	0.1	122	12	0.3	185		0.0	248	8	19.8
60		0.0	123	4	12.9	186	0	0.0	249	15	26.4
61	0	0.0	124		0.0	187	0	0.0	250	6	0.5
62	0	0.0	125	0	0.0	188	5	0.3	251	0	0.0
63	5	0.3	126	25	1.2	189	7	0.5	IMCA	3707	1.06

Table 19 – Lessons learnt ratio (LLR) data 2015

Individual Company LTIFR and TRIR Statistics

The following tables show the important statistical rates for each of the 251 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.

No.	Banding	Offshore LTIFR	Offshore TRIR	Onshore LTIFR	Onshore TRIR	Overall LTIFR	Overall TRIR
IMCA		0.61	2.51	0.30	1.46	0.51	2.17
1	B	33.04	33.04	9.02	14.18	12.27	16.73
2	B	0.00	0.00			0.00	0.00
3	C	0.99	4.96	0.00	0.00	0.51	2.57
4	C	0.00	2.51	0.00	0.00	0.00	2.44
5	D	1.01	1.68	2.16	2.16	1.16	1.74
6	D	0.95	2.22	0.92	1.83	0.94	2.16
7	C	0.84	1.68	0.00	0.00	0.77	1.54
8	C	0.00	0.34			0.00	0.34
9	B	2.73	19.13	0.00	0.00	2.57	18.02
10	D	0.00	1.22	0.00	71.27	0.00	1.52
11	B	0.00	3.36	0.00	0.00	0.00	2.92
12	B	9.57	57.39	0.00	202.92	7.14	94.27
13	D	0.30	2.13			0.30	2.13
14	C	1.06	2.47	0.00	0.00	1.05	2.45
15	D	0.23	3.46	0.00	0.00	0.21	3.09
16	A	0.00	0.00	15.95	15.95	7.44	7.44
17	C	0.38	1.52			0.38	1.52
18	A	0.00	0.00	0.00	0.00	0.00	0.00
19	A	0.00	0.00			0.00	0.00
20	B	1.13	7.92	0.00	0.00	0.90	6.30
21	C	0.35	1.39	0.00	841.75	0.35	2.08
22	D	1.05	2.53	0.00	0.00	0.92	2.20
23	B	0.00	1.82			0.00	1.82
24	B	1.25	1.25	0.00	0.00	1.06	1.06
25	A	33.12	49.68	14.65	21.98	20.32	30.48
26	D	0.32	2.15			0.32	2.15
27	B	0.00	0.00	4.66	4.66	4.65	4.65
28	A	3.74	11.21			3.74	11.21
29	A	4.51	9.02	0.00	0.00	3.97	7.95
30	D	1.76	3.52	0.00	0.23	0.84	1.80
31	B	0.00	0.00	0.00	0.00	0.00	0.00
32	C	0.37	0.75	0.00	0.00	0.34	0.68
33	A	0.00	0.00	0.00	0.00	0.00	0.00
34	A	11.11	11.11			11.11	11.11
35	A	0.00	0.00	0.00	0.00	0.00	0.00

No.	Banding	Offshore LTIFR	Offshore TRIR	Onshore LTIFR	Onshore TRIR	Overall LTIFR	Overall TRIR
IMCA		0.61	2.51	0.30	1.46	0.51	2.17
36	B	0.00	7.45			0.00	7.45
37	B	0.00	0.00	0.00	0.00	0.00	0.00
38	A	0.00	0.00			0.00	0.00
39	A	26.84	60.39			26.84	60.39
40	A	0.00	0.00			0.00	0.00
41	A	0.00	0.00	0.00	0.00	0.00	0.00
42	C	0.00	1.42	0.00	0.00	0.00	1.30
43	B	4.16	4.16	0.00	0.00	2.21	2.21
44	C	0.00	0.00	0.00	0.00	0.00	0.00
45	A	14.59	102.11	1080.50	1080.50	28.79	115.14
46	B	0.00	1.30	0.00	0.00	0.00	1.00
47	A	9.23	13.84			9.23	13.84
48	A	0.00	10.11	0.00	0.00	0.00	7.58
49	A	0.00	0.00	0.00	0.00	0.00	0.00
50	B	0.00	8.48	0.00	0.00	0.00	3.72
51	A	0.00	0.00	0.00	0.00	0.00	0.00
52	A	16.41	16.41	0.00	0.00	12.79	12.79
53	A	0.00	0.00	0.00	0.00	0.00	0.00
54	A	0.00	0.00	0.00	0.00	0.00	0.00
55	B	0.00	4.68			0.00	4.68
56	D	0.00	0.57	0.00	0.00	0.00	0.54
57	A	0.00	0.00	0.00	0.00	0.00	0.00
58	B	0.00	1.15	0.00	0.00	0.00	1.15
59	C	0.00	5.71	0.00	1.41	0.00	3.79
60	A	0.00	0.00	0.00	0.00	0.00	0.00
61	A	0.00	0.00	0.00	0.00	0.00	0.00
62	D	0.32	0.95	0.51	1.25	0.50	1.23
63	D	0.00	0.27			0.00	0.27
64	A	0.00	0.00	0.00	0.00	0.00	0.00
65	C	0.00	1.70	0.00	0.00	0.00	1.50
66	D	0.36	2.16	0.00	8.54	0.34	2.54
67	D	0.93	9.09	0.00	0.00	0.93	9.08
68	B	0.00	0.00	0.00	0.00	0.00	0.00
69	C	0.00	0.90	0.00	0.00	0.00	0.76
70	D	0.00	1.37	0.00	0.61	0.00	0.63
71	B	0.00	0.00	0.00	0.00	0.00	0.00
72	A	0.00	0.00	0.00	0.00	0.00	0.00
73	B	0.00	1.91	0.00	0.00	0.00	1.75
74	B	0.00	1.41	0.00	0.00	0.00	1.31
75	B	0.00	0.00	0.00	0.00	0.00	0.00
76	B	0.00	2.46			0.00	2.46
77	B	2.25	4.49	0.00	0.00	1.03	2.05
78	C	0.50	13.49	0.00	0.00	0.48	13.01
79	B	0.00	2.96	1.61	3.22	1.04	3.13
80	B	0.00	5.41	0.00	0.00	0.00	3.01
81	A	0.00	7.64	0.00	6.51	0.00	7.03
82	B	0.00	16.73	0.00	0.00	0.00	12.22
83	D	0.00	0.00	0.00	0.00	0.00	0.00
84	D	0.00	4.83	0.45	0.45	0.22	2.73
85	A	0.00	0.00	0.00	0.00	0.00	0.00
86	B	0.00	0.00	0.00	10.32	0.00	10.14
87	B	0.00	2.38	0.00	0.00	0.00	1.90
88	B	0.87	2.61			0.87	2.61
89	A	0.00	0.00	0.00	0.00	0.00	0.00
90	B	1.76	4.41	0.00	0.00	1.67	4.18
91	B	0.00	0.00			0.00	0.00
92	A	8.15	8.15			8.15	8.15
93	A	0.00	0.00	0.00	0.00	0.00	0.00
94	B	0.00	0.00			0.00	0.00
95	B	0.00	4.47	0.00	26.32	0.00	7.65
96	D	2.15	9.87	0.00	0.00	1.62	7.44

No.	Banding	Offshore LTIFR	Offshore TRIR	Onshore LTIFR	Onshore TRIR	Overall LTIFR	Overall TRIR
IMCA		0.61	2.51	0.30	1.46	0.51	2.17
97	A	0.00	0.00	0.00	0.00	0.00	0.00
98	B	0.00	0.00	0.00	0.00	0.00	0.00
99	D	0.00	0.62	0.05	0.88	0.03	0.81
100	B	0.00	0.00			0.00	0.00
101	B	0.00	2.98	0.00	5.89	0.00	4.44
102	D	0.23	1.41	0.00	0.00	0.23	1.35
103	A	0.00	0.00	0.00	0.00	0.00	0.00
104	C	0.00	0.64	0.00	0.00	0.00	0.56
105	C	0.00	2.65	0.00	0.00	0.00	2.57
106	B	21.23	21.23	0.00	0.00	2.59	2.59
107	C	0.00	0.00	0.00	0.00	0.00	0.00
108	B	0.00	3.12	0.00	0.00	0.00	2.64
109	A	0.00	0.00			0.00	0.00
110	C	0.00	2.14	0.00	0.00	0.00	2.06
111	C	0.71	2.13	0.00	0.00	0.64	1.91
112	C	0.00	0.37			0.00	0.37
113	D	0.13	2.49	0.13	0.67	0.13	1.12
114	A	0.00	0.00	8.20	32.79	8.15	32.59
115	C	2.09	2.79	0.00	0.00	1.89	2.52
116	A	0.00	0.00	0.00	0.00	0.00	0.00
117	B	0.00	1.41	0.00	0.00	0.00	0.99
118	B	0.00	3.17	0.00	0.00	0.00	2.89
119	D	1.13	4.51	0.00	0.00	0.97	3.89
120	B	1.05	3.16	0.00	0.00	0.96	2.89
121	B	0.00	3.28	0.00	0.00	0.00	2.72
122	D	0.12	0.12	0.00	0.00	0.12	0.12
123	A	0.00	0.00	0.00	0.00	0.00	0.00
124	C	0.00	0.00	0.00	260.54	0.00	33.93
125	B			0.00	0.00	0.00	0.00
126	D	1.00	5.00			1.00	5.00
127	D	0.67	3.00	0.00	0.00	0.61	2.76
128	A	0.00	0.00	0.00	0.00	0.00	0.00
129	B	0.00	0.00	0.00	0.00	0.00	0.00
130	B	1.94	5.81	0.00	0.00	1.22	3.67
131	C	0.41	1.63	0.00	0.00	0.39	1.57
132	D	0.00	1.25			0.00	1.25
133	D	0.41	1.94	0.22	0.69	0.28	1.12
134	D	0.53	2.87			0.53	2.87
135	D	1.02	2.22	0.52	1.04	0.94	2.04
136	B	0.00	0.00	6.50	6.50	3.98	3.98
137	B	0.00	0.00	0.00	0.00	0.00	0.00
138	C	1.04	5.18	0.00	0.00	0.77	3.85
139	B	3.21	3.21	0.00	0.00	2.91	2.91
140	C	0.00	4.87			0.00	4.87
141	C	1.46	6.31	0.00	0.00	1.40	6.06
142	C	3.44	4.30	0.00	0.00	2.93	3.66
143	C	1.34	3.58			1.34	3.58
144	C	0.00	0.00	0.00	0.00	0.00	0.00
145	B	5.87	199.61	0.00	0.00	5.74	195.09
146	B	0.00	3.35			0.00	3.35
147	A	0.00	0.00	0.00	0.00	0.00	0.00
148	A	0.00	0.00	0.00	0.00	0.00	0.00
149	C	0.75	4.50	0.00	0.00	0.43	2.56
150	A	8.42	8.42	0.00	0.00	6.08	6.08
151	C	0.38	1.14	0.00	0.00	0.36	1.09
152	D	0.05	1.22	0.00	0.22	0.04	1.04
153	A	0.00	29.23	0.00	0.00	0.00	20.11
154	B	0.00	10.63	0.00	0.00	0.00	1.50
155	D	1.11	5.57			1.11	5.57
156	A	0.00	0.00	0.00	0.00	0.00	0.00
157	D	2.50	4.53	0.34	1.19	1.74	3.36

No.	Banding	Offshore LTIFR	Offshore TRIR	Onshore LTIFR	Onshore TRIR	Overall LTIFR	Overall TRIR
IMCA		0.61	2.51	0.30	1.46	0.51	2.17
158	A	55.28	65.33	0.00	0.00	44.63	52.74
159	B	3.27	3.27	0.00	0.00	2.92	2.92
160	B	0.00	0.00			0.00	0.00
161	A	0.00	0.00	89.69	89.69	9.23	9.23
162	A	0.00	0.00	0.00	0.00	0.00	0.00
163	A	45.02	180.08	0.00	0.00	22.35	89.41
164	C	1.89	3.78	0.00	0.00	1.81	3.62
165	A	0.00	4.71	0.00	0.00	0.00	3.69
166	C	0.00	1.82	0.00	0.00	0.00	1.71
167	B	0.00	4.87	0.00	0.00	0.00	4.13
168	C	0.00	0.00	0.00	0.00	0.00	0.00
169	D	0.74	2.95	1.04	2.07	0.82	2.72
170	B	0.00	16.49	0.00	0.00	0.00	14.66
171	C	0.00	1.01	1.42	2.13	0.83	1.66
172	B	2.57	5.13	0.00	0.00	1.32	2.65
173	C	0.75	0.75	0.00	3.24	0.51	1.54
174	A	3.90	3.90	0.00	0.00	3.63	3.63
175	B	2.42	2.42			2.42	2.42
176	D	0.53	2.36	0.00	7.36	0.49	2.70
177	D	0.44	1.78	0.22	0.59	0.34	1.23
178	B	3.00	4.50	0.00	0.00	1.78	2.67
179	A	0.00	0.00	0.00	0.00	0.00	0.00
180	C	0.00	3.26	0.00	0.00	0.00	2.27
181	B	3.93	5.89			3.93	5.89
182	C	0.46	0.92	0.00	0.00	0.44	0.88
183	A	26.97	26.97	0.00	0.00	8.34	8.34
184	A	0.00	0.00			0.00	0.00
185	C	0.73	3.65			0.73	3.65
186	A	0.00	11.28	0.00	0.00	0.00	10.11
187	C	1.16	2.33	0.00	1.11	0.76	1.91
188	D	0.33	1.31	0.00	0.00	0.31	1.26
189	C	0.00	6.67	1.21	2.42	1.08	2.88
190	B	0.00	0.92	0.00	0.00	0.00	0.88
191	D	0.03	0.45	0.00	0.00	0.03	0.42
192	A	0.00	0.00	0.00	0.00	0.00	0.00
193	D	0.00	1.10	0.00	0.00	0.00	0.99
194	D	0.76	1.95	0.15	2.03	0.44	1.99
195	C	0.00	1.62	0.00	0.00	0.00	1.60
196	D	2.23	4.79	0.00	0.00	2.15	4.61
197	B	0.00	1.09	0.00	0.00	0.00	1.02
198	A	0.00	0.00	0.00	0.00	0.00	0.00
199	A	3.79	3.79	0.00	0.00	3.68	3.68
200	A	0.00	0.00	0.00	0.00	0.00	0.00
201	B	0.00	2.55			0.00	2.55
202	A	8.00	8.00			8.00	8.00
203	A	0.00	0.00	0.00	34.36	0.00	6.38
204	A	0.00	0.00	0.00	0.00	0.00	0.00
205	A	0.00	0.00	0.00	0.00	0.00	0.00
206	A	0.00	0.00	0.00	0.00	0.00	0.00
207	A	0.00	0.00			0.00	0.00
208	A	0.00	0.00	0.00	0.00	0.00	0.00
209	C	3.53	9.42	1.93	1.93	2.93	6.58
210	A	0.00	0.00			0.00	0.00
211	D	0.55	1.11	0.00	0.00	0.53	1.05
212	A	0.00	0.00			0.00	0.00
213	A	0.00	0.00	0.00	0.00	0.00	0.00
214	D	0.00	0.00	0.00	1.57	0.00	0.33
215	A	0.00	0.00	228.31	684.93	124.19	372.58
216	B	11.33	14.16	0.00	0.00	9.78	12.22
217	B	0.00	0.00			0.00	0.00
218	B	0.00	0.00	0.00	0.00	0.00	0.00

No.	Banding	Offshore LTIFR	Offshore TRIR	Onshore LTIFR	Onshore TRIR	Overall LTIFR	Overall TRIR
IMCA		0.61	2.51	0.30	1.46	0.51	2.17
219	A	0.00	0.00			0.00	0.00
220	D	1.61	4.84	0.00	0.00	1.15	3.44
221	A	0.00	0.00	8.31	8.31	5.63	5.63
222	B	0.00	1.52	0.00	0.00	0.00	1.23
223	D	1.31	5.58	1.63	1.63	1.34	5.22
224	B	0.00	0.00			0.00	0.00
225	A	0.00	0.00	0.00	0.00	0.00	0.00
226	A	0.00	0.00	0.00	0.00	0.00	0.00
227	B	0.00	0.00	0.00	0.00	0.00	0.00
228	B	1.70	3.39	0.00	0.00	1.47	2.93
229	D	0.12	0.17	0.00	0.00	0.12	0.17
230	D	0.00	0.23			0.00	0.23
231	A	0.00	0.00	0.00	0.00	0.00	0.00
232	B	0.00	0.00	0.00	0.00	0.00	0.00
233	A	0.00	0.00	0.00	0.00	0.00	0.00
234	A	11.11	11.11	0.00	0.00	10.06	10.06
235	B	6.97	23.71	9.43	28.28	7.29	24.30
236	B	1.13	2.26			1.13	2.26
237	D	0.86	2.59	0.00	0.00	0.84	2.51
238	C	0.00	0.00	0.00	0.00	0.00	0.00
239	C	0.46	5.52			0.46	5.52
240	D	0.00	1.62	0.00	0.00	0.00	1.62
241	B	0.00	0.00			0.00	0.00
242	D	1.32	2.31	0.00	0.00	1.10	1.92
243	B	4.93	6.16	0.00	0.00	4.74	5.92
244	B	3.04	6.08	0.00	0.00	2.00	4.00
245	C	0.00	1.52	0.00	0.00	0.00	1.15
246	A	0.00	0.00	0.00	0.00	0.00	0.00
247	A	14.62	43.86			14.62	43.86
248	A	0.00	13.39	0.00	0.00	0.00	12.38
249	A	0.00	0.00	0.00	14.88	0.00	8.79
250	C	0.56	1.68	0.00	0.00	0.41	1.24
251	B	1.28	2.57	0.00	0.00	0.91	1.82
IMCA		0.61	2.51	0.30	1.46	0.51	2.17

Table 21 – Individual company LTIFR and TRIR statistics 2015

IMCA Environmental Performance Indicators

Table 22 shows the new IMCA environmental performance indicators as supplied by those companies that were able to do so. More information is available in section 4.

No.	Spills	Amount spilt	Bunkers (volume)	Bunkers (weight)	Onshore MWh	Non-hazardous waste	Hazardous waste
IMCA	1.17	128.60	7706.71	6723.74	781.47	455.55	78.53
1	0.00						
2							
3	1.99						
4			8785.85		1284.25	1788.41	
5	0.00		16441.26		1513.97	252.46	24.54
6	8.39	203.17		8924.19	3933.85	539.64	786.79
7	0.42	167.57	95003.14	86072.22	2.81	671.30	2.67
8				9136.28		224.26	
9	2.73	819.86					
10	0.31	6.10					
11			72907.55		1481.48		
12	0.00	153.05	17125.80		1066.49		
13	0.00		9895.64				
14							
15	0.23	46.20		49751.73	1383.67	1256.33	1180.43
16				4181.30	3252.97	1323.81	156.18
17	0.38		617.65	218.12		4527.92	362.11
18				14154.53	1111.11	65.28	6.53
19							
20				52123.80	2494.75	315.05	209.19
21			3121.20	3.07	1199.49	0.47	0.01
22	0.84	779.60	22251.79		848.16	1487.15	141.88
23				3608.59		296.05	1.00
24			22118.84		830.18	197.05	757.83
25							
26	0.86	5.06					
27					349.65	27.93	4.65
28				20035.43		847.24	306.08
29	4.51	54.10					
30	0.00						
31	0.00				207.84	4.59	
32			18464.22			393.04	16.77
33			178588.24		85.88	20935.26	24.12
34							
35					624.68	24.72	
36	3.72	949.72					
37			22798.97		738.63	364.66	
38			41549.81			289.19	
39			10856.15				
40				13896.01		698.01	1.30
41							
42	0.71	14.16		11809.57	1403.45	651.85	2.54
43				6929.56	1297.05	137.87	2.87
44	0.87	3.49	2571.61			40.00	
45							
46			11734.15		1514.46	4.30	
47							
48	10.11	2.53			1269.82	33.09	9.25
49							
50			15460.51		0.75	171.13	25.86
51							

No.	Spills	Amount spilt	Bunkers (volume)	Bunkers (weight)	Onshore MWh	Non-hazardous waste	Hazardous waste
IMCA	1.17	128.60	7706.71	6723.74	781.47	455.55	78.53
52							
53		1.65	26697.10		2348.51	14.41	0.77
54				130.43	2473.57	30.13	
55							
56				5311.27	39.86	111.30	127.16
57				1455.76	1222.60	13.19	
58							
59			6476.90	2286.97	575.27	82.83	60.69
60					1941.77	5.39	
61					2658.03	35.48	8.16
62			4397.37			0.02	0.60
63			468.01			13.07	1.70
64			13291.96		576.13	108.42	6.75
65	0.00						
66					1694.03		
67	0.47	16.32					
68							
69			18546.87		953.42	216.94	0.18
70			22554.37			228.22	
71				20.82	28.75	1.08	0.81
72				42752.96	3751.10	1330.58	136.57
73	0.96	1.91	45252.10			43.87	
74				65183.01	2706.78	1340.07	732.85
75			1625.70		327.01	1278.73	
76	46.69	73.40					
77	0.00		13268.22		1210.11	19.78	0.16
78	1.00	5.50	6182.02		435.90	35.79	4.15
79					186.93	99.15	0.52
80				92.05	913.19	3.01	9.04
81			28268.01	23714.57		8.43	1.76
82							
83	0.36	460.42		760.17	4036.46	11.61	
84	3.15	1095.04		15424.96	471.16		
85			3709.83		5072.31		
86							
87			57232.21		330.19	343.79	16.14
88	1.74	34.75					
89			3736.64				
90	1.76	177.10	40917.76			1967.88	1.12
91	1.54						
92				31156.23		93.77	1089.37
93			4047.02		28.69		
94							
95			17125.22		3948.51	955.95	57.36
96	1.29	51.50		40769.73	0.23		
97				39308.18	58.82	21.79	
98					636.44	2.41	
99	0.87	53.19	12776.88		2246.84	1329.75	169.25
100							
101							
102	6.69	11.14	17791.65		6749.26	188.66	12.69
103					1441.87		
104							
105			32804.55		3400.83		
106				3014.09	209.12	10.36	
107				1.01	22.79	0.22	0.15
108			168097.99			29.07	
109			1344.09			201.61	100.81
110	2.85	6432.64	26743.23			36.99	3.43
111							
112			8170.32			252.51	

No.	Spills	Amount spilt	Bunkers (volume)	Bunkers (weight)	Onshore MWh	Non-hazardous waste	Hazardous waste
IMCA	1.17	128.60	7706.71	6723.74	781.47	455.55	78.53
113	1.44	142.72		82520.13	489.81		
114					472.12	8.15	0.81
115	6.28	10.47	37421.52			1057.27	67.70
116							
117							
118			38874.59			810.36	
119	1.69	1976.41	22532.26		507.36	279.44	340.19
120	9.49	1091.85	83420.10		29.74	588.11	
121							
122							
123						3.22	3.22
124							
125					531.61	27.49	68.67
126	2.25	75.18		41413.39			
127				63826.98	11977.19	1123.44	
128			26970.95		849.88	173.54	
129				34654.85		67.45	26.51
130			3569.55		717.12	739.65	
131	0.00			1869.72	1315.79	66.67	35.30
132	0.00		34014.99				
133	0.17	10.55		6639.65	842.78	2191.00	45.05
134	0.43	1333.08		5848.32		326.73	30.96
135	5.36	10.65		22395.00	1731.34	71.00	56.16
136					324.80	238.79	19.90
137							
138				14034.11	588.43	1323.74	457.42
139			30430.71		1641.41	908.20	
140							
141				26743.02	6286.19		
142			24774.02		2322.76	12.74	
143	0.89	92.51	19165.83				
144					146.46	14.23	0.71
145			13300.05			852.07	
146	14.24	50.25					
147						31.58	9.47
148					1641.24	216.93	2.05
149	6.76	559.36					
150			7995.62		757.28	124.75	92.46
151	0.38	1.90	12647.85	11024.18			
152	0.10	7.29	24826.68		358.68	848.43	191.26
153	58.46	175.38		5261.31	450.97	361.93	
154				53.15	1069.93	18.03	
155	0.74	11.14				1121.92	705.87
156						4.28	
157	0.46	110.38		15848.31	172.41	125.76	813.54
158							
159				13150.14		1120.16	29.19
160			27381.06			547.62	862.96
161				172.84	37.67	0.05	
162	0.00						
163			33.77		2574.57	22.35	2.24
164				34576.94	664.66	1.21	0.60
165			5492.49				
166			29105.50		1639.18	2369.73	
167			8674.46		5421.20		
168				18.36		7.82	
169	0.37	25.82	20136.90	11810.11	2104.00	256.62	51.58
170			13094.53		6862.33	79.16	
171			6332.47			74.89	
172			7973.09		1052.63	234.41	2.33
173	7.48	14.21			3071.70	85.50	122.36

No.	Spills	Amount spilt	Bunkers (volume)	Bunkers (weight)	Onshore MWh	Non-hazardous waste	Hazardous waste
IMCA	1.17	128.60	7706.71	6723.74	781.47	455.55	78.53
174							
175	9.69						
176			45374.44			37.22	
177	0.89	10.60	1433.56		2491.70	105.23	11.01
178				552.09	32.95	44.57	
179			204.04		1028.69	82.87	5.52
180				9632.89		857.67	51.69
181							
182	16.95	99.48	23416.16		5974.14	94.23	464.21
183	107.86	1388.74					
184	6.77	67.66		29074.65		489.20	6.77
185	2.19	366.68		14864.52		56.24	0.73
186							
187	0.58	1.16	13084.53		1116.90	13.61	0.36
188			4975.06			385.98	35.24
189				37754.42	624.85	899.19	2.63
190	0.92	22.95		5005.16	14679.53	134.84	8.96
191	0.49						
192	9.16	2.29					
193				9768.50	598.68	170.05	0.85
194	5.94	96.91		1159.16		115.67	3.43
195							
196	1.92	86.84		17324.62	303.65	876.79	228.79
197					481.20	17.93	
198					3732.82	1438.33	62.23
199					4375.00	22.06	
200	0.00			13888.89	14.47		
201			25224.97			2406.06	203.98
202							
203					8872.85	31.91	1.91
204				73366.01	264.42	2949.85	
205							
206	19.39	111.51		65548.05		230.17	
207			65067.63	55201.51		24.36	
208					46.60	8.49	1.42
209			8613.67		389.24	22.73	13.69
210							
211			38966.51	13759.88	11322.46	890.61	732.52
212							
213			16511.03		3588.37		
214							
215					2.38	62.10	15.52
216	2.83	1.42	11208.91				
217			24172.95	20505.33		10.00	0.02
218					2758.88	2.90	0.43
219							
220			39101.54			7.18	0.72
221					2490.70	68.16	
222			9432.23	8017.08	403.78	252.48	20.86
223	1.31	6.81		33451.72	1760.27	491.73	
224				7799.55		145.57	
225					753.88		
226					66.86		
227			10087.75		1614.99	88.13	20.03
228				8930.37	2611.38		
229							
230							
231	252.53	328.28					
232				47660.88	332.49	703.15	7.03
233	0.00		233.56	186.85		47.39	
234	14.81	18.52	37629.63		460.60	171.01	1.34

No.	Spills	Amount spilt	Bunkers (volume)	Bunkers (weight)	Onshore MWh	Non-hazardous waste	Hazardous waste
IMCA	1.17	128.60	7706.71	6723.74	781.47	455.55	78.53
235					377.07	182.23	
236	1.13	6.78		22593.36			
237							
238	3.45	22.76		9784.32	1504.83	141.12	150.61
239	2.76	557.64		15672.94			
240			874.81		5896.44	15.44	19.77
241			42607.82	49542.87		213.17	1.73
242	0.99	1317.39	51715.90				
243							
244							
245			2400.98		280.32	329.83	28.97
246	40.84	10.21					
247							
248	13.39	174.09	81.82		3024.28	5.52	235.22
249	42.93	429.33			2159.07	45.70	36.04
250							
251				14681.62		157.64	6.48
IMCA	1.17	128.60	7706.71	6723.74	781.47	455.55	78.53

Table 22 – IMCA Environmental performance indicators, 2015

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

For the purposes of these safety and environment statistics, ‘inshore’ work (for example in the renewables sector) is considered to be offshore rather than onshore.

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

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.

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.

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

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

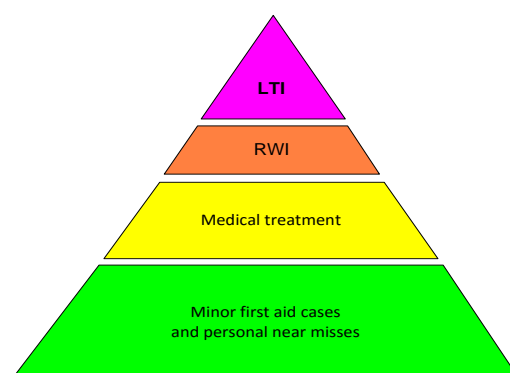
Definitions

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	<ul style="list-style-type: none"> – 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.
	<i>* This should take into account travel time in attending the doctor to assess the injury</i>

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 proactive 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 = Number 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	Managerial visit rating
MV	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
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