SYSTEMATIC APPROACH TO EMERGENCY PREPAREDNESS AND RESPONSE
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In any presentation on Emergency Preparedness and Response we should commence with a safety moment. Is it safer to walk down a street in Abu Dhabi with square manholes or round manholes? What do you think? And like any effective system of Emergency Preparedness and Response there should always be management-0ndepth and a framework of alternates and deputies. And so it is that I am standing in for Masood Sarwar, the Corporate HSE Manager for Dana Gas. I have known him for several years since his previous job in Eni in Pakistan. We produced the global Crisis, Emergency and Business Continuity Management System for Eni so I fell well qualified to stand in Masood's shoes.

You will all have seen the Hollywood movie. Well the Titanic sank in 1912. 1500 lives were lost, including Captain Smith who made these comments some five years before the disaster to the Editor of the new Times. The ship had everything from stem to stern, including Emergency Response plans, but the plans were never tested, nor were the lifeboats. The world was rightfully stunned by this massive disaster and the United Kingdom introduced the Safety of Life at sea or SOLAS regulations, so future ships would test their emergency plans to a far greater extent, and have sufficient lifeboats to deal with mass evacuation. You could say that Noah had a better Emergency Response Plan for the Ark than Captain Smith had for the Titanic or indeed the non-existent Business Continuity Plan that the White Start Line, the owners of the ship, had for their business and all sister ships. Having an Emergency Response capability is all about being able to sleep at night. The Titanic is a classic case study which is as relevant today as it was at the turn of the Century. There is a popular misconception that there were not enough life boats. The reality was that there was a paradigm at the time that such ships were unsinkable and that life boats were only designed for inter-ship transfer. Hence the number of lifeboats at the time was governed by tonnage rather than POB, People on Board. The management of major emergencies is a bit like the Eskimo who must be able to roll his kayak in any sea and return to the business of hunting Polar Bear. While we are yet to see international standard in Emergency Response there are certainly widely recognized and endorsed best practices empowering the all important On Scene Commander to take all necessary action to either shut down a facility and if necessary to abandon a facility.

We have come a long way since 1912 with many countries now mandating Safety Cases and similar sounding step-by-step systematic approaches in the O&G and other sectors. There are many ways to skin a cat and it is important that systems are put in context. So where does ER start and finish? The word Emergency Response tends to mean all things to all mean. Most organizations tend to use the expression at the front end of the business nearby the Control Room although some companies refer also to corporate ER and actions in the Boardroom. I intend to take the widest possible view and it is for this reason that I will address crisis, Emergency and Business Continuity management Systems.

With the benefit of hindsight, who agrees with the British Court of Inquiry's finding in 1912 that the loss of the Titanic was due to collision with an iceberg, brought about by

the excessive speed at which the ship was being navigated? Perhaps few of us have read the British report; more likely our opinion is based upon the movie. Those fifty words were in fact the extent of the report. Many feel that the report was far too kind to Captain Smith as it found while his acceleration into a known icefield had been a mistake, it was not negligence because he had followed the established custom and practice of not slowing down for ice warnings in clear weather. We know now that the triggering event for this crisis was the steamship's management attempt to establish a new speed record on her maiden voyage. It was the saving of three hours that cost some 1500 lives. Could that happen in Abu Dhabi? You would like to think that a modern day inquiry would comment that thirty-two more lifeboats, costing just $16,000, could have been stowed away without being noticed on the broad decks of the Titanic, and that this may have saved everyone, but just like the Steamship management, most trouble today still comes from some very human failings. Indeed most recent crises have stemmed from executive mismanagement, poor management decisions at best. I will come back to triggers because there is no doubt that if you audited the Titanic today, you would find regulators demanding financial transparency and more responsible management of its organizational risks. Companies we work with are finding that if their governance practices are not adequate, they risk sharp declines in share prices, inability to raise capital, de-listing from stock exchanges, and legal action.

So ladies and gentlemen, having an Emergency Response capability, a last-resort risk treatment, is all about being able to sleep at night. Ships are safe in harbor but that is not where they are meant to go, so we encourage you to use the red card like they do at the football if you do not agree. We all have different experiences and if yours is totally the opposite, then please speak up, because in an emergency we need to pull together as a team and you need to voice your opinion if we are off track. Consider the Titanic, which was claimed to be unsinkable. Clearly the Steamship Management focused on the wrong areas. They did not try to find what could have gone wrong. We now know that a cup of tea with Captain Smith, even with his 26 years experience would have focused on the acclaimed early arrival rather than the absence of lifeboats. Indeed the opportunity of a celebrated early arrival would perhaps have even blinded the MD to the accompanying risks. A governance committee may have yielded more honest results with those of a less vested interest in an early arrival. We would have found that processes and machinery were untested, that an iceberg warning had been received, in fact three distinct warnings, that crew on lookout did not have binoculars, and that perfect weather was ideal for speed but no good for iceberg spotting. We would have found that the supposedly water-tight compartments were not water-tight, contributing to 500 deaths. We would have found that the crew were only just acquainted with their duties in an accident and only one drill was held before the maiden trip. That would have led us to realize that there were not enough lifeboats, or that there was insufficient emergency training and signs.

If we then chained the separate risks, our governance committee would have found that an iceberg warning, plus millpond conditions, plus no binoculars, plus high speed significantly increased the probability of a collision and that the Captain may have been forced by the logic to take precautionary action. Perhaps we would not have found that the unsinkable design was flawed or that the rudder was undersized, but we would have found that most of the knowledge about risks and controls were resident within the crew and that unchecked authority was vested in the Captain who had no crisis plan. It is for this reason that the best boards these days provide strategic direction in a constant process of tension and dynamism with the executive.

Ladies and gentlemen, crisis leaders, explorers of business continuity and first Responders alike visualize a fog, some 3 kilometres across. Business Continuity is a management tool about getting back to the start, to the bottom of this pyramid. Crisis management is about getting through to the end, to the top of this pyramid but it is not enough. Crisis Leadership is getting up into the air and seeing that that the fog is only 3 kilometres across in one look. This is vision and it has to happen in the boardroom. The best companies have learnt to use their crisis leadership capability to be able to Eskimo roll their canoe in whatever sea they choose to paddle, and to take their companies beyond danger to opportunity. The future is for sale and it is all about surfing on the front of the wave instead of being in front of the iceberg. The better companies have moved from Emergency Response to Crisis Anticipation. The best companies are re-designing themselves around Crisis Leadership. Crisis Management is just looking at the hole in the fence. Crisis Leadership is seeing the open paddock beyond.

When we run simulations and stress tests, we always ask for the profiles of commercial exposures and operational risks so that we can build scenarios around credible events or issues. We invariably find that what appears in these profiles, often driven by insurance requirements, is not what truly causes CEOs to toss and turn at night. ……

Environmental pollution/Product defect/Unwanted takeover/Sabotage Death of senior manager/Kidnap of senior manager/Computer breakdown/Industrial dispute/Fraud. Indeed in the last ten years this is what companies thought they should prepare for. White collar crime/Labor disputes/Company mismanagement . Now have a look at this. This is what actually caused just about every corporate crises in the western world during that time. Sexual harassment/Class action lawsuits/Executive dismissals/Hostile takeover. And this is what recent research has found. These are the growth areas for crises. Interestingly almost 50% of Australian companies experienced sophisticated economic crime, theft and misappropriation of assets over recent years. How does this compare to your organization*? A*nd if you just felt okay with your own organization how do you really know?

Let me take you on a tour around Asia. We worked with a large Australian oil Company in Indonesia. For whatever reason the well casing failed to contain the mud flow and it has caused the displacement of some 10,000 people. The mud is likely to keep flowing for 100 years. Lapindogate as it is now called is a social and environmental disaster. Luckily for the company they were non-operated financial partners and were able to distance themselves from the immediacy of Emergency response and the cash calls that were made. Emergency response for them was minimizing the financial liability. We worked we a large resource sector company in Australia that is currently being taken over by the Russians. We arrived about an hour after the fatality had been reported. The Emergency response Team was still in the process of recovering the body. The management team in the head office was visibly shaken so is the impact that death has on many people. For them Emergency response was logging actions, briefing corporate and regulators and dealing with the media enquiries that followed. A long and stressful afternoon and evening. Such responses are not uncommon and in another simulated event at a casino the HR manager was so stressed that he actually called the live next of kin by mistake.

We worked with another large Australian oil company in the highlands of Papua New Guinea when a helicopter with 7 POB plummeted out of the sky. Some survived and

some didn't. Luckily for the company it crash landed a very short distance from the drill site and first response was highly effective. It had had been anywhere in the mountainous jungle then it would have been an entirely different story. We worked with the largest mining company in the world in Pakistan not long after a world-call gas plant was commissioned. When our Instructors arrived in location they found that fire water pressure in the ring main was so great that it took five men to hold the fire hose. How good is that when there is a multimillion dollar facility on fire? You learn some very interesting things when you do simple drills. We worked with another major European Oil & Gas Company in Australia who were commissioning another gas plant and tying into a major pipeline not long after the ExxonMobil gas plant explosion that left Melbourne, a major Australia City without gas for three days. Not long after the test commenced we found that the hand held radios do not work at the tie in point. Luckily there were so no hydrocarbons in the lines and the situation was promptly rectified. How many such dead spots are out there in the Field?

We worked with a large petrochemical plant on the island of Borneo. It had been in operations for over five years when we initiated the live drill. We waited and waited and waited for the H2S alarm to activate the nearby Emergency Services. Nothing happened so we had to artificially trigger the activity. You see the alarm had not been connected to the fire station for five years. You learn some amazing things when you press fire alarms. Such communications failures are not uncommon. A large Australian oil company that relies on a SMS paging service experienced three team activation failures in succession by the service provider. A large chemical plant in India has developed a total reliance on mobile phones as emergency communications until the military took all the bandwidth in an operation and left them without communications. A Multi-national oil operator in Vietnam experienced intermittent communications failures with its offshore platform in the middle of a multiple casualty medical evacuation such is the lack of redundancy in communications. Another super-major in Borneo paid no attention to its alternate site until the inevitable happened and emergency command was effectively neutered.

We worked with another chemical company with a large quantity of toxic gas inside the city of Brisbane prior to an explosion and fire which highlighted the value of effective training in Emergency Response. The Incident Management Team formed up within one hour of the event on a Saturday afternoon and effectively managed the post incident counseling, regulatory and media liaison. That same largest mining company in the world has a Nickel Smelter in a remote part of Australia. We were only given 20 minutes to do a full site muster of some 400 workers such was the confidence in the electronic swipe system. Well two hours later we found the last of the three missing people. One was a cleaner who could not hear the alarms inside here storage room. One was an employee who had a faulty card and did not tell anyone. The other was a driver who drove out the back gate which was not monitored. For those of you who may be used to mustering in less than 10 minutes some sites are still out it 12 hours later and cannot get a definitive answer until there is a shift change. We worked with a very large industrial facility in Dubai who brief was to stop the CEO from coming into the Emergency Response room and shouting over the radio during the heat of the moment. When a system was out in place to focus the leadership into the corporate space enabling the On Scene Commander to remain in control, the problem went away. We worked with an aviation company servicing many resource sector sites. When confronted by a multiple casualty scenario the Operations manager realized that he was not of the right stuff and

handed his baton to someone who could perform under pressures. Systems ultimately are only as good as the people manning them.

We worked with another mid size LPG and LNG operator who conducted a live drill with Emergency Services to validate Mutual Aid and other response times. Things were going alone just fine with the Fire Brigade mounting a fog attack and being successful in closing a valve. Interestingly the police who were the legal Incident Controllers for these event got lost in the maze of streets in the Port authority that was home to the LNG plant and got there suitably embarrassed well after the event was brought under control. It pays to drive and or to mark these Emergency services routes in advance. We recently worked with one of the super-majors in the Philippines with a live drill at sea in response to security and oil spill events. As is normal in these situations there were a multiplicity of government stakeholders involved and while it all worked out in the end it took some 12 hours of stakeholder mapping of radios and other communications linkages until it was possible to work out who could talk to whom and by what means. We worked with another super-major in Vietnam who when they deployed their fire team in response to a pipeline rupture fond to their horror that the hoses had incompatible couplings with those of an adjoining fire brigade. Such is the value of standards. Another company on Mongolia found itself over run by protestors, one of whom had a heart attack and died and for which the company was promptly blamed. It does not get much better than that other than suffice to say that there are now systems in place.

Simulations are designed as much to raise issues as they are to solve them. A petroleum company who occupy the same building as a US Consulate prudently practiced a building evacuation. It too over two hours to regroup their staff as it is not possible to muster everyone in the street after an inner city disaster. Should you be concerned if you do not have such a plan for terrorism at a mass-gathering of your company? A leading bank practiced the loss of their main processing centre. The CEO announced this problem at a routine monthly meeting and the team swung into action. A very impressive performance with key executives in the UK and New Zealand, and another sick in bed all contributing to the development and implementation of strategy under pressure. In planning this activity we learnt the greatest lesson. The processing centre resembles Fort Knox, but we were able to walk around the corner and prove that it was possible to enter through a section on non-armoured glass. More importantly we learnt that while all of the banking transactions could be cutover to another facility within an hour, the technology could not allow this to be reversed. Their plan was based on a one-way solution and this finding saved tens of thousands of dollars.

Among the large companies we work with is one that chose to practice a raid by a regulator over allegations of misuse of market power. It had actually happened to a competitor, and so they prudently went about exploring their response should it happen to them. It is always valuable benchmarking to compare and contrast the vulnerabilities of different companies. The top risks for an international oil company are the loss of just one trader and oil spill to state the unusual and obvious together. Their commodity traders are so commercially skilled, that they are not easily replaced, and the loss of market share is potentially huge. As far as oil spill is concerned, how much contingency planning is enough? Well, it was decided that as long as they spend more than their competitors… that this was enough. Australia's national heath benefits scheme decided to practice their national response to the outbreak of an Avian Influenza pandemic which had been transmitted human-to-human. They very quickly found themselves totally dislocated as office quarantining provisions and social distancing struck home but had

pre-planned how to manage to operate the business in a virtual mode and thereby maintain critical functions.

A mining company recently went through a de-merger and now finds itself as an attractive takeover option, and as a consequence has produced a hostile takeover contingency plan. One does not often come across that sort of business resilience planning. A large football stadium practiced its response to the evacuation of a jam-packed stadium in the aftermath of the rupture of a gas pipeline and proved that they could regain control of the pandemonium. Another international company has a problem with the distribution of illegally imported true products, and the distribution of false products which almost constitute 40% of their market. That is a perilous situation to be in, you must admit. Another top company we work with was very concerned about senior leadership succession issues, and decided to conduct an insider trading scenario to see how the management team would react when one of their fellow members was arrested as a result of a Stock Exchange investigation. It is very hard to prove these situations, but none the less there was much blood spilt on the boardroom floor, and a plan is now in place. It is no wonder that Director Insurance premiums have gone through the roof. It can work in your favour sometimes though, like an international construction company who found it was able to justify a reduction in other insurance premiums through active crisis prevention.

I am sure that many of you can relate similar stories. But what is important is to reflect back on the value of a systematic approach to Emergency Preparedness and Response. While there are many audit criteria and a variety of basic, predictive and exploitive systems around let me use the POSTED acronym to summarize the benefits as I see them.

People. Emergency command be it the on Scene Commander, the Emergency management Team Leader or the Crisis management Team Leader is the single most important component of any system. For this reason they should be selected not by virtue of appointment but because they display the qualities required to regain control of difficult situations. There must be a manager who Key Performance Indicator is as champion of the capability.

Organization. There must be a framework. Just as a football team immediately adopts set positions before the ball goes into play so to must each part of any company know and relate to all internal and external stakeholders. Whether it is line management working as a team or adapted to suit the Incident Command System it is now best-in-class to have a holistic approach to Crisis, Emergency & Business Continuity Management. Such system approaches with linkages to SMS, EMS and SecMS allow budget attribution, comprehensive management review and audit.

Serviceability. It is one thing to have the emergency facilities in place it is quite another to constantly check that they are in working order.

Training. Like the best racing car drivers, we practice in the rain. We want to be good in the rain because we want to win. Even the good Admirals must practice, because even the best Admirals only win 3 out of every 5 battles.

Equipment. There minimum essential first responder requirements with a particular focus on redundancy in command & control facilities and communications.

Doctrine. Finally without an underpinning commonly-understood combat philosophy linked to the emergency survival systems in any facility all is naught.

The benefits of an effective system of Emergency Preparedness and Response are on the table. For these companies Crisis, Emergency & Business Continuity Management is embedded in their corporate culture. These companies recognize the value of a converged philosophy has been tested and proved from the Boardroom through to the Control Room and with critical dependencies.