What are the Main Issues and Concerns Facing Asian/Far Eastern Countries?

John Clegg, CEO, National Offshore Petroleum Safety Authority, Australia

Summary

It is suggested that safety issues are similar throughout the world and sufficient standards and guidance generally exist. However, it is in the areas of regulation and compliance with recognised good practice that improvements are required. The regimes should reflect the international nature of the offshore oil and gas industry. The adoption of common regulation, standards and data collection will enable the regulator and the industry to benchmark themselves and hence provide a basis for real improvement in health and safety.

I will start by making a bold statement:

The offshore petroleum industry is the same the world over.

You may protest that this is too simple and no doubt it is. You may legitimately point to the varying geographical differences we face around the world. For example the difficulties "loop" currents pose for deep water drilling in the Gulf of Mexico, the need to dig holes in the sea bed offshore eastern Canada to protect sea bed facilities from iceberg scouring, tropical cyclones off north and west Australia and the threat they pose to floating production systems and hence the people on them.

I do not seek to minimise the genuine difficulties these issues present. Loop currents may be unique to the Gulf of Mexico, not well understood and pose particular problems but other parts of the world have their own problems with strong currents. Cyclones off Australia, typhoons in the South China Sea, (which incidentally led to the loss of a drill ship some years ago), hurricanes in the Gulf of Mexico and seemingly almost continuous winter- time gale force winds in the North Sea are all different but present predictable problems. My argument is there are differences in the geographical conditions around the world – but they are not especially significant. In general we either know how to manage these things or we are learning fast how to do so.

How about technology? Is this different in Asia and the Far East? There are differences but it is far from clear how important these are – if at all. Platforms look much the same. There are differences but these are not fundamental. The drilling rigs look the same and so they should be, they traverse the globe. In Australian waters we have rigs that have recently worked in other parts of our region, as well as Africa, and the North Sea. In any case, as with production platforms they are designed by a relatively small number of global players. There

are regional variations. In Australia we have not had many, (if any) offshore wells drilled using a technique known as under-balanced drilling. Nor have any wells been drilled with so called "dry BOPs" where the well is drilled from a semi-submersible drilling rig or drill ship with the BOPs on the rig as opposed to on the sea bed and therefore "wet." However, nearby in the region I understand a large number of such wells have been drilled.

My conclusion is that in the case of technology, just as with the geography of our region compared with the rest of the world, there are some regional differences but fundamentally it is much the same. This is inevitable because of the global reach of contractors, design houses and the oil majors.

Let me give you an example of this. In Australia recently we had a pipelay barge laying a pipeline from an offshore platform to shore. The standards on board were inadequate and there had been a series of incidents, enforcement action was taken. This was particularly disappointing as some years before, when it was operating in the North Sea, they were prosecuted following a fatal accident. This graphically illustrates that a solely national approach is an inadequate approach to securing good standards in the industry.

My second bold statement is:

There are no new accidents

In one sense of course all accidents are unique. The particular cause, background and circumstances are unique to each incident. However there are often similar underlying causes such as lack of competence, failure to follow procedures, inadequate operation of permit to work systems and poor supervision. On older platforms, maintenance backlogs contribute to incidents. Erosion and corrosion incidents resulting in serious hydrocarbon releases occur in both hemispheres. The handling of tubulars on drill floors of drilling rigs kills people in Asia just as it has in the North Sea.

I conclude that the Asian region, as compared with other regions with offshore oil and gas does *not* differ significantly in geography, technology or in the sorts of accidents that occur. On the contrary the similarities in these areas are more apparent than the differences. In one area though there are major differences. The methods by which safety is regulated in different countries in the Asia/Pacific region.

How is safety regulated?

Almost two years ago, a public official representing the Australian Government pointed out at an international conference whilst explaining the significant changes being made to Australia's regulatory regime, that the nature of

government safety regulation inevitably reflects the constitutional history of the country concerned.

My Canadian colleagues would recognise the issues that face well established constitutional federations where each state or territory has constitutionally recognised rights and powers. This is also the case in Australia. Furthermore, given its history and language, it was almost inevitable that Australia would adopt a safety case model very similar in concept if not application to that of the United Kingdom.

I would like to emphasise that Australia, which only this year has put in place a new and significantly improved regulatory regime, is indebted to the kind and expert assistance provided by the International Regulators Forum. In particular, the help provided by the USA, Norway and the UK was critical. This work is still underway and we continue to draw on best practice as developed by our European and American friends.

But the safety case model is but one way of regulation. There are of course others. However, there are emerging nations in the region with little or no capability to provide any sort of regulatory regime for safety. Given low per capita incomes and extremely scarce resources it is understandable if the priority was given to developing the resource to gain income. Indeed it could be seen to be a chicken and egg situation. Which comes first? Without income they cannot develop their national infrastructure including education systems which should in time permit the development of a skill base to regulate safety. Initially, it is at least an arguable point that precious expertise should go into a regulatory body anyway. Might they not be better working in a role to get their industry up and running in the first place?

However, let me reassure you, I am absolutely convinced that effective government safety regulation is essential in today's world. We owe it to our people who work in the industry. Also we must not forget that our citizens' work in each others countries. We are NOT independent, we are **interdependent**. Furthermore I am absolutely convinced that there is no conflict between effective safety regulation and hence a good safety performance and economic efficiency. Indeed the two go hand in hand – you cannot have one without the other. Dr Stephen Bornstein's comments in yesterday's presentation were particularly interesting on this topic.

I would like to offer some suggestions as to some principles which I believe underpin effective safety regulation. These principles relate to:

- People,
- Processes, and
- Positional power

Positional Power

Let me deal with the last bullet point first, Positional Power. By this I mean governmental positional power or put another way political power. Unless the regulatory body has the power to make its voice heard and can take effective action it does not matter how many people or processes the regulatory body has. Note I am not prescribing any particular type of regulatory body. In Australia in common with UK and Norway it is an independent authority. Other countries integrate offshore petroleum policy, business development as well as health, safety and environment regulation apparently successfully. And these sorts of differences exist all over the world and are not unique to the Asia Pacific region. In our region we do have a number of nations with very small regulatory organisations. And it is to these sorts of organisations I want to turn to next.

People

Assuming we have the positional power in government to enable it to be effective, does it have the right people? Unless the organisation has people who are regarded by the organisations they regulate, as being credible the regulatory body will be ineffective. Credibility depends on knowledge, skills and experience. All three are needed. How can this be developed in a new petroleum province? I would suggest more experienced neighbours should offer to help. For example our vision for my organisation, the Australian National Offshore Petroleum Safety Authority is that we should be able, in due course, to be able to offer assistance to those of our neighbours who wish to draw on our experience. In a small way we are already doing that. IRF has provided help to nations and perhaps we should look at how we can do more of this.

Processes

Turning to processes, and by this I mean the whole range of government law, regulations, directions, guidance and so on. In general as regulators we take far too much trouble in trying to get the "perfect" set of safety law and then failing to follow through by implementing it properly. Good people are needed as I said above but can we not keep the law as simple and as cheap to produce as possible and spend more time on implementation?

Whatever sort of legislation is introduced we have to work out what it means in practice, at the "sharp end." There is a wealth of data, guidance, codes of practice and so on. The key is to apply what we already have. Let me give you an example. On a drilling rig in Australia recently we had an incident involving a near miss involving man-riding on the drill floor. Following a dreadful accident in the North Sea the UK "Step Change" campaign produced some excellent guidance. This is well known in Australia but in this case was not applied. The issue is not producing guidance – although there are areas where new guidance is needed – but primarily applying what we already have.

Conclusion

So if I were to be asked by my colleagues in those nations who are looking to build their offshore petroleum capability – given that the technology is much the same world wide – what should their priorities be? I would say:

Let's have consistent international regulation on safety.

Taf Powell, my colleague from the UK, spoke eloquently on this on day one. Offshore petroleum is a global industry. It shares common features all round the world. If there is one area in which international cooperation on safety can be beneficial – this is it. Regulation should avoid effort to accommodate national preferences which are not really necessary. It should be based on goal setting and incorporate general duties on the employer and employees, the safety case may be an appropriate vehicle. This will then allow those resources to be devoted to real safety issues – which in turn should promote greater effectiveness of the regulatory effort – to everyone's benefit. For example the North Sea countries have agreed to apply the International Association of Drilling Contractors template for safety cases for drilling rigs. Only particular national differences that are really necessary have to be addressed outside of the template. This is good for drilling contractors and regulators alike.

Let's apply what we already have.

Good practice is achieved by compliance with regulation and appropriate application of standards and guidance. Step Change is a wonderful source of advice. If you do nothing else following this conference I would urge you to have a look at its products. Its great strength is that it is a joint venture between industry, government and trade unions. The Norwegian equivalent, "Working Together for Safety" shares similar characteristics.

Let's benchmark our performance.

Lastly, and most importantly, **working with IRF** will enable the industry and the regulator not only to identify good and best practice but by working to similar standards and collecting common data it will also enable them to benchmark their relative health and safety performances both nationally and internationally. Such a benchmark will provide a stimulus to real improvement.