

# The Black Swan

**Jane Cutler, NOPSEMA CEO**

5<sup>th</sup> International Regulators' Offshore Safety Conference  
Perth 21-23 October 2013

“The past seldom obliges by revealing to us when wildness will break out in the future.

War, depressions, stock-market booms & crashes, and ethnic massacres come & go, but they always seem to arrive as surprises...

*Against the Gods, the Remarkable Story of Risk, P Bernstein 1996*

After the fact, when we study the history of what happened, the source of the wildness appears to be so obvious to us, that we have a hard time understanding how people on the scene were oblivious to what lay in wait for them.

*Against the Gods, the Remarkable Story of Risk, P Bernstein 1996*

Until Australia all swans were white

Observations or experience can be limited



# The Black Swan – The Impact of the Highly Improbable

A Black Swan event has 3 attributes:

- Outlier
- Extreme impact
- After the event, it is explicable and predictable

*The Black Swan: The Impact of the Highly Improbable, Nassim N Taleb 2007*

- Circumstances: many subtly different pathways can result in the same class of damaging endpoint
- The next event will be subtly different and yet just as predictable afterwards

- Outcome: low likelihood, high consequence events will occur
- Black swans are everywhere!

## Post Macondo/Montara:

- Have we done enough?
- Are we prepared as an industry to protect people, the environment and communities should something go wrong?



- What are the priorities for improving process safety and integrity management and reducing hydrocarbon risks?

