

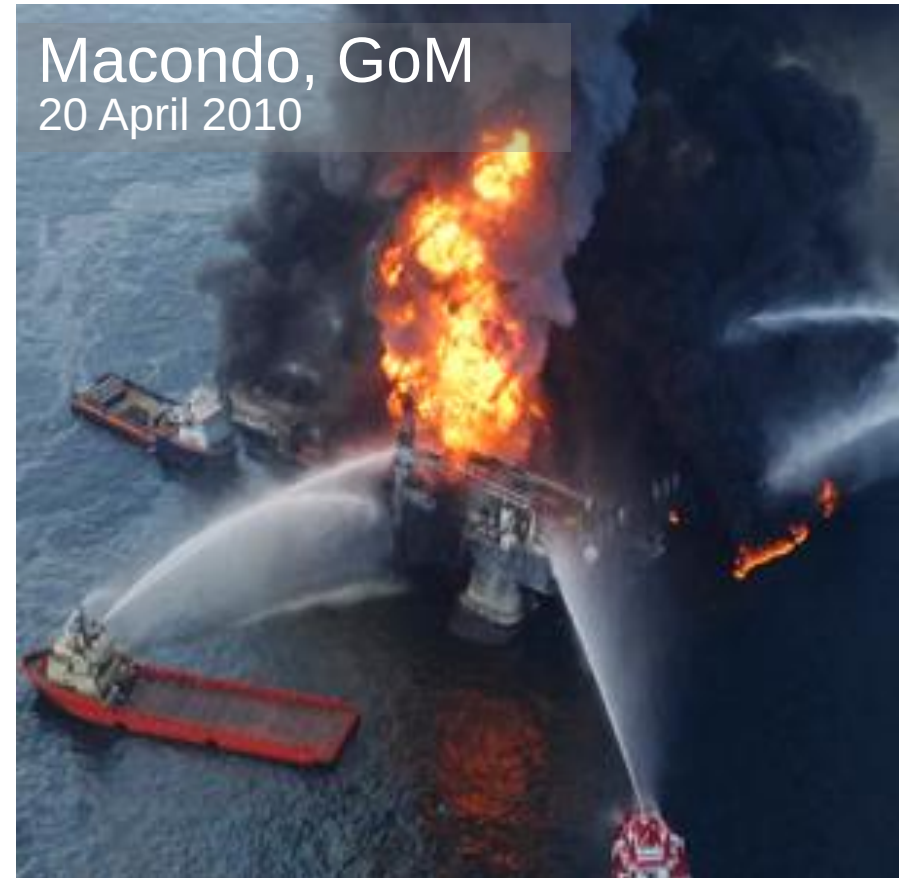
Hellenic Hydrocarbon Resources Management

Optimising Multi-Agency Response to Offshore Incidents

Marcus Russell – Global Engagement Manager

Macondo & Montara changed Industry...

Loss of Well Control Incidents Of A Scale That Had Not Been Anticipated



A New Paradigm Was Created

The Response was Un-precedented and Technically Complex



Industry Came Together To Restore Confidence

Prevention

Better capabilities and practice in well engineering design and well operations management

OGP Wells Expert Committee
International Association of Oil & Gas Producers



Intervention

Improved capping response in the event of an incident and to study further the need for – and feasibility of – global containment solutions

SUBSEA WELL
RESPONSE PROJECT

Oil Spill Response



Response

Effective and fit-for-purpose oil spill response preparedness and capability

OSR
Oil Spill Response
Joint Industry Programme



IOGP & IPIECA members have invested millions of dollars to build new equipment and make the new techniques available to all

TIERED PREPAREDNESS & RESPONSE

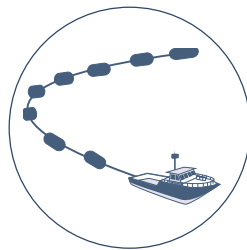
Integrating Resources for Efficient and Effective Response

WHAT IS TIERED PREPAREDNESS AND RESPONSE?

- 💧 Tiered Preparedness and Response is an internationally recognized planning approach used to:
 - Define and structure levels of oil spill response capabilities;
*this approach is **not** used to categorize the size or scope of a spill*
 - Plan for appropriate resources to be rapidly mobilized and cascaded to an incident location
 - Enable response escalation for an oil spill of any magnitude
- 💧 The following resources are considered when using Tiered Preparedness and Response:



RESPONDERS



EQUIPMENT



ADDITIONAL
SUPPORT

WHY IS TIERED PREPAREDNESS AND RESPONSE USED?

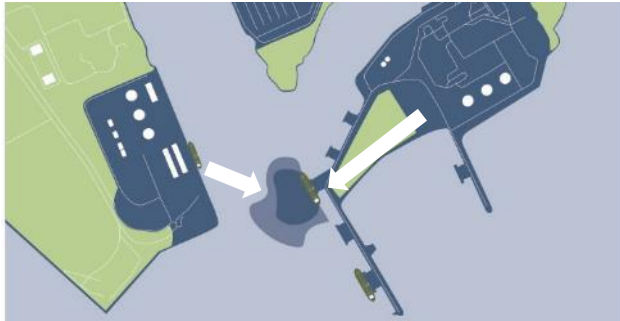
💧 Tiered Preparedness and Response enables:

- Integration of local, regional, and global industry capabilities into oil spill response planning
- Industry's ability to efficiently respond to an oil spill of any magnitude without maintaining the entire range of response resources at each operating facility or within each country



EXAMPLES OF CASCADING RESOURCES

TIER 1:



RESOURCES NECESSARY TO
HANDLE A LOCAL SPILL AND/OR
PROVIDE AN INITIAL RESPONSE



TIER 2:



NATIONAL OR REGIONAL
RESOURCES NECESSARY TO
SUPPLEMENT A TIER 1
RESPONSE



TIER 3:

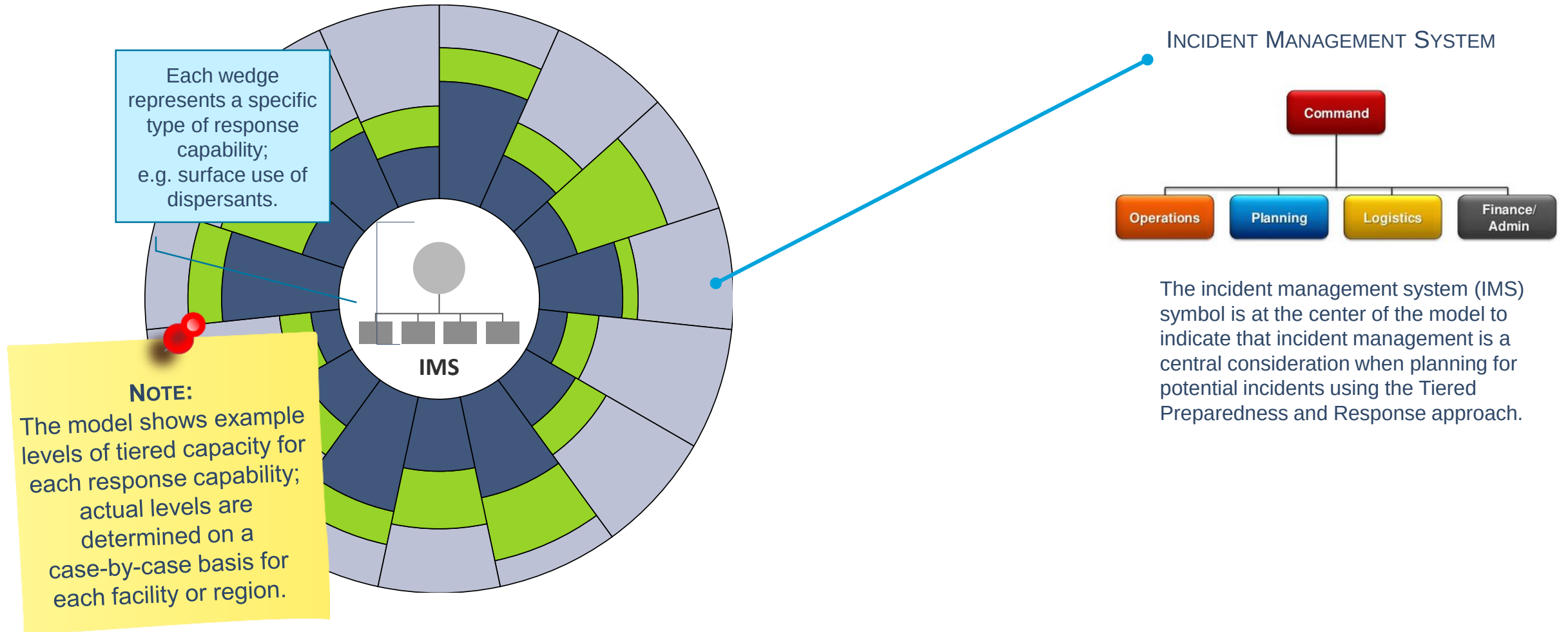


GLOBAL RESOURCES NECESSARY FOR SPILLS
THAT REQUIRE A SUBSTANTIAL ADDITIONAL
RESPONSE DUE TO INCIDENT SCALE,
COMPLEXITY, AND/OR IMPACT POTENTIAL



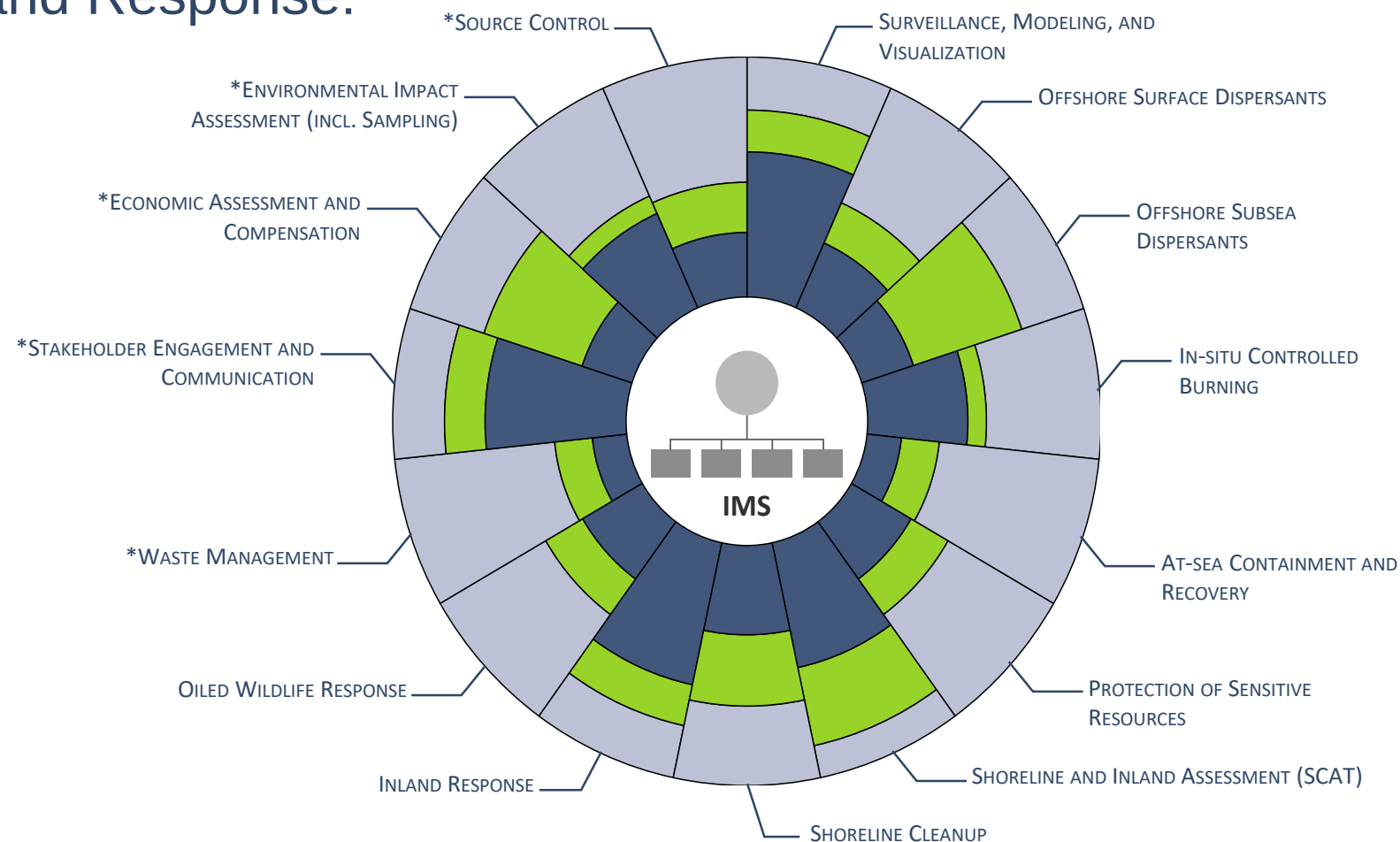
TIERED PREPAREDNESS AND RESPONSE MODEL

Agreed Industry Good Practice



CAPABILITIES OF TIERED PREPAREDNESS AND RESPONSE

- 💧 The following 15 capabilities essentially represent the scope of Tiered Preparedness and Response:



* These capabilities may not be provided by oil spill response organizations or mutual aid, but must be considered by operators in planning. Operators must combine internal and external resources to meet the capability required to respond to potential incidents.

THE RIGHT FIT

- There is no “one size fits all”, the best fit will depend on:
 - Pre-existing resources
 - Planned/Continuing operations
 - The Regulatory framework
 - Cultural preconceptions
- Above all the starting point must be risk-based scenario planning

TIER 1:



TIER 2:

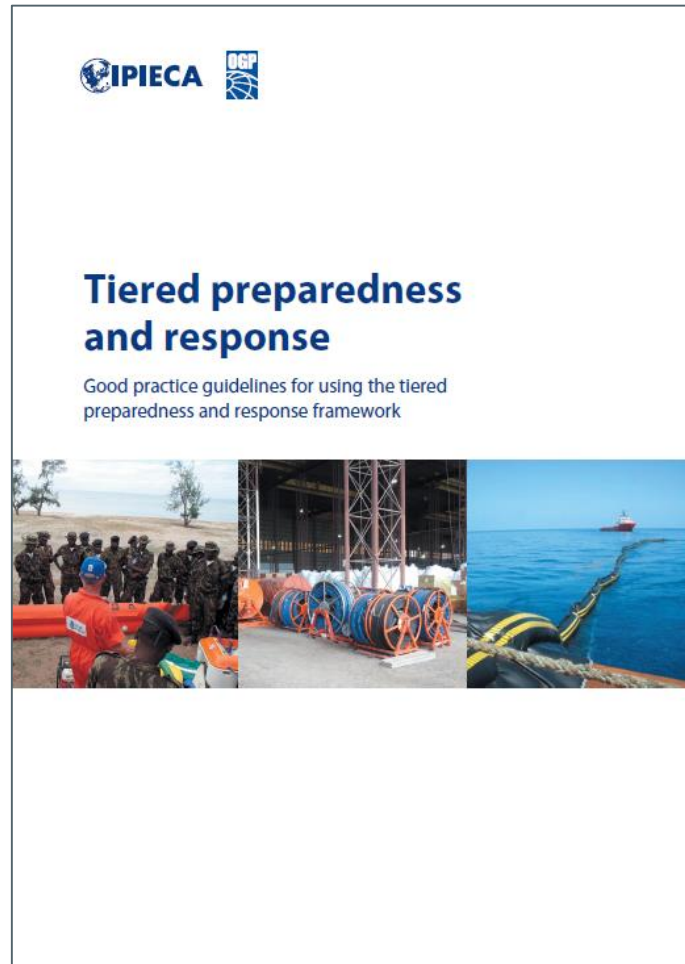


TIER 3:



More Reading

The IOGP / IPIECA Good Practice Report Series



OIL SPILL RESPONSE LIMITED

Thank You!