

HHRM

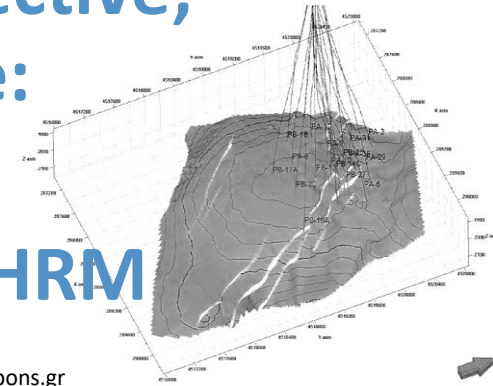
HELLENIC HYDROCARBON
RESOURCES MANAGEMENT

5th Tirana Gas Pipelines Safety Workshop

"Oil & Gas Sector Sharing HS experiences with other sectors and the Society"

28 February 2019

EU Offshore Safety Directive; Case Study Greece: Integration & Implementation by HHRM



www.greekhydrocarbons.gr

Dr. S. Bellas
Vice President



2013/30/EU Directive for Offshore Safety



Steps to think and move fast but safe forward

What was the rationale ?

- A number of “major” accidents that happened in the offshore installations worldwide and their implications (P36 –Brazil-2001, Bombay High –India-2005, Macondo –Gulf of Mexico-USA-2010, etc.)

Why is it important for us ?

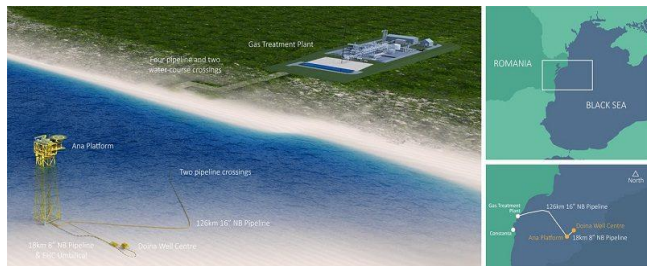
- Mediterranean is a semi closed Sea and will be eventually affected (not equally) by any such accident, either in Adriatic, the Ionian, the Cretan or any other neighbouring Sea. It refers to all of us !
- Challenging (deep-frontier) environments are progressively becoming the new Oil&Gas game ! (*see next slide for such “cases”*)

How can we derisk such an event ?

- By transparent cooperation, cautiously monitoring, taking appropriate measures and managing everything consistently in advance
- By properly implementing the suggested recommendations of the OSD
- By developing liability and compensation provisions

Some recent examples (*Offshore Magazine*)

25.01.2019: Goliat platform and supply vessel was recently connected to shore power (Barents Sea, Norway). In this way CO2 emissions will be cut by 1,400 metric tons/yr and Nox emissions by 12 metric tons/yr. Goliat is partly electrified through one of the world's longest subsea electric cables to an offshore platform.



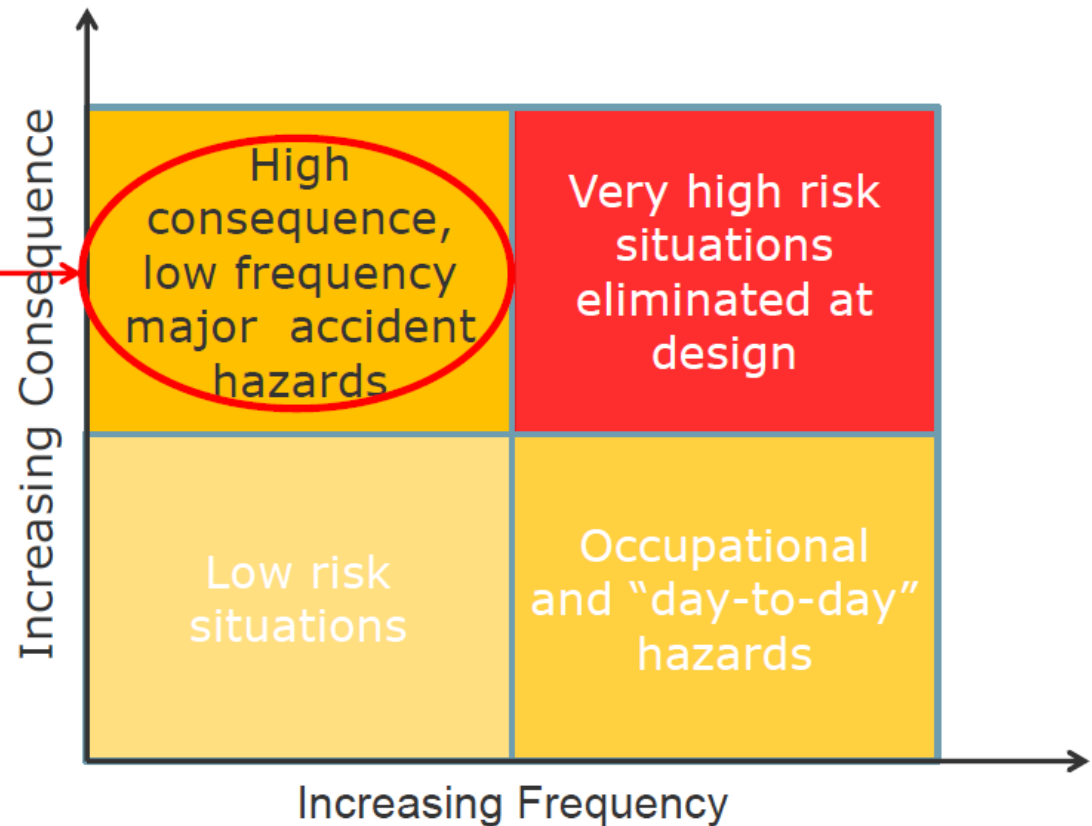
02.08.2018: Midia gas development offshore Romania (Black Sea). Five production wells –one subsea and – four platform wells will be connected through an 18km subsea pipeline to an unmanned production platform and all together through a 126km gas pipeline to the shore (gas treatment plant in Corbu).

Important Definitions (1/2)

- **Major Accidents** (in relation to an installation or connected infrastructure)
 - a. An incident involving an explosion, fire, loss of well control, or release of oil, gas or dangerous substances involving, or with a significant potential to cause fatalities or serious personal injury
 - b. An incident leading to serious damage **to the installation or connected infrastructure involving**, or with a significant potential to cause, fatalities or serious personal injury
 - c. Any other incident leading to fatalities or serious injury to five or more persons who are on the offshore installation where the source of danger occurs **or who are engaged in an offshore oil & gas operation in connection with the installation or connected infrastructure**
 - d. Any major environmental incident resulting from incidents referred to in points a, b, and c

Major Accident Hazards

DIRECTIVE 2013/30/EU
OF THE
EUROPEAN PARLIAMENT
AND OF THE COUNCIL
of 12 June 2013
on
safety of offshore oil and
gas operations



Important Definitions (2/2)

- **Offshore**

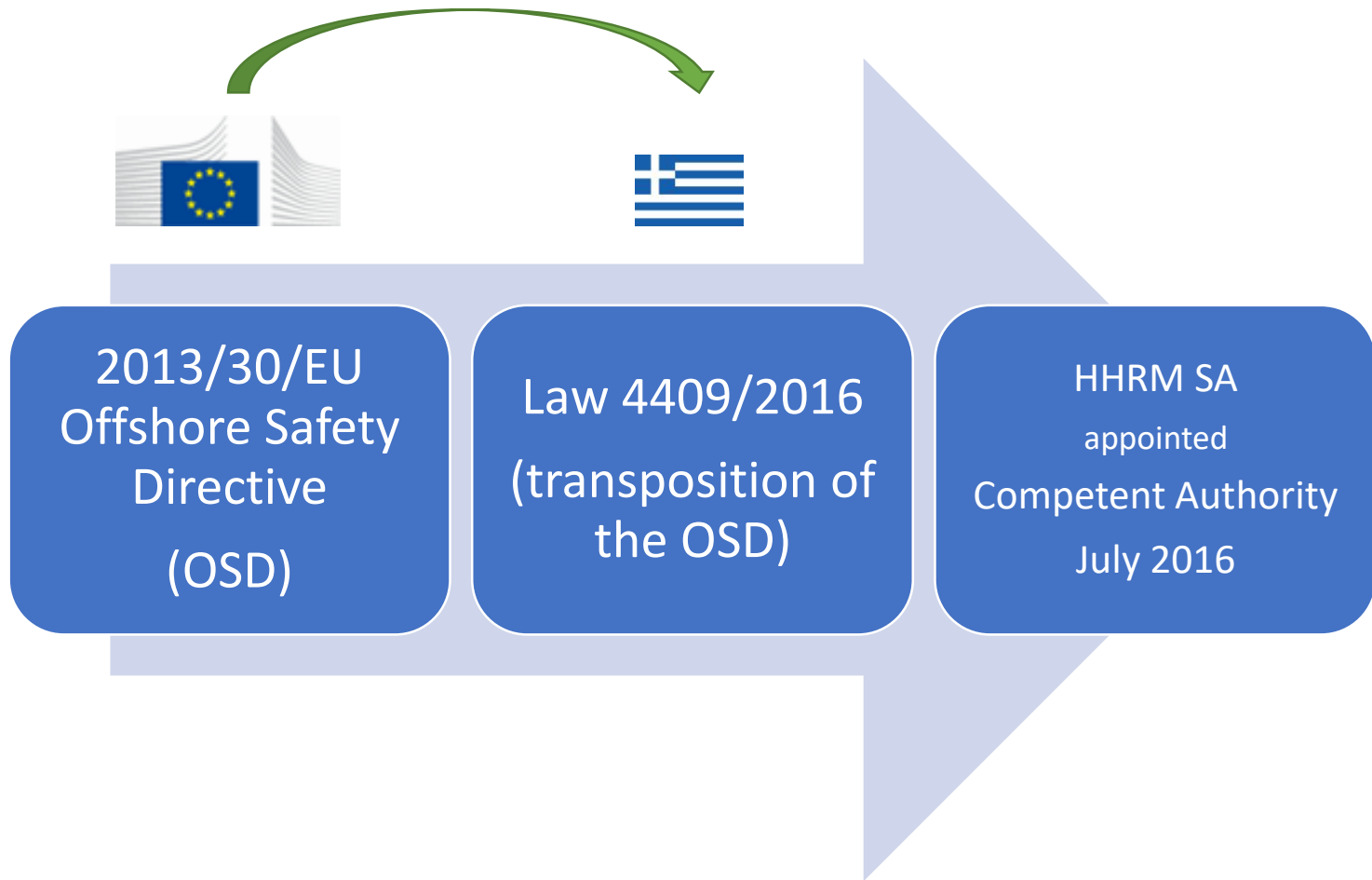
The Exclusive Economic Zone or the continental shelf of a Member State according to the United Nations Convention on the Law of the Sea

- **Offshore oil and gas operations**

All activities associated with an installation or connected infrastructures, including design, planning, construction, operation and decommissioning for exploration and production of oil or gas

- **Excluding** conveyance of oil and gas from one coast to another

HHRM is the Competent Authority



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- In 2018 HHRM has concluded its collaboration with DNV GL, an international expert, to organize the monitoring of the existing offshore operations in Greece.



- The tender was carried out in cooperation with the European Bank for Reconstruction and Development (“EBRD”).



European Bank
for Reconstruction and Development

- A gap analysis between the EU Directive and the Greek Law was done and HHRM published a series of Guidance documents, which aim to assist the offshore Oil & Gas Operators and Owners in Greece to fulfil their regulatory duties.

Competent Authority - Responsibilities

- The responsibilities of HHRM include:
 - Assessing and accepting Reports on Major Hazards; assessing design notifications and notifications of well operations or notifications of combined operations
 - Overseeing compliance by operators and owners of the Greek Offshore Safety Law, including inspections, investigation and enforcement actions
 - Advising other authorities or bodies
 - Making annual plans and producing reports
 - Cooperating with other EU Competent Authorities
 - Proposing the issuing of safety regulations and regulatory acts

External Emergency Response Plan

- According to art. 29 of the Law 4409/2016 and in collaboration with relevant Greek Authorities, HHRM is responsible for the preparation of an External Emergency Response Plan covering all offshore oil and gas installations within its jurisdiction.
- The Working Group has been already formed and initiated its operations.

External Emergency Response Plan



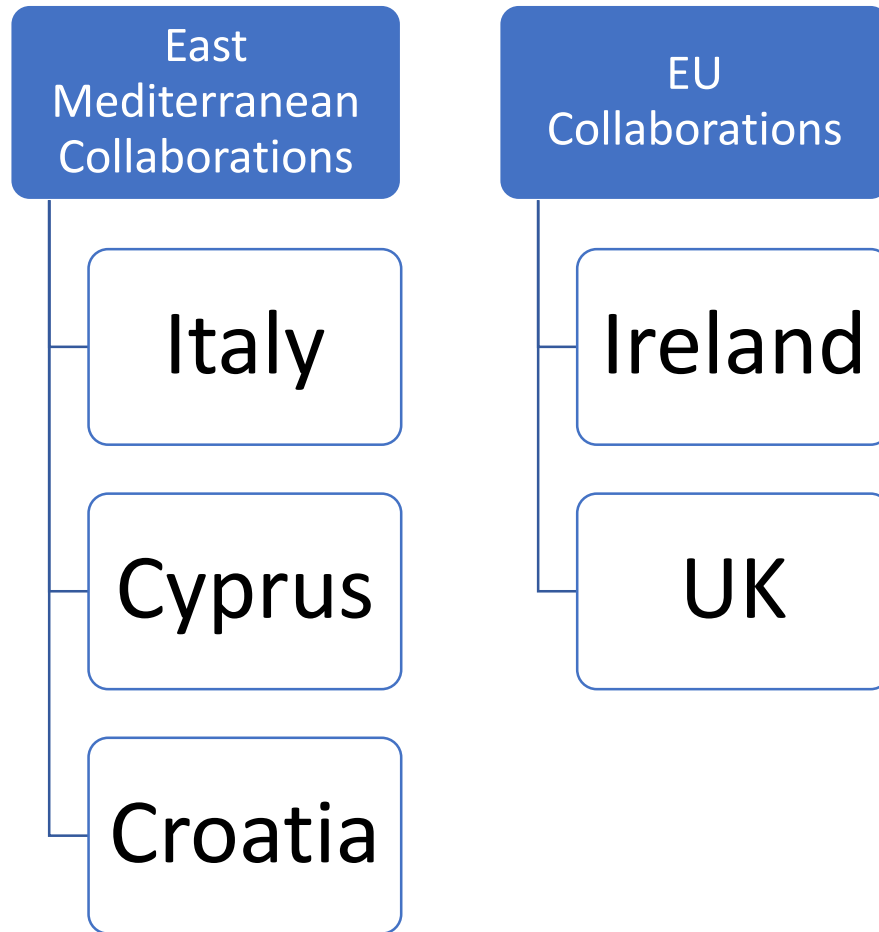
National collaboration of HHRM

- Preparation and implementation of coordinated or joint procedures with other Authorities such as
 - the coordination of inspections and
 - the investigation of any potential incident.
- Drafting of a number of Ministerial Decisions that are indicated in the Greek Law that implemented the EU Directive.

International collaboration of HHRM

- Member of the EU Offshore Authorities Group (EUOAG)
- Participates in Workshops in Croatia, Italy, Belgium, Romania
- Collaborates with the Joint Research Centre (JRC) of the European Commission in the areas of
 - inspection procedures,
 - confidential reporting &
 - preparation of the External Emergency Response Plan
- Concluded Agreements with Italy, Croatia and Ireland for the exchange of expertise and application of best practices

Cooperation Agreements



Funding Opportunities

HHRM has submitted proposals for EU funding aiming to cover expenses for the exchange of technical expertise:

- Structural Reform Support Program (Italy)
- *Sealines Project* (Italy, Cyprus, Croatia, Egypt, France, Malta, Montenegro)

HHRM's activities in 2018

HHRM recently:

- Assessed & Accepted 3 Reports on Major Hazards (RoMH)
- Assessed 6 Notifications of Well Operations (NOWOs)
- Assessed a Design Notification for a new platform
- Is currently assessing another 2 NOWOs

Sharing of Information

HHRM's website

HHRM

HELLENIC HYDROCARBON
RESOURCES MANAGEMENT

ROMH AND NOTIFICATION REQUIREMENTS

UNDER L4409/2016



Release Date: 01 March 2018
Revision Date: 01 March 2018
Revision No.: 1

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HYDROCARBON
RESOURCES MANAGEMENT

GUIDANCE

L4409/2016



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REPORT ON MAJOR HAZARDS

L4409/2016



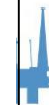
Release Date: 01 March 2018
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Policy and Strategy

L4409/2016



Release Date: 01 March 2018
Revision Date: 01 March 2018
Revision No.: 1

SAVE THE DATE

Invitation

Hellenic Hydrocarbon Resources Management
is organizing a Workshop
on Emergency Response in Offshore Hydrocarbon Installations

Athens, Tuesday 25 June 2019

A detailed programme of the workshop will be communicated shortly
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THANK YOU!



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