Agreements for E&P Offshore Operation Safety

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**DGS-UNMIG - Safety measures**

Italy has an indicator of injuries for millions of tep produced lowest than other Countries (0.26 in 2014). Nevertheless the **Directorate general for safety - National mining office for hydrocarbons and georesources** (DGS-UNMIG) of the Ministry of Economic Development wants to improve the already good safety measures of offshore Oil&Gas operations in application of D.Lgs 18\(^{th}\) august, 2015 n.145 (transportation of Directive 2013/30/UE) and with respect to the D.Lgs 26\(^{th}\) june, 2012 n.83.

With this prospective DGS-UNMIG started agreements with University, Research Institutions and Authorities obtaining a scientific support (CNR, RSE, INGV, OGS, AMRA, CRIET, Navy, Harbor Body and Universities).

The **pills of E&P Safety**

The interest is on five pillars of E&P safety operations:

- **Control**: testing and constant monitoring of the safety objectives expected.
- **Competence**: the increased competence and knowledge in the field of safety by research activities.
- **Efficiency**: the improvement of existing by promoting efficiency operations.
- **Research & Innovation**: the promotion of technological and process innovation.
- **Dialog**: a renewed action for dialogue with stakeholders and citizens.

\[\text{Dialog:} \quad \text{Research & Innovaion:} \quad \text{Efficiency:} \quad \text{Competence:} \quad \text{Control:} \quad \text{Safety}\]

**Research Institutions and Authorities**

- **AMRA SCARL, ANALYSIS AND MONITORING OF ENVIRONMENTAL RISKS, NAPOLI**
- **DGS-UNMIG DIRECTORATE GENERAL FOR SAFETY – NATIONAL MINING OFFICE FOR HYDROCARBONS AND GEOTHERMAL RESOURCES, ROME**
- **“BICOCCA” UNIVERSITY OF MILAN, INTERUNIVERSITY RESEARCH CENTRE FOR TERRITORIAL ECONOMY, MILANO**
- **AMRA SCARL, ANALISYS AND MONITORING OF ENVIRONMENTAL RISKS, NAPOLI**
- **BUIG - Il MARE - Bolleno ufficiale degli idrocarburi e delle georisorse. Seconda edizione**

The **objectives**

The following tasks have been set up for guarantee-oriented actions:

- identification of an measurable index for the evaluation of variation of the offshore installations safety level from the current status and criticalities;
- application of a naval-air-satellite integrated system for the daily monitoring of Adriatic Sea, in coordination with MATTM;
- check of Adriatic sealines conditions for oil & gas transportation;
- check of steel structures conditions of offshore facilities;
- offshore operations monitoring: drilling and recording systems for drilling parameters;
- evaluation of seismic hazard of existing platforms;
- development of feasibility studies for seismic and ground deformation monitoring;
- check of the current emissions of installations and their forecast to 2020;
- analysis of the environmental effects of the NaTech operations and incident;
- collection of information about the activities of Italian institutions for increasing levels of offshore safety and related databases;
- geology and stratigraphy analysis of marine areas open to hydrocarbons exploration and production activities;
- energetic optimization of the offshore installation even by means of renewable energy;
- risks evaluation for production and drilling plants for Major hazard Report and relevant mitigation actions;
- study of operating procedures for control and evaluation of report on major hazard;
- mapping of international legislation on the continental shelf, on the use of mineral resources and cross-border relations;
- analysis of Best Practices for economic, financial and legal solutions at critical accidents in offshore installations, including across borders.
- study on instruments adopted for the social corporate responsibility of companies;
- legal and economic analysis of the possible conversion of offshore production platforms in other energy uses (renewable energy and storages for loading and reloading of LNG);
- mapping of natural hydrocarbon emission;
- communication;
- hydrocarbon transport;
- international legislative framework on energy;
- best practices for financial and economic solution in the hydrocarbon sector.

The **agreements: work in progress**

1) DGS-UNMIG has started 14 technical collaboraons with University, Research Institutions and Authorities since January 2014.
2) Other 2 collaborations will start soon with University of Naples and Guardia di Finanza.
3) Until today have been achieved 30% of the objectives set by the agreements.
4) The main developed topics of the collaborations are “Control” and “Competence” by improving skills and knowledge of safety in E&P activities.

**References**

- http://unmig.mise.gov.it/

**BUIG - IL MARE - Bollettino ufficiale degli idrocarburi e delle georisorse. Seconda edizione revisionata e ampliata. Marzo 2015.**

La geologia marina in Italia

**Primo convegno dei geologi marini italiani - Roma, 18 e 19 febbraio 2016**