Agreements for E&P Offshore Operation Safety

LILIANA PANEI (*), ILARIA ANTONCECCHI (*)(**), LUCA DONINI (*)(^), GIANVITO TEOFILO (*)(^)
& FRANCO TERLIZZESE (*)

(*) DGS-UNMIG DIRECTORATE GENERAL FOR SAFETY – NATIONAL MINING OFFICE FOR HYDROCARBONS AND GEOTERMAL RESOURCES, ROME

(**) "BICOCCA" UNIVERSITY OF MILAN, INTERUNIVERSITY RESEARCH CENTRE FOR TERRITORIAL ECONOMY, MILANO
(^) AMRA SCARL, ANALISYS AND MONITORING OF ENVIRONMENTAL RISKS, NAPOLI



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 18th august, 2015 n.145 (transportation of Directive 2013/30/UE) and with respect to the D.Lgs 26th 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 pillars 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.



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.

Research Institutions and Authorities CRIET Centro di Ricerca Internativersitato in Economia del Territorio ALMA MATER STUDIORUM UNIVERSITA DI ROMA ALMA MATER STUDIORUM UNIVERSITA DI BOLOGNA LISTITUTO DE INTERNATIVA DI ROMA LISTITUTO DI

The agreements: work in progress

- 1) DGS-UNMIG has started 14 technical collaborations 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/

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