



Harmonization and **N**etworking for contaminant assessment in the Ionian and **A**driatic Seas

Croatian experiences from offshore platforms - plans and strategies



Croatian Hydrocarbon Agency

1st Workshop Meeting, April 20th Athens, Greece

Croatian Hydrocarbon Agency

The main responsibilities of CHA are:

- Supervision over all aspects of exploration and exploitation of hydrocarbons
- Encouraging competitiveness and optimal hydrocarbons management
- Ensuring balance between energy and environmental policies of the Republic of Croatia

History of exploration and production in Croatian offshore

- First exploratory wells in early 1970s
- In late 1990s start of production of gas in northern Adriatic
- 3 exploitation fields
- Sea depth 40 – 70m, distance to the nearest land 36-61 km
- Biogenic gas (99,6 % methane)
- 20 installations (19 production, 1 compression), 21 pipelines (620 km of different pipelines)
- All installations still producing



Environmental impact assessment

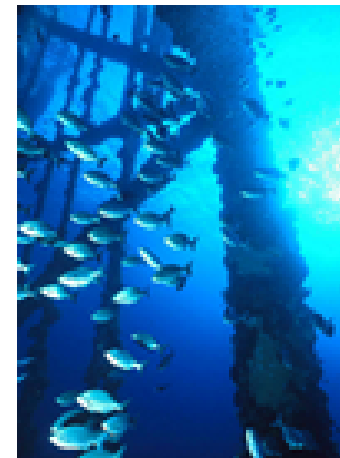
EIAs for projects:

- EIA for hydrocarbon activities has to include measures for removal of the installation
- Existed EIA is related to whole object's life and it is leaned on *Decision of the assessment of the intervention's impact on the environment* as well as on the *Environmental protection law* (these are in accordance with EU regulations)
- Existing EIAs for offshore installation prescribe some measures for decommissioning (i.e. liquidating the wells, clearing gaslines, transporting the waste from removal process to land and using it as a secondary resource, not using explosives in the decommissioning)

Strategic environmental assessment study SEA

SEA for offshore exploration and exploitation of hydrocarbons

- In 2015, for potential new developments (existing production was not in scope)
- Describes methods for decommissioning and proposes some measures (to leave the construction for forming an artificial reef) and to clean the gaslines and leave them on the sea bed)



Environmental protection and monitoring

Environmental protection program and monitoring on existing producing platforms are performed in line with Decision issued by Ministry of Environment and Energetic (MZOE RH)

- According to each Decision, MZOE prescribes group of parameters that should be monitored.
- These group of parameters are defined as a result of *Studies of environmental impact* (more detailed explanation in national legislative – MZOE RH)

Environmental protection and monitoring

Group of parameters:

- Physical and chemical properties of water and sediments
- Biological communities living in the fouling community on the platform and ecotoxicological platform effect
- Formation water analysis
- Sewage water analysis
- Air emissions
- Various day by day monitoring

General legal framework

- ✂ **Mining Act (OG 56/13 and 14/14)** - the conditions for granting and using authorizations for the prospection, exploration and production of hydrocarbons and regulates the management of mineral raw materials and the planning of mining economic activities
- ✂ **Act on the Exploration and Exploitation of Hydrocarbons** which regulates the management, exploration and production of hydrocarbons
- ✂ **Environmental Protection Act (OG 80/13 and 78/15)** - which regulates *inter alia* the principles of environmental protection within the framework of sustainable development

General legal framework

- ✚ **Maritime Code (OG 181/04, 76/07, 146/08, 61/11, 56/13 and 26/15)** – giving the legal framework for the registration and putting into service of offshore installations, as well as prescribing statutory requirements with regard to new and existing offshore installations
- ✚ **Act on Safety of Offshore Exploration and Production of Hydrocarbons/Offshore safety act (OG 78/15)** – transposition of Directive 2013/30/EU
- ✚ **Regulation on the Coordination for the safety of offshore exploration and production of hydrocarbons** - describes the organization of the appointed Competent Authority for offshore safety

General legal framework

- Y **Decree on Essential Technical Requirements, Safety and Protection in Exploration and Exploitation of Hydrocarbons in the Offshore** - outlines the main technical requirements to be followed while performing offshore exploration and production activities
- Y **Regulations of minimum safety requirements and workers health protection, and technical supervision of plants, equipment, installations and apparatus in hazardous areas (OG 39/06 and 106/07).** These Regulations comply with European Directive 1999/92/EC (ATEX 137)



Interreg
ADRION **ADRIATIC-IONIAN**
European Regional Development Fund - Instrument for Pre-Accession II Fund



HarmonIA



Thank you for your attention!



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