

**Hierarchy of State Plans
and risk and vulnerability
assessment for Regional
Plans**

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NATIONAL PLAN -CONTINGENCY PLAN FOR ACCIDENTAL MARINE POLLUTION



- establishes the procedures for preparedness plan and response, and measures for predicting, preventing and restricting accidental marine pollution or unusual natural marine phenomenon.
- in case of accidental marine pollution caused by oil and/or oil mixture if the amount exceeds 2000m³ of hazardous and noxious substances
- complete inventory of emergency response equipment pertinent to their offshore oil and gas operation, including aircrafts and helicopters
- list of certified labs for analyses and data sampling
- Amendments to the Maritime Code – in procedure



Headquarters: command activities in line with the Contingency Plan, implementing measures for the prevention of marine pollution, mobilization of human resources, available equipment and resources from the land, sea and air, decision to use dispersants, waste management for collected material, requesting assistance from other countries or activation of the Sub-regional Plan etc....

Maritime Rescue Coordination Centre Rijeka (MRCC): operational activities in line with the Contingency Plan, coordinating activities in line with county contingency plans, coordinating implementation of measures for the prevention of marine pollution, activating the Coast Guard, informing operational bodies of the other countries and REMPEC on potential/present marine pollution by the Pollution Reporting System (POLREP)

N. P. – prediction, preventing and restricting sea pollution



Predicting procedures encompass:

- monitoring of marine environment,
- designating and managing particularly sensitive sea areas,
- providing appropriate systems for control of maritime traffic,
- providing technical resources and services for the implementation of measures for preventing and restricting sea pollution,
- **assessment of risk and sensitivity of the area covered by the Contingency Plan**



The central state administrative body competent for the sea **is in charge** of preparing assessment of risk and sensitivity of the area, in cooperation with central state administrative bodies competent for environmental and nature protection

Risk assessment includes (partial list):

- determination of high risks areas in relation to marine pollution (tankers' routes terminals, ports, etc.),
- estimated quantities of potential oil and/or oil mixture and hazardous and noxious substances releases and their effect on specially sensitive areas,
- analysis of oceanographic, hydrographical and meteorological data,
- records of reported marine pollution incidents caused by oil and/or oil mixture, hazardous and noxious substances,
- economic valorization (of the consequences) of potential marine pollution.

Sensitivity assessment includes:

- defining and mapping of the coastline type (pebble, sandy, rocky and alike),
- list and description of protected natural resources,
- list and description of resources at risk (commercial objects on shore and at sea, sport and recreational areas, tourist zones, fishing areas, maricultural zones, cultural heritage areas and other),
- list of potential places of refuge

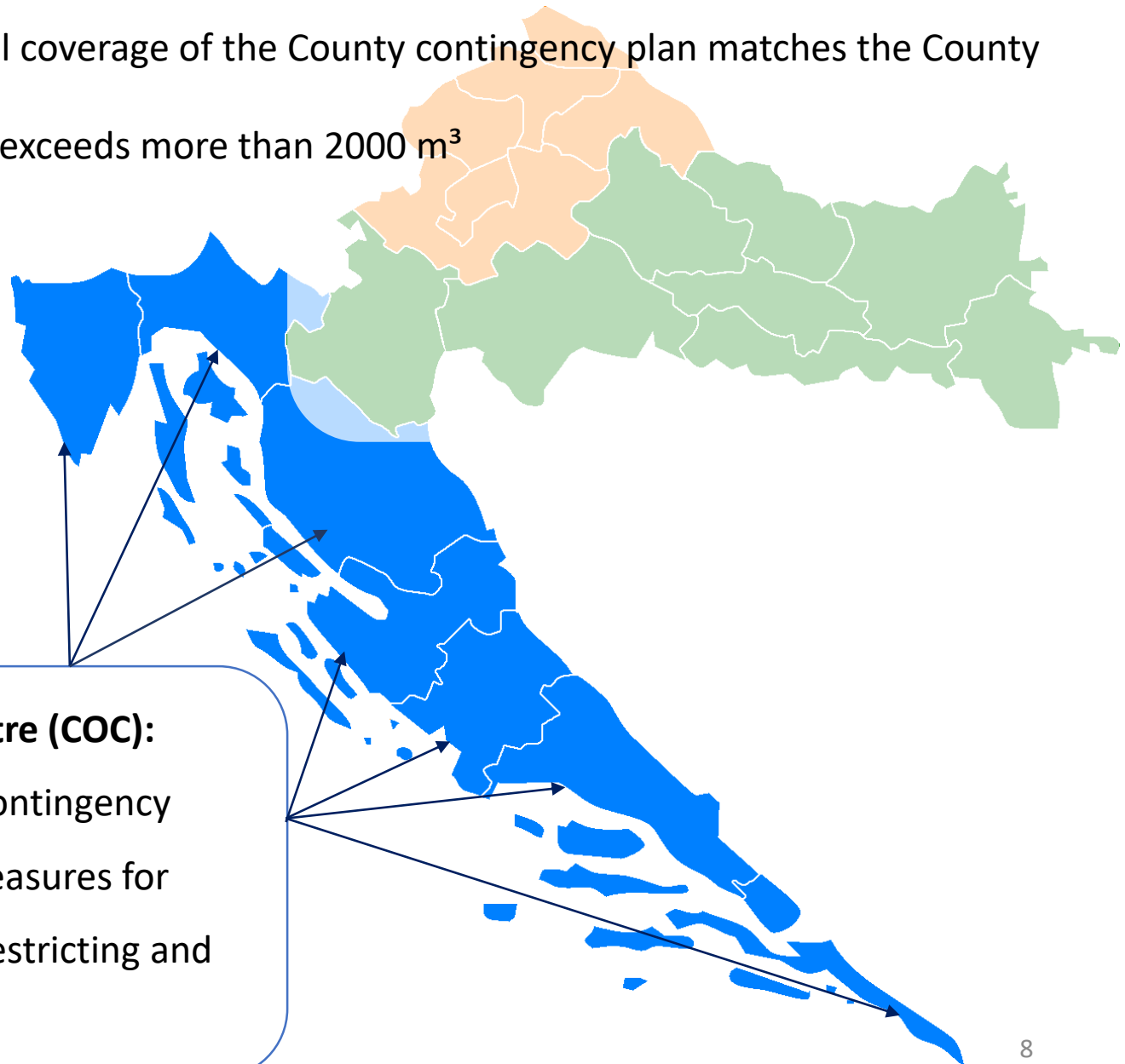
according to the Plan of Providing Assistance
to a Ship in Distress)



COUNTY PLAN



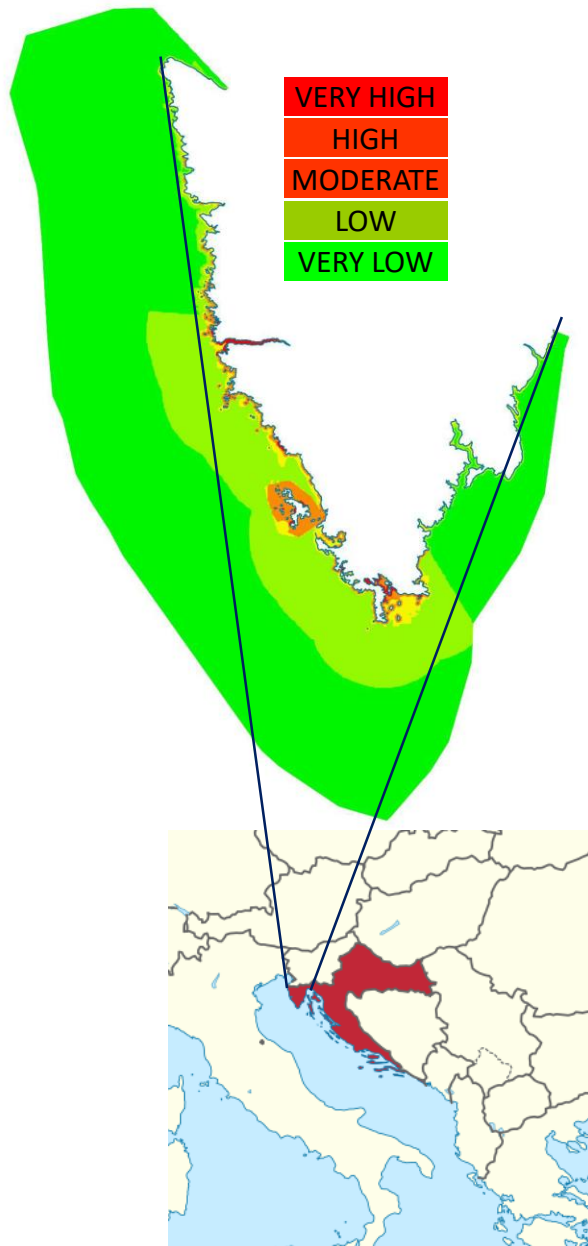
The scope and geographical coverage of the County contingency plan matches the County borders if oil spill does not exceeds more than 2000 m³



County Operational Centre (COC):

Implement the County contingency plans procedures and measures for predicting, preventing, restricting and achieving preparedness.

COUNTY PLAN – result example Istra area



- Web available: [https://www.istra-istria.hr/fileadmin/dokumenti/upravna tijela/UO za odrzivi razvoj/20131015 03 Osjetljivost.pdf](https://www.istra-istria.hr/fileadmin/dokumenti/upravna_tijela/UO_za_odrzivi_razvoj/20131015_03_Osjetljivost.pdf)
- Author: Istarska županija, UO za održivi razvoj Odsjek za zaštitu prirode i okoliša, Pula, 2013.
- Descriptive sensitivity rating
- Descriptive rating of significance factors
- Synthetic sensitivity map of the area performed by ArcGIS and „spatial analyst“ extension
- Raster format ESRI grid → Map algebra
- Sensitivity analyses by Jenks method
- Synthetic sensitivity map
- 4 areas mark as very high risk
- basic layout for future study

1. The Equipment Assistance Service (EAS) consists of a stand-alone oil pollution response equipment, in Ravenna (Italy): technical support personnel qualified and trained in the maintenance and deployment of the oil pollution response equipment 4 Fire Boom, 1 Speed Sweep, 1 Current Buster, 1 Roboom-Roskim Integrated System and 3 Trawl Net System
2. Full Scale Civil Protection Exercise Adriatic 2018, 21 – 25 May 2018, Split
 Scenario: collision of ships (tanker and ferry), search and rescue of human lives at sea (2 persons are rescued by HGSS); measures to prevent pollution of the sea and the shore fire-fighting on vessels conducting underwater activities



Vježba Adriatic 2018 (Foto: Ivo Gagali/PIXSELL)

OPERATOR'S PREPAREDNESS



- Periodical drills
- Different levels (scale L1 – L3), annual plan submitted to Coordination
- The last one was held in December 2018.:

- L2 (mid-scale)

- Oil spill**

- Drill purpose: thorough check of communication, identification of potential risks, the team's readiness for sudden occurrences checking and improvement of additional measures to reduce the risk

- Dispersant Radiagreen OSD, available on platform site and on the supply vessels (200 – 600 l)

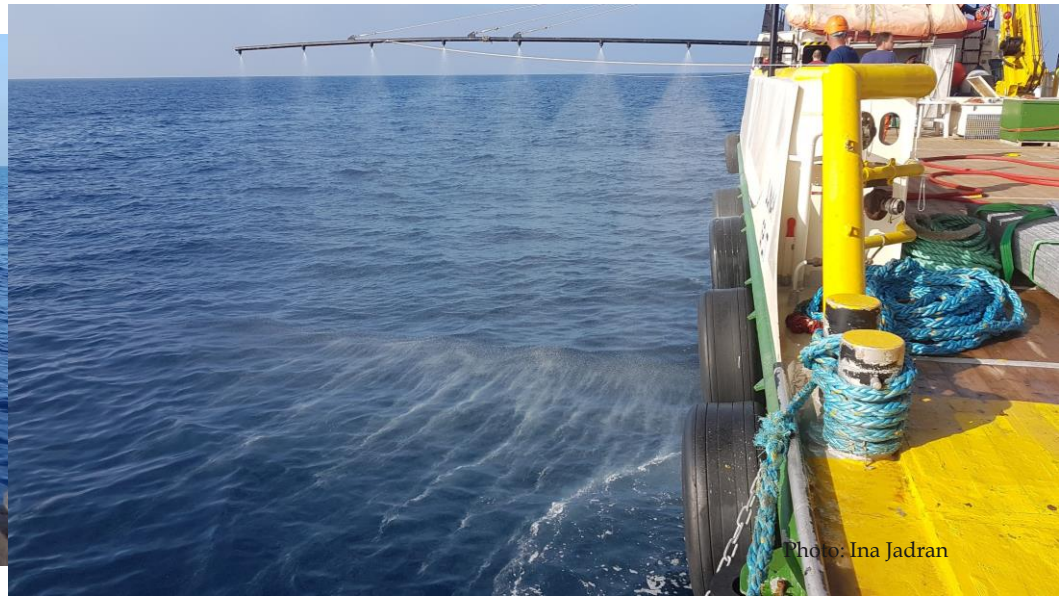


Photo: Ina Jadran

Thank you for the attention

