

## Croatia

### Ministry of Environmental and Nature Protection

#### Reply on the Questionnaire on issues relating to the environmental effects related to waste originating from chemical munitions dumped at sea

##### Situation

- 1. Is there an environmental risk for your country/region to be affected by waste originating from chemical munitions dumped at sea (WOCMDS)? If so, what are the environmental challenges and effects posed by WOCMDS?**

According to the initiative of the CP of Barcelona Convention at their 13 COP (Portorož, November 2005) UNEP/MAP MED POL in cooperation with CP collected available country data on the dumping sites of ammunitions in the Mediterranean Sea based on which Report on the Ammunitions Dumping Sites into the Mediterranean Sea was prepared in 2009 (UNEP(DEPI)/MED WG. 338/2). Croatia participated in the initiative by providing available data and locations of dumped ammunitions and filling out the corresponding questionnaire. We consider the mentioned Report as relevant document that reflect the state of environmental risk posed by the WOCMDS in the Mediterranean Sea including Adriatic Sea as well.

Beside former Yugoslav navy training grounds on the sea, there were incidents on dumping of ammunitions in the North Adriatic Sea by NATO during NATO campaign in Kosovo in 1999. Campaign included air strikes aimed at the targets in Former Serbian Republic of Yugoslavia and aircraft landings at the Aviano airbase. During the missions NATO aircrafts released the monition (bombs) used in air strikes for the purpose of safe landing. Data on locations of released ammunition are not available.

- 2. Does the scientific community in your country/region examine the environmental effects related to WOCMDS? If so, what are the funding of such scientific researches?**

On the regional level (Mediterranean Sea region) activities conducted in the framework of UNEP/MAP has been concentrated mostly on the mapping the officially recorded ammunitions dumping sites. To our knowledge, Italian research institute ICRAM was engaged in the European Commission co-funded project „RED COD“ aimed to assess effects and risks toward the benthic ecosystems caused by leaking of persistent pollutants from dumped ammunitions in the Southern Adriatic Sea. In Croatia, Ministry of Defence is the responsible ministry holding the data on dumped ammunition sites in the area under sovereignty and jurisdiction of the Republic of Croatia. As an administrative unit of the Ministry of Defence there is the Institute for Research and Development of Defence System which is envisioned as a place where

the needs of national defence and security meet the scientific and technological potentials of the Republic of Croatia. The Institute had conducted some projects related to sea dumped ammunition. The projects were related to environmental security in military ports ([http://iros.morh.hr/en/science/projects/environmental\\_security\\_of\\_military\\_ports](http://iros.morh.hr/en/science/projects/environmental_security_of_military_ports)) and underwater detection and mapping of threat materials ([http://iros.morh.hr/en/science/projects/underwater\\_detection](http://iros.morh.hr/en/science/projects/underwater_detection)).

### **Response to incidents**

**3. Does your country/region have the experience in responding to incidents related to WOCMDS?**

Most common experience regarding dumped ammunitions is mostly related to the deactivation and disposal of old underwater mines. For other related experiences we have no information.

**4. Does your country/region have the capacity to respond to incidents related to WOCMDS?**

Existing capacity that could respond to incidents related to WOCMDS are represented in existing institutional, technical and human capacities set under the national Contingency Plan for Accidental Marine Pollution (OG 92/08). Although the NCP does not defined the dumped ammunition as type of risk and threats that can result in marine pollution, NCP should be implemented also in case of marine pollution caused by hazardous and noxious substances. Nevertheless additional training as well as technical capacities should be built in order for proper reply to incidents of that kind.

**5. Has your government/organization developed an action plan or built capacities to respond to incidents related to WOCMDS? If not, does your government/organization intend to do so in the future?**

According to the knowledge of the Ministry of Environmental and Nature Protection there is no such action plan prepared. Concerning the delicacy of the subject matter, despite of the so far raised discussions on that issue, political decision seems necessary to launch specific activities.

### **Raising awareness and other actions**

**6. Does your government/organization provide information on WOCMDS to civil society and industry? Does your government/organization raise awareness on WOCMDS and how?**

Available information on existing disposal sites charted on the maps of Former Republic of Yugoslavia are published by Croatian Hydrography Institute on the nautical maps (all sizes). There are no data regarding type and amount of disposed material. Still to assume is that there are uncharted locations of dumped ammunitions in the Croatian part of the Adriatic Sea. There are no specific activities related to raising awareness related to WOCMDS.

**7. Are there any partnership between government, industry and civil society in your country/region on raising awareness, reporting and monitoring of WOCMDS?**

Ministry of Environmental and Nature Protection is not aware of any mentioned partnership on the national level.

### **Cooperation**

**8. Does your government cooperate with other States, regional and/or international organizations to assess or increase awareness of WOCMDS?**

As already reply (on the first question) Croatia as a CP of the Barcelona Convention cooperates in initiatives undertaken related to this issue.

**9. What would be, in your view, possible modalities for international cooperation to assess and increase awareness of WOCMDS?**

International cooperation specially through regional seas conventions should be strengthen in a way to assess the impact of WOCMDS, define the goals and monitoring activities as well as measures to reduce/eliminate the negative effects of WOCMDS on marine environment including humans.