



REPUBLIC OF SLOVENIA
COURT OF AUDIT

AUDIT REPORT

Intervention management system in the case of a sudden pollution of the Adriatic Sea

2021



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Intervention management system in the case of a sudden pollution of the Adriatic Sea

No.: 320-2/2020/58

Ljubljana, 8 june, 2021

Summary

The Court of Audit implemented the audit reviewing whether the system of managing interventions in case of sudden pollution in the Adriatic Sea in the period from 1 January 2017 to 31 December 2019 was efficient. The audit was a part of the international parallel audit involving Supreme Audit Institutions of all countries along the Adriatic coast.

The system of managing interventions in case of sudden pollution in the Adriatic Sea involves several stakeholders, while the audit reviewed those that carry the main responsibilities to develop this system, namely the Ministry of Infrastructure, the Ministry of Defence, the Ministry of the Environment and Spatial Planning, the Maritime Administration of the Republic of Slovenia, the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief, the Slovenian Environment Agency, the Slovenian Water Agency and Luka Koper, port and logistic system, public limited company responsible for preventing and fighting sea pollution within the area of a cargo port in Koper.

The Court of Audit found out that the auditees are focused on various measures preventing the occurrence of accidents and consequently pollution of the sea, and that they carry out those measures as well. It, however, pointed out some weaknesses, such as: implementation of the public utility service of maintaining infrastructure for the safety of sea navigation was based on a 17-year-old concession contract. The system of hydrological and meteorological measurements and for providing data necessary for safe navigation at sea was upgraded but was not fully set up. While carrying out maritime pilotage and harbour towage difficulties occurred that could also affect the safety of navigation at sea. In order to remedy disclosed issues the authorised auditees already adopted some measures. Between the years 2017 and 2019 there were 2 cases of emergency related to grounding of tankers. If those accidents caused an oil spill, the consequences could result in a catastrophe for marine environment and also for the coast. An important step towards the improvement of safety in the maritime transport is opening of the marine traffic control centre in 2021. In order to reach the desired level of monitoring and control over the maritime transport, it is necessary to approach towards listing of contents and possible amendments of the legal bases.

The Court of Audit disclosed that procedures to be used in case of pollution of the sea are defined. Smaller scope of pollution is managed by regular units and services of the auditees within their powers, while procedures related to larger scope of pollution are defined in regional plan of protection and disaster relief operations when accidents occur at sea. Thereby, the Court of Audit

found out that responsibilities of those that have the permits to use water, i.e. harbours, related to cleaning and remedying water pollution including the tasks of removing collected waste and substances were not always defined in the issued permit. Also the responsibilities for cleaning the coast and offshore areas were not clearly defined. The auditees did not clarify the legal bases enough for the Maritime Administration of the Republic of Slovenia and the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief to be able to impose on the polluters the costs of activities undertaken when fighting the pollution of the sea.

The Court of Audit also established several weaknesses related to the content of the current regional plan of protection and disaster relief operations. All foreseen plans of the state bodies, where tasks of each body are defined in case of activating the plan of protection and disaster relief operations, were not developed respectively were not up-to-date. The Court of Audit assessed that readiness to cooperate and commitment of the stakeholders to participate would be better and more firm if the plan of protection and disaster relief operations was developed at the state level. The Republic of Slovenia would have to ask other states for the assistance when its own resources for protection and disaster relief operations in case of pollution would not suffice. On the basis of the international agreements and conventions the Republic of Slovenia can ask for help other countries and international organisations or can get involved in cross-border actions to prevent or respond in case of major emergency in the Adriatic Sea.

The Slovenian system of managing interventions in case of sudden pollution in the Adriatic Sea foresees gradual activation of forces and means for protection and rescue. In case of larger scope of pollution at sea respectively when capacities of the Maritime Administration of the Republic of Slovenia would not suffice to remedy the consequences of the pollution, additional forces of protection, rescue and assistance are activated through the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief including the request for international assistance. The Court of Audit also established that there was no joint overview of the necessary protection and rescue equipment available in the state if an ecological disaster at sea occurred. The assessment of the necessary equipment that should be at disposal of to the Republic of Slovenia and which should consider the scope of maritime transport, the amount and type of cargo transferred in the Gulf of Trieste and in the Adriatic Sea was not developed. Nevertheless, the auditees estimated that they have sufficient equipment needed to intervene in case of smaller scope of pollution. The data related to available human resources who can intervene in case of large scope of pollution were not complete, furthermore there was no joint overview of human resources who could be involved in such interventions. After the completion of the audit, the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief drew up a new overview of the equipment as well as an overview of human resources trained to intervene in case of large scope of pollution at sea.

Education and training of the participants involved in the interventions are carried out regularly, i.e. in the Republic of Slovenia as well as abroad, in the form of drills open to a wide range of participants what was pointed out by the Court of Audit as positive practice. In case of sudden pollution at sea, good cooperation among all stakeholders authorised for preventing sudden sea pollution and for intervening when pollution occurs is a crucial precondition for effective and efficient responding mainly in cases of a major emergency. According to the assessment of the Court of Audit, it would be appropriate that auditees implement drills also to check response time in cases of dangerous chemicals pollution whereby they could review the availability of necessary equipment to be used and personal protective equipment for such type of pollution.

In the event of a major emergency the auditees would ask each other for help, when their capacities for temporary storage of collected waste and substances are filled. The Court of Audit found out that there was no protocol defined when capacities of all are filled. Additionally, the location of common temporary disposal of waste was not selected.

On the basis of the implemented audit, the Court of Audit issued an opinion that the system of intervening in case of smaller scope of pollution was **partially efficient**. Special attention should be placed on the field of mobilisation in case of major emergency which was not efficient in the opinion of the Court of Audit. In this context, the key element is good cooperation among all stakeholders with powers in the field of preventing sudden pollution at sea and powers to intervene in cases of pollution in the Republic of Slovenia. According to the opinion of the Court of Audit, the aforementioned is a necessary precondition for efficient and effective responding in cases of sudden pollution at sea, especially in the events of major emergency. Furthermore, full commitment to cooperating with the international community is of vital importance, since any major pollution along the Adriatic Sea can represent a significant ecological threat to all countries on the shores of the Adriatic Sea.

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1. Introduction

The Court of Audit audited the efficiency of the intervention management system in case of sudden pollution of the Adriatic Sea. The audit was carried out on the basis of the Court of Audit Act¹ and the Rules of Procedure of the Court of Audit², and in accordance with the International Standards of Supreme Audit Institutions defined by the Instructions for Conducting Audits³.

In line with the Decision on audit implementation⁴, the following auditees were determined:

- Ministry of Infrastructure,
- Ministry of Defence,
- Ministry of the Environment and Spatial Planning (hereinafter referred to as: Ministry of Environment),
- Maritime Administration of the Republic of Slovenia (hereinafter referred to as: Maritime Administration),
- Administration of the Republic of Slovenia for Civil Protection and Disaster Relief (hereinafter referred to as: Administration for Civil Protection and Disaster Relief),
- Slovenian Environment Agency (hereinafter referred to as: Environment Agency),
- Slovenian Water Agency (hereinafter referred to as: Water Agency) and
- LUKA KOPER, port and logistic system, public limited company (hereinafter referred to as: Port of Koper).

The responsibility of the Court of Audit is, on the basis of the implemented audit, to express an opinion on the efficiency of the intervention management system in case of sudden pollution of the Adriatic Sea⁵. The audit was planned and implemented in a manner to obtain sufficient and reasonable assurance for expressing an opinion.

1.1 Audit outline

The audit was part of the international parallel audit titled **Efficiency audit: Managing interventions in case of sudden pollution in the Adriatic Sea**⁶, involving 6 Supreme Audit

¹ Official Gazette of the RS, Nos 11/01 and 109/12.

² Official Gazette of the RS, No 91/01.

³ Official Gazette of the RS, No 43/13.

⁴ No 320-2/2020/3 as of 24 January 2020.

⁵ In this audit a sudden pollution is considered a case of emergency (such as collision of ships, ship grounding, fire, explosion or any other event on or off the ship) leading to accidental releases of polluting substances from ships, thus causing marine pollution. In the continuation of the report, the expression is often replaced by the term ecological disaster.

⁶ Audit of efficiency of the system of managing interventions in case of sudden pollution in the Adriatic Sea.

Institutions of all countries along the Adriatic coast, namely: Republic of Albania, Bosnia and Herzegovina, Republic of Croatia, Italian Republic, Montenegro and Republic of Slovenia.

Subject of the Audit covered the intervention management system⁷ in case of sudden pollution in the Adriatic Sea.

Objective of the Audit which was defined as a performance audit was to express an opinion on the efficiency of the intervention management system in case of sudden pollution in the Adriatic Sea in the period from 1 January 2017 to 31 December 2019.

The Court of Audit therefore examined:

- implementation of measures for preventing sudden marine pollution,
- meeting conditions for taking appropriate actions (providing financial, material and human resources),
- appropriateness of intervention procedures,
- inspection of functioning of the intervention system, and
- management of collected waste and other substances.

1.2 Audit Scope

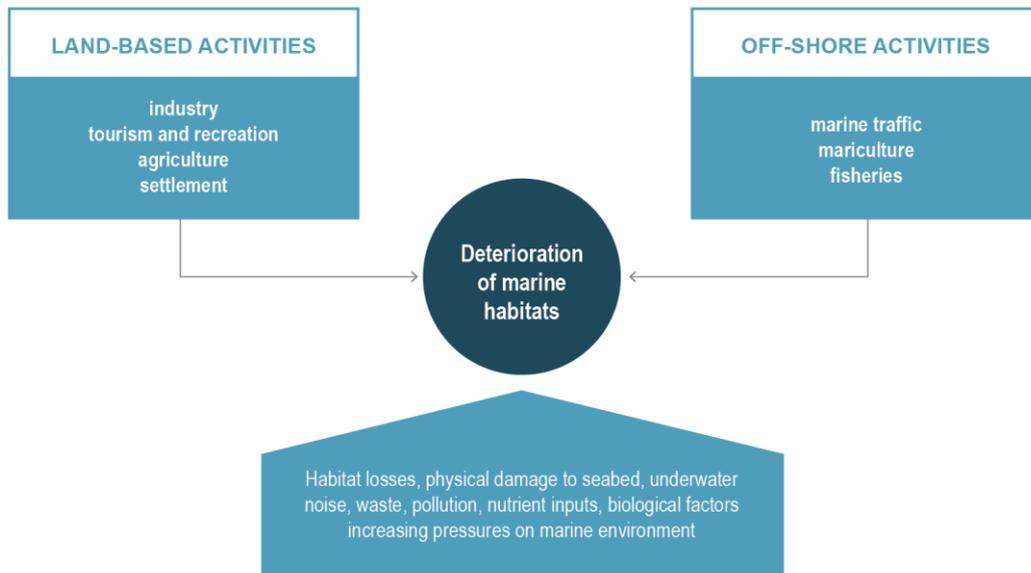
The Adriatic Sea is a gulf of the Mediterranean Sea. Its geographical boundaries are formed by the Italian Peninsula to the west, the Balkan Peninsula to the east, extending to the Ionian Sea towards the south. The west coast of the Adriatic Sea belongs to Italian Republic, while the east coast is shared by the Republic of Albania, Bosnia and Herzegovina, Republic of Croatia, Montenegro and Republic of Slovenia. Slovenian coastline is 46.6 km in length and is surrounded by the Gulf of Koper, the Gulf of Strunjan and the Gulf of Piran, all being part of the Gulf of Trieste.⁸

The sea enables implementation of several activities which at the same time impose an environmental burden and pressures on the state of marine environment. Figure 1 presents impacts on the marine environment due to implementation of different activities.

⁷ Intervention management system refers to activities for preventing sudden pollution and for taking action in the concerned case.

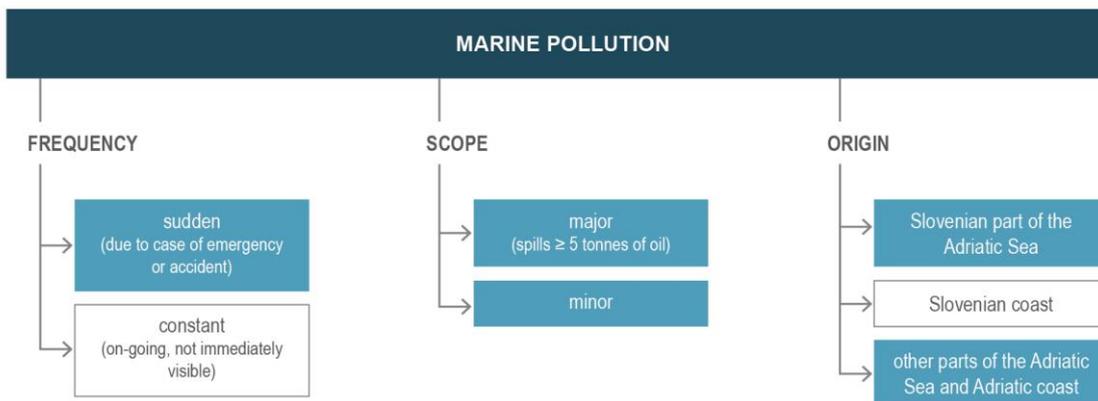
⁸ [URL: <http://www.jakrs.si/bralna-kultura/rastem-s-knjigo/>], 23/05/2021.

Figure 1 Impact on the marine environment due to implementation of different activities



Marine pollution may be caused by various cases of emergency or constant/regular pollution which may not be seen at first sight. Cases of emergency that cause sudden pollution of sea may happen in the Slovenian part of the Adriatic Sea, at land or in other parts of the Adriatic Sea. The audit focused on the intervention management system in case of sudden pollution at sea caused by different cases of emergency respectively accidents in the Slovenian or other parts of the Adriatic Sea. Figure 2 presents definition of pollution considering individual factors, with the coloured fields marking the factors examined in the audit.

Figure 2 Definition of pollution



Cases of emergency posing a risk of accidents occurring in the Slovenian part of the Adriatic Sea include the following events on the waterway respectively upon mooring⁹:

- ship grounding on waterways respectively in the vicinity of the coast,
- collision of ships (collision of a ship with a pier/wharf and collision of a ship during manoeuvring or navigation with a moored ship),
- deliberate or accidental release of polluting substances (operational discharge¹⁰ and discharge of oil during ship (re)fuelling), and
- fire on the ship.

The majority of risks of marine accidents derive from marine and, consequently, inland activities including transshipment and storage activities in the cargo port in Koper. Most accidents occur while manoeuvring the vessel upon arrival to or departure from the port, while less accidents happen during navigation itself. The most common causes of accidents in the Slovenian part of the Adriatic Sea are bad weather and carelessness of the crew¹¹, while the risk of marine accidents is associated with the development of port and general marine operations¹².

In the period from 2017 to 2019, there were 14,406 manoeuvres in the Slovenian ports pertaining to the arrival/departure of ships, of those more than a half included transport of hazardous cargo. The total amount of transported cargo in the respective period amounted to 94,277,990 tons, of which there was 34% of hazardous substances.

1.3 Introduction of auditees

For the auditees were selected the entities responsible for the functioning of the intervention management system in case of sudden pollution of the Adriatic Sea, and the Port of Koper.

1.3.1 Ministry of Infrastructure

In accordance with Article 38 of State Administration Act¹³ (hereinafter referred to as: ZDU-1), the Ministry of Infrastructure carries out tasks in the field of rail, air and maritime transport, inland waterway transport, road transport, with the exception of road safety control, tasks in the field of

⁹ Risk assessment of marine accidents, 01/06/2018, University of Ljubljana, Faculty of Maritime Studies and Transport (hereinafter referred to as: risk assessment of marine accidents), [URL: https://www.gov.si/assets/ministrstva/MzI/Dokumenti/sektor-za-pomorstvo/ocena-tveganja_nesrece_na_morju.pdf], 23/05/2021.

¹⁰ Fuel pumping, oily water pumping, pumping the remaining cargo, pumping residues after fuel cleaning, pumping or discharging oily ballast water in case of transition of oils from fuel tanks into a ballast oil tanker.

¹¹ Emergency Response Plan, Government of the Republic of Slovenia, version 1.0, 27/02/2018, page 13, (hereinafter referred to as: emergency response plan), [URL: http://www.sos112.si/slo/tdocs/nacrt_morje.pdf], 23/5/2021.

¹² Slovenian territorial waters respectively ports are used also for international traffic, namely international freight transport in the Port of Koper and international passenger transport in ports in Koper, Izola and Piran.

¹³ Official Gazette of the RS, Nos 113/05 – official consolidated text, 89/07 – CC ruling, 126/07 – ZUP-E, 48/09, 8/10 – ZUP-G, 8/12 – ZVRS-F, 21/12, 47/13, 12/14, 90/14 and 51/16.

transport infrastructure and cableway installations, tasks in the field of energy and mining, as well as the tasks in the field of efficient use of energy and renewable energy resources.

Pertaining to the audit field, the Ministry of Infrastructure mostly:

- has the responsibility to draft regulations for the provision of navigation safety at sea and for the transposition of the European Union law and international instruments (conventions, protocols, guidelines) related to maritime into the Slovenian law,
- participates in international organisations, bodies and working bodies, committees and other forms of cooperation in the field of maritime,
- participates in bilateral and multilateral contracting procedures in the field of maritime,
- develops strategic guidelines for maritime sustainable development and for ensuring sea navigation safety,
- participates in the procedures for the preparation of regulations and interministerial respectively intersectoral harmonisation of regulations of other ministries.

Tasks in the field of inland water navigation are at the ministry assumed by the Maritime Sector which operates within the Directorate of Aviation and Maritime Transport.

The responsible persons of the Ministry of Infrastructure in the period covered by the audit and during the audit implementation itself were the following:

- dr. Peter Gašperšič, Minister, until 20/03/2018, until 13/09/2018 performing current business,
- mag. Alenka Bratušek, Minister, from 13/09/2018 to 29/01/2020, until 13/03/2020 performing current business, and
- Jernej Vrtovec, Minister, from 13/03/2020.

1.3.2 Maritime Administration of the Republic of Slovenia

The Maritime Administration was established on 1 January 1995 and operates as a subordinated body of the Ministry of Infrastructure.

On the basis of Decree on Bodies within Ministries¹⁴, the Slovenian Maritime Administration performs administrative and expert tasks related to maritime transport and port infrastructure and maintains order in ports and in the rest of Slovenian territorial and internal sea waters; it ensures safety of navigation, controls maritime transport operations and the maintenance of facilities for the safety of navigation and navigation routes. Moreover, it supervises the implementation of regulations governing maritime transport and port infrastructure and regulations governing inland waterway transport, as well as performs special expert tasks related to marine protection. In accordance with

¹⁴ Article 7, Official Gazette of the RS, Nos 35/15, 62/15, 84/16, 41/17, 53/17, 52/18, 84/18, 10/19 and 64/19.

Water Act¹⁵ (hereinafter referred to as: ZV-1), the Maritime Administration also carries out a public utility service for aquatic and coastal land maintenance. Additionally, the Maritime Administration coordinates operations of state bodies authorised for maritime activities and cooperates with coordination rescue centres from neighbouring countries¹⁶.

Safety of Coastal Sea Division (hereinafter referred to as: SVOM), which operates within the Maritime Administration, performs operational tasks related to protection against sea pollution and interventions in case of sudden pollution at sea. The tasks are carried out within internal and territorial sea waters, except within the area of the Koper cargo port. Tasks of SVOM include:

- sea surface cleaning and prevention of sea pollution;
- removal of floating debris, waste, and other abandoned or discarded objects or materials from the sea;
- providing a stand-by or on-call service for the implementation of protection measures against sudden sea pollution and for monitoring sudden sea pollution;
- collecting, sorting and temporary storing waste produced when implementing protection measures against sudden sea pollution, and delivery of waste for processing, namely reprocessing/recycling or disposal;
- ensuring cooperation with other public administration bodies and bodies and services for protection and rescue respectively disaster relief in line with the national emergency response plan in the event of accidents at sea;
- ensuring stocks of detergents and necessary restocking thereof, and purchasing new equipment – devices for efficient operational implementation of measures at sea;
- regular investments and maintenance of vessels, devices and material resources intended for operational implementation of preventive and intervention activities related to protection against sea pollution;
- ensuring operational preparedness of vessels, devices and material resources for cleaning and preventing sea pollution.

The responsible person of the Slovenian Maritime Administration in the period covered by the audit and during the audit implementation itself was mag. Jadran Klinec, Director.

1.3.3 Ministry of Defence

In accordance with Article 35 of ZDU-1, the Ministry of Defence performs functions in the field of the defence system and the system of protection against natural and other disasters. The functions relate to organisational, professional, administrative and technical tasks pertaining to the defence plan of the State and the ministry, to implementation of defence policy within Euro-Atlantic cooperation and

¹⁵ Article 98 in connection to Article 161, Official Gazette of the RS, Nos 667/02, 2/04 – ZZdrI-A, 41/04 – ZVO-1, 57/08, 57/12, 100/13, 40/14, 56/15 and 65/20.

¹⁶ Article 26 of Maritime Code (Official Gazette of the RS, Nos 62/16 – official consolidated text, 41/17, 21/18 – ZNOrg and 31/18 – ZPVZRZECEP) and Explanation of the special part of the budget for the year 2020 (Ministry of Infrastructure), [URL: <https://www.gov.si/teme/sprejeti-proracun/>], 23/05/2021.

participation in international operations. They also include defence planning, development, organisation, equipping, education and training, functioning and management of the Slovenian Armed Forces. Additionally, those functions include civil defence preparations and response to cases of emergency, as well as duties related to administrative communications and cryptographic protection within the defence system. Relating to the audit field, the Ministry of Defence is responsible for organisation, preparation and performance of operations for the protection against natural and other disasters, and functions related to the rights and obligations of citizens with respect to defence, civil protection and disaster relief¹⁷.

The responsible persons of the Ministry of Defence in the period covered by the audit and during the audit implementation itself were the following:

- Andreja Katič, Minister, until 20/03/2018, until 13/09/2018 performing current business,
- Karl Viktor Erjavec, Minister, from 13/09/2018 to 29/01/2020, until 13/03/2020 performing current business, and
- mag. Matej Tonin, Minister, from 13/03/2020.

1.3.4 Administration of the Republic of Slovenia for Civil Protection and Disaster Relief

In accordance with Article 101 of Protection Against Natural and Other Disasters Act¹⁸ (hereinafter referred to as: ZVNDN), the Administration for Civil Protection and Disaster Relief carries out administrative and expert tasks regarding protection, rescue and disaster relief, as well as other tasks for the protection against natural and other disasters, unless otherwise stipulated by the concerned act. Pertaining to and of importance to the audit field, the Administration for Civil Protection and Disaster Relief carries out also the following administrative and expert tasks related to the protection against natural and other disasters:

- drawing up a proposal of a national programme and a plan for protection against natural and other disasters;
- taking care of organising and functioning of the monitoring, notification and alarm system;
- in cooperation with other ministries, developing risk assessments and other bases for protection, rescue and disaster relief planning, as well as directing and coordinating measures for preventing and mitigating consequences of natural and other disasters;
- monitoring and declaring events of natural and other disasters, and providing guidance on proper handling;
- devising national protection and disaster relief plans in cooperation with other ministries and government offices;

¹⁷ Explanations of the annual financial statement of the state budget for the year 2018, [URL: <https://www.gov.si/assets/ministrstva/MF/Proracun-direktorat/Drzavni-proracun/Zakljucni-racun/2018-ZR/04-Obrazlozitev-posebnege-dela/1911-Ministrstvo-za-obrambo.pdf>], 23/05/2021.

¹⁸ Official Gazette of the RS, Nos 51/06 – official consolidated text, 97/10 and 21/18 – ZNOrg.

- organising, equipping and training of national units and civil protection services, as well as other forces for protection, rescue and disaster relief operations; providing conditions for the work of the commander of the Civil Protection Headquarters of the Republic of Slovenia and of national and regional damage assessment committees;
- monitoring and coordinating mobilisation of civil protection service and other forces for protection, rescue and disaster relief;
- drawing up programmes and organising and implementing education and training in protection, rescue and disaster relief;
- standardisation of resources for protection, rescue and disaster relief;
- building and maintaining national reserves of material resources for the event of natural and other disasters;
- ensuring coordinated development of forces for protection, rescue and disaster relief in the territory of the State in line with risk assessments, emergency response plans and criteria defined by the responsible minister;
- possibility of organising special services for support and performance of certain tasks in case of protection, rescue and disaster relief in the event of ecological disasters or other accidents at sea¹⁹.

The Administration for Civil Protection and Disaster Relief is a subordinated body of the Ministry of Defence. The Administration for Civil Protection and Disaster Relief has 13 branches, among which its branch in Koper is the most important considering the audit field.

The responsible person of the Administration for Civil Protection and Disaster Relief in the period covered by the audit and during the audit implementation itself was Darko But, Director General.

1.3.5 Ministry of the Environment and Spatial Planning

In line with Article 38.a of ZDU-1, the Ministry of Environment is responsible for environmental protection, nature conservation, water management, climate change, waste management, efficient use of resources, comprehensive environmental impact assessment, handling genetically modified organisms, systemic regulation of public utilities, public utility services of environmental protection, public utility services of nature conservation, public utility services of water management, nuclear safety, ionising radiation protection, alerting and natural disaster recovery, investments in environmental and water infrastructure; moreover, it carries out tasks in the field of spatial planning and urban development, monitoring the situation and trends in the current environment, developing, encouraging and promoting, as well as regulating spatial planning, land (use) policy, national, regional, municipal spatial planning, construction and housing policy. Related to the audit field are especially the tasks of water and waste management. The Ministry of Environment is authorised also for drawing up a marine environment management plan.

¹⁹ Article 10 of Decree on the Organization, Equipment and Training of Protection and Aid Forces (Official Gazette of the RS, Nos 92/07, 54/09, 23/11 and 27/16).

The responsible persons of the Ministry of Environment in the period covered by the audit and during the audit implementation itself were the following:

- Irena Majcen, Minister, until 20/03/2018, until 13/09/2018 performing current business,
- Jure Leben, Minister, from 13/09/2018 to 20/03/2019, until 27/03/2019 performing current business,
- Simon Zajc, Minister, from 27/03/2019 to 29/01/2020, until 13/03/2020 performing current business, and
- mag. Andrej Vizjak, Minister, from 13/03/2020.

1.3.6 Slovenian Water Agency

The Water Agency was established on 29 August 2015 and operates as a subordinated body of the Ministry of Environment. Its tasks are laid down in Decree on Bodies within Ministries, with the following being of key importance considering the audit field:

- performing administrative, professional and development tasks in the field of water management in adherence to regulations governing waters;
- carrying out administrative, professional, organisational and development tasks in the field of constructing port facilities and other hydromechanical structures and water infrastructure, as well as water infrastructure, aquatic and coastal land maintenance;
- performing organisational, administrative, professional and development tasks in the field of public utility services of water maintenance;
- performing administrative, professional and other tasks related to water infrastructure and aquatic and coastal land owned by the State;
- participating in the implementation of tasks related to the protection against natural and other disasters;
- participating in remedying consequences of natural and other disasters due to harmful effects of waters;
- participating in the fulfilment of international obligations on the basis of international agreements in the field of water management;
- independently performing the tasks related to permitting water use and participating in the issues related to the respective matter;
- supervising water protection areas;
- preparing professional bases and measures for drawing up water management programmes and plans.

The responsible persons of the Water Agency in the period covered by the audit and during the audit implementation itself were the following:

- Tomaž Prohinar, Director, until 21/03/2020,
- Roman Kramer, Acting Director, from 21/03/2020 to 28/08/2020, and
- Roman Kramer, Director, from 28/08/2020.

1.3.7 Slovenian Environment Agency

The Environment Agency is a subordinated body of the Ministry of Environment. Its tasks are laid down in Decree on Bodies within Ministries²⁰, with the following being of key importance considering the audit field:

- performing expert and administrative tasks related to air, land and water protection in line with the regulations concerning environmental protection and nature conservation, except for the tasks within the competence of the Water Agency and the tasks of environmental impact assessment;
- performing administrative and expert tasks related to waste management, with the exception of radioactive waste and the tasks related to transboundary shipment of waste;
- performing administrative and expert tasks related to monitoring of environmental status including water status assessment;
- performing the tasks of a national meteorological, hydrological, oceanographic and seismological service;
- keeping records on environmental protection and water monitoring;
- fulfilling international obligations and performing tasks of international data exchange.

The responsible persons of the Environment Agency in the period covered by the audit and during the audit implementation itself were the following:

- mag. Joško Knez, Director General, until 15/11/2018,
- mag. Gregor Sluga, Acting Director General, from 16/11/2018 to 15/5/2019, Deputy Director General, from 16/05/2019 to 02/06/2019,
- mag. Lilijana Kozlovič, Acting Director General, from 03/06/2019 to 02/12/2019, Director General, from 03/12/2019 to 13/03/2020,
- Iztok Slatinšek, Acting Director General, from 14/03/2020 to 10/09/2020, Director General, from 11/09/2020 to 31/03/2021, and
- mag. Joško Knez, Acting Director General, from 01/04/2021.

1.3.8 Port of Koper

The Port of Koper was founded in 1957. Its principal activity includes transshipment and storage of all types of cargo, therefore it has 12 specialized terminals organised by incoming goods respectively cargo²¹.

²⁰ Article 14.

²¹ Container terminal, car and ro-ro terminal, general cargo terminal, reefer terminal, timber terminal, dry bulk terminal, silo terminal, alumina terminal, iron ore and coal terminal, liquid cargoes terminal, livestock terminal, and cruise terminal.

In 2008, the Port of Koper and the Republic of Slovenia concluded a Concession contract on port operations, and on management, development and regular maintenance of port infrastructure within the area of the Koper cargo port²² (hereinafter referred to as: concession contract). Concerning the audit field, the following tasks of the Port of Koper are relevant:

- to provide safety within the area of the port, to maintain order in ports and marine environment, namely to provide prescribed measures for preventing marine pollution and hazardous liquids spills to spread,
- to ensure the implementation of all measures necessary for remedying and preventing environmental pollution within the area of the port, and, in case of pollution, to cooperate with authorised national services, bodies and authorities and as provided by the safety measures plan and the emergency response plan at the national level,
- to set up and maintain preparedness for intervention, to mobilize necessary rescue and disaster relief forces, to implement the prescribed protection measures and to make risk assessment and plan of protection and disaster relief respectively emergency response plan at its own expense.

In the Port of Koper, there are 2 public utility services carried out, namely public utility service of regular maintenance of port infrastructure intended for public transport and public utility service of collecting waste from vessels within the area of the Koper cargo port.

The responsible persons of the Port of Koper in the period covered by the audit and during the audit implementation itself were the following members of the company's Management Board:

- Dragomir Matić, President of the Management Board, until 29/12/2017,
- Andraž Novak, Member of the Management Board, until 29/12/2017,
- Irena Vincek, Member of the Management Board, until 29/12/2017,
- Stojan Čepar, Worker Director, Member of the Management Board, until 16/02/2018,
- Dimitrij Zadel, President of the Management Board, from 29/12/2017,
- Irma Gubanec, Member of the Management Board, from 29/12/2017,
- Metod Podkrižnik, Member of the Management Board, from 29/12/2017,
- Vojko Rotar, Worker Director, Member of the Management Board, from 16/02/2018.

1.4 Audit Approach and Limitations

Assurance for expressing an opinion on the efficiency of the intervention management system in case of sudden pollution of the Adriatic Sea was obtained by:

- reviewing legal and other bases, as well as publicly accessible data pertaining to the audit field,
- collecting, reviewing and assessing documentation obtained at the auditees, and

²² Concession contract on port operations, and on management, development and regular maintenance of port infrastructure within the area of the Koper cargo port, No 2411-08-800011 as of 8 September 2008.

- interviews with auditees and written questions.

The system of managing interventions in case of sudden pollution in the Adriatic Sea was assessed on the basis of criteria and was considered efficient if:

- measures for preventing sudden marine pollution are being implemented;
- procedures for intervention in case of sudden pollution are appropriate;
- basic conditions enabling appropriate intervention are established;
- functioning of the system in practice is being inspected and verified, and
- handling with collected substances is defined.

Audit limitations:

- The audit was limited to the examination of bases determining proper conduct in case of sudden pollution in the Adriatic Sea, therefore it was verified whether those bases enable efficient intervention management. However, it was not possible to verify actual responding and intervening in case of major pollution in the Adriatic Sea, since in the last 10 years there was no such incident that would require activation of an emergency response plan setting out the way of responding and intervening in such case of emergency. The Court of Audit did thus not assess whether respectively how the system actually functions in practice. Assessed were only the bases arranging and regulating the system.
- The audit did not address constant marine pollution, it was focused on a sudden pollution of the Adriatic Sea. In this regard, the Court of Audit limited its review to the sea-based sources of pollution. Marine pollution as a consequence of land-based activities was not subject to audit.
- Furthermore, public procurement award procedures and tendering procedures for the selection of concessionaires, as well as concluding contracts and accompanying annexes were not reviewed. Reviewing the regularity of the use of funds on the basis of concluded contracts and annexes was also not subject to audit, therefore the concerned issue was neither additionally examined nor the opinion was expressed thereon.

2. Intervention Management System

2.1 Preventive measures

ZVNDN defines implementation of preventive measures as a priority and as one of the basic foundations of the system for the protection against natural and other disasters. In the event of ecological disaster at sea, preventive measures are thus of additional importance, since negative impacts may have wide-ranging consequences not just for marine environment but also for the coast, the people and activities based on-shore. Preventing natural and other disasters, detecting, monitoring and examining risks of natural and other disaster are the core tasks of the system for the protection against natural and other disasters. The objective of such system is to reduce the number of accidents respectively the number of casualties and to decrease other thereto related consequences. According to ZVNDN, accidents at sea are classified under the category of other accidents²³ within the protection against natural and other disasters system.

In the audit it was examined, whether and which measures for preventing sudden marine pollution are being implemented and who is responsible for their implementation.

ZVNDN stipulates that the competent ministries are responsible for the implementation of measures for preventing natural and other disasters respectively consequences thereof, each in the field of their authority, while the Administration for Civil Protection and Disaster Relief, in cooperation with other ministries, directs and coordinates measures for preventing and mitigating consequences of natural and other disasters. Implementation of measures for preventing and mitigating consequences of natural and other disasters is verified by the Inspectorate for Protection against Natural and Other Disasters, a subordinated body of the Ministry of Defence.

From the measures presented in the continuation of the audit report it is evident that powers and responsibilities for preventing marine pollution are distributed between different ministries and their subordinated bodies. The Ministry of Environment is several times specified as the ministry authorised for carrying out activities, although it was established in the audit that other bodies are accountable for the implementation of the planned measures (more under point 2.1.4). It is thus necessary to point out that sudden marine pollution should be addressed as part of the issue of sea pollution which is a field of a broader scope. However, many planned measures refer to pollution caused by regular on-shore activities, and not only to the measures for preventing sudden marine pollution as a consequence of accidents at sea. The Court of Audit thus assessed that it is important that the Ministry of Environment who is responsible for environmental protection, the Ministry of Infrastructure who is responsible for the field of vessel traffic, which is the main source of risk of accidents at sea, the Maritime Administration as the body having a key supervision role in fulfilling requirements of Maritime Code and of the regulations in the field of vessel traffic control, and the

²³ Other accidents include: road, rail and air accidents, fire, mining accidents, dam collapse, accidents caused by activities at sea, nuclear incidents and other ecological disasters and industrial incidents caused by human activity, including war, state of emergency, use of weapons or weapons of mass destruction, terrorist attacks with classic means and other forms of massive violence.

Administration for Civil Protection and Disaster Relief who is responsible for the preparation of an emergency response plan ensuring coordinated and integrated approach to the concerned issue. This, however, is only possible by regular cooperation.

Resolution on the National Programme for the Maritime Development of the Republic of Slovenia²⁴ sets out that there is no regulation in the Republic of Slovenia that would address respectively regulate the system of marine environment protection in a uniform way, and that marine environment protection is regulated by individual regulations mostly pertaining to the field of nature protection and conservation, waters and environment, cultural heritage, bathing waters, and to the field of general use, as well as by regulations pertaining to the field of maritime, fisheries, energy and other specific uses of sea, as well as spatial planning and local self-government.

Considering the subject of the audit that refers to marine pollution as a consequence of a case of emergency at sea, the relevant legal bases, laying down implementation of preventive measures, are mainly those that regulate the field of marine traffic and, in this framework, ensuring the navigation safety at sea, including ZV-1 that regulates management of aquatic and coastal land. Risk assessment of marine accidents found that risk of marine accidents is associated with the development of port and general marine operations.

In the continuation of the audit report are presented groups of measures for preventing accidents at sea that could lead to marine pollution. In accordance with the assessment of the Ministry of Infrastructure, the key measure for preventing sudden marine pollution is to draft regulations for ensuring safety of navigation and, consequently, for preventing accidents at sea and environmental pollution.

2.1.1 Monitoring and control over maritime transport

In line with Maritime Code, the Maritime Administration is responsible for marine traffic control and organising maritime mobile service (identity) and service for monitoring and maritime surveillance. The Court of Audit examined, whether the Maritime Administration at all times knows which ships are operating in the Slovenian territorial waters, the Gulf of Trieste, and the Adriatic Sea, which cargo is being carried and where these ships are headed, and whether the Maritime Administration maintains regular communication with those ships.

Ship reporting, sending notices and their tracking and controlling in the Slovenian territorial waters is defined and regulated by national regulations, especially by Maritime Code, Decree on maritime traffic control²⁵, and Decree on reporting formalities for ships²⁶. At the level of the European Union,

²⁴ Official Gazette of the RS, Nos 87/10 in 75/16 – ReNPRP30.

²⁵ Official Gazette of the RS, Nos 994/10, 26/12 and 84/15.

²⁶ Official Gazette of the RS, Nos 69/12 and 78/19.

a directive establishing a vessel traffic monitoring and information system²⁷ was adopted in 2002 and has been transposed in Slovenian law by several regulations²⁸. Additionally, Republic of Croatia, Italian Republic and the Republic of Slovenia signed a memorandum of understanding on mandatory ship reporting system in the Adriatic Sea²⁹ which became internationally binding in 2002 since the International Maritime Organisation (hereinafter referred to as: IMO) adopted a resolution³⁰ determining mandatory ship reporting system in the Adriatic Sea, the so called ADRIREP³¹.

In accordance with the aforementioned regulations, a ship from abroad and headed to the port in the Republic of Slovenia is obliged to report its arrival and submit to the Maritime Administration the required information about the ship³². Each ship carrying dangerous goods, regardless of tonnage, must, before the arrival or departure from the port in the Republic of Slovenia, submit to the Maritime Administration also a declaration on dangerous goods and other required data. Ships sailing to the Koper cargo port must report their arrival also to the Port of Koper.

Ships arriving to the port in the Republic of Slovenia must be equipped with the automatic identification system (hereinafter referred to as: AIS), voyage data recorder (VDR) and long-range identification and tracking system (LRIT) that must be used in accordance with the international agreements and regulations of the European Union. All ships with gross tonnage of 300 or more, and fishing vessels exceeding 15 m must be fitted with AIS.

The required data must be electronically submitted to the information system for marine traffic control called National Single Window (hereinafter referred to as: NSW) that enables exchange, collection, processing and storing of data on marine traffic. Access to data managed by the Maritime Administration is provided also to the Maritime Police, Financial Administration of the Republic of Slovenia, Health Inspectorate of the Republic of Slovenia and National Institute of Public Health.

In case a ship already reported its arrival to any other port in the European Union or departed from it, certain data about the vessel, cruise, cargo, and persons on board already exist in the information

²⁷ Directive 2002/59/EC of the European Parliament and of the Council of 27 June 2002 establishing a Community vessel traffic monitoring and information system and repealing Council Directive 93/75/EEC (OJ L 208, 05/08/2002, p. 10). The directive was subsequently amended and supplemented for several times. Amendments and supplementations are presented on the following website, [URL: <https://eur-lex.europa.eu/legal-content/SL/TXT/?uri=CELEX:02002L0059-20110316>], 23/05/2021.

²⁸ ZVNDN, Memorandum of understanding between the Government of the Republic of Slovenia, the Government of the Republic of Croatia and the Government of the Italian Republic on mandatory ship reporting system in the Adriatic sea (Adriatic traffic) (Official Gazette of the RS, No 27/00), Rules amending the Rules on the Investigation of Accidents at Sea (Official Gazette of the RS, No 85/10), Act Amending the Maritime Code (Official Gazette of the RS, No 88/10), Decree on maritime traffic control.

²⁹ Act ratifying the Memorandum of understanding between the Government of the Republic of Slovenia, the Government of the Republic of Croatia and the Government of the Italian Republic on mandatory ship reporting system in the Adriatic Sea (Official Gazette of the RS, No 27/00).

³⁰ Resolution MSC.139(76) Mandatory ship reporting systems, 5/12/2002. [URL: [https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/MSResolutions/MSC.139\(76\).pdf](https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/MSResolutions/MSC.139(76).pdf)], 23/5/2021.

³¹ Adriatic Traffic Reporting System.

³² Detailed data to be reported by the ships are specified in Annex to Decree on reporting formalities for ships and Annex I to Decree on maritime traffic control.

system SafeSeaNet³³. These data are available also to the Maritime Administration, since SafeSeaNet is accessible also via NSW.

In line with the ADRIREP system for vessel traffic control, some tankers and ships carrying dangerous and polluting substances³⁴ are obliged to report to bodies respectively reporting centres along the Adriatic Sea³⁵ when arriving and departing from the area under control of the respective body. Reported must be different information about the ship, crew and cargoes, while each centre is obliged to immediately submit the received data to other control centres. On the receipt of the report, the body based on-shore submits to the ship the data on navigation conditions, recommended navigation route and the areas to be avoided, as well as the information on weather conditions and other important data.

In the Republic of Slovenia, the tasks of gathering information on ships and communicating with the ships within the ADRIREP system are performed by the Maritime Rescue Coordination Centre – MRCC which operates within the Maritime Administration. The received messages are entered into the NSW and are compared with the data already existing in the NSW system. The NSW system enables transfer of those data to other countries included in the system. Ships carrying dangerous goods and headed to the port but not obliged to report as in accordance with ADRIREP must nevertheless submit data on dangerous cargo to the Maritime Administration in line with the stipulations deriving from national legal bases.

It was established that participation in the ADRIREP system and Decree on maritime traffic control provide a basis for the Maritime Administration to be able to know which ships carrying dangerous substances are operating within the Adriatic Sea and what kind of dangerous substances or cargoes that might cause pollution are being carried. However, accuracy of information depends on whether the ships actually report to the competent authorities, whether the ships declare dangerous goods being carried and whether the control centres consistently perform their tasks.

³³ SafeSeaNet is the European Union vessel traffic monitoring and information system developed by the European Commission in cooperation with other Member States to ensure implementation of the European legislation. The system serves for the exchange of information on ships, ship movements, cargoes, and persons on board among the bodies and authorities of the European Union Member States.

³⁴ Obligations applicable to tankers with gross tonnage more than 150 and other ships with gross tonnage more than 300 that carry dangerous goods or goods that could cause pollution. Dangerous goods refer to goods classified under the International Maritime Dangerous Goods Code (IMDG Code), Chapter 17 of the International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code) and under Chapter 19 of the International Code of the Construction and Equipment of Ships Carrying Liquefied Gases in Bulk (IGC Code). Environment polluting goods are defined as: oil (as defined in Annex I to MARPOL Convention), noxious liquid substances (as defined in Annex II to MARPOL Convention), and harmful substances (as defined in Annex III to MARPOL Convention). MARPOL – the International Convention for the Prevention of Pollution from Ships was adopted in 1973. It includes regulations for preventing and reducing pollution of the marine environment by ships from operational or accidental causes. There are 6 Annexes to the Convention. [URL: [https://www.imo.org/en/About/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-\(MARPOL\).aspx](https://www.imo.org/en/About/Conventions/Pages/International-Convention-for-the-Prevention-of-Pollution-from-Ships-(MARPOL).aspx)], 23/05/2021.

³⁵ As in accordance with the ADRIREP rules, the complete Adriatic Sea is divided into 5 sectors. Sector 5 includes the Republic of Slovenia and 2 other responsible bodies, namely the coordination centres in Trieste and Venice. The ship headed to the port in Koper first notifies the Coast Guard in Brindisi (Italy) when arriving to the Strait of Otranto, then the report is passed on to the Maritime Rescue Coordination Centre in Bar (Montenegro), which is followed by a message communicated to the centre in Rijeka (Croatia), an interim message to the centre in Ancona (Italy), and at the end, the final report is received by the centre of the cargo port in Koper.

In accordance with the Resolution on the National Programme for the Maritime Development of the Republic of Slovenia which entered into force in 2010 and in line with the Resolution on the National Programme for Protection against Natural and Other Disasters 2016-2022³⁶, the development goals concerning the improvement of navigation safety are directed towards the development of operations and activities of the Maritime Administration, towards upgrading its existing navigation control system, including the setting up of a special control centre VTS³⁷. VTS is marine traffic monitoring system internationally regulated by the SOLAS Convention³⁸ and Guidelines for vessel traffic services adopted in 1997 by IMO³⁹.

In the period covered by the audit, the tasks of monitoring and maritime traffic control were carried out by the Maritime Administration by means of VHF⁴⁰ communication instruments, AIS, radars and surveillance cameras.

With regard to meeting conditions for setting up a VTS system, the purchasing and upgrading process of the required equipment has been taking place since 2004. However, hardware and software that would enable the desired level of monitoring and maritime traffic control were not fully installed and provided by the end of the period covered by the audit. To ensure the required equipment, the Maritime Administration was in 2018 approved the project of establishment of the Slovenian Centre for Traffic Control and Management in Critical Situations at Sea; the investment is scheduled to be completed in April 2021⁴¹. As stated by the Maritime Administration, certain deficiencies and shortcomings detected in the existing system for monitoring and maritime traffic control will be remedied by establishing a new Centre for Traffic Control and Management in Critical Situations at

³⁶ Official Gazette of the RS, No 75/16.

³⁷ Vessel Traffic Service.

³⁸ Convention for the Safety of Life at Sea. The Convention for the Safety of Life at Sea was adopted in 1974 for the first time. More about the convention is available on the following website, [URL: <https://www.imo.org/en/KnowledgeCentre/ConferencesMeetings/Pages/SOLAS.aspx>], 23/05/2021.

³⁹ Guidelines for vessel traffic services resolution A.857(20), 27/11/1997, [URL: [https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/AssemblyDocuments/A.857\(20\).pdf](https://wwwcdn.imo.org/localresources/en/KnowledgeCentre/IndexofIMOResolutions/AssemblyDocuments/A.857(20).pdf)], 23/05/2021. These guidelines set out that the VTS system is designed to improve safety and efficiency of navigation and that it allows for identification and monitoring of vessels, strategic planning of vessel movements and provision of navigational information and assistance. It can also assist in prevention of pollution and coordination of pollution response. In establishing a VTS system, the competent authorities should, among others: ensure that an appropriate legal framework for the operation of a VTS is provided for; ensure that the service area is delineated and declared a VTS territory; determine the type of services to be provided; determine VTS services and responsibilities of ships with regard to VTS, including sanctions if the set requirements are not met; conclude agreements on intersectoral and regional exchange of data; ensure that the VTS authority is provided with adequate equipment and facilities and with the sufficient staff capable of performing the required tasks.

⁴⁰ VHF – Very High Frequency devices enable sending and receiving voice messages via electromagnetic waves for the purpose of communication with on-shore based facilities and/or with other vessels.

⁴¹ The total cost of the project amounts to EUR 2,323,005, of which the European financial resources from the Cohesion Fund amount to EUR 1,563,313. The purpose of the project is to reduce the possibility of a case of emergency by 75% due to purchase of equipment and by establishing vessel traffic control service, which means that the expected time from one to another case of emergency is extended from the existing 20 years to 80 years. The investment encompasses construction of new facilities, purchase of equipment for the new Centre for Traffic Control and Management in Critical Situations at Sea, purchase of hardware and updating of a substitution and training centre at the Faculty of Maritime Studies and Transport. According to the Maritime Administration, the realisation of a project in the part referring to the construction of new facilities and the provision of equipment was smooth and without any significant problems by the end of 2019.

Sea. Deficiencies as set out in the examined documentation and as explained by the Maritime Administration are summarised below:

- the automatic vessel detection system detects only large vessels, namely the vessels that must be equipped with AIS transmitters;
- radars detect vessels at sea but do not gather data thereon, thus communication with the observed vessel must be established; however, small vessels are not equipped with VHF radio stations, therefore the Maritime Administration tries to identify them with cameras or in the last resort sails to the vessel;
- problems with data transmission and communication in bad weather conditions;
- deficiencies and gaps in acquiring data on weather conditions, in video surveillance system and radar coverage to detect vessels and hydrocarbons.

According to the Maritime Administration, 2 obstacles preventing the setting up of VTS system in the Republic of Slovenia will be removed by implementing the project of establishing the Centre for Traffic Control and Management in Critical Situations at Sea, namely wear and tear and only partial functioning of communication devices and AIS receivers, as well as lack of space for maritime traffic controllers. Furthermore, the Maritime Administration emphasised that 2 obstacles still remain, namely:

- open-ended legal arrangement pertaining to the determination of the VTS control, and
- lack of qualified staff.

The Court of Audit found out that in the period covered by the audit the Ministry of Infrastructure and the Maritime Administration did not yet start with the preparation of relevant content and necessary amendments to the provisions of the existing regulations that would enable setting up of a VTS system.

Explanation of the Ministry of Infrastructure

During the audit, the Maritime Administration did not submit to the Ministry of Infrastructure the information on the level of services provided by the VTS system which shall be enabled by the new equipment respectively centre, therefore serving as a basis for amending organisational regulations of the Maritime Administration respectively for amendments of other regulations. Only after the Maritime Administration will make an expert analysis of implementation and of relevant content for setting up a VTS system and adopt amendments of organisational regulations, the Ministry of Infrastructure will be able to amend other regulations within its competence.

Measure taken by the Ministry of Infrastructure and the Maritime Administration

In 2020, the Ministry of Infrastructure and the Maritime Administration commenced with activities for amending Maritime Code in order to improve maritime traffic control.

In addition to providing the necessary equipment, it is necessary to ensure adequately qualified and trained staff as soon as possible who will be able to respectively know how to use all the installed equipment, including software. The Maritime Administration stated that 6 harbour supervisors underwent a training and obtained a licence for a VTS operator in 2006, however the licences expired in 2009. By the completion of the audit, there were neither harbour supervisors with a valid VTS

licence at the Maritime Administration nor any trainings for harbour supervisors for the work of a VTS operator provided in the period from 2017 to 2019 (more about harbour supervisors under point 2.1.3.1).

Measure taken by the Maritime Administration

The purchase and upgrading of the necessary hardware and software for establishing the Centre for Traffic Control and Management in Critical Situations at Sea was concluded by a handover between the Maritime Administration and contractor on 28 January 2021. In January 2021, a training for harbour supervisors regarding the use of the installed hardware and software when carrying out the tasks of maritime traffic safety control was provided.

2.1.2 Sea navigation safety measures

2.1.2.1 Sea navigation and navigation routes safety facilities

Maritime Code defines a waterway in internal waters and territorial sea of the Republic of Slovenia as a narrow part of the sea deep and wide enough for the ships to safely sail along and, if necessary, marked respectively equipped with facilities for navigation safety at sea⁴². Article 28 of Maritime Code determines the manner of waterways maintenance, namely it defines that maintenance of navigation routes in the territorial sea and internal waters of the Republic of Slovenia is provided by setting up facilities for navigation safety at sea and by ensuring undisturbed respectively proper operations thereof. Expert control over regular maintenance of facilities for the safety of navigation and navigation routes is within the competence of the Maritime Administration.

Regular maintenance of facilities for the safety of navigation and navigation routes is carried out as a mandatory public utility service⁴³. Implementation of a public utility service in the cargo port in Koper, other ports intended for public transfer, local ports, military ports and in other parts of internal waters and territorial sea is provided by the Republic of Slovenia, and by local communities in marinas and sports marinas.

In 2003, the ministry responsible for transport and the company SIRIO, d.o.o., Koper, a company for seamanship, fisheries and trade (hereinafter referred to as: company Sirio d.o.o.) entered into a concession contract on the implementation of a public utility service for regular maintenance of facilities for the safety of navigation and navigation routes for the period of 10 years⁴⁴. In 2013, a new decree on the implementation of a public utility service for regular maintenance of sea navigation

⁴² Sea navigation safety facilities include: lighthouses, coastal lights, buoys and other objects, signal and radio stations, visual, acoustic, electrical, electronic, radar and other devices for the safety of sea navigation, navigation routes and safety in ports.

⁴³ A public utility service for which a concession was granted includes regular maintenance of navigation safety facilities on waterways within the territorial sea and internal waters of the Republic of Slovenia in a way that undisturbed operations of such facilities are ensured, including the necessary renovation and replacement in case individual facilities or devices do not operate or function in line with their purpose, as well as regular control over the conditions of facilities for navigation safety.

⁴⁴ Additionally, an annex to the contract was concluded in 2004.

safety facilities⁴⁵ was adopted and was subsequently amended twice. The valid decree implies that concession for performing the concerned public utility service shall be granted for 2 years. It was considered at all times that the Maritime Administration should have published a public tender for granting a new concession not later than 3 months after the enforcement of the respective decree.

The Maritime Administration commenced with a tendering procedure for the selection of a contractor in 2015, however, the selection procedure was not successful. The Court of Audit established that the Maritime Administration repeated a tendering procedure for the selection of a concessionaire for 3 times in the period covered by the audit but was unsuccessful. The Ministry of Infrastructure submitted to the Court of Audit a proposal amending Maritime Code, namely in the part pertaining to the performance of regular public utility service for regular maintenance of sea navigation safety facilities, with the purpose to determine maintenance of facilities for the safety of navigation and navigation routes as the responsibility of the Maritime Administration and not as a public utility service. Upon the completion of the audit, the proposal foreseeing the transfer of the aforementioned authority to the Maritime Administration was not included among the amendments of the Maritime Code that were subject to interministerial respectively intersectoral harmonisation. The Court of Audit assessed that it would be necessary to update the manner of maintaining sea navigation safety facilities, since the existing concessionaire has been implementing those activities for 17 years on the basis of the same contract. Therefore, the question arises, whether the implementation of the concerned public utility service is still optimal considering that the circumstances have changed over such a long period (technological progress, new and state-of-the-art devices and thereto related risk of unavailability of spare parts for older devices, changes in maintenance costs and similar). Implementation of a public utility service solely on the basis of a provision stipulating that a concessionaire is bound to provide services until new concession contract is concluded, specifically on the basis of an expired contract, represents a situation that is not regulated in the long term neither for a concessionaire nor for the Maritime Administration.

Measure taken by the Maritime Administration

The Maritime Administration commenced a public procurement award procedure for the selection of a concessionaire for the implementation of a public utility service of regular maintenance of sea navigation safety facilities in December 2020 and in February 2021 then reached a decision on the selection of a contractor who shall implement the concerned public utility service for the period of 2 years.

Within its control activities, the Maritime Administration also inspected proper functioning of all facilities and reported to the concessionaire⁴⁶ about irregularities. According to the data provided by the Maritime Administration, the concessionaire remedied identified errors, irregularities and deficiencies. Irregularities in the operation of sea navigation safety facilities are recorded in the NSW.

⁴⁵ Decree on the method and conditions for the provision of public utility services for regular maintenance of navigational safety facilities (Official Gazette of the RS, Nos 36/13, 35/14 and 24/18).

⁴⁶ The Maritime Administration indicated that it carries out regular weekly inspections at sea. The practice of carrying out inspections is evident also from the decision of the maritime inspection service.

In the period covered by the audit, the Maritime Administration recorded 59 events related to sea navigation safety facilities, with most of them pertaining to non-functioning.

The Court of Audit found out that responsibilities for maintaining sea navigation safety facilities in the Koper cargo port are not clearly defined. Facilities designed for the purpose of navigation safety at sea are in the regulations classified under port infrastructure intended for public transfer⁴⁷ whereby it was established that no legal basis provides a definition or an explanation of the respective term and to which facilities it is actually referred⁴⁸. As explained by the Maritime Administration, those facilities may in practice be floating platforms, mooring buoys, floating warehouses, pontoon bridges, etc., as well as sea navigation safety facilities as provided in the Maritime Code. This implies that the bases regulating maintenance of sea navigation safety facilities in the area of the cargo port in Koper are not harmonised. In line with Article 4 of Decree on the method and conditions for the provision of public utility services for regular maintenance of navigational safety facilities, a concession on maintenance of sea navigation safety facilities must be granted by the Maritime Administration also for the area of the Koper cargo port. Furthermore, Decree on the administration of the freight port of Koper, port operations, and on granting concession for the administration, management, development and regular maintenance of its infrastructure stipulates that the respective facilities are part of port infrastructure intended for public transport and that the selected concessionaire, namely the Port of Koper, is responsible for the maintenance of the concerned infrastructure.

Recommendation

When amending the existing regulation and arrangement of the field related to the implementation of a public utility service of maintaining sea navigation safety facilities, the Ministry of Infrastructure should adequately regulate the field of maintenance of sea navigation safety facilities in the area of cargo port in Koper.

Additionally, the Ministry of Infrastructure should in the relevant legal bases uniformly define facilities and devices designed for the purpose of sea navigation safety and safe mooring.

Furthermore, the Court of Audit established that maintenance of waterways as defined in Maritime Code⁴⁹ does not include maintenance of appropriate water depth which is one of the key characteristics of navigation routes as in accordance with Article 27 of Maritime Code. Maintenance of appropriate water depth indirectly arises from the Maritime Code, namely the stipulations about

⁴⁷ On the basis of Article 32 of Maritime Code, Article 3 of Decree on the administration of the freight port of Koper, port operations, and on granting concession for the administration, management, development and regular maintenance of its infrastructure (Official Gazette of the RS, Nos 71/08, 32/11, 53/13, 25/14, 3/18, 41/18 and 62/19) and in accordance with point 1.1. of the concession contract.

⁴⁸ Findings about a definition of a port infrastructure were already presented in the audit report of the Court of Audit titled Efficiency of managing port infrastructure within the area of cargo port in Koper, No 3262-2/2016/94 as of 15 October 2018, [URL: <http://www.rs-rs.si/revizije-in-revidiranje/arhiv-revizij/revizija/ucinkovitost-izvajanja-koncesijske-pogodbe-1107/#tabs-3128>], 23/5/2021.

⁴⁹ Pursuant to Article 28 of Maritime Code, maintenance of navigation routes in the territorial sea and internal waters of the Republic of Slovenia shall be provided by setting up the facilities for sea navigation safety and by ensuring undisturbed respectively proper operations thereof.

maritime inspection lay down that proper water depth maintenance is the responsibility of a port operator.

2.1.2.2 Weather forecasting and sea status

Tasks of a national service for meteorology, hydrology, oceanography and seismology are carried out by the Environment Agency who has to provide data acquired through observation, special analyses, assessments and forecasts, as well as thereto related tasks from its field of competence also to other state authorities in case its activities and information are required by those bodies for the performance of the tasks within their competence as prescribed by law⁵⁰. The main task of the Environment Agency that is relevant to the audit field is to provide meteorological, hydrological and oceanographic support for ensuring the navigation safety at sea.

Resolution on the National Programme of Protection against Natural and other Disasters 2009-2015⁵¹ and Resolution on the National Programme of Protection against Natural and other Disasters 2016-2022⁵² foresee drawing up and implementation of a programme for developing and establishing a service for maritime meteorology, hydrology and oceanography within the framework of a system for observation, reporting, warning and alarming about extreme weather and hydrological events and for providing support in case of sudden marine pollution. It is also envisaged that the service for maritime meteorology, hydrology and oceanography at the Environment Agency and the service for maritime traffic control at the Maritime Administration are to be included into a single, uniform maritime information system.

Providing conditions for the operations of the Maritime Meteorology, Hydrology and Oceanography Service was the result of the BOBER project⁵³, which was carried out by the Environment Agency in the period from 2010 to 2016. Within the framework of the project, the premises required for the operations of the service were provided. The Environment Agency stated that due to the lack of human resources required for setting up an operational service for maritime meteorology, hydrology and oceanography it failed to make full use of the acquired premises and that in the period covered by the audit there was only 1 expert, who was just before retirement, present on the premises on workdays; additionally, the unnecessary premises could also be used by the Maritime Administration.

The Court of Audit established that the Environment Agency was planning and implementing activities for establishing a service for meteorology, hydrology and oceanography for several years, yet the service was not set up by the end of the period covered by the audit although its establishment was envisaged also with the 2009-2015 resolution. The Environment Agency explained that the

⁵⁰ The Environment Agency is required to perform all the aforementioned tasks in accordance with National Meteorology, Hydrology, Oceanography and Seismic Service Act (Official Gazette of the RS, No 60/17) mainly for the purpose of water management, environmental protection and nature conservation, cultural heritage protection, public health protection, spatial planning, administrative and other tasks related to the field of construction, transport, energy, agriculture, forestry and other economic activities.

⁵¹ Official Gazette of the RS, No 57/09.

⁵² Official Gazette of the RS, No 75/16.

⁵³ The project of upgrading the system for monitoring and analysing the water environment in Slovenia – BOBER (Better Observation for Better Environmental Response) which was co-funded by the European Union.

current services required by the users at sea are provided in Ljubljana in line with the existing staffing capacity which is why the scope of the services provided does not meet the needs at sea. The Maritime Administration stated that, considering sea navigation safety at sea, the main information that is missing respectively not provided by the Environment Agency refers to the data on the movement of currents, simulation of an oil slick movement on the sea surface and most up-to-date weather forecasting⁵⁴. Another problem represents also the fact that accidents at sea may also occur outside the Environment Agency's regular working hours, therefore the Maritime Administration cannot be provided with the respective data immediately after the accident.

By setting up a specialised unit for carrying out meteorological, hydrological and oceanographic services at sea, as stated by the Environment Agency, the demonstrated needs could be satisfied in a much greater scope and the Agency could at the same time additionally develop new services since it could better focus on the maritime field.

The national hydrological monitoring is carried out at 2 coastal stations in Koper and Piran, at oceanographic buoys Vida, Zora and Zarja and by surface current measuring device at the cape in Piran. The network of measuring respectively monitoring points is designed in a way to provide hydrological and oceanographic parameters for the purpose of monitoring and forecasting processes at sea within the framework of a meteorological and hydrological forecasting service⁵⁵.

In 2019, the Environment Agency commenced a public procurement for upgrading buoys with additional meteorological and oceanographic sensors⁵⁶ to improve monitoring of the current situation at sea. By upgrading buoys, the Environment Agency could acquire data on visibility, wind, temperature, air humidity and salinity of the sea water which could improve maritime traffic safety especially in case of fog at sea, which is in Slovenia a very common weather phenomenon during winter. As assessed by the Environment Agency, the additional buoy Vida could contribute to the sufficient scope of the required measurements in the Slovenian part of the Adriatic Sea. However, the public procurement was not carried out by the end of the period covered by the audit. Upon the completion of the audit, a contract for the purchase of equipment and upgrading oceanographic buoys was signed.

Measurements of wind speed and direction, visibility, tide and wave motion, temperature, pressure and humidity within the territorial waters of the port are carried out also by the Port of Koper. The collected data is shared with the Maritime Administration, pilotage and ship towage providers, as well as with the Slovenian Armed Forces. It was stated by the Environment Agency that the measurements performed by the Port of Koper are primarily intended for the safe operations of the Port of Koper and are not in full compliance with the meteorological standards. This is why they are less useful for the Environment Agency.

The Court of Audit established that measurements of visibility directly at sea as part of the existing national meteorological service were not carried out at the time of completion of the audit. The Environment Agency performs such measurements on the location of a weather station at the

⁵⁴ For 2 to 3 hours in advance.

⁵⁵ Programme of hydrological monitoring of surface waters for the period 2016-2020, point 3.1.

⁵⁶ [URL: https://www.enarocanje.si/Obrazci/?id_obrazec=319902], 23/05/2021.

Portorož Airport. In the period covered by the audit, the Environment Agency carried out activities to ensure the relevant sensors on buoys Zarja and Zora, however, this was not fulfilled by the end of the audit implementation.

A visibility sensor provided by the Maritime Administration is installed on the silo in the Port of Koper. Since this sensor is installed at a height above the surface and since, as explained by the Port of Koper, visibility within the territorial waters of the port may change per height, the Port of Koper thus installed an additional visibility sensor on a weather station at sea. Ships headed to the Port of Koper could thus be provided with data on visibility also on the basis of the measurements carried out by the Port of Koper.

Data gathered by all measurement points (hydrological and meteorological measurement points) are stored in the database of the Environment Agency and provide a foundation for forecasting events and issuing warnings⁵⁷. As foreseen already for several years, the data regarding meteorological conditions shall be entered into a uniform information system EPIS⁵⁸ and that the service for meteorology and hydrology and the service for maritime traffic control should be interconnected.

The exchange of meteorological, hydrological and oceanographic data within the framework of the EPIS information system was not established in the period covered by the audit. The Environment Agency provided a 24-hour service of observation and issuing warnings, as well as the assistance by the meteorologist on duty within its regular working hours. The Maritime Administration received notifications and warnings through the Notification Centre of the Republic of Slovenia and via websites of the Environment Agency, as well as by telephone if additional information was required. Cooperation in case of emergency events was arranged if the need arose and depended on the resourcefulness of employees of the Maritime Administration and the Environment Agency. The Environment Agency also set up a maritime forecasting system which includes models for predicting wave motion, movement of currents, astronomical tide and a model for simulating the spread of an oil slick.

Measure taken by the Maritime Administration and the Environment Agency

In 2002, the Maritime Administration and the Environment Agency concluded a cooperation agreement, thereby formally determining the content, the scope and the manner of cooperation between the respective institutions as follows: the Environment Agency shall notify the Maritime Administration about dangerous weather events, provide access to the system for monitoring and forecasting the spread of oil slicks, access to data and measurements that the Maritime Administration shall enter into its information system and, in case of demanding weather conditions, offer the possibility of telephone consultation with services on duty at the Environment Agency.

⁵⁷ Weather forecast for the Slovenian coastal region is available on the following website, [URL: <http://meteo.arso.gov.si/met/sl/weather/bulletin/coast/>], 23/05/2021.

⁵⁸ As stipulated by Article 4 of Decree on the coordination of services at sea (Official Gazette of the RS, No 102/12) which entered into force on 5 January 2013, as well as in accordance with Resolution on the National Programme of Protection against Natural and other Disasters 2009-2015 and Resolution on the National Programme of Protection against Natural and other Disasters 2016-2022.

2.1.2.3 Providing pilotage, compulsory ship towage and other assistance to ships

Maritime pilotage entails the provision of advice to the master mariner by a qualified professional (a maritime pilot) with regard to ship navigation in order to ensure safe navigation in ports and other areas of the territorial sea and internal waters. There exist coastal and port pilotage. Port pilotage is the pilotage in the port area. Coastal pilotage entails the pilotage of the vessel in the part of the territorial sea outside the port pilotage area. It is, however, not performed as explained by the Maritime Administration. To ensure navigation safety, the Maritime Administration shall order a mandatory pilotage in case of certain types or sizes of ships, types or nature of carried goods or in case of certain areas of navigation and certain weather conditions. Pilotage is not mandatory for ships with gross tonnage to 500 and for ships which are determined with regard to type and the experience of the master mariner in every single case by the Maritime Administration, for vessels used for administrative purposes and for domestic military ships.

Pilotage is mandatory in the area of the Koper cargo port or in other areas in case a ship for which pilotage is mandatory arrives to or departures from that area. In the period covered by the audit it applied that a port operator must provide a 24/7/365 pilotage service⁵⁹. The concession act and the concession contract⁶⁰ determine the Republic of Slovenia as operator of the cargo port in Koper⁶¹.

In the case of movements of the ship related to arrival, mooring and departure from the port, the ship is required to use a prescribed number of tug boats. Compulsory towage and thereto pertaining conditions and requirements, mandatory number of tug boats and the manner of carrying out harbour towage within the area of the Koper cargo port are defined by special rules⁶². However, it is the Maritime Administration who decides on the provision of mandatory pilotage and compulsory towage, as well as the required number of tug boats for the purpose of towage, fire-fighting and rescue in the Koper cargo port.

In the period covered by the audit, the pilotage was performed by maritime pilots of the maritime pilotage company PILOTI KOPER pomorska pilotaža d.o.o., while the company ADRIA-TOW, Storitve vleke in asistiranja ladij in plovil, d.o.o. Koper⁶³ (hereinafter referred to as: company ADRIA-TOW) provided vessel towing services in the Port of Koper. Both concerned services were performed as free-market services.

The Maritime Administration is responsible also for control over the provision of pilotage and compulsory marine towage. In case harbour supervisors find out that a ship breaches the rules on compulsory ship towage, it is issued a warning and prohibited to enter or leave the port. Provision of

⁵⁹ Rules on sea pilotage (Official Gazette of the RS, Nos 115/06 and 27/13).

⁶⁰ Article 4 of the concession act which relates to Decree on the administration of the freight port of Koper, port operations, and on granting concession for the administration, management, development and regular maintenance of its infrastructure, and points 1.1 and 3.2 of the concession contract.

⁶¹ In the audit report referred to in footnote 48 it was established that the arrangement pursuant to the concession act, according to which the Republic of Slovenia is determined as operator of the port and thus authorised to carry out certain tasks regarding management and operation of the port, does in this regard not comply with the provisions of Maritime Code.

⁶² Rules on compulsory ship towage (Official Gazette of the RS, No 84/05).

⁶³ In addition to vessel towing, the company offers supply, rescue and assistance to vessels.

pilotage or marine towage may also be subject to maritime inspection. Such inspections are carried out when human life or marine environment is threatened, as explained by the Maritime Administration.

According to documentation of the Maritime Administration, there were certain irregularities respectively problems identified in the performance of towage and mandatory pilotage, such as:

- the number of tug boats upon mooring/unmooring of ships was not in compliance with the existing Rules on compulsory ship towage,
- too high ship speed upon entering a shipping channel with the maritime pilot already on board,
- maritime pilot allegedly informed maritime supervisor about detected deficiencies on board during manoeuvring performance⁶⁴ but claimed nothing was wrong when manoeuvring was finished, although visual and voice recordings proved otherwise,
- late arrival of a maritime pilot or too short presence of a maritime pilot on the ship,
- tug boats were not prepared when ships entered individual shipping channels.

Measures taken by the Maritime Administration and the Ministry of Infrastructure

The Maritime Administration adopted several internal rules relating to the provision of pilotage and compulsory vessel towage in order to eliminate irregularities respectively weaknesses, namely to ensure more adequate performance of pilotage and ship towage by exerting consistent control.

Director of the Maritime Administration limited vessel speed within the Koper cargo port to a maximum of 6 knots by a decision.

The Ministry of Infrastructure, in cooperation with the Maritime Administration, adopted new Rules on sea pilotage⁶⁵ laying down coordinates of 2 maritime pilot stations for maritime pilot embarkation.

After the period covered by the audit, the Government of the Republic of Slovenia (hereinafter referred to as: the Government) decided on a public utility service of pilotage to be provided in a form of a public company⁶⁶. A public utility service of pilotage is provided by the public company JAVNO PODJETJE KOPRSKA PRISTANIŠKA PILOTAŽA d.o.o.

2.1.2.4 Hydrographic services

One of the key measures for ensuring navigation safety at sea is the provision of a hydrographic service⁶⁷. The ministry responsible for maritime, namely the Ministry of Infrastructure, is authorised for the field of hydrographic services, while the Geodetic Institute of Slovenia is responsible for the

⁶⁴ Too high ship speed upon arrival of the ship to maritime pilot station, crew qualification, a tug boat taking too much time for mooring.

⁶⁵ Official Gazette of the RS, Nos 82/20 and 89/20 – corr.

⁶⁶ On 20 February 2020, the Government adopted Decree on the form and method of performing commercial public service of maritime pilotage (Official Gazette of the RS, No 11/20).

⁶⁷ Hydrographic services include hydrographic measurement of physical features of the sea, baselines and coastlines, hydrographic monitoring, hydrographic measurement of objects and phenomena related to coastal areas, sea surface, water column, sea bed and underground areas, managing, collecting, storing, maintaining, processing and presenting data, as well as nautical cartography and issuing hydrographic publications.

implementation of the tasks pertaining to the field of hydrography. The work of the Geodetic Institute of Slovenia includes acquisition of data on sea depths, navigation facilities respectively infrastructure (lighthouses and buoys), waterways, types of sea bed, port infrastructure, navigational hazards, restricted navigation and coastal lines. Based on this activities, the institute produces nautical charts, navigational publications and issues notices to mariners.

The Geodetic Institute of Slovenia performs regular annual hydrographic measurements of certain parts of Slovenian sea. In the period from 2016 to 2020, the institute re-performed measurements of the entire Slovenian part of the Adriatic Sea to gather data on sea depths of higher resolution as required by contemporary standards applicable to the provision of hydrographic measurements and nautical charts.

2.1.2.5 Safety of sea navigation in the Port of Koper

Maritime Code stipulates that a port operator is responsible for the port operations that must be organised respectively arranged in way to ensure navigation safety at sea, environmental and water protection and port safety; in addition thereto, a port operator is responsible for the provision of activities necessary for undisturbed operation of the port as in accordance with its purpose (pilotage, marine towage, transshipment services, etc.).

Pursuant to the concession contract, the Republic of Slovenia respectively on its behalf the Ministry of Infrastructure as port operator has the right and duty to ensure safety of sea navigation within the port area for its own account and on its own responsibility. To this end, the port operator shall undertake the following tasks:

- to exercise control over navigation safety at sea,
- to lay down conditions for ensuring safety of maritime traffic and maintaining order in a port, to define special safety measures, to prohibit or postpone ship arrival to the port or to prohibit further management with dangerous goods on the ship when not all prescribed safety measures are fully implemented or when a risk of an accident exists,
- to manage vessel traffic,
- to decide on a mandatory pilotage and compulsory marine towage and to define the necessary number of tug boats,
- to determine maximum draught for sailing in certain parts of the port,
- to ensure that public utility service for regular maintenance of facilities for the safety of navigation and navigation routes is carried out and to exercise control over the implementation of the concerned public utility service.

The Port of Koper shall ensure the implementation of all measures necessary for preventing environmental pollution and larger incidents in its own name and on its own account. To this end, the Port of Koper implemented several measures in the period covered by the audit, such as:

- it adopted several internal documents⁶⁸,
- it established a sea protection unit,
- it implements a public service of regular maintenance of port infrastructure intended for public transport, including regular maintenance of the territorial sea waters⁶⁹,
- it offers and carries out education, training and drills for its employees,
- it exercises regular control over the territorial waters of the port by ships and through video surveillance system, and also a special control in the case of transshipments of dangerous respectively hazardous substances, as well as performs measurements of ship's berthing speed respectively distance from the wharf and approaching angle,
- it has available material and technical means for decision-making support, efficient interventions, detecting of persons responsible for the accident, event analysis and for the safety of all involved in the interventions, for example:
 - meteorological and oceanographic stations, anemometers, alarm systems connected to security and control centres, hydrocarbon sensors in the circumstances of reduced visibility that are installed at critical points of the territorial waters and cover the sea surface directly below,
 - oil interceptors for the prevention of sea pollution in the event of possible oil spills,
 - floating curtain booms (hereinafter referred to as: containment booms) along the coast under Pier II that prevent oil slick spreading and the spread of various derbies under piers and vice versa; they can also be placed around the ships prior to fuel oil transshipment.

The Court of Audit established that in the period covered by the audit the Port of Koper implemented measures for the prevention of accidents that could cause marine pollution. Implementation of measures for preventing sea pollution and to remedy the consequences thereof is based on a contract which the Port of Koper concluded with its subsidiary, the company LUKA KOPER INPO - invalidsko podjetje, d.o.o. (hereinafter referred to as: company INPO) which operates in the field of construction, production and other services related to water- and landborne traffic, and disability services.

2.1.3 Control over meeting conditions of navigation safety at sea

2.1.3.1 Ongoing control

Pursuant to Maritime Code, navigation safety at sea is ensured by determining conditions that must be met by waterways within territorial and internal sea waters, navigation safety facilities, ports,

⁶⁸ An outline for preventing major accidents laying down guidelines, policies, manner of intervening and responsibilities pertaining to the prevention of accidents and mitigation of the consequences thereof; risk assessment and plan of protection and disaster relief in case of industrial incidents in the area under a concession contract; adopted internal organisational regulation on prevention, intervention and remedying of consequences in the event of industrial incidents laying down preventive, intervention and remedy activities in case of industrial incidents in the area of the cargo port in Koper.

⁶⁹ Maintaining the existing depth of waterways within the entire territorial waters of the port, regular removal of floating debris, waste, and other abandoned or discarded objects or materials from the sea, aquatic and coastal land.

berths, ships and their crew members, and by determining conditions that must be satisfied by vessels and floating facilities and their crew. The audit was not focused on individual conditions but it examined, whether control is being exercised over implementation of the required conditions.

There are 2 types of sea navigation safety control carried out, namely: ongoing control and maritime inspection. The responsibility for the performance of both types of control lies with the Maritime Administration.

The ongoing control includes control over maintaining order in ports and other parts of the territorial sea and internal waters, control over safety of sea navigation⁷⁰, maritime transport operations and maintenance of facilities for the safety of navigation and navigation routes. The concerned control is exercised by the Maritime Administration supervisors. The latter are also responsible for other administrative and expert tasks related to the field of navigation safety at sea and marine traffic management, maritime mobile service (identity) and service for monitoring and maritime surveillance, search and rescue at sea, and the tasks pertaining to expert control over regular maintenance of port infrastructure intended for public transport and over regular collection of waste from vessels.

In 2017, there were 22 harbour supervisors employed at the Maritime Administration. In 2018, an additional harbour supervisor was employed, therefore the total number of harbour supervisors employed at the Maritime Administration amounted to 23 in the years 2018 and 2019. Control over navigation safety at sea is exercised by 11 harbour supervisors⁷¹. Control over navigation safety at sea is carried out 24/7, namely there are 2 harbour supervisors present per each shift.

The Court of Audit established that the Maritime Administration repeatedly expressed the need for increasing the number of harbour supervisors in the period covered by the audit. It thus proposed to the Ministry of Infrastructure to increase the establishment plan for the total number of 4 harbour supervisors⁷². However, explanations justifying the increase in the establishment plan do not clearly present the reasons behind the proposed additional employment. In its letters to the Ministry of Infrastructure, the Maritime Administration pointed out only insufficient respectively incomplete control over navigation safety at sea and inappropriate ongoing control at sea as consequences of staff shortage. The need for employing extra staff was justified on the grounds of ensuring safety and notable lack of human resources. However, it was not clearly evident from the documentation the Maritime Administration submitted to the Ministry of Infrastructure which fields face the most serious lack of staff, leading to non-implementation or less-quality implementation of tasks of

⁷⁰ Sea navigation safety control refers to control over: boat crew members; transport of people and goods by boats; navigation regime for vessels; boats regarding their suitability for navigation; maintenance and marking of waterways within the territorial sea and internal waters of the Republic of Slovenia, and condition of sea navigation safety facilities; floating devices, their safety for use and floating/navigational suitability; provision of pilotage and compulsory ship towage.

⁷¹ The remaining 12 harbour supervisors perform other tasks respectively do not participate in sea navigation safety control.

⁷² 1 additional work post (harbour master – secretary) in 2017 and 3 additional work posts (harbour supervisor – senior advisor) in 2019.

harbour supervisors⁷³. It was also not evident, whether and how the Maritime Administration tried to implement organisational changes that would enable quality and undisturbed operations and activities related to sea navigation safety control especially during the summer season.

2.1.3.2 Maritime inspection

Maritime inspection upon the exercise of provisions of Maritime Code and accompanying regulations, as well as other rules regulating navigation safety at sea is carried out by the Maritime Administration. Maritime inspection includes control over⁷⁴:

- vessels regarding their suitability for navigation, safety of the persons on board and environmental protection,
- implementation of international regime of maritime ports in accordance with international obligations of the Republic of Slovenia; control over condition of ports, meeting conditions for navigation safety at sea and safe mooring, embarkation and disembarkation of persons and loading and unloading of cargo,
- construction of facilities for navigation safety at sea both offshore and onshore,
- provision of public transport of people or goods by sea,
- crew members on board,
- ensuring safety at work of crew members.

Following notification of a harbour supervisor, maritime inspection upon navigation regime for vessels, inspection upon floating devices in terms of their safety for use and floating/navigational suitability, upon pilotage service and vessel towage service may also be required to ensure safety of sea navigation.

Maritime Inspection Division carries out regular annual inspections of foreign ships⁷⁵, the quota of which is defined by the European Maritime Safety Agency⁷⁶ (hereinafter referred to as: EMSA) on a year by year basis.

⁷³ For example, justifications of the increase in the number of employees were not based on setting up a VTS centre. The 2013 investment programme for setting up a VTS centre in the Republic of Slovenia thus suggests that employing 5.5 additional operators is required for the provision of vessel traffic services pursuant to the variant currently carried out within the framework of the project of establishing the Centre for Traffic Control and Management in Critical Situations at Sea. The investment project identification document for the project of establishing the Centre for Traffic Control and Management in Critical Situations at Sea also suggests gradual transition from maritime traffic control to Vessel Traffic Monitoring & Information Systems (VTMIS), which requires additional recruitment and education of staff.

⁷⁴ Article 182 of Maritime Code.

⁷⁵ Procedures regarding maritime inspections are laid down by Decree on the inspection of foreign ships (Official Gazette of the RS, Nos 105/10, 96/14 and 71/19).

⁷⁶ EMSA was founded by the European Union and provides to the European Commission and the Member States of the European Union technical assistance and support concerning development and implementation of the EU maritime legislation on maritime safety and pollution by ships. EMSA mainly implements preventive measures, nevertheless, it also holds operational functions related to responding in case of oil pollution, and detecting, monitoring and tracing of long-distance vessels.

In the period covered by the audit, the Maritime Inspection Division had 3 maritime inspectors and 1 respectively 2 inland navigation inspectors⁷⁷.

Pertaining to maritime inspection, the Maritime Administration pointed out problems that might affect the provision of an adequate level and continuity of maritime inspections, namely:

- at the moment, maritime inspection service is carried out by 3 maritime inspectors of approximately the same age who will thus be retired at approximately the same time, and by 1 inspector in training;
- for the maritime inspector to be able to independently perform the tasks of maritime inspection, education and training of at least 2 years is required as estimated by the Maritime Administration;
- maritime inspection is based on comprehensive legal bases and includes several different fields, the scope of which has been additionally widening⁷⁸.

The Court of Audit established that in the period covered by the audit the Maritime Administration repeatedly expressed the need for increasing the number of maritime inspectors in different fields⁷⁹. The expressed need was justified on the grounds that 1 maritime inspector retired, while hiring a replacement employee was not possible due to employment restrictions deriving from the provisions of Fiscal Balance Act⁸⁰, and in addition thereto, the work load increased due to adoption of new regulations. Documentation provides that the allowed number of employees at the Maritime Administration for the year 2018 increased by 2 employees, of which 1 employee was envisaged for the Maritime Inspection Division. In 2019, the Maritime Administration implemented 2 public invitations for the work post of an engineering inspector at the Maritime Inspection Division, however both competitions were unsuccessful. The number of maritime inspectors remained the same by the end of the period covered by the audit.

The examined documentation additionally provides that the Maritime Inspection Division met the required quota of regular inspections of foreign ships as determined by EMSA⁸¹. During its last examination EMSA found out that the number of inspectors in the field of inspections of foreign ships is adequate with regard to the scope of inspections carried out, nevertheless, in the future more attention should be placed on the provision of adequate respectively sufficient number of maritime inspectors considering constant increase in work load of the Maritime Inspection Division. It should be added that the Court of Audit established that, in the period covered by the audit, the Maritime Administration failed to implement changes in its internal organisation that could contribute to risk

⁷⁷ In the period covered by the audit, there was initially only 1 inland navigation inspector employed who was later joined by another one for a certain period of time; however, there was again only 1 inland navigation inspector upon the end of the period covered by the audit.

⁷⁸ For example, to the field of labour legislation and environmental protection.

⁷⁹ Inland navigation inspector, maritime engineering inspector, inspector for on-board living and working conditions of seafarers, nautical inspector.

⁸⁰ Official Gazette of the RS, Nos 40/12, 96/12 – ZPIZ-2, 104/12 – ZIPRS1314, 105/12, 25/13 – CC ruling, 46/13 – ZIPRS1314-A, 56/13 – ZŠtip-1, 63/13 – ZOsn-I, 63/13 – ZJAKRS-A, 99/13 – ZUPJS-C, 99/13 – SVarPre-C, 101/13 – ZIPRS1415, 101/13 – ZDavNepr, 107/13 – CC ruling, 85/14, 95/14, 24/15 – CC ruling, 90/15, 102/15, 63/16 – ZDoh-2R, 77/17 – ZMVN-1, 33/19 – ZMVN-1A and 72/19.

⁸¹ As in accordance with annual reports on the work of the Maritime Inspection Division.

management in future, namely the risk arising from the aforementioned problems occurred while exercising maritime inspections.

Measure taken by the Maritime Administration

In 2020, the number of maritime inspectors increased by 1 inspector. In 2021, the Maritime Administration created an extra vacancy for 1 inland navigation inspector by internal relocation and also plans to create additional vacancy for maritime inspector, again by internal relocation. In the opinion of the Maritime Administration, this should fill vacancy at Maritime Inspection Division.

Maritime inspectors and harbour supervisors impose fines for the case of sea pollution as defined by Maritime Code. In the period covered by the audit, they imposed fines in the total amount of EUR 15,000. Fines given to natural persons who caused environmental pollution amounted to EUR 400, while the offence of a legal person carried a fine of EUR 4,600⁸².

In 2010, the Court of Audit established⁸³ that inspectors imposed fines in accordance with Maritime Code, namely on the type of offence but must thereby comply with the provisions of Minor Offences Act⁸⁴ applicable to offence proceedings and pursuant to which the inspectors have the right to impose only lower-level fines, however, situations may arise where major damage due to pollution has been caused but, in line with the concerned Act, only the lowest fine may be imposed.

In 2016, an amendment to Maritime Code⁸⁵ was adopted, namely an additional article⁸⁶ was added which stipulated that a fine in the amount higher than the minimum fine determined by the respective act may be levied on offences laid down in this act under an expedited procedure. Despite this possibility the Court of Audit established that maritime inspectors and harbour supervisors imposed the lowest fines in the period covered by the audit.

2.1.4 Other measures and international cooperation

Marine Strategy Framework Directive⁸⁷ establishes a framework within which Member States shall take the necessary measures to achieve or maintain good environmental status in the marine environment. In 2017, the Ministry of Environment prepared the first programme of measures which

⁸² A fine in the amount of EUR 4,000 was given to a legal person and a fine in the amount of EUR 600 was given to a responsible person of a legal entity.

⁸³ In 2010, the Court of Audit issued an audit report on the achievement of objectives of traffic inspection, [URL: <http://www.rs-rs.si/revizije-in-revidiranje/arhiv-revizij/revizija/doseganje-ciljev-inspekcijskega-nadzora-prometa-1264/>], 23/05/2021.

⁸⁴ Official Gazette of the RS, Nos 29/11 – official consolidated text, 21/13, 111/13, 74/14 – CC ruling, 92/14 – CC ruling, 32/16, 15/17 – CC ruling and 73/19 – CC ruling.

⁸⁵ Act Amending the Maritime Code (PZ-F; Official Gazette of the RS, No 33/16).

⁸⁶ Article 989.a.

⁸⁷ DIRECTIVE 2008/56/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 17 June 2008 establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive), as last amended on 17 May 2017 (OJ L 164/19, 25.6.2008, p. 19).

is part of the Marine Environment Management Plan 2017-2021⁸⁸. The programme is divided into several categories of measures. Within the category of measures for reducing pollution caused by polluting substances, the following measures pertaining to the audit field are relevant⁸⁹:

- preventing pollution from maritime traffic,
- preventing and restricting transboundary pollution and plans of protection and disaster relief,
- optimisation of operations and equipment of a mandatory public utility service for aquatic and coastal land maintenance,
- audit of protection and disaster relief plan in the event of accidents at sea.

The first 2 measures refer to the implementation of the existing legislation, while the second 2 are additional/supplementary measures. The Ministry of Environment is bound to report to the European Commission on the progress in the implementation of additional/supplementary measures. The Court of Audit established that the Ministry of Environment compiled an interim report on the progress in 2018, indicating individual implemented activities⁹⁰.

In accordance with the legislation, it is necessary to revise respectively update the programme of measures by the end of 2021, which is to be commenced in January 2022 and completed in December 2028. Evaluation of the programme of measures respectively assessment of efficiency of its implementation shall be made within the procedure for the preparation of the second marine environment management plan that shall apply after 2021.

International measures for preventing maritime pollution are based on international conventions and protocols to which the Republic of Slovenia is a party. Conventions and protocols do not normally specify actual measures but rather oblige the contracting parties to adopt appropriate measures in adherence to the provisions of an individual act or a regulation. According to the Ministry of

⁸⁸ Official Gazette of the RS, No 41/17.

⁸⁹ Relating to the category marked D8 and measures with codes TU3(1a), TU4(1a), TU5(1b), TU6(1b).

⁹⁰ Carried out an international training and drill in the field of emergency rescue and recovery operations at sea with the purpose of preventive and efficient joint interventions; formulated a proposal relating to revised Emergency Response Plan adopted by the Administration for Civil Protection and Disaster Relief in 2018; actual transfer of individual tasks carried out at sea from the Environment Agency to the Maritime Administration, and purchase of a new vessel.

Infrastructure, the Republic of Slovenia is a party to fundamental conventions and protocols in the field of pollution prevention⁹¹.

The Republic of Slovenia concluded with the Republic of Austria, the Republic of Croatia, the Republic of Hungary, and the Italian Republic, who all share water catchment areas or border river basins, several international contracts respectively agreements. Within the area of the Adriatic Sea, operates Croatian-Italian-Slovenian Joint Commission for the Protection of the Adriatic Sea and its Coastal Areas⁹², which was also joined by Montenegro in 2010. The tasks of the commission include, among others: to propose to the governments of the contacting parties the measures necessary for the elimination of existing and the prevention of any new causes of pollution, as well as to propose draft international contracts necessary to ensure reduced pollution of the Adriatic Sea⁹³. There was no commission meeting in the period covered by the audit⁹⁴.

In 2005, the Governments of the Republic of Croatia, the Italian Republic and the Republic of Slovenia signed the Agreement on the Sub-regional Contingency Plan for Prevention of, Preparedness for and Response to Major Marine Pollution Incidents in the Adriatic Sea⁹⁵ (hereinafter referred to as: agreement on the contingency plan). On the basis of the aforementioned agreement, the parties thereto adopted the contingency plan for preventing major pollution of the Adriatic Sea and for preparedness and response to such incidents, as well as for the use of their best endeavours to render assistance to any signatory of this agreement in case of emergency. The purpose of the respective agreement is to establish a mechanism for mutual assistance under which the competent national authorities of Croatia, Italy and Slovenia will cooperate in the activities related to prevention and response in cases of emergency respectively marine pollution.

⁹¹ International Convention for the Prevention of Pollution from Ships (MARPOL 73/78) as modified by the Protocol of 1978 and the Protocol of 1997 (Official Gazette of the RS – International Agreements, No 2-1/93); International Convention for the Safety of Life at Sea, 1974 with amendments and protocols of 1978 and of 1988 thereto (Official Gazette of the RS – International Agreements, No 2-1/93); International Convention on Oil Pollution and Preparedness, Response and Co-operation, 1990 (Official Gazette of the RS – International Agreements, No 9/01); Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances, 2000 (Official Gazette of the RS – International Agreements, No 5/06); Convention on the Prevention of Marine Pollution by Dumping of Wastes and other Matter, 1972 with annexes thereto (Official Gazette of the RS – International Agreements, No 9/92); 1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972 (Official Gazette of the RS – International Agreements, No 10/05), Convention on the protection of the Mediterranean Sea against pollution (Barcelona Convention), the protocols for the prevention of pollution of the Mediterranean Sea by dumping from ships and aircraft and the protocols concerning cooperation in combating pollution of the Mediterranean Sea by oil and other harmful substances in cases of emergency (Official Gazette of the RS – International Agreements, No 26-84/02).

⁹² The joint commission was established on the basis of the Cooperation Agreement for the Protection of the Adriatic Sea and its Coastal Areas (Official Gazette of the SFRY – International Agreements, No 2/77) The agreement was ratified by a Decree ratifying Yugoslav-Italian Cooperation Agreement for the Protection of the Adriatic Sea and its Coastal Areas (Official Gazette of the SFRY – International Agreements, No 2/77) and by Act notifying succession to agreements between the former Yugoslavia and the Republic of Italy (Official Gazette of the RS – International Agreements, No 11/92).

⁹³ The commission also: a) examines all the issues related to the pollution of the Adriatic Sea and its coastal areas; b) proposes to the governments the actions that are, in the opinion of the commission, necessary to be taken in relation to studies and examinations; c) issues its opinion on bilateral programmes and provides for their harmonisation.

⁹⁴ The last meeting of the joint commission was in 2011. The next meeting is scheduled for 2020 as in accordance with the Ministry of Environment.

⁹⁵ Official Gazette of the RS, No 61/08.

The Court of Audit found out that the agreement ratified by the Republic of Croatia and the Republic of Slovenia in 2008 is not in force, since it has not yet been ratified by the Italian Republic. Therefore, the implementation of the contingency plan was not examined in the audit.

However, the Court of Audit thereby established that 3 ministries are responsible for the implementation of the agreement on the contingency plan in the Republic of Slovenia, namely: the Ministry of Environment, the Ministry of Defence and the Ministry of Infrastructure, whereby the role and responsibilities of the Ministry of Environment are not defined, neither are defined its tasks. The Ministry of Environment who prepared the text of the agreement on the contingency plan acknowledged that this was a loophole in the agreement. Furthermore, the audit showed that the auditees held different views about which authority should be responsible for the implementation of tasks of a national pollution prevention coordination centre in case the agreement on the contingency plan would enter into force.

Explanation of the Ministry of Infrastructure

The Ministry of Infrastructure established that problems in implementing international instruments may occur in practice, namely the instruments responsibility for which lies with several competent authorities (operating in the field of environment, economy, defence, transport) or for which the competent authorities are not defined. To this end, the issues relating to the content defined at the international level but not transposed into the European Union law, e.g. by directives, were most common.

The Republic of Slovenia is actively involved also in the EU Strategy for the Adriatic and Ionian Region – EUSAIR⁹⁶. In the period covered by the audit, mostly those joint strategic contents were defined that all countries are willing to include in their national programming documents for the period 2021-2027. One such content was formulating and implementing a joint plan of measures for the Adriatic and Ionian Region in the event of oil spill⁹⁷. The purpose of the project was to draw up a plan of measures in case of unforeseeable events, thereby laying down standard operational proceedings and roles of all interested parties in the event of sea and coastal pollution due to oil spill⁹⁸. The concerned plan and national plans should be mutually harmonised and interconnected. The foreseen plan should be joined by all the countries along the Adriatic coast and should be based on the existing subregional plan which is part of the agreement on the contingency plan.

⁹⁶ The EU Strategy for the Adriatic and Ionian Region – EUSAIR is a European Union macro-regional strategy in which 8 countries are included: Albania, Bosnia and Herzegovina, Croatia, Greece, Italy, Montenegro, Serbia and Slovenia. In terms of its content, the strategy is built on 4 thematic pillars: blue growth, connecting the region (transport and energy networks), environmental quality and sustainable tourism. Bosnia and Herzegovina and the Republic of Slovenia (Ministry of Environment) are coordinators of the third pillar, i.e. environmental quality. A Macro-Regional Strategy is actually a policy framework enabling the countries of the same region to find solutions to common problems by joint cooperation and to better utilise their joint potentials.

⁹⁷ Information on the situation regarding the implementation of the European Union Macro-Regional Strategies (EU MRS) in the period from April 2018 until the end of May 2019.

⁹⁸ EUSAIR, PILLAR 3: Environmental Quality, Annual progress report for year 2019.

In 2020, the Republic of Croatia, the Italian Republic, Montenegro and the Republic of Slovenia applied to the Call for Proposals of the European Commission⁹⁹ with a joint project¹⁰⁰. Their project was not selected, however, they plan to apply again to the next call for proposal with the same project.

2.2 Intervention

Taking into account valid legal bases and explanations of the auditees, the continuation of the audit report brings to the forefront the powers and responsibilities for the intervention, including foreseen intervention procedures in case of sudden sea pollution. Presented are the activities of the stakeholders included in the intervention procedure in the event of an ecological disaster in the Slovenian part of the Adriatic Sea, outlined is also the procedure applicable in case of insufficient domestic forces and resources for protection and disaster relief operations, thus requiring from the Republic of Slovenia to request for the international assistance.

2.2.1 Legal bases for intervention

Intervention in case of sudden pollution in the Slovenian part of the Adriatic Sea is defined in several legal bases determining stakeholders, their powers and responsibilities. Fundamental regulations in the concerned field are ZVNDN, which regulates the system of protection against natural and other disasters, and ZV-1, regulating sea management¹⁰¹.

Disaster relief respectively emergency response plan represents a fundamental intervention plan in the event of marine accidents outside ports and in case of coastal pollution caused by accidents at sea.

Drawing up of protection and disaster relief plans in case of natural and other accidents is laid down by ZVNDN, while the procedure itself and its content are set out in detail in Decree on the content and elaboration of protection and rescue plans¹⁰². Emergency response plan actually sets out a detailed scenario for protection, rescue and disaster relief in case of incidents and also regulates protection, rescue and disaster relief until the stage when immediate danger to humans, animals, property, cultural heritage and environment no longer exists and until the risk of further damage has been reduced. Furthermore, it precisely defines the necessary protection measures and the tasks of

⁹⁹ A call for proposal within the Union Civil Protection Mechanism, [URL: https://ec.europa.eu/research/participants/data/ref/other_eu_prog/ucpm/guide/call/ucpm-call-document-pp-2020_en.pdf], 23/05/2021.

¹⁰⁰ Adriatic Sea Oil Spill Contingency Plan – ASOSCOP.

¹⁰¹ Regulation of significant importance in the respective field is also Environmental Protection Act (hereinafter referred to as: ZVO-1; Official Gazette of the RS, Nos 39/06 – official consolidated text, 49/06 – ZMetD, 66/06 – CC ruling, 33/07 – ZPNačrt, 57/08 – ZFO-1A, 70/08, 108/09, 108/09 – ZPNačrt-A, 48/12, 57/12, 92/13, 56/15, 102/15, 30/16, 61/17 – GZ, 21/18 – ZNOrg and 84/18 – ZIURKOE), Article 27 of which provides that the manner of response actions and intervention measures in the event of an environmental accident on surface waters, whereby the sea is also included as in accordance with definitions of Article 7 of ZV-1, shall be governed by the regulations on waters, and that the necessary intervention measures shall be carried out by the competent services according to the regulations on waters and services for protection, rescue and relief designated under the regulations on protection against natural and other disasters.

¹⁰² Decree determinates persons responsible for drawing up plans, criteria and manner of devising protection and disaster relief plans (Official Gazette of the RS, Nos 24/12, 78/16 and 26/19).

plan implementers in line with their statutory defined responsibilities in order to provide organised and coordinated protection, rescue and disaster relief operations.

Protection and disaster relief plans may be national, regional or municipal. National protection and disaster relief plans are drawn up by the Administration for Civil Protection and Disaster Relief in cooperation with other ministries and are adopted by the Government. Decree on the content and elaboration of protection and rescue plans lays down that a regional protection and disaster relief plan shall also be formulated as an emergency response plan in accordance with the concerned decree, it shall be followed in case of accidents at sea and adopted by the Head of the Branch Office of the Administration for Civil Protection and Disaster Relief.

In the period covered by the audit, there were 2 valid and applicable emergency response plans in the event of accidents at sea. The first plan was developed in 2011¹⁰³ and valid by 2018 when a new emergency response plan was prepared¹⁰⁴. It sets out measures and activities for protection, rescue and disaster relief and is based on a risk assessment¹⁰⁵ and expert articles/publications. The Court of Audit found out that the existing emergency response plan differs from the previous one, namely it does not only refer to pollution of offshore areas but also of coastal land.

It was also established that the existing emergency response plan was formulated by the Branch Office of the Administration for Civil Protection and Disaster Relief in Koper. In accordance with the provisions of Decree on the content and elaboration of protection and rescue plans, the emergency response plan in the event of accidents at sea is developed as a regional plan, although it was several times clearly stated in the text of the plan itself that it is actually a national plan. In all stages, namely from the beginning until the adoption of the valid plan, the responsible person was the same, who at the same time performed also the function of the Civil Protection Commander for the Slovenian coastal region. The Court of Audit assessed that it was inappropriate that the same person formulated, discussed and later adopted the plan and was also its trustee.

The emergency response plan is based on the currently available forces and resources of the State that are necessary in case of interventions in the event of accidents at sea. In the event of accidents that exceed capacities of national forces and resources for protection, rescue and disaster relief operations, the State may ask other countries and international organisations for help and assistance.

According to the data of the Ministry of Infrastructure, certain international regulations¹⁰⁶ applied in the period covered by the audit that were adopted and ratified by the Republic of Slovenia and could be used in case the Republic of Slovenia either needed help and assistance of other countries that are

¹⁰³ Emergency Response Plan, Government of the Republic of Slovenia, version 2.0, 2011.

¹⁰⁴ Emergency Response Plan, Government of the Republic of Slovenia, version 1.0, 2018.

¹⁰⁵ Risk assessment of marine accidents.

¹⁰⁶ Act ratifying the International Convention on Oil Pollution and Preparedness, Response and Co-operation (Official Gazette of the RS – International Agreements, No 31/01), Act ratifying the Protocol on Preparedness, Response and Co-operation to Pollution Incidents by Hazardous and Noxious Substances (Official Gazette of the RS – International Agreements, No 25/06) and Act ratifying the Protocol concerning cooperation in preventing pollution from ships and, in cases of emergency, combating pollution of the Mediterranean Sea (Official Gazette of the RS – International Agreements, No 2/04).

signatories and thus parties to those regulations¹⁰⁷, or itself participated in interventions in another country in case of pollution. International regulations define activities regarding preparedness and response of countries in case of a sudden marine pollution. It is foreseen that countries, in accordance with their capacities and availability of adequate resources and at the request of the country affected or which might be affected, shall participate and provide help and equipment required for the intervention in case of oil pollution and/or pollution with other dangerous respectively hazardous substances (more under point 2.2.2.3.1).

2.2.2 Intervention procedure in the Slovenian part of the Adriatic Sea

The emergency response plan divides reporting and intervention procedure in the event of accidents at sea in 2 categories:

- minor accidents which encompass minor ecological disasters and minor coastal pollution; it is expected that these accidents are addressed by regular units and services, whereby forces for protection and disaster relief operations are to be activated in a limited scope, and
- major accidents which include: accident of a vessel whereby it comes to an oil spill, spill of petroleum products or other hazardous substances over 5 tons, huge fire on the ship, shipwreck and major coastal pollution.

The existing emergency response plan may be activated also in the event of an accident with long-term consequences respectively in case of accidents or other emergency events when rescue and protection relief forces and resources of the State must be provided. The previous emergency response plan envisaged activation of protection and disaster relief plan only in case of major accidents.

2.2.2.1 Reporting on ecological disaster

Emergency response plan lays down that events and phenomena respectively activities and developments at sea shall be monitored by the Environment Agency (monitors hydrological and meteorological phenomena and forecasts their development), vessels of the Police Directorate Koper, the Maritime Administration and of the Slovenian Armed Forces, as well as by the Portorož Flying Centre¹⁰⁸, fishermen and other marine traffic users. In the event of an accident, the data shall be first processed by the competent professional departments of the Maritime Administration, the Police Directorate Koper and the Administration for Civil Protection and Disaster Relief. Later on, the type and scope of an accident are determined on the basis of the foreseen scenarios of possible development of events and their expected consequences.

¹⁰⁷ Among them also Slovenia's neighbouring countries, namely the Republic of Croatia and the Italian Republic.

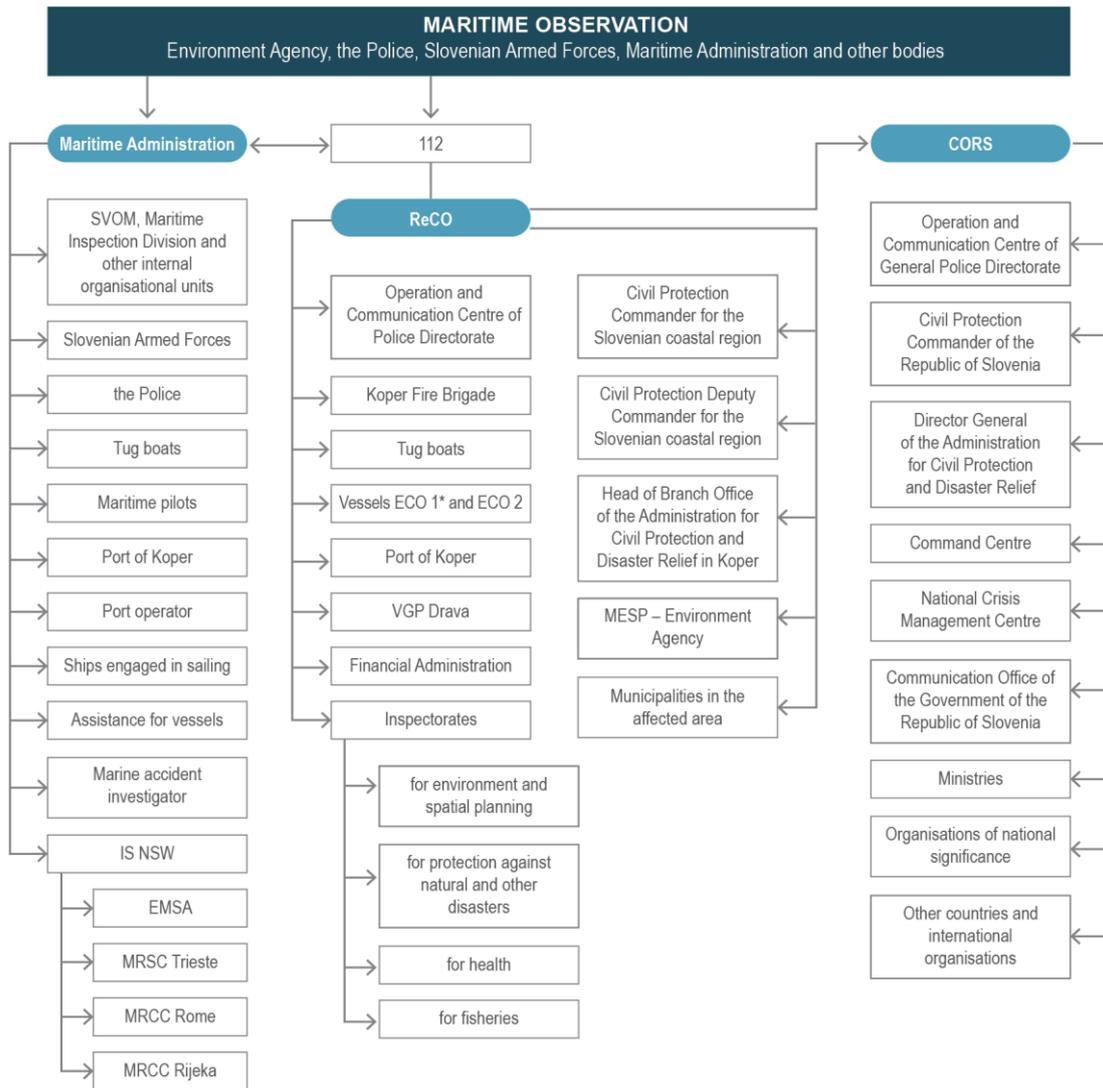
¹⁰⁸ AEROKLUB OBALNI LETALSKI CENTER PORTOROŽ-Aeroclub centro aeronautico costiero Portorose (hereinafter referred to as: Portorož Flying Centre).

The Court of Audit established that the following reporting procedure is adopted in case of emergency: regional notification centre in Koper passes on the information about the accident at sea to the Maritime Administration¹⁰⁹ and to the competent authorities and services at regional and municipal level. If the Maritime Administration is the first notified authority¹¹⁰, it shall inform the regional notification centre and other competent authorities and services about the accident at sea. Figure 3 presents the scheme of reporting on the accident that was designed for the purpose of this audit on the basis of the submitted documentation and statements of the auditees.

¹⁰⁹ Regardless of the type and scope of the incident.

¹¹⁰ Information about the incident may be received by the Maritime Administration in several different ways, namely: by an emergency radio call made by a vessel, by a telephone call made by the Notification Centre of the Republic of Slovenia (112), by a telephone call made by citizens or by notification via email from ITMCC Bari (Italian satellite receiving station).

Figure 3 Scheme of reporting to competent authorities and services at regional and national level



Key:

ReCO – Regional Notification Centre
CORS – Notification Centre of the Republic of Slovenia
SVOM – Safety of Coastal Sea Division
IS NSW – National Single Window Information System

EMSA – European Maritime Safety Agency
MRCC – Maritime Rescue Coordination
MRSC – Maritime Rescue Sub-Centre
VGP – Water Management Company
MESP – Ministry of the Environment and Spatial Planning

Notes: Who will be notified of the accident and mobilised, if later necessary, depends on the type and scope of the incident.
 * Since June 2019, the ECO 1 vessel is no longer on the list of service providers of the Administration for Civil Protection and Disaster Relief.

2.2.2.2 Intervention in case of minor ecological disaster

In the following paragraphs it is presented how intervention in case of smaller scope of pollution is carried out, namely in the internal sea waters and territorial sea, areas where water rights are granted and in the cargo port in Koper, since authorities for interventions in those areas are differently defined.

2.2.2.2.1 Areas of internal waters and territorial sea

In the period covered by the audit, the implementation of operational tasks related to protection against sea pollution and interventions in case of sudden pollution at sea were under the authority of the Maritime Administration and included internal waters and territorial sea of the Republic of Slovenia in line with the maritime regulations.

Related to the authorities concerning the interventions in case of sea pollution, there were some changes introduced before the period covered by the audit, which are due to ease of comprehension presented in the following paragraphs. The Maritime Administration has been after the amendment of the ZV-1¹¹¹ from 2012 authorised for cleaning of the sea and for preventing sea pollution¹¹². Before that, those tasks were implemented within the framework of the Environment Agency. In 2014, the Environment Agency and Maritime Administration signed an agreement on the transfer of tasks related to safeguarding of coastal sea¹¹³ to the Maritime Administration, and at the beginning of 2016, the employees who were performing tasks of safeguarding of coastal sea started working for the Maritime Administration.

Despite the provisions of ZV-1 on the authorities of the Maritime Administration, a part of the period covered by the audit the Decree on the concession to perform mandatory state public utility service for aquatic and coastal land maintenance¹¹⁴ was valid, thus arranging the field differently than ZV-1, namely the public utility services related to preventing and remedy of the consequences of the pollution at sea are carried out by concessionaire who was awarded the concession by the Government. The decree expired in September 2017 when the Decree amending the Decree on the manner of performing mandatory public utility service in the field of water management (hereinafter referred to as: water utility decree)¹¹⁵ came into force. The amendments of the water utility decree harmonised the regulations regarding aquatic and coastal land maintenance with the provisions of ZV-1¹¹⁶, namely the authorities in case of sudden pollution at sea are divided between Maritime Administration and Water Agency. In 2016, the Water Agency was handed over the tasks in the field of water management¹¹⁷ from the Environment Agency.

¹¹¹ Act Amending the Water Act (ZV-1B, Official Gazette of the RS, No 57/12).

¹¹² In line with points 4 and 5 of Article 98 and in connection to Article 161 of ZV-1.

¹¹³ Based on Articles 17 and 28 of Act Amending the Water Act (ZV-1B, Official Gazette of the RS, No 57/12).

¹¹⁴ Official Gazette of the RS, Nos 69/05 and 101/05.

¹¹⁵ Official Gazette of the RS, No 47/17.

¹¹⁶ Audit opinion thereof was delivered in the audit report listed in the footnote 48.

¹¹⁷ On the basis of Decree on Bodies within Ministries (Official Gazette of the RS, No 62/15).

The Court of Audit found out that by annulment of the Decree on the concession to perform mandatory state public utility service for aquatic and coastal land maintenance the tasks of public services implemented at sea were no longer detailed in the legal bases. Despite that it is clear that cleaning of the polluted sea must be undertaken by the Maritime Administration but the authorities to clean the coast are not clear, since:

- the valid water utility decree defined that the concessionaire who is selected by the Government for the period of 7 years should perform tasks and services for preventing pollution of coastline area under the framework of public service due to natural and other accidents. Whereby it was established that neither ZV-1 nor water utility decree defined the term “coastline of sea”, thus it is not clear what should be included among the tasks for preventing pollution of coastline of sea. ZV-1 defines only the terms coastal land¹¹⁸ and coast¹¹⁹. From the agreement on the transfer of individual tasks carried out at sea from the Environment Agency to the Maritime Administration it is evident that the coastline at the sea is a shore of the aquatic and coastal land and that the tasks are implemented by a concessionaire in the field of water management,
- the Ministry of Environment concluded during the period covered by the audit with the company DRAVA Water Management Company Ptuj d.o.o. (hereinafter referred to as: VGP Drava) several concession contracts¹²⁰ for managing water. The Court of Audit established that until the middle of 2019 none of 2 by then valid concession contracts made with VGP Drava did not include that in case of sea pollution the company VGP Drava carries out the tasks of cleaning the coast and coastal land. According to the opinion of the Water Agency the task of cleaning the coast and coastal land should be included in one contract¹²¹ in 2019 but the Court of Audit found out that the contract where the subject matter of the concession is defined clearly states that removal of floating debris, waste and other abandoned or discarded objects or materials from the coastal land is not included in the contract. The implementation of the tasks also in the area of coast and coastal land is indirectly presented in the contract only where the area of concession is defined. It is stated that the tasks are implemented also on the coastal line of the sea whereby it has already been pointed out that the term coastline of the sea is not defined nor used by ZV-1.

¹¹⁸ Coastal land is land directly on the border with the aquatic land and extends 25 m from the border of aquatic land.

¹¹⁹ Coast is a line of shore between the highest and lowest tide.

¹²⁰ Concession contract on performing mandatory public utility service in the field of water management, for implementing tasks of cleaning surfaces of inland waters and preventing pollution of aquatic and coastal land of inland waters from the framework of public utility carried out in the Republic of Slovenia, No 430-191/2013-9 as of 24 June 2015 (2550-15-441096); Concession contract on performing mandatory public utility service in the field of water management of water catchment of Adriatic rivers and the Adriatic Sea except for the area of Landscape Park Sečoveljske soline for the period of 4 years, No 430-191/2013-8 as of 24 June 2015 (2550-15-441095); Annex No 1 to Concession contract on performing mandatory public utility service in the field of water management of water catchment of Adriatic rivers and the Adriatic Sea except for the area of Landscape Park Sečoveljske soline, No 430-191/2013-8 as of 15 March 2018; Concession contract on performing mandatory public utility service in the field of water management, for implementing tasks of cleaning surfaces of inland waters and preventing pollution of aquatic and coastal land of inland waters and coastal line of sea from the framework of public utility carried out in the Republic of Slovenia due to natural and other disasters, No 4302555/-19-430029 as of 24 June 2019; Concession contract on performing mandatory public utility service in the field of water management concerning Adriatic rivers with the Adriatic Sea, No 2555-19-430028 as of 24 June 2019.

¹²¹ Concession contract on the manner of performing mandatory public utility service in the field of water management, for implementing tasks of cleaning surfaces of inland waters and preventing pollution of aquatic and coastal land of inland waters and coastal line of sea from the framework of public utility carried out in the Republic of Slovenia due to natural and other disasters, No 4302555/-19-430029 as of 24 June 2019.

Therefore, the Court of Audit assessed that it is not unambiguously clear whether in accordance with the valid concession contract a concessionaire is obliged to provide cleaning of coastal land and coast, as defined by ZV-1, in case of sudden pollution of sea.

The Water Agency explained that in case of pollution at sea causing pollution of the coast and coastal land the company VGP Drava carries out cleaning since it possesses appropriate equipment that it uses when cleaning inland waters. The Court of Audit pointed out that in this case a violation of Article 142 of Rules on the Procedures of Implementing the Budget of the Republic of Slovenia¹²² occurred, since the rules provide that direct budget users must conclude a contract before the service starts to be carried out and before a purchase is made. The deficiency of arrangements of this field was pointed out already in 2017 when an accident occurred – grounding of a tanker whereby the sea was not polluted and thus the cleaning of the coast and coastal land was not necessary (more under point 2.2.3).

The concession contracts provide demands related to technical equipment provided by the concessionaire, but the Court of Audit found out that along with ambiguities related to authorities for cleaning the coast and coastal land in the concession contract that was valid at the end of the period covered by the audit, there was not defined how a concessionaire must handle the collected substances and waste. The Water Agency stated that in practice a concessionaire transfers smaller quantities of oily waste to a temporary storage in Ptuj where the company has its headquarters, and are later collected by contracting company. When larger quantities of oily waste occur a company would be activated which concluded a contract with the Administration for Civil Protection and Disaster Relief, among others for waste acceptance. The Court of Audit assessed, in order to avoid any uncertainty when an accident occurred, to be appropriate to define the manner of handling of collected waste in a concession contract.

When pollution occurs at sea a procedure of taking action is foreseen, namely after the receipt of the notice on accident or noticed pollution the Maritime Rescue Coordination Centre activates SVOM¹²³ that checks the sea by its vessel and reviews the situation. If the pollution is smaller (up to 5 m³), SVOM undertakes the activities in accordance with its abilities, in case of larger pollution the Administration for Civil Protection and Disaster Relief and contractual parties of both bodies are activated (more under point 2.2.3), the rescue includes also the Maritime Administration which since 2019 possesses a new vessel with the cleaning capacity of 15m³.

2.2.2.2 Areas where water rights are granted

In cases when water rights are granted in certain areas ZV-1 defines responsibilities of the holder of water right. The holder of water right must¹²⁴ in the area of implementing water rights provide on his own certain tasks related to maintenance of aquatic and coastal land including sea, namely mowing, removing extensive growth on banks, removing of floating debris, waste and other abandoned or discarded objects or materials from the surface waters in the area of water right in line with rules on the acquisition of water rights.

¹²² Official Gazette of the RS, Nos 50/07, 61/08, 99/09 – ZIPRS1011, 3/13 and 81/16.

¹²³ Maritime Rescue Coordination Centre (MRCC) and SVOM are internal organisational units of Maritime Administration.

¹²⁴ Despite the provisions of Article 98 of ZV-1.

It was found out that in the period covered by the audit in the area of territorial waters of the Slovenian part of the Adriatic Sea there were 24 valid water right permits covering the total area of 16,990,247 m² including cargo port of Koper. Only exceptionally the wordings of the valid water right permits state that the holder of water right must prevent any pollution of sea with dangerous substances, provide regular removal of floating debris, waste, and other abandoned or discarded objects or materials from the surface waters in the area of water right. In case of sea pollution where water right is granted the holder of water right must at its own expense provide intervention measures to prevent the spread of pollution and to remedy the consequences of pollution, namely cleaning polluted surface of sea and coast and cleaning of infrastructure and devices within the area of water right and in the impact area regardless of whether the polluter is known or not and in line with the rules.

The audit showed that the responsibilities of holders of water rights were not defined in the wordings of water right permits, namely 3 water right permits issued in 2017 and 2018 for ports in case of sea pollution and related measures to prevent the spread of pollution and to remedy the consequences of the pollution, nevertheless some obligations were listed in the explanation of the water right permit¹²⁵.

Explanation of the Water Agency

Wordings in the water right permits issued in 2017 and 2018 were changed in line with the systemic respectively simplified manner of providing permits. The changes were implemented with the objective to shorten the wordings, and unimportant things are deleted from them. Consequently, the wordings differ from the previous permits. Despite that, the explanations of the newer permits include all responsibilities that must be followed by holders of water rights in line with the provisions of ZV-1 and other legislation. Despite the provisions in the legal bases it is not always simple to assess who must fulfil the obligation. In case the intervention measures are necessary due to consequences of activities related to water right permit, the holder of water right should implement them in line with ZV-1 and Maritime Code otherwise they should be implemented by the state (concessionaire) or local community.

According to our assessment the wording of the water right permit should clearly state all obligations of the holder of water right. The wording is the most important part of the water right permit, it decides on the subject of the procedure and the wording of the water permit becomes final, valid and implementable. It is not enough to list the obligations of the holder of water right in the explanation of the water right permit. Also, it was found out in the audit that the obligations of the holder of water right are not clear from the provisions of ZV-1, since ZV-1 in Article 101 defines activities that are in line with rules on the acquisition of water rights. The explanation of the Water Agency also shows

¹²⁵ The explanations of 2 water right permits stated that the holder of water right must always implement obligations arising from ZV-1, namely: waste water occurring on a vessel is forbidden to release into water directly from the vessel, it is forbidden to pour, dispose or throw substances, objects and waste, on water land it is forbidden to transship dangerous substances in solid, liquid or gaseous form, it is necessary to provide removal of floating debris, waste and other abandoned or discarded objects or materials and damaged and torn equipment. Also, the holder of water right permit must follow responsibilities and restrictions that arise from Maritime Code that forbids vessels to release, dispose or throw waste, substances, objects that could cause obstacle or danger to the safety of navigation or pollute nature. In the third water permit the explanation is even narrower, there is no prohibition that from a vessel it is not allowed to release, dispose or throw waste, substances, objects that could cause obstacle or danger to the safety of navigation or pollute nature, as it was stated in the other 2 water right permits.

that it is not easy to assess who should implement certain obligations. ZV-1 and General Administrative Procedure Act define¹²⁶ the content of the legal decision (also a water right permit) and thus the wording of the water right permit must always clearly include all obligations of the holder of water right.

Again, the Court of Audit highlighted the ambiguity arising from the water right permits, since they lack the information when the holder of water right resumes the obligations from the permit, whereupon the Court of Audit pointed out the issue in the past¹²⁷. Neither ZV-1 nor the issued water right permits include unambiguous definition what is the starting point of the implementation of the water right, and thus it is not clearly defined when the holder of the water right resumes its obligations¹²⁸, this is important mainly when the holder of water right does not start immediately with the use of water. Therefore it is necessary to clearly and unambiguously define the issue, mainly to define authorities and responsibilities in case of sudden sea pollution.

Recommendation

The Ministry of Environment and the Water Agency should review how water permits issued in future by the Water Agency should clearly and unambiguously define when the rights and obligations start for the holder of water right if the holder of water right permit does not start using water immediately. The Water Agency should provide that the wording of the permit includes all responsibilities of the holder of water right in case of pollution at sea where water right is granted and thus related implementation of measures to prevent the spread of pollution and to remedy the consequences of the pollution, also including collecting, storing and removing waste.

Control over the implementation of water right permits is carried out by inspectors authorised for waters. Considering provisions of ZV-1, the inspection includes reviewing whether the holder of water right respects demands, conditions, prohibitions or limitations related to obligations arising from the water right permit. During the period covered by the audit inspectors did not implement control over the water right permits for the use of water by ports.

¹²⁶ Article 128 of ZV-1 and Article 213 of General Administrative Procedure Act (Official Gazette of the RS, No 24/06 – official consolidated text, 105/06 – ZUS-1, 126/07, 65/08, 8/10 and 82/13).

¹²⁷ Presented in the published audit report Managing St Jernej Canal, No 320-7/2015/37 as of 8 March 2017, [URL: <http://www.rs-rs.si/revizije-in-revidiranje/arhiv-revizij/revizija/ucinkovitost-upravljanja-jernejevega-kanala-605/#tabs-760>], 23/05/2021.

¹²⁸ The audit area finds the following obligations important: holders of water rights must carry out mowing, removing of extensive growth on banks, removing of floating debris, waste, and other abandoned or discarded objects or materials from the surface waters in the area of water right.

Measure taken by the Ministry of Environment

After the period covered by the audit the Ministry of Environment carried out an inspection where the inspector disclosed that the holder of permit uses sea in the way, for the purpose and in limits as defined in the water right permit. The control also showed that the manager of the port had rules of procedure for operating and maintenance of infrastructure and also the rules defined the implementation of conditions as provided in water right permit related to water protection and defined manners of preventing any pollution of water with dangerous substances.

If the inspector finds out violations, the holder of water right can be issued appropriate measures considering the water right permit that clearly defines obligations of the holder of water right. In 3 cases it was found out that the above was not the case, thus the control over the implementation of water right permits cannot serve its purpose.

2.2.2.3 Intervention procedure in case of major ecological disaster

Intervention in case of pollution is regardless its scope directed in such a way to stop spreading the pollution and to implement cleaning at sea. If the pollution reaches the coast, the consequences are much more severe. In case of major ecological disaster at sea also in the territorial waters of the Port of Koper an emergency response plan is activated and thus forces and means as foreseen in the emergency response plan. At first, authorised bodies are activated and services of civil protection at the regional level¹²⁹.

It is foreseen that the Civil Protection Commander for the Slovenian coastal region, when accident occurs:

- assesses the situation and, if necessary, convenes the Coastal Region Civil Protection Headquarters in its operational or complete formation,
- monitors the development of the situation and results of activities undertaken by forces for protection and disaster relief and decides about possible additional measures,
- appoints the head of the intervention who leads and coordinates operational measures on the spot and
- if needed, asks for help neighbouring regions and national forces.

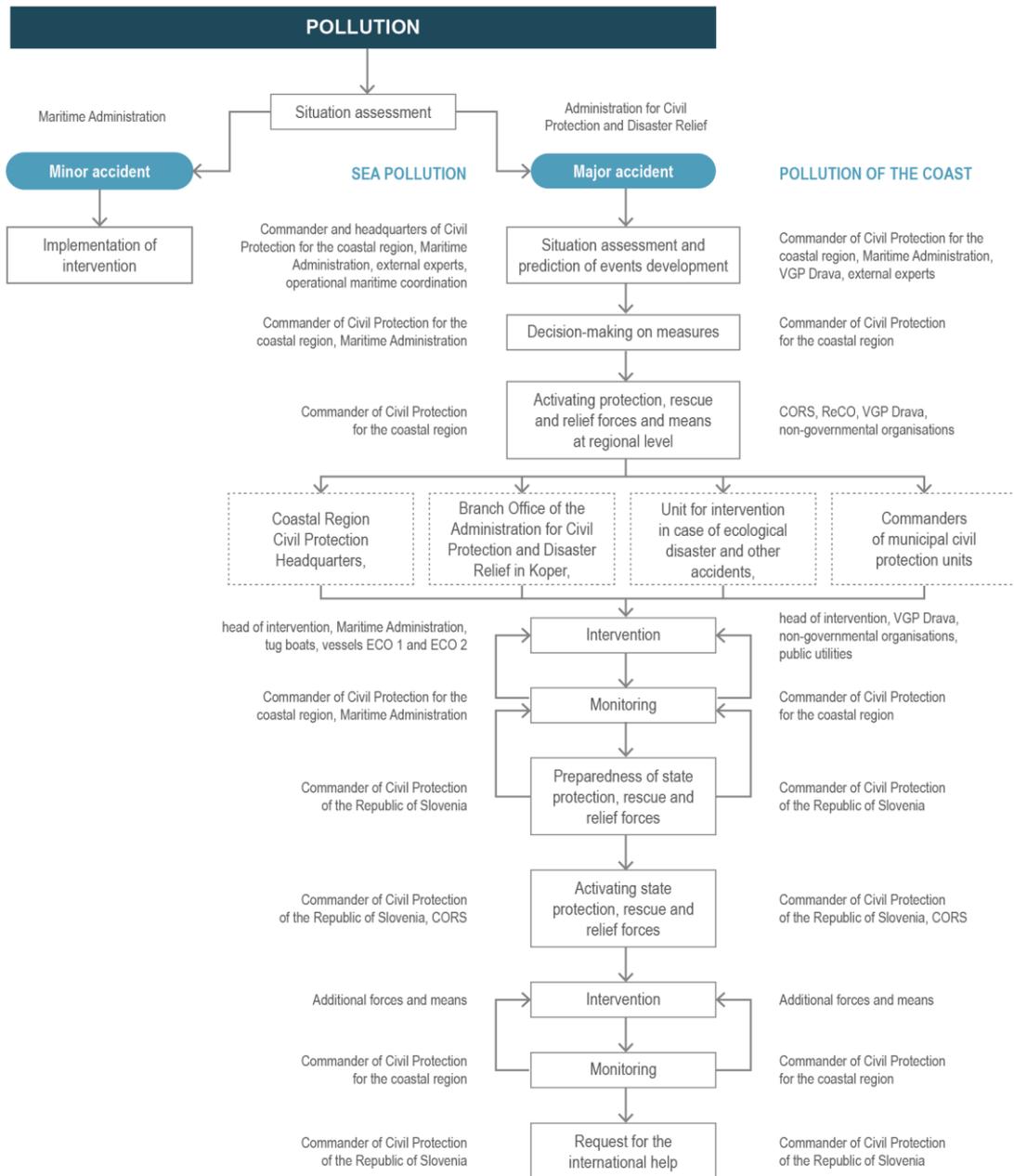
On the basis of the situation on the spot further measures are decided upon. After the assessment also standby mode is ordered for certain national forces for protection and disaster relief operations¹³⁰. When resources of the state do not suffice, the plan foresees a possibility that the state asks for the international help (more under point 2.2.2.3.1).

¹²⁹ Coastal Region Civil Protection Headquarters, Branch Office of the Administration for Civil Protection and Disaster Relief in Koper and civil protection commanders of municipalities. Activation of those forces is under the authority of Civil Protection Commander for the Slovenian coastal region or its deputy.

¹³⁰ The preparedness and activation of civil protection forces and other forces for protection, rescue and disaster relief operations under the state responsibility is decided upon by the Civil Protection Commander of the Republic of Slovenia.

In case the coast is polluted the procedure of intervention is the same, while the bodies who implement individual tasks are changed. As explained by the Administration for Civil Protection and Disaster Relief, the measures of intervention follow the principle of gradual activation of forces and means. The procedure of intervention when ecological disaster occurs at sea and when the coast is polluted is presented in Figure 4 developed for the needs of the audit, namely on the basis of documentation and additional explanations of the auditees.

Figure 4 Activation of regional and national forces for protection, rescue and disaster relief operations when accidents occur at sea and coast is polluted



Note: * Since June 2019, the ECO 1 vessel is no longer on the list of service providers of Administration for Civil Protection and Disaster Relief.

2.2.2.3.1 International cooperation

Emergency Response Plan defines that the Republic of Slovenia informs other countries and international organisations when accidents with cross border impacts occur and in other cases, if provided by international bilateral and multilateral agreements. As shown in the Emergency Response Plan the international help would be needed in case of major disaster in the Slovenian part of the Adriatic Sea. Mostly it would be needed:

- specialised vessels for fighting fire on larger ships (larger tug boats with fire fighting equipment),
- specialised vessels for cleaning seabed and limiting the spread of pollution with dangerous substances, petroleum and petroleum products, and
- technical and other means for cleaning coast and wildlife animal species.

The Maritime Administration informs EMSA about the accidents at sea. The informing is carried out in the following way: a report on emergency event is sent by the Maritime Administration via NSW to the international information system SafeSeaNet. It is a type of notice that an emergency event happened, but it is not a request for possible assistance from EMSA. The Maritime Administration informs about the accident also Maritime Rescue Coordination Centres of neighbouring countries.

The Administration for Civil Protection and Disaster Relief also informs thereof Emergency Response Coordination Centre in Brussels¹³¹, Euro-Atlantic Disaster Response Coordination Centre¹³² and Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea¹³³. It also informs neighbouring countries: the Republic of Croatia and Italian Republic, on the basis of bilateral agreements¹³⁴

When a commander of civil protection assesses that the international assistance is necessary, the emergency response plan foresees that it proposes it to the Government that adopts appropriate decision thereof. The Administration for Civil Protection and Disaster Relief stated that it would ask for the international help and assistance of EMSA¹³⁵ in case of pollution exceeding 100 m³ of

¹³¹ *Emergency Response Coordination Centre – ERCC.*

¹³² *Euro-Atlantic Disaster Response Coordination Centre – EADRCC.*

¹³³ *Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea – REMPEC.*

¹³⁴ Act Ratifying the Agreement between the Government of the Republic of Slovenia and the Government of the Republic of Croatia on cooperation in protection against natural and man-made disasters (Official Gazette of the RS, No 82/99), Act Ratifying the Agreement between the Government of the Republic of Slovenia and the Government of the Republic of Croatia on timely exchange of information in case of radiological danger (Official Gazette of the RS, No 22/99), Memorandum of understanding between the Ministry of Defence of the Republic of Slovenia – Administration for Civil Protection and Disaster Relief and the Presidency of the Council of Ministers of the Italian Republic – Department of Civil Protection on Co-operation in the Field of Disaster Management, and Decree ratifying the Arrangement between the Nuclear Safety Administration (SNSA) of the Republic of Slovenia and the Institute for Environmental Protection and Research (ISPRA) of the Republic of Italy for the early exchange of information in the event of a radiological emergency and co-operation in nuclear safety matters (Official Gazette of the RS, No 74/10). The objective of the agreements is to mutually inform each other on danger and accidents, to prevent or mitigate consequences of sea pollution and define framework conditions for cooperation in case of intervention at sea due to accidents.

¹³⁵ EMSA concluded contracts with several vessels (tankers) and has equipment for intervening in case of major pollution. Tankers are spread across the territory of seas close to the European Union and are in the state of preparedness to intervene if oil spills occur at sea.

dangerous waste. Requests for the international assistance are posted to neighbouring and other countries and international organisations in accordance with international agreements. The international assistance can be requested via European Union mechanism in the field of civil protection, and according to data of the Administration for Civil Protection and Disaster Relief also the Republic of Croatia and Italian Republic are the members thereof. The system of requesting for help functions in the following way: data are entered into the CECIS-MP¹³⁶ information system, including information about accident at sea, short description of situation and needed capacities to respond to the accident. It is foreseen that the receipt of the international assistance in the form of material means is coordinated by the Administration for Civil Protection and Disaster Relief and its office in Koper.

Since in the period covered by the audit there was no emergency event causing major pollution of sea there was no need to inform the international organisations, the Republic of Slovenia did not ask for international help when intervening and was not involved in cross-border interventions to prevent or respond in case of major pollution of the Adriatic Sea. The audit disclosed that in 2017 within the drill the participants tested the procedure of requesting for the international help. Thereby it was found out that the procedure for requesting for the international help and signing of the contract on the value and payment for the implemented services were not defined. At the end of 2018, the Administration for Protection and Disaster Relief prepared a procedure for requesting for the international help where it defined procedure of preparing the request for the international help.

Emergency Response Plan provides that the notice on a spill of dangerous substance can be sent to regional centre also by authorised bodies for informing from neighbouring countries and international organisations. The information on the spill of dangerous substance in neighbouring countries is important mainly due to timely preparedness to intervene if the pollution should spread to Slovenian part of the Adriatic Sea and for providing help to neighbouring countries.

The Maritime Administration in the field of intervening in case of emergency events cooperates with REMPEC¹³⁷ and authorities from neighbouring countries: Italy, Croatia and Montenegro¹³⁸. The Administration for Protection and Disaster Relief also cooperates with REMPEC. It has contact data on responsible persons in the Republic of Slovenia in case of major pollution at sea, while on the responsible persons and offices and organisations of the countries on the border of the Adriatic Sea who are responsible for intervening in case of major accident at sea the Administration for Protection and Disaster Relief and its office in Koper failed to establish official links.

¹³⁶ *Common Emergency Communication and Information System of the European Commission-Marine Pollution – CECIS-MP.*

¹³⁷ Participation at meetings of national contact points in the field of preparedness and responding to oil spills and other dangerous and hazardous substances in the Mediterranean Sea, participation in different conferences, workshops and other events.

¹³⁸ According to the data of the Maritime Administration, it cooperates with authorised ministry for maritime, traffic and infrastructure of the Republic of Croatia, Harbourmasters' office in Pula and Adriatic Training and Research Centre ATRAC. It also cooperates with Italian ministry authorised for maritime (It.: *Ministero dell'Ambiente e della Tutela del Territorio e del Mare*), their coastal guard (It.: *Guardia Costiera*) and storage in Ravenna of EMSA for equipment needed for preventing and responding to pollution at sea. Cooperation with Montenegro is developed through communicating with maritime safety administration (Maritime Safety Department of Montenegro).

Recommendation

The Administration for Civil Protection and Disaster Relief should provide appropriate list of contacts from services or organisations from countries near the Adriatic Sea that are authorised to intervene in case of sea pollution, and take care for setting up a mechanism for regular updating of the contacts.

2.2.2.3.2 Weaknesses of the Emergency Response Plan

A part of the Emergency Response Plan are also attachments where different instructions and plans for intervention¹³⁹ are presented as well as forms of documents needed in cases of intervention¹⁴⁰. In accordance with the Emergency Response Plan there should be 18 plans of activities where tasks are defined for each body in case of activating the plan. They should be developed by individual ministries and other state bodies.

It was found out that in the period covered by the audit there were 10 actually prepared plans of activities¹⁴¹ out of all demanded, while the rest of the plans were not prepared or the Administration for Protection and Disaster Relief did not have them. Among the plans of activities for the cases of sudden pollution at sea that were not developed, there were also plans of activities of 3 key stakeholders who have in our opinion extremely important role in intervening in case of pollution at sea, namely Maritime Administration, Ministry of Environment and Water Agency. Among the appendixes there was no plan of activities for initial remedy of consequences that should be developed by the Water Agency. The Court of Audit also established that Emergency Response Plan did not have the attachment on planned financial funds for implementing the plan while attachments on material funds for implementing the Emergency Response Plan and attachments on available human resources were either not fulfilled or were not complete (more in the following paragraphs of the report). The audit disclosed that several other plans of activities were developed that were not foreseen in the Emergency Response Plan¹⁴².

¹³⁹ For example: instructions for the citizens how to act in case of an accident, instructions for informing the citizens after the alarm, plan for providing connections at an accident, plan for activating tug boats, plan of activating ECO 1 and ECO 2 vessel, plan of activating contractual members of civil protection units, plan of intervening at coast pollution, plan of rescue harbour, plan of intervention in case of oiled birds, procedure of intervention of the Maritime Administration in case of sea pollution and coast pollution and other instructions.

¹⁴⁰ For example: a sample of a decree for activating forces and means for protection and rescue, a sample of working order for intervention (data about accident and safety precautions), a sample of a request for international state help and other forms.

¹⁴¹ Plan of activities of the Notification Centre of the Republic of Slovenia, regional notification centre of Koper, Branch Office of the Administration for Civil Protection and Disaster Relief in Koper, plan of the Police Directorate Koper, plan of activities of Ministry of Foreign Affairs, Ministry of Finance, Ministry of Economic Development and Technology, Ministry of Culture, Ministry of Public Administration, plan of informing and activating the unit for identification of the death casualties.

¹⁴² Plan of activities of the Slovenian Army, plan of activities of Ministry of Transport and Ministry of Justice.

It was found out that existing plans of activities with attachments were not up-to-date¹⁴³ even though the Decree on the content and elaboration of protection and rescue plans provides that Emergency Response Plans must be updated (keeping data in the plan considering time, area and service providers) and, if necessary, must be also supplemented and amended. It was assessed that the quality of the data included in the plans of activities is not such as to actually serve their purpose and to represent a source of information to be used when the need to intervene occurred.

Explanation of the Administration for Civil Protection and Disaster Relief

The Administration for Civil Protection and Disaster Relief set up a system of collecting data on responsible persons in the state bodies who must be informed in case of disaster. They are updated once a year or when a change occurs. The last update of the data was implemented in March 2021.

Recommendation

The Administration for Civil Protection and Disaster Relief and the Ministry of Defence should, when upgrading the Emergency Response Plan, also update plans of activities of those stakeholders who are included in the intervention in case of accident at sea. They should review which data are necessary and have added value in case of intervention and should provide the implementation of regular review of data from the plans of activities and their attachments.

In accordance with their authorities the plans must be developed and harmonised with the Emergency Response Plan also by:

- municipalities of Coastal region for broader coastal area under the local authority and
- commercial companies, institutes and other organisations which in their work processes use, produce, transport or store dangerous or hazardous substances, petroleum and petroleum products and energetic gases and handle in their work process with hazardous substances.

According to the assessment of the Court of Audit it would be necessary to rethink whether the Emergency Response Plan should be adopted at the level of Government in future, namely as a national plan. The Government is the one who in case of major disaster activates its forces and, if needed, requests for the international help. Therefore, it is very important according to our opinion that the Government is informed about the content of the plan and also to agree with it. After all, in case of major pollution not only Coastal region but also larger area of the Republic of Slovenia would be affected. Commitment to cooperate and involvement of stakeholders who should participate in the development of Emergency Response Plan would be better and more firm if the plan was developed at the state level. But this is not the case for the valid Emergency Response Plan, since the audit showed several weaknesses related to its content. According to our assessment it would be wise to supplement the Emergency Response Plan and also upgrade it, mainly related to involvement

¹⁴³ As an example a plan of activities of the Police Directorate Koper from 2005 and a plan of activities of the Ministry of Foreign Affairs from 2002 are presented. Plans of activities of Branch Office of the Administration for Civil Protection and Disaster Relief in Koper and regional notification centre in Koper have no date of origin nor of their last update.

of stakeholders who are not included in the valid plan but carry an important role in case of major disaster at sea.

The Administration for Civil Protection and Disaster Relief explained during the audit that it plans to update the valid Emergency Response Plan and amend it in order to be a national plan for accidents at sea including all procedures of activating and notification and all stakeholders who are needed to intervene in case of pollution at sea.

It is necessary to point out that before the development of a national Emergency Response Plan it is necessary to amend the valid Decree on the content and elaboration of protection and rescue plans and then the Administration for Civil Protection and Disaster Relief with other stakeholders can approach towards the development of the national plan.

2.2.2.4 Intervention procedures in the Port of Koper

Protection, rescue and relief in case of accidents in the Koper cargo port is regulated by Emergency Response Plan of Port of Koper d. d. for industrial accidents (hereinafter referred to as: Port of Koper response plan). The Port of Koper is a commercial company that in its work process uses, transports and stores dangerous substances, petroleum, petroleum products and carries out services or manages infrastructure for tasks that represent a risk for accidents, thus it must on the basis of ZVNDN at its own expenses set up and maintain preparedness for intervention, organise needed forces for rescue and help, provide notifications and alarm systems to warn the workers and citizens about danger. It must carry out prescribed protection measures and develop a risk assessment and plan of protection and disaster relief.

Obligations of the Port of Koper are defined also in the concession contract for preventing pollution at sea which provides that it must in the area of cargo port:

- provide safety within the area of the port, maintain order in ports and marine environment, namely provide prescribed safety measures for preventing marine pollution and hazardous liquids spills to spread,
- define plan of safety measures in cases of emergency¹⁴⁴,
- ensure the implementation of all measures necessary for remedying and preventing environmental pollution within the area of the port¹⁴⁵, and, in case of pollution, cooperate with authorised national services, bodies and authorities and as provided by the safety measures plan and the emergency response plan at the national level and
- set up a protection service which must implement appropriate tasks.

¹⁴⁴ Among them ship, elementary and other accidents. The Port of Koper response plan must include: system of notification, measures to be implemented by the Port of Koper, means used thereby, tasks of personnel and cooperation with the Police and other authorities and also the plan of port and its area.

¹⁴⁵ Tasks of cleaning polluted sea ground, cleaning of coastal land, temporary storage of residues after cleaning, treatment of residues after cleaning and their final removal, setting up monitoring of sea and coast pollution, development of a report on implemented measures including a performance assessment.

It was disclosed that interventions of the Port of Koper in case of sudden pollution at sea are defined in several different internal documents¹⁴⁶, the primary document being the Port of Koper response plan. The last version of the plan of activities of the Port of Koper was developed in 2017¹⁴⁷, according to the statements of the representatives of the Port of Koper during the audit implementation the company planned to revise it in 2020. The Port of Koper response plan was developed for intervening and is activated at the occurrence of every accident in the area of cargo port in Koper that could result in the release of hazardous substances, a fire or an explosion. In 2018, there was an inspection¹⁴⁸ carried out that was directed towards harmonisation of scenarios of major disasters at sea in the safety report with scenarios in the emergency response plan for the case of major disaster caused by hazardous substances and harmonisation of it with the valid legislation. The inspection did not disclose any violations of ZVNDN.

For the needs of intervention the Port of Koper established a sea protection unit organised in the following way: professional group and head of the unit is in the Port of Koper that is responsible for planning, expert issues and coordination with subcontractors, while operational implementation of tasks is handed over to the company INPO that in the area of the cargo port Koper takes care of remedying the consequences of pollution and thus implements operational services of cleaning the sea.

The documentation shows that in the Port of Koper emergency events are divided into 3 categories: minor, medium and major accidents depending on the scope of pollution. The spills in the sea area are thus divided as follows: the spill of smaller quantity (up to 1 m³) of petroleum or less dangerous and harmful substances is considered a smaller accident, if the quantity reaches between 1 m³ and 10 m³ it is medium accident, while in case of a spill over 10 m³ of petroleum or spill of extremely dangerous and harmful substances it is considered a major accident.

If an accident occurs, it is foreseen that the first assessment of the scope of accident and possible consequences is given by the head of fire brigade¹⁴⁹ on the spot and is reported to the security and control centre that informs the authorised persons and activates needed forces¹⁵⁰. In case of smaller spill at sea the sea protection unit is activated that has, according to the assessment of the Port of Koper, sufficient forces and capacity to control pollutions at sea of smaller and medium scope. The head of the intervention assesses the situation and possible consequences and, if needed, orders activation of additional units via control centre. In case of a major disaster due to spill at sea the sea protection unit of the Port of Koper is activated. If it is necessary, a joint intervention of all units of the Port of Koper for intervening on land and at sea is implemented. In case of major disaster and high risk of threat for human health and life, environment and assets, the Port of Koper believes that the units and means available to the Port of Koper shall not suffice to control the situation. Therefore in such cases the assistance of the Civil Protection and Disaster Relief Service of the Municipality of

¹⁴⁶ Port of Koper response plan, 14/ 07/ 2017, contract on providing the prevention of sea pollution and remedy of consequences of pollution as of 12 June 2009, concluded between Port of Koper and company INPO, organisational rules defining prevention, measures and remedies of industrial accidents as of 16 January 2018.

¹⁴⁷ Port of Koper response plan was before the adoption reviewed and approved by Civil Protection and Disaster Relief Service of the Municipality of Koper and Branch Office of the Administration for Civil Protection and Disaster Relief in Koper.

¹⁴⁸ Inspection was implemented by Inspectorate for Protection against Natural and Other Disasters.

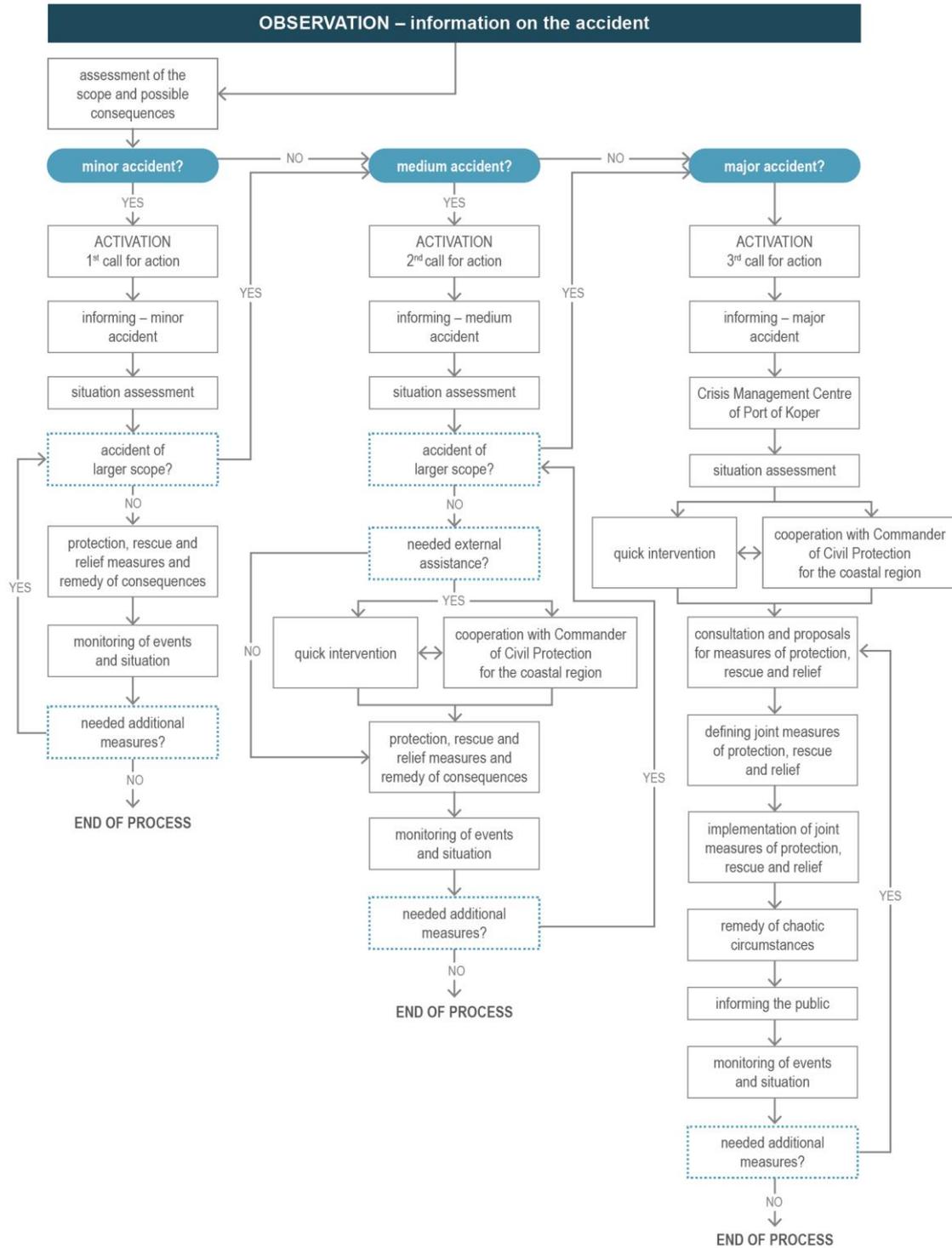
¹⁴⁹ Fire brigade of the Port of Koper that is organised within the unit for health protection and ecology.

¹⁵⁰ Intervention forces of operational levels in the Port of Koper are active 24 hours a day, all year.

Koper is foreseen. The head of intervention via control centre demands activation of additional forces, while control centre asks for help from regional notification centre. The head of intervention in case of a joint intervention with municipal or national forces in the area of the Port of Koper is the head of forces in the Port of Koper, if the intervention spreads over the borders of the cargo port in Koper, it is defined that the commander of municipal or national forces takes over the intervention.

If severe consequences occurred in larger environment extending over the area of cargo port in Koper, or there would be needed help of the municipality or other forces for protection, rescue and relief, the plan of protection and disaster relief is activated. Figure 5 shows the procedure of intervention of the Port of Koper.

Figure 5 Key activities when implementing measures for protection, rescue and relief by Port of Koper



Source: Port of Koper response plan.

As presented in documentation, it is necessary in the first phase to stop the spill of petroleum as soon as possible, then the spread of oil slick on the surface must be prevented in order not to reach the coast or cross borders of the cargo port in Koper. To be able to reach the objective, the Port of Koper uses

containment booms. When oil slick is limited, the oil slick must be removed from the water surface and coast if it has reached it. According to the Port of Koper, if the spill of hazardous chemicals occurred, it would set up an appropriate level of operational control that would monitor the spill of the hazardous substance, and by using hydrological and meteorological measurements it would predict possible movements of the oil slick. If needed, primarily it would be necessary to inform and evacuate those under threat and later, considering the type, scope and properties of hazardous substance, try to limit the spread of the pollution and monitor its concentration in the atmosphere or in/at sea.

Tasks of remedying the consequences of pollution and services of monitoring and cleaning the surface of the sea in the area of the cargo port in Koper are undertaken by the company INPO that within its contractual obligations:

- implements constant preparedness for intervention,
- purchases, uses and maintains vessels and other material resources needed to intervene,
- implements immediate interventions¹⁵¹ in case of sea pollution,
- purchases, stores and maintains stocks for cleaning, preventing and limiting sea pollution,
- collects, classifies and temporarily stores waste that occurs during implementing measures of protecting the sea against pollution,

implements daily monitoring and, if needed, cleans sea surface.

2.2.3 Interventions in the Slovenian part of the Adriatic Sea

According to the data of the Maritime Administration, there was in the period covered by the audit in the Slovenian part of the Adriatic Sea in total 133 cases when the Maritime Administration received a notice on sea pollution. Interventions related to removal of wooden floating debris, vessels, waste, buoys, dead animals and oil slicks were undertaken by the Maritime Administration with its own vessels and a vessel for reviewing the site of the incident. Events related to pollution in the cargo port in Koper are not included in the total number.

On the basis of the data it was found out that the Maritime Administration acted also in the areas where water right is granted and carried out or it assisted in cleaning of polluted sea even though this is a task of the holder of water right. From the data used by the Maritime Administration it was not possible to find out in a simple manner in how many cases the cleaning was carried out by the Maritime Administration even though the water right was granted. For each event it would be necessary to implement an additional review of documentation of the Maritime Administration.

The audit reviewed events taking place in 2017 and relating to sea pollution with oils. It was established that the records of the Maritime Administration show in total 13 reported emergency events of sea pollution with oils. The Maritime Administration with its own capacities took action in 3 cases, out of which in 2 cases in the area where water right was granted. The Maritime

¹⁵¹ Response time max 1 hour.

Administration did not issue an invoice for the cleaning to the holder of water rights, since it believes it does not have appropriate legal bases for it (more under point 2.4.3.3).

For the implementation of protection, rescue and relief the Administration for Civil Protection and Disaster Relief may conclude a contract with different stakeholders in line with Article 75 of ZVNDN. The audit disclosed that the Administration for Civil Protection and Disaster Relief in the period covered by the audit cooperated with several contractual service providers¹⁵² and covered their expenses for the implemented tasks of protection and rescue at sea accidents in the total amount of EUR 147,839. The documentation shows that in the period covered by the audit in the Slovenian part of the Adriatic Sea at least in 2 cases a contracting company ADRIA-TOW intervened, which was not activated by the Administration for Civil Protection and Disaster Relief, since it was not a major disaster in the time of activation. The documentation shows that contracting party was activated by the Maritime Administration that also paid for the service in one case, i.e. in the amount of EUR 3,186 to ADRIA-TOW for intervening even though it had no legal bases for it¹⁵³. Thereby provisions of Article 142 of Rules on the Procedures of Implementing the Budget of the Republic of Slovenia were violated, since a contract must be made before the service is undertaken. Apart from that, it was disclosed that intervention in such cases considering the content of the contract between Administration for Civil Protection and Disaster Relief and ADRIA-TOW is at least partly covered in the contractual sum¹⁵⁴. The cases of activating forces when it is not clear how large is the scope of the accident are not defined in practice, namely who can activate additional forces when resources of the Maritime Administration do not suffice.

The Maritime Administration used its own vessels when intervening, for interventions that include delivery of the collected waste it cooperated with 3 external service providers that were paid somewhat under EUR 10,000¹⁵⁵ for undertaken services and work. A part of the period covered by the audit the Maritime Administration had for the purpose of remedying consequences of sea pollution a contract made with the Port of Koper which did not conclude a contract with the Administration for Civil Protection and Disaster Relief. According to the assessment of the Maritime Administration, the Port of Koper obtains appropriate equipment and experience thus it could, if needed, for quick intervention ask the Port of Koper for help. The Court of Audit found out that a contract with the Port of Koper was concluded on 16 August 2018 and was valid until the Maritime Administration obtained the new vessel¹⁵⁶. The subject of the contract was cooperation in remedying sea pollution when the Maritime Administration assessed that alone with its own resources and

¹⁵² ADRIA-TOW, Portorož Flying Centre, mainly implementing observational flights, PROSUB podvodni servis d.o.o. (hereinafter referred to as: Prosub d.o.o.) offering professional and technical assistance when sea pollution occurs and a vessel ECO 2, and MITJA PETRIČ S.P. offering professional and technical assistance when sea pollution occurs and a vessel.

¹⁵³ The invoice for activating ADRIA-TOW when grounding of a tanker Capodistia occurred was paid by the owner of the ship, while the invoice for fire fighting in case of burning boat with people on board was paid by the Maritime Administration.

¹⁵⁴ The contract for 2018 and annex for 2019 related to it include that ADRIA-TOW is obliged to, among others, offer technical and professional assistance when accidents with dangerous substances occur at sea and in case of marine pollution.

¹⁵⁵ Company INPO (acceptance of dangerous waste collected after the intervention at sea), TOŠKAN prevozi in druge storitve d.o.o. (services of hiring trucks fitted with a crane, shipping of logs, remains of boats and similar) and Public utility – Azienda pubblica MARJETICA KOPER, d.o.o.-s.r.l. (transport of containers filled with waste collected at sea) received in total EUR 9,865.

¹⁵⁶ Respectively at least by 28 February 2019.

equipment cannot remedy consequences of pollution at sea. According to the data of the Maritime Administration, the Port of Koper was not included in interventions outside territorial waters of the port when the contract was valid. The Maritime Administration received the vessel (Picture 1) specialised for removal and cleaning of oil pollution on 22 February 2019.

Picture 1 New vessel of Maritime Administration



Source: Maritime Administration.

According to the data of the Maritime Administration there is a plan to sign an agreement on cooperation with the Port of Koper that would in detail define and describe manner and conditions of activating in case the Maritime Administration needed help in intervention. Also the Administration for Civil Protection and Disaster Relief plans to sign a contract with the Port of Koper for its assistance when needed to intervene in case of sea pollution. The Court of Audit assessed that it is necessary to primarily establish in which cases the assistance of the Port of Koper is necessary, which administration and in which phase of intervention shall be authorised for activation of the Port of Koper and then approach towards preparing and signing of a contract on cooperation with the Port of Koper. Similarly, procedures for activating additional forces must be defined, when available resources of the Maritime Administration cannot suffice and the accident has not reached the spread to activate an emergency response plan. When the audit was completed, none of the two administrations concluded a contract with the Port of Koper, showing that legal bases were not defined, namely in the sense of defining the manner of cooperation in the intervention.

Recommendation

The Maritime Administration and the Administration for Civil Protection and Disaster Relief should review the needs that the Port of Koper could meet and, considering their own authorities, approach towards signing a contract on cooperation with the Port of Koper. The contract should include also responsible persons who can activate the Port of Koper and clear procedure of activating the Port of Koper that shall be known to all involved stakeholders.

The documentation shows that in the period covered by the audit in the Slovenian part of the Adriatic Sea there was no ecological disaster causing major pollution of sea and coast and that would demand activation of forces for protection, rescue and relief¹⁵⁷. There were some weaknesses when intervening in accidents at sea, namely:

- in a procedure of intervening when there is a major quantity of waste in sea,
- in a procedure of fire fighting at sea,
- rapidness of responding in case of spilling of heavy fuel.

Considering the found weaknesses, the Maritime Administration carried out several activities:

- updating of the procedure of informing and intervening in case of major quantity of waste at sea and on the coast, and a purchase of additional vessel and vehicle fitted with a crane¹⁵⁸,
- signing an agreement with the Fire brigade Koper¹⁵⁹ where content, scope and manner of cooperation in case of fire was defined¹⁶⁰,
- concluding an oral agreement between the Maritime Administration and Sea police unit on mutual assistance at sea with vessels and crews; the Court of Audit assessed that oral agreement does not represent an appropriate risk management related to effectiveness of cooperation when a disaster occurs at sea since the procedure is not formalised.

Recommendation

The Maritime Administration should provide, when cooperating with other stakeholders, that the content and manner of cooperation are clearly defined and that all involved are properly informed.

¹⁵⁷ An exception is the accident of tanker Capodistria where no spill of dangerous substances occurred (more in the following paragraphs of the report).

¹⁵⁸ The major change was an introduction of intervention at sea with a new vessel that can be used to prevent waste to reach the coast, floating waste can be limited at sea and prevent them to reach the shore.

¹⁵⁹ Public institute Fire brigade Koper ENTE PUBBLICO VIGILI DEL FUOCO, CAPODISTRIA.

¹⁶⁰ In case of fire at sea it is foreseen that the Maritime Administration provides its own vessel with a crew, fire fighters use the vessel, provide fire fighting equipment, firemen and head the intervention.

In 2017, there was an emergency event at the Debeli rtič Cape where a tanker grounded, full of motor fuel¹⁶¹ that did not spill at the accident. Related to the event there was an oral analysis of the accident carried out that presented findings of those involved in the intervention and later a special report was delivered. Both showed that the response of the units was too slow and that in such cases forces and resources should be immediately activated and appropriate decisions should be adopted. Well constructed tanker and grounding which occurred at moderate speed of the ship prevented the spill of residual fuel. The oral analysis after the emergency event presented several weaknesses, among them it is necessary to point out: difficulties in communication and informing (giving contradicting demands and information, insufficient and unclear guidance of intervention at the spot, poor communication between participants during intervention), difficulties with equipment. It was found out that there are not enough capacities for storing oily water and other dangerous waste and that at the state level there is no temporary storage or waste disposal for that purpose (more under point 2.5.2). Related to the above, several proposals were adopted to improve procedures of intervention, equipment used, training of personnel to be ready in case of disaster at sea. Proposals referred also to the adoption of appropriate legal bases, since it was not clear who should clean coastal land (later adopted amendments of the water utility decree, more under point 2.2.2.2.1).

It was assessed that ex-post analysis of the event is appropriate form of analysing the accident since it offers an opportunity for realistic assessment of actual conditions, including proposals for future improvements. Nevertheless, added value of such analysis would be even better if the analysis included a plan of future needed activities that would present who should carry out certain tasks and when it is foreseen to realise those tasks, which was not the case in the analysis of tanker accident. In our opinion that is of key importance, since only in this way authorities, responsibilities and time limits can be defined and this provides for monitoring of effectiveness of the implemented tasks.

Recommendation

The Maritime Administration and the Administration for Civil Protection and Disaster Relief should upgrade the existing manner of analysing of the emergency events in order to define after the analysing all responsibilities and authorities for each activity and foreseen timetable.

The documentation shows that in 2019 in the Slovenian part of the Adriatic Sea there was a major threat for the occurrence of ecological catastrophe, since tanker carrying 30,000 tones of diesel fuel entered with full speed into the area only 120 m from the coast where it grounded. Only due to immediate reaction and actions taken by the pilot were the reason that the accident did not happen and thus the ecological catastrophe was avoided. In the investigation carried out by investigator of sea accidents¹⁶² 9 safety recommendations were issued, among others also to the Ministry of Infrastructure and the Maritime Administration that adopted several safety measures after the event (more under point 2.1.2.3).

¹⁶¹ The ship carried 200,158 tons of heavy fuel, 18.4 tons of diesel and 0.4 tone of lubricant.

¹⁶² An investigation body operating under the Ministry of Infrastructure. It is authorised to investigate sea accidents and incidents, and to disclose reasons therefor, mainly to prevent similar accidents in future.

Table 1 shows the number and type of emergency events which happened in the cargo port in Koper in the period covered by the audit. There were pollutions of the land that caused pollution of the sea¹⁶³ and pollutions that occurred at sea¹⁶⁴. According to the data of the Port of Koper all pollutions were of smaller scope and were remedied on the spot.

Table 1 Type and number of emergency events in Port of Koper

Emergency event	2017	2018	2019
Events land – sea	14	17	30
Events sea – sea	9	10	9
Total	23	27	39

Source: data by Port of Koper.

The Republic of Slovenia is not well prepared for possible larger spills of petroleum or petroleum products according to investigator of sea accidents, since it is not necessary that the accident occurs in the Slovenian part of the Adriatic Sea. Every year around 40 million tons of petroleum or petroleum products are shipped to Trieste and an accident in Italian waters or on sailing routes towards Trieste would cause an extreme environmental catastrophe for the Republic of Slovenia.

2.3 Review of functioning of the intervention system

In the continuation of the report, on the basis of the received documentation and explanations of the auditees, findings related to the review of functioning of the intervention system in case of sudden pollution of the Adriatic Sea are presented. Those are activities implemented by the auditees to review the operation of the intervention system in the Republic of Slovenia.

The operation of the intervention system is in practice reviewed by carrying out tasks, trainings and also after the interventions in emergency events.

In the period covered by the audit there were 10 joint drills where participants¹⁶⁵ tested their preparedness for intervention when different situations occur that can cause sea pollution¹⁶⁶, coordination of interventions and communication. They also carried out a test of handling with equipment¹⁶⁷, once they reviewed operation of the EU mechanism for requesting the international help.

¹⁶³ From the land and from the Rižana River flowing into the sea, mostly sea pollutions occur due to alluvial deposits. Sometimes sea is also polluted by remains of the cargo and contaminated rainwater.

¹⁶⁴ Sea is most often polluted with oils as a consequence of discharges from ships, sometimes also with soot and debris.

¹⁶⁵ At the implemented drills there were different participants: representatives of Maritime Administration, Administration for Civil Protection and Disaster Relief, Port of Koper, concessionaires carrying out vessel towage, cleaning of coast and coastal land and representatives of other organisations.

¹⁶⁶ Fire on board, grounded vessel and similar.

¹⁶⁷ Testing lowering, towage and lifting of containment booms.

The documentation on implemented tests presented the following findings:

- undefined procedure for requesting for the international help¹⁶⁸,
- weaknesses in communication during the intervention,
- too long response time for delivering equipment and difficulties with equipment¹⁶⁹.

The documentation showed that certain weaknesses in intervention were disclosed several times (too long response time at the beginning of the intervention, difficulties with the containment booms, difficulties in communication and lack of protective working materials). On the basis of the findings the proposals were issued to improve the implementation of the intervention and amend the concept of protective measures, expressed was the need to organise similar tests more often in future also in worse weather conditions and poor visibility.

In the period covered by the audit, the representatives of both administrations attended, apart from implemented tests, also several trainings, courses and workshops in the Republic of Slovenia and abroad where they obtained knowledge and experience in the field of intervention¹⁷⁰ and obtained or upgraded the existing certificates from the field¹⁷¹.

The key objectives of trainings, drills and exercises for the employees of the Port of Koper are mainly: to test the organisation of managing intervention in case of sea pollution, to improve the level of cooperation and harmonisation between the stakeholders included in intervention, to reach appropriate communication when implementing intervention and to obtain experience when handling with the equipment and other means that can be used in intervention. The documentation presents that the Port of Koper in the period covered by the audit carried out 4 drills where efficiency of the implementation of the Port of Koper response plan was tested. It is necessary to point out that 1 drill was implemented without prior notice, thus the implementation and stages of the drill were not known in advance to the employees. In this way the Port of Koper could test actual preparedness for accidents and thereby could assess efficiency of the implementation of the emergency response plan¹⁷². Representatives of the Port of Koper in the period between 2017 and 2019 participated in every annual drill in the organisation of the Maritime Administration and where they reviewed preparedness to intervene at sea in case of pollution due to spill of fuel, and they attended other drills organised by the Administration for Civil Protection and Disaster Relief.

¹⁶⁸ Mainly it is not defined who is authorised for signing a contract with a partner who offers a ship and equipment during intervention.

¹⁶⁹ More under point 2.4.2.

¹⁷⁰ They participated in trainings for using and maintaining the system for cleaning the coast, they tested equipment of EMSA in the warehouse in Italy, updated knowledge on equipment for limiting the spread and removing pollution at sea and use of radio lines for transmitting messages between services, units, vessels, and renewed safety procedures on vessels. Participants attended meetings that were in the period covered by the audit organised by REMPEC and EMSA.

¹⁷¹ The employees at the Maritime Administration must obtain appropriate certificates for professional expertise and must update them periodically, they are issued by IMO.

¹⁷² Found out were certain weaknesses in implementing emergency response plan related to communication (poor radio connections), lack of AIS system equipment on rescue vessels and cargo port pools not covered with video surveillance system. The audit disclosed that the Port of Koper later purchased additional AIS system equipment for those vessels.

The Port of Koper foresees also other trainings in the field of protection of sea related to obtaining and updating certificates for responding to and intervening in case of pollution at sea and implementing workshops for operating in emergency events. The employees constantly obtain new knowledge, attend trainings, drills and carry out tests.

The Court of Audit asseed that the operation of the intervention system in case of sudden pollution at sea is in practice periodically tested in form of drills which are attended by wide range of participants and also by analyses of emergency events. In our opinion it would be necessary to monitor and consider recommendations of prior analyses and drills and also possible recommendations given by the investigator of sea accidents and incidents. As an example of best practice, highlighted should be activities of the Ministry of Infrastructure and the Maritime Administration when a tanker almost grounded in 2019 due to exceeded speed when entering the area of the cargo port in Koper. On the basis of safety recommendations of the investigator of sea accidents and incidents both auditees adopted appropriate measures to remedy weaknesses in the field of maritime pilotage and ship towage (more under point 2.1.2.3).

Regular trainings and drills to provide effective and efficient intervention is of key importance, as well as mutual cooperation of all stakeholders involved in intervention when sudden pollution at sea occurs. In case of sudden pollution at sea it is very important that all stakeholders harmoniously cooperate, thus it is of key importance to implement joint trainings, drills and workshops where the procedures of intervention are reviewed and operationally tested, and, if possible, also by involving other countries bordering the Adriatic Sea and organisations which would participate in the international intervention.

Emergency Response Plan defines the procedure of informing and intervening when accidents occur at sea and defines a major disaster as spill of petroleum, petroleum products or other dangerous substances. According to the data of the Maritime Administration, the most common accidents in the Slovenian part of the Adriatic Sea are caused by spills of petroleum and petroleum products and most of the drills referred to pollution are caused by spills of petroleum and petroleum products in sea. It is necessary to point out activities of intervention also in case other dangerous substances, i.e. chemicals, are dismissed in sea. In that case the intervention could be very demanding, since it would be necessary to find out what was dismissed, when and where. Slicks of other chemicals are not visible on the water surface in the way the oil slicks are, and also it is not necessary that the slick remains on the water surface but it can drown to the bottom. An additional difficulty is represented by spread of toxic substances by air. If the toxic cloud moved towards the shore it would be necessary to evacuate the citizens. Due to those characteristics, the measures of intervention would be different as in case of spill of petroleum, namely the difference is in handling with the equipment and in the type of equipment needed to be effective in fighting pollution, considering the equipment for intervening in rescue as well as the protective equipment of rescuers. Since transshipments of dangerous respectively hazardous substances increase in the Slovenian ports, the Court of Audit assessed that when implementing drills special attention should be placed on establishing whether the planned procedure of intervention in case of spill of chemicals and its implementation are appropriate and whether the auditees possess sufficient and appropriate equipment to intervene and protective equipment for rescuers involved in interventions.

Recommendation

The Maritime Administration and the Administration for Civil Protection and Disaster Relief should in future implement drills also for other types of pollution, mainly for pollution with hazardous chemicals, and should review the availability of equipment to intervene and protective equipment for rescuers involved in such interventions. When implementing future drills and trainings they should review also if the weaknesses disclosed in the prior trainings and emergency events were remedied.

2.4 Sources for intervening

The audit reviewed whether in the period covered by the audit sufficient financial, material and human resources were provided. Namely, whether the quantity of resources corresponded to the needs, whether the equipment was maintained and whether the resources were available on time when needed.

Decree on the content and elaboration of protection and rescue plans defines that emergency response plans identify necessary forces and funds for protection, rescue and relief and resources including their availability and procedures for their activation. If there is a major change in the availability of forces and funds for protection, rescue and relief it is necessary to change or amend the plan at least every 3 years for major accidents with hazardous substances and consider new developments of the expertise and experience gained during interventions and drills related to protection, rescue and help.

2.4.1 Human resources

In case of sudden pollution at sea it is of key importance to respond and intervene timely, mainly to prevent the pollution reaching the coast. In case of minor pollution in the Slovenian part of the Adriatic Sea it is foreseen that the accidents are managed by regular units and services, in case of major pollution or an accident causing long-term consequences it is foreseen to activate forces for civil protection and disaster relief under the national authority. The audit reviewed the situation related to human resources that intervene, whether those resources are available on time and in the scope based on the needs.

2.4.1.1 Available human resources for intervention in a smaller ecological disaster

2.4.1.1.1 Maritime Administration

In 2016, the Maritime Administration took over some tasks implemented at sea and therefore from the Environment Agency accepted staff, equipment and inventory for cleaning or remedying consequences of pollution at sea. In total, the Maritime Administration accepted 6 employees even though the documentation showed that upon taking over the tasks and also later when tasks were handed over to SVOM the personnel needs were assessed to 8 employees. The Maritime Administration explained that it was able to implement all tasks related to prevention and remedying

of consequences of sea pollution, however, if a major pollution occurred their human resources would not be able to provide intervention of high quality.

In 2019, the Maritime Administration obtained a new vessel. According to its data there must be a crew of 3 persons ready if the vessel is to be properly managed, considering the number of employees, the Maritime Administration only has 1 crew. The documentation presents that the Maritime Administration after obtaining the new vessel proposed to the Ministry of Infrastructure to increase the number of employees by 3 persons. Explanations pertained to additionally needed human resources were presented by the Maritime Administration already when tasks were transferred to it, namely instead of 6 employees it should have 8 employees, and it would need 2 crews to manage the new vessel¹⁷³. According to its assessment there should be 9 employees¹⁷⁴ at SVOM. The number of employees at SVOM did not change by the end of the period covered by the audit.

2.4.1.1.2 Port of Koper

One of the key areas pertaining to the organisation of the intervention forces in cases of emergency events in the Port of Koper is the Area of port safety which is divided into management and operational level¹⁷⁵. The other key area pertaining to organisation of the intervention forces in cases of emergency events is the Area of health protection and ecology which is also divided into management and operational level¹⁷⁶. Apart from them also company INPO and fire brigade of the Port of Koper cooperate in intervention in emergency events. According to the Port of Koper, the company INPO has a unit and means for intervention in case a spill of petroleum or dangerous substances occurs at sea. Together with the head of the sea protection unit they form a unit of sea protection at the level of the Port of Koper intended to intervene at sea. The company INPO organised work in 4 shifts, in each one work is performed by 9 employees, and 2 supervisors are additionally involved in interventions. When the sea is polluted also the firemen are involved, if needed. It is planned that forces are activated by control centre on the basis of a demand from the head of the intervention and in line with the level of the accident. In this manner appropriate units are activated, if the size of the accident would spread and forces of the Port of Koper would not suffice, the national forces of protection, rescue and relief are included in the intervention.

2.4.1.2 Available human resources for intervention in a major ecological disaster

In case of major disaster or an accident causing long-term consequences it is foreseen in the emergency response plan to activate forces for civil protection and disaster relief under the national authority. In

¹⁷³ In case an intervention at sea takes more than 12 hours, the Maritime Administration warns about labour legislation providing that a worker has in a period of 24 hours the right to a rest that lasts continuously for a period of at least 12 hours. A worker whose working hours are unevenly spread or temporarily changed has in a period of 24 hours the right to a rest continuously for a period of at least 11 hours (Article 155 of Employment Relationship Act, Official Gazette of the RS, Nos 21/13, 78/13 – corr., 47/15 – ZZSDT, 33/16 – PZ-F, 52/16, 15/17 – CC ruling, 22/19 – ZPosS and 81/19).

¹⁷⁴ An Analysis of the needed human resources for undisturbed operation of SVOM was prepared in 2017 within Professional bases for implementation of specialised expert tasks related to protection against pollution at sea and intervention when sudden pollution of sea occurred, issued by the Faculty of Maritime Studies and Transport.

¹⁷⁵ Intervention forces of the management level are: head of the area, head of operational level, head of technical assistance and head of civil protection. Operational level comprises of: head of guards, guards and operators of control centre.

¹⁷⁶ Intervention forces of the management level are: head of the area, head of the sea protection unit and head of fire safety. Operational level comprises of: head of firemen units and firemen.

the period covered by the audit, there were several occasions when emergency event caused pollution of sea, whereas the documentation shows that in all cases regular forces and services took measures and cleaned the sea. There were no accidents causing major pollution of sea and coast and that would demand activation of forces for protection, rescue and relief in that period. The audit reviewed whether there were appropriate human resources available to intervene in such cases.

The Court of Audit found out that in the valid Emergency Response Plan there was a list of state bodies and organisations that could participate in the intervention of a larger scope, in the attachments of the plan there were also the data on forces for protection, rescue and relief including units, services and other operational assemblies or associations and other non-governmental organisations and humanitarian organisations.

When reviewing Emergency Response Plan and its attachments it was found out that:

- from the attachments it is not clear whether and which units should be involved in the intervention in case of major pollution of sea, also the data on units are not always entered¹⁷⁷,
- from the attachments it is not clear what each category of data stands for¹⁷⁸,
- the table includes a scale how many members of a unit should be needed and the current situation, namely how many participants are actually available in a unit; from the tables with the data it is evident that by rule the number of participants suffice considering the scale; nevertheless, it needs to be stressed that Emergency Response Plan does not explain what is the basis for the assessment of the needed number of members of a unit in an intervention.

The Administration for Civil Protection and Disaster Relief explained that data included related only to Coastal region, while the data about national forces of protection, rescue and relief are not included. The Court of Audit believes that the data on available forces are not complete and thus there is no joint overview of human resources that could be involved in the intervention when sudden pollution at sea occurs. The Administration for Civil Protection and Disaster Relief in the period covered by the audit failed to assess or analyse the needs of personnel in case of sudden sea pollution.

In case of an accident also the employees of Branch Office of the Administration for Civil Protection and Disaster Relief in Koper could participate (3 persons trained to intervene in case of pollution of the Slovenian part of the Adriatic Sea), in case of major pollution at sea regional headquarters of civil protection would be activated which includes 10 persons in an operational assembly. Also, a special service would be involved in the intervention which operates within civil protection and is intended to support other bodies when limiting a larger scope of pollution at sea. It is the Service for offering support in ecological disasters or other accidents at sea which supplements other professional services authorised to intervene at accidents on sea, its tasks are mainly offering technical assistance and professional help in case of sea pollution. Contractual members must respond in proposed time when accident at sea occurs, namely in 3 hours. As stated in the Emergency Response Plan and from

¹⁷⁷ As an example, included data on available forces in the units that definitely would not intervene in pollution of sea (i.e. service for triggering avalanches), while data on other operational assemblies at the state level were not presented or the table was empty.

¹⁷⁸ The table should include data on personnel fulfilment and data on the number of trained participants but they are not always presented, thus the question is whether the data is not complete or members of a unit are not trained.

the data of the Administration for Civil Protection and Disaster Relief this unit included in total 19 members at the end of the period covered by the audit, the number corresponds to the needs, nevertheless Emergency Response Plan and data of the Administration for Civil Protection and Disaster Relief cannot explain what is the basis for the defined criteria on the needed forces as it has already been established.

Measure taken by the Administration for Civil Protection and Disaster Relief

In 2021, Administration for Civil Protection and Disaster Relief prepared a joint overview of human resources who are trained to intervene at sea in case of major pollution. The list included 255 members of different services and units which could implement tasks of protection, rescue and relief in case of ecological disaster at sea.

The audit could not conclude how many persons should have been planned for cleaning of sea, how many persons for cleaning of coast, while the documentation shows that there is a lack of trained people for cleaning of coast.

Explanation of the Administration for Civil Protection and Disaster Relief

An analysis of the needs of personnel in case of major sea pollution is not needed nor meaningful. Every accident has its own particularities thus it is not possible to define needs that would be helpful in case of disaster to a commander or head of intervention. There is specified quantity of equipment and a number of personnel available to limit a spill at sea, and activation of additional personnel would be considered if the spill reached the coast. In that case, apart from the structures of protection, rescue and relief other voluntaries could be involved.

Activation of forces and their response time are important indicators of the efficient and effective intervention, mainly in case of larger ecological disaster. The documentation shows that response time and activation of forces in case of sea pollution are most rapid at units of Port of Koper which with has its staff constantly ready, as well as the equipment, to intervene also outside territorial waters of the port, due to its port operations.

Considering the responsiveness at the emergency event in 2017 when a tanker full of motor fuel grounded near the Debeli rtič Cape it was found out:

- immediate response of the units was too slow, the time passed due to waiting for detailed information or assessment of the situation from the spot,
- when activating a member of concessionaire in the field of water management who was on duty there was an error in the notification system that caused shorter delay in preventive activation of the unit for implementing measures of remedying consequences of pollution on the coast,
- when activating forces of Port of Koper the communication with several stakeholders at Port of Koper was on-going, thus they received contrary demands and information,
- response of the Service for offering support in ecological disasters or other accidents at sea was reached in predicted time, in less than 2 hours there were 10 members ready for intervention as well as ECO 1 vessel.

From the Emergency Response Plan it is clear that in case of sea pollution operational maritime coordination is involved in the activating of forces. On the basis of Decree on the coordination of

services at sea providing the cooperation and manner of work implemented by bodies who operate at sea within their authorities there are 2 working bodies: coordination of services at sea and operational maritime coordination. Coordination of services at sea comprises of the representatives of different ministries¹⁷⁹ and is headed by the head of Maritime Administration. Its role according to the Decree on the coordination of services at sea is defined by rules of procedure where it is defined that tasks of the services are related to: solving joint issues concerning the sea, dealing with and analysing circumstances and conditions at sea and proposing measures to improve the situation. In the Emergency Response Plan the role or tasks of coordination of services at sea in case of ecological disaster were not defined but there is a question whether or what should be the role of the coordination service in case of pollution of sea. Considering its structure it can be concluded that every member of the service should operate in the role of the head of the body and implement tasks in its authority, the above is not evident from the Emergency Response Plan.

Emergency Response Plan defined that commander of civil protection for the coastal region or his deputy coordinated their work and work of headquarters with work of operational maritime coordination in case of intervention. It should offer to the commander or his deputy the professional assistance or carry out tasks ordered by the commander. The role of the service in case of sea pollution intervention is not evident from diagrams of activating bodies and their expert services defined in Emergency Response Plan.

Recommendation

Administration for Civil Protection and Disaster Relief should when preparing amendments to Emergency Response Plan appropriately include in it coordination of services at sea and operational maritime coordination.

2.4.2 Material resources

Emergency Response Plan includes special chapter on material and technical means for implementing the plan where it is defined that funds are planned for:

- protective and rescue equipment and tools (means for personal and common protection, equipment, vehicles, technical and other means needed by experts, rescue units, services and rescuers),
- means for protection, rescue and relief from national reserves.

In the audit report for all the above listed material and technical means the term equipment is used.

There should be attachments to Emergency Response Plan which must present the whole overview of the existing equipment. The Court of Audit established that the attachments including the data on

¹⁷⁹ Members of the coordination of services at sea in line with Article 2 of Decree on the coordination of services at sea are representatives of bodies of the ministries, by rule heads of subordinate bodies of ministries or their deputies or heads of internal organisational units of ministries.

equipment are not completed, thus there was no joint overview of the necessary protection and rescue equipment available in the state if an ecological disaster at sea occurred. The need to have a joint overview of the equipment was present also at the implemented drills¹⁸⁰. Since there was no joint list of available equipment this represents an important obstacle for efficient and effective respond to sudden pollution at sea, that is not to be able to use appropriate equipment or ask for it either neighbouring countries or EMSA. No unified list and overview of the equipment also hinders coordinated and harmonised purchases of the needed equipment, so the joint forces for protection and rescue do not have at their disposal the most optimal combination of the equipment. Maritime Administration explained that when purchasing equipment it cooperates with Administration for Civil Protection and Disaster Relief, being the case when purchasing the ecological vessel in 2019, but their regular cooperation could not be confirmed in the audit.

Measure taken by the Administration for Civil Protection and Disaster Relief

In 2021, Administration for Civil Protection and Disaster Relief developed a joint overview of all equipment to be used in case of major pollution at sea where it collected data on equipment of all forces for protection, rescue and relief that would intervene in a major pollution at sea.

Auditees included in the interventions when sudden disaster at sea occurred (Administration for Civil Protection and Disaster Relief, Maritime Administration and Port of Koper) have at their disposal variety of equipment which was assessed by them as necessary in case of sea pollution. Mainly ecological and other working vessels, containment booms, skimmers, blooting and other equipment. Port of Koper assessed that the available equipment provides efficient and effective interventions at sea and remedies of consequences of pollution when smaller and medium accidents occur, namely for all types of known pollution that can happen in territorial waters of the port. Similarly, Maritime Administration assessed that it has in line with its authorities at its disposal enough equipment for cleaning in case of pollution. Administration for Civil Protection and Disaster Relief could be included in intervention when major accident occurred with its equipment, however, during the audit it did not point out there was a lack of important type of equipment. All the equipment that could be used by Administration for Civil Protection and Disaster Relief belongs to national reserves of material assets for rescue when major pollution with dangerous chemicals occurred at sea and which is stored in the warehouse of the civil protection at Port of Koper. Picture 2 shows some equipment used in case of pollution.

¹⁸⁰ In the analysis of the grounded tanker in 2017 there was a proposal issued to make an up-to-date list of all means and equipment in the Republic of Slovenia to intervene in case of accidents at sea. The analysis of the services for the support and performance of certain tasks in case of protection, rescue and disaster relief in the event of ecological disasters or other accidents at sea in 2019 a proposal was issued to develop check lists with a list of all equipment to be used for easier control/review of appropriate selection of the equipment.

Picture 2 Drums and bulkheads (left) and skimmers (right)



Source: Administration for Civil Protection and Disaster Relief.

In the period covered by the audit there was one major purchase carried out, namely in 2019 a new ecological vessel of the Maritime Administration was purchased. Important purchases of the auditees in that period were an intake system for cleaning the coast provided by Administration for Civil Protection and Disaster Relief, and AIS safety system with which Port of Koper equipped its vessels.

Auditees regularly provide maintenance of the equipment, namely they maintain the equipment on their own and by using help of companies able to provide such maintenance.

According to the auditees the proposals to purchase equipment needed are based on practice¹⁸¹ thereby also guidelines and new developments in the field of preparedness and responding to oil spills and other dangerous substances are considered. It was found out that the assessment of the necessary equipment that should be at disposal of the Republic of Slovenia and which should consider the scope of maritime transport, the amount and type of cargo transferred outside the Slovenian part of the Adriatic Sea, in the Gulf of Trieste and in the wider area of the Adriatic Sea was not developed. As warned by investigator of sea accidents and incidents the Slovenian part of the Adriatic Sea, a major danger for ecological disaster is represented by maritime transport in the Gulf of Trieste.

Measure taken by the Administration for Civil Protection and Disaster Relief

In 2021, the Administration for Civil Protection and Disaster Relief developed a plan of activities for preparing a joint list of missing equipment including activities to identify quantities and type of equipment that is needed by the Republic of Slovenia considering the type and scope of maritime transport inside and outside of the Slovenian part of the Adriatic Sea, as well as deadlines and holders of tasks.

¹⁸¹ From past experience of employees and on the basis of accidents that occurred, experience gained at expert trainings, seminars and drills in the Republic of Slovenia and abroad.

To be able to analyse the needs related to purchases of new equipment or replacement of the existing, important sources of information are drills and trainings that are organised or participated by members of forces for protection, rescue and relief when ecological disaster occurs, as well as analyses of emergency events related to sea pollution.

The documentation showed that in the period covered by the audit the following issues related to equipment were identified:

- all technical means available were not used¹⁸²,
- lack of protective equipment of rescuers¹⁸³, lack of tools, up to 2019 the Maritime Administration did not have specialised ecological vessel, vehicle to transport equipment, inappropriately equipped vessels¹⁸⁴,
- distant locations where equipment is stored¹⁸⁵,
- other problems with the equipment¹⁸⁶.

During the period covered by the audit the situation related to equipment improved. The drills carried out in 2019 showed no more major difficulties related to handling of the equipment and lack of key equipment, as for example an ecological vessel. Also in general the drills carried out in 2019 showed less difficulties with the equipment. Auditees analysed implemented drills which presented some difficulties occurring in the field of equipment in practice and also gave proposals for solutions what is assessed as a positive approach towards best practice. In future it would be wise to consider the fact that the holder of the drill should also monitor the realisation of issued proposals.

In case there is a lack of equipment the Administration for Civil Protection and Disaster Relief can ask for help, namely for experts and equipment, all stakeholders involved in interventions when pollution at sea¹⁸⁷ occurs, since it concluded contracts on cooperation¹⁸⁸ with some of them. The Civil

¹⁸² For example, side and stern camera on the vessel not used, gloves not used, working shoes not used as well as external unit of VHF.

¹⁸³ It is necessary to purchase working helmets, quality sunglasses for members of civil protection, portable radio stations, appropriate clothes and shoes also for seasonal workers. Those intervening must be equipped with breathing apparatus and oxygen and other dangerous gases concentration meters and protective masks.

¹⁸⁴ Vessels of SVOM and the Port of Koper were at first not equipped with AIS transmitters and radio stations.

¹⁸⁵ Using more time and vehicles to transport the equipment. In 2017, it was proposed that equipment needed to intervene which was stored in Ilirska Bistrica should be moved closer to the sea where the Administration for Civil Protection and Disaster Relief has its own warehouse (Port of Koper). It was also stressed that for rapid interventions of the Maritime Administration in case of dangerous substances spill at sea, containers with equipment should be placed in the area of marina in Koper and marina in Portorož.

¹⁸⁶ As an example: it was found out that sharp edge of the new vessel can damage containment booms, the lift for booms on the vessel had insufficient load carrying capacity thus it was not possible to handle the drum of containment booms. There were also weaknesses when closing the containment booms when the drum was used for winding but additional drum was not set up on the pier, therefore the containment booms were damaged which were already assessed in the past as out-of-date and obsolete.

¹⁸⁷ Operational cooperation with Maritime Administration, the Police, Slovenian Army, Port of Koper and company INPO, ADRIA-TOW, Prosub d.o.o., Portorož Flying Centre and other stakeholders who possess equipment, knowledge and experts for cleaning polluted sea – Adriaing d.o.o., Sirio d.o.o., VGP Drava, Faculty of Maritime Studies and Transport and Maritime biological unit Piran.

¹⁸⁸ Coastal flying centre Portorož, ADRIA-TOW, ProSub d.o.o., up to 2019 also Mitja Petrič s. p.

Protection Commander of the Republic of Slovenia or the Government may also request for the international help.

2.4.3 Financial resources

ZVNDN defines that funds for assistance during the remedy of damage, namely financing administrative, professional, control and other tasks of protection against natural and other catastrophes under national authority, are provided by the budget of the Republic of Slovenia, while local self-governments provide funds for financing their roles of protection against natural and other accidents. Public Finance Act¹⁸⁹ defines that services of remedying consequences of natural disasters are financed from budgetary reserve¹⁹⁰.

ZVO-1 defines that the manner of operations and intervention measures in case of environmental disaster on surface water are defined by rules on water. Needed intervention measures are implemented by authorised services in line with rules on water and services for protection, rescue and relief designated under the regulations on protection against natural and other disasters. The costs of intervention measures are paid by polluter causing ecological disaster but if its assets do not suffice to cover the expenses, the State must cover the rest of the costs.

2.4.3.1 Financing the interventions in case of minor pollution

Financial resources for intervening in cases of minor pollution which are remedied within regular activities are provided by the Maritime Administration, Water Agency, Port of Koper and holders of water permits.

The Maritime Administration plans and provides its funds for interventions in case of pollution within the financial plan. The audit could not disclose how much funds was used for implementing the interventions, since the Maritime Administration did not calculate costs of an individual intervention when pollution occurred, thus it does not have the data.

In the period covered by the audit, according to the Maritime Administration there were no pollution of sea that caused pollution of coast. The Maritime Administration explained that if such a pollution occurred, the company VGP Drava would carry the costs of intervention as defined by concession contract. Under point 2.2.2.2.1 it was already pointed out that up to 2019 the concession contract did not include services of cleaning of coast, the new concession contract referred to the period up to 2026 also does not clearly define whether company VGP Drava should provide cleaning of the coast and coastal land.

¹⁸⁹ Official Gazette of the RS, Nos 11/11 – official consolidated text, 14/13 – corr., 101/13, 55/15 – ZFisP, 96/15 – ZIPRS1617 and 13/18.

¹⁹⁰ Funds from budgetary reserve are earmarked for financing of expenditures of remedying consequences of natural and other disasters, namely also for ecological catastrophe.

Company INPO implements cleaning of polluted sea for the Port of Koper. The Port of Koper in the period covered by the audit paid EUR 1,007,569¹⁹¹ to company INPO for providing and implementing interventions if pollution of sea occurred.

2.4.3.2 Financing the interventions in case of major pollution

Emergency Response Plan includes a chapter on planned financial funds for the implementation of the plan. The funds are planned for:

- costs of operational tasks¹⁹²,
- costs of equipping units and services,
- costs of trainings of units and services, including costs for obtaining authorisations and certificates and
- material costs (transport, services and other).

Emergency Response Plan does not include an attachment on planned financial funds for the implementation of the plan.

In case of a major disaster at sea funds would be provided from budgetary reserve to cover costs of necessary protection, rescue and relief as defined by Public Finance Act and Rules on the Procedures of Implementing the Budget of the Republic of Slovenia. On the basis of decisions of the Government and valid legislation regulating budget realisation of the Republic of Slovenia, funds can be reallocated from budget users to the budgetary reserve.

In the period covered by the audit, there was no pollution at sea that would require activation of an emergency response plan and allocation of funds from budgetary reserve.

The Administration for Civil Protection and Disaster Relief defines commercial companies, institutes and other organisations that employ trained staff and means to perform certain tasks in case of protection, rescue and disaster relief in the event of ecological disasters at sea. It reimburses their costs for participation in intervening and for their training that exceed their regular activities¹⁹³.

The Court of Audit established that the Administration for Civil Protection and Disaster Relief concluded several contracts for implementing tasks related to protection, rescue and assistance, namely particularly for providing professional and technical assistance¹⁹⁴. Service providers were in the period covered by the audit paid in total EUR 147,839.

¹⁹¹ Out of it, EUR 986,400 for prevention of pollution at sea and remedy of consequences of pollution and EUR 21,169 for implemented services of the intervention.

¹⁹² Reimbursement of costs for activated members of civil protection and other forces of protection, rescue and relief.

¹⁹³ Article 75 of ZVNDN in connection to Article 35 of Decree on the Organization, Equipment and Training of Protection and Aid Forces.

¹⁹⁴ Among them services of vessel towage, observation flights and offering vessels.

International convention¹⁹⁵ defines that in case the international help is needed and a state takes measures on its own initiative it also covers its own costs. If a state assists another state on the request of the latter, the requesting state refunds the costs of another state's operations. This is also the case if no other provisions are defined by bilateral or multilateral agreements concluded among involved states even before the pollution occurred.

The Italian Republic and the Republic of Slovenia in 2013 concluded a memorandum¹⁹⁶ on the basis of which costs of intervention are analysed from case to case. The memorandum defined that costs of providing assistance are borne by the state that offers help unless otherwise agreed.

The agreement between the Republic of Slovenia and the Republic of Croatia from 1997¹⁹⁷ presents that the country delivering the assistance cannot demand from the country receiving the assistance any compensation for the given help. The agreement continues that the country delivering help can demand the total or partial reimbursement of costs. Thus, it is not possible to clearly understand whether the country offering help can demand reimbursement of costs. The Administration for Civil Protection and Disaster Relief explained that reimbursement of costs can be realised only when countries agree thereon, otherwise costs of intervention are borne by the state that delivers the assistance.

2.4.3.3 Reimbursement of intervention costs

Article 27 of ZVO-1 defines that costs of intervention measures are paid by polluter causing ecological disaster but if its assets do not suffice to cover the expenses, the State must cover the rest of the costs.

Article 118 of ZVNDN prescribes in detail covering costs of necessary measures or interventions. In the first paragraph it is defined that natural person or legal entity that on purpose or due to gross negligence caused accident or a threat which has led to necessary intervention must cover the costs of protective or rescue interventions, costs of remedial activities and returning to the previous state and compensations to natural persons or legal entities. Regardless of the first paragraph, natural person who due to negligence, inexperience or inappropriate equipment caused accident or a threat or a condition which has led to necessary intervention must reimburse a proportional part of costs of intervention as defined by the Government.

The audit disclosed that costs of intervention measures were actually paid by polluters, but only in those cases when the Port of Koper assisted in intervention with its capacities and it also issued

¹⁹⁵ Act ratifying the International Convention on Oil Pollution and Preparedness, Response and Co-operation, 1990 (MKP00), Official Gazette of the RS, No 31/00.

¹⁹⁶ Memorandum of understanding between the Ministry of Defence of the Republic of Slovenia – Administration for Civil Protection and Disaster Relief and the Presidency of the Council of Ministers of the Italian Republic - Department of Civil Protection on Co-operation in the Field of Disaster Management, [URL: <http://www.sos112.si/slo/page.php?src=sv41.htm>], 23/05/2021.

¹⁹⁷ Act Ratifying the Agreement between the Government of the Republic of Slovenia and the Government of the Republic of Croatia on cooperation in protection against natural and man-made disasters.

invoices for costs to polluters¹⁹⁸. If the Maritime Administration implemented intervention, those causing the pollution did not cover the expenses of the intervention, since the Maritime Administration did not charge them because it believes it does not have appropriate legal bases for it. In practice, when pollution occurs a polluter must cover the costs of intervention if the Port of Koper implemented the intervention, respectively the costs were not covered by them if the Maritime Administration intervened. This was also the case in the accident of a tanker near the Debeli rtič Cape in 2017 when the Port of Koper as well as both administrations intervened but costs of the intervention were charged to the polluter only by the Port of Koper, i.e. in the amount of EUR 13,520. All costs related to interventions of the Maritime Administration in the area where water right is granted were also covered by the Maritime Administration even though the costs should be covered by the holder of water right according to the valid legal bases (more under point 2.2.2.2.2).

The Maritime Administration several times asked the Ministry of Defence and the Administration for Civil Protection and Disaster Relief for an opinion on provisions of Article 118 of ZVNDN. Related to issues on reimbursement of costs of interventions also the Ministry of Infrastructure asked for an opinion of the Ministry of Defence and received an answer of the legal department that Article 118 of ZVNDN does not exclude the costs of the intervention to be claimed from the polluter directly on the basis of Article 118. The Ministry of Defence and the Administration for Civil Protection and Disaster Relief did not issue an official response to the Maritime Administration and the Ministry of Infrastructure.

The Court of Audit found out that by the end of the period covered by the audit the implementation of reimbursement of costs caused by interventions as prescribed by Article 118 of ZVNDN was not arranged in such a manner to be clear how the Maritime Administration and the Administration for Civil Protection and Disaster Relief should charge polluters at least a proportional share of intervention costs. The Government should define the matter in advance considering Article 118 of ZVNDN. Nevertheless, it is not clear why the Maritime Administration failed to demand reimbursement of costs of interventions from polluters on the basis of Article 27 of ZVO-1, despite the fact that reimbursement of costs is not appropriately arranged in Article 118 of ZVNDN.

Undertaken measure and explanation by the Ministry of Defence

In 2021, the Ministry started to implement activities for arranging provisions of Article 118 of ZVNDN and explained that due to natural disaster (environmental) it would be more appropriate to use Article 27 of ZVO-1 for covering costs of interventions in case of pollution at sea.

The Court of Audit found out that in the period covered by the audit the Port of Koper issued invoices for cleaning of sea in the total amount of EUR 31,380 to polluters of sea. In one of the cases it also

¹⁹⁸ In case the sea is polluted in the area of the Port of Koper the costs of the intervention and remedies undertaken by the Port of Koper are covered by the polluter. This is also the case for the area outside the range of the concession contract. If the assets of the polluter causing ecological disaster do not suffice to cover the expenses, the State must cover the rest of the costs afterwards the Port of Koper with all due care used all legal means to obtain the payment in the process of enforcement.

intervened outside the territorial waters of the port when for the costs in the amount of EUR 13,520 issued an invoice to a polluter¹⁹⁹.

2.5 Waste

The sea is exposed to regular pollution and also to pollution which is a consequence of emergency events. After the cleaning of pollution different substances and materials remain. The audit reviewed whether procedures and plans for managing waste and substances collected including their storage and/or destruction are defined. The audit thus focused on whether it is clearly defined where collected substances and waste could be stored/disposed in case of sudden pollution at sea.

The Ministry of Environment explained that legislation does not specifically define manners of operation in case of ecological disaster at sea and that waste from such accidents must be managed as all other waste in line with the legislation related to waste management. Key principles on waste management are defined by Decree on waste management²⁰⁰ issued on the basis of ZVO-1.

Decree on waste management defines that waste must be treated, those that cannot be treated²⁰¹ must be removed. The original waste producer²⁰² or other holder of waste must provide for their treatment, i.e. reprocessing of waste or removal, either by themselves, by disposing to a waste collector²⁰³ or to waste processor. The waste producer can also send them to another EU member state or a third country to be processed, non-hazardous waste can be sold. If defined by special regulation defining specific types of waste management, they must be delivered or handed over to a waste collector obligatory.

Residual materials and waste from sea bottom are collected on behalf of a polluter by:

- the Maritime Administration in the area of aquatic land under the authority of the Ministry of Environment,
- the holder of water right in the area where water right is granted and
- VGP Drava when the coast and coastal land, which is under the authority of the Ministry of Environment, need to be cleaned.

Collected residual materials and waste are handed over by the Maritime Administration, the holder of water right and VGP Drava to authorised collectors of waste.

¹⁹⁹ Grounding of ship at the Debeli rtič Cape in 2017.

²⁰⁰ Official Gazette of the RS, Nos 37/15 and 69/15.

²⁰¹ Decree on waste management lists conditions when waste can be removed and not treated, namely if: technological processing can not be carried out, no possibilities for their further use or their parts, treatment burdens environment or human health more than their removal, costs of treatment are not proportional with costs of their removal and considering other conditions stated in the decree.

²⁰² A waste producer is a person whose operations or activities cause waste (original waste producer).

²⁰³ A waste collector is a legal entity or proprietor who implements the service of collecting waste in line with the Decree on waste management.

2.5.1 Management of collected waste and other substances in case of minor pollution

2.5.1.1 Areas under the authority of the ministry

ZV-1 defines²⁰⁴ that public utility service for aquatic and coastal land maintenance must submit floating debris, waste and other abandoned or discarded objects or materials to the local provider of public utility service of municipal waste management, where floating debris, waste and other abandoned or discarded objects or materials are collected, the local service provider must accept them and move them to the landfill sites.

Paragraph 2 of Article 99 of ZV-1 provides that costs of accepting and disposing of floating debris, waste and other abandoned or discarded objects or materials from surface water and aquatic and coastal land under the authority of the ministry must be borne by the ministry. Considering that:

- the term “ministry” on the basis of Article 12 of ZV-1 relates to the ministry responsible for water, i.e. the Ministry of Environment,
- Article 99 of ZV-1 imposes the costs of accepting and disposing floating debris, waste and other objects or materials on the ministry,
- paragraph 5 of Article 161 of ZV-1 provides that some tasks implemented on sea must be carried out by a subordinated body of the ministry responsible for maritime, i.e. the Maritime Administration.

The Court of Audit assessed that there is a possibility to differently interpret provisions determining the payer of tasks implemented at sea, since implementation of Article 99 of ZV-1 relates to the implementation of Article 98 of ZV-1. Article 98 of ZV-1 defines tasks of public utility service for aquatic and coastal land maintenance. The amendment of ZV-1 transferred some tasks of this public utility service carried out on sea²⁰⁵ to the Maritime Administration. Nevertheless, it is not evident whether and how the amendment of Article 98 affects the implementation of Article 99 of ZV-1, namely financing of costs of accepting and disposing floating debris, waste and other objects or materials that occur when implementing tasks at sea defined by Article 98 of ZV-1.

Recommendation

The Ministry of Environment should when amending or supplementing ZV-1 clearly define Article 99 where it refers to defining the ministry or its subordinated body that is authorised for paying costs of accepting and disposing floating debris, waste and other abandoned or discarded objects or materials from the sea.

²⁰⁴ Paragraph 1 of Article 99.

²⁰⁵ Tasks of removing of floating debris, waste and other abandoned or discarded objects or materials from the surface waters and from aquatic and coastal land under the authority of the ministry and tasks of cleaning of surface water and preventing pollution of aquatic and coastal land.

In the period covered by the audit, the Maritime Administration stored waste and other substances, and when the capacities were filled it submitted them to companies which accepted collected waste on the basis of purchase orders. In case the quantities exceeded their own capacities, the Maritime Administration asked for help the Port of Koper and other stakeholders (Administration for Civil Protection and Disaster Relief, VGP Drava, operators of beaches, ports and harbours). Costs of acceptance and disposing of floating debris, waste and other abandoned or discarded objects or materials from the sea in the areas where water right is not granted were borne by the Maritime Administration in the period covered by the audit. Therefore it paid EUR 9,865 to the companies.

2.5.1.2 Areas where water rights are granted

ZV-1 in Article 101 defines that in the area of granted water right the holder of water right must follow regulations when removing floating debris and other waste, whereby a public utility service provider of municipal waste management must accept the municipal waste²⁰⁶ at the expense of the holder of water right.

Waste management is in detail defined by water permits. The audit showed that water right permits reviewed in the audit define that in the area of granted water right the regular removal of floating debris, waste and other abandoned or discarded objects or materials must be carried out in the entire area where water right is granted and in the part of the sea affected by implementing water right. The waste must be correctly disposed and later transferred to landfill sites at the expense of the holder of water right. It is necessary to provide for regular collection of all sorts of waste and waste water from vessels, set up appropriate capacities for their acceptance and correct storing until the waste is submitted to the authorised organisation. An exception is represented by 5 water right permits²⁰⁷, most of them were issued in 2017 and 2018 where obligations of the holder of water right are defined differently, namely in 3 water right permits the obligations are listed solely in the explanation of the permit.

The Water Agency explained that even in the presented obligations of removing floating debris, waste and other abandoned or discarded objects or materials in newer water right permits there were some simplifications due to shortening of permits and that despite the differences in explanations the obligations of the holder of water rights in the field of collecting, storing and removing of waste are defined by Article 101 of ZV-1. All obligations of holders of water rights must be presented in the wording of the permit as already presented under point 2.2.2.2.2.

In the period covered by the audit, the Maritime Administration intervened several times in case of pollution in the area where water right was granted. It was disclosed that costs of submitting the waste from those areas in all cases were covered by the Maritime Administration which failed to

²⁰⁶ Municipal waste is defined by ZVO-1 as waste from households and similar waste from shops, production, business operations, services and other activities and public sector.

²⁰⁷ In 2 cases the wording states that the holder of water right must provide at its own expenses the remedy of consequences of pollution, in 2 cases the explanation provides that the holder of water right must carry out its obligations at all times, such as removal of floating debris, waste and other objects or materials, and that in line with the Maritime Code it is forbidden for vessels to dismiss, dispose or throw waste, substances, objects that could cause an obstacle or danger to the safety of navigation or pollute nature. In 1 case the explanation defines that the holder of water right must at all times carry out obligations of mowing, removing of floating debris and waste.

issue invoices to the holders of water rights even though the costs should be borne by the holders of water rights. It was found out that payment for submitting the waste included also submitting waste collected from the part of the sea under the authority of the Ministry, as well as waste collected in the area of granted water rights. The amount of costs actually paid by the Maritime Administration instead of holders of water rights was not possible to define by the audit, since the Maritime Administration does not keep the data.

In the cargo port in Koper collecting, sorting and temporary storing of waste produced when implementing protection measures against sea pollution and delivery of waste for processing, namely reprocessing or disposal, is provided by company INPO. If company INPO cannot or is not allowed to accept specific types of waste, it becomes an intermediary and organises transport via authorised collector of waste. Picture 3 shows the Port of Koper waste management centre.

Picture 3 Port of Koper waste management centre



Source: data by Port of Koper.

In the cargo port in Koper regular collection of waste from vessels must be implemented, namely the services are foreseen as a public utility service. Decree on the method, subject and conditions for the provision of national public utility service of collecting waste from the vessels in the Koper freight port area²⁰⁸ defines that the Government decides on the selection of concessionaire and that a concession contract is signed by the minister authorised for environment and the minister authorised for maritime. Already in the audit of managing port infrastructure within the area of cargo port in Koper it was found out that the concession contract was not made, therefore the Court of Audit demanded from the Ministry of Infrastructure to implement activities in the process of

²⁰⁸ Official Gazette of the RS, No 59/05.

awarding a concession²⁰⁹. In the period covered by the audit, the concession contract was not concluded. By the end of the period covered by the audit, the arrangement was still valid, namely until the concession contract is made for public utility service of collecting waste from the vessels in the area of cargo port in Koper this public service must be carried out by the Port of Koper.

2.5.2 Management of collected waste and other substances in case of major pollution

Emergency Response Plan does not regulate in detail collected waste management, but it provides that consequences of sea pollution must be remedied by services or organisations competent for the tasks. It also provides that in case of major sea pollutions the State does not have enough technical means nor trained staff for remedying and that the international help would be needed or other type of cooperation with specialised organisations.

The same was pointed out when a tanker grounded in 2017 where it was found out that there were not enough capacities for storing oily water and other hazardous waste²¹⁰ and that at the state level there was no temporary storage or waste disposal.

A study of a possible common temporary disposal of waste is one of the planned activities in the programme of measures included in the Marine Environment Management Plan 2017-2021 that should be implemented by the Ministry of Environment and the Maritime Administration. A waste disposal should be intended for temporary storage of waste in case of ecological disaster until the delivery to the collectors of waste. The audit found out that in the mid-term report on implementing programmes of measures from the Marine Environment Management Plan 2017-2021 the Ministry of Environment failed to report on the development pertaining to implementing the activity, during the audit it stated that the location for common temporary disposal was not defined yet.

In 2016, the Government adopted Waste management programme and programme of preventing waste in the Republic of Slovenia²¹¹. The programme presents that due to insufficient local capacities to process waste and the needs for specialised processing technologies substantial amount of hazardous waste is exported from the Republic of Slovenia. The programme does not include procedures of operation in case of sudden major quantity of waste occurring after the accident at sea.

Auditees should ask for assistance each other in case of major disaster when their capacities do not suffice. The Court of Audit established that neither the Emergency Response Plan nor the Waste management programme or any other document defined the actions when all capacities are filled.

²⁰⁹ The Ministry had to present that it prepared proposals for appointing members of expert commission for managing a procedure for awarding concession for public utility service of collecting waste from the vessels in the Koper cargo port that was submitted to the Government and that it called upon ministries authorised for environment and finance to give proposals for appointing 2 remaining members of the expert commission.

²¹⁰ For example: the Maritime Administration can store 7 m³ of substances, the Administration for Civil Protection and Disaster Relief has a floating tank for storing 25 m³ of oily substances and it concluded a contract with company SAUBERMACHER SLOVENIJA, environment protection, trade and transport services, for collecting and storing hazardous waste, the Port of Koper can store in total 109 m³ of oily water including storing of regularly collected waste from vessels.

²¹¹ [URL: https://www.enarocanje.si/Obrazci/?id_obrazec=319902], 23/05/2021.

Undertaken measure and explanation by the Ministry of Environment

In December 2020, the Ministry publicly presented draft Maritime Spatial plan of Slovenia which defines spatial and temporal distribution of existing and future activities and uses of sea. The draft strategic document foresees that in the framework of updating of the emergency response plan locations for disposal of polluted material which occurred in case of major pollution with petroleum products at sea shall be defined and reviewed, as well as for temporary storage, namely from removing oily water from sea surface until delivery to a processor or a disposer. It is also foreseen that within the framework of updating of the emergency response plan in case of disaster at sea a protocol of management of waste which occurred at accident at sea should be produced.

In order to be able to prepare a doable emergency response plan for management of waste which occurred due to petroleum products spill and other hazardous substances the Ministry believes that cooperation of several sectors is needed because of their different knowledge and experience as well as their authorities.

Within updating the emergency response plan it is foreseen an implementation of measures for solving issues related to collecting substances in case of major pollution due to accident at sea. According to the assessment of the Ministry of Environment cooperation of several state bodies is needed to implement the measures, the Court of Audit fully agrees on this but it needs to be stressed that for efficient and effective implementation of measures one key decision-maker should be identified. Bearing in mind that this entity should not carry the responsibility for undertaking all activities, rather it should cooperate with other state bodies as provided by ZDU-1²¹². If an individual task relates to administrative fields of 2 or more ministries, such task is headed by the ministry to whose administrative field the task refers, other ministries must cooperate as defined by ZDU-1. Tasks related to waste management in line with Article 38 of ZDU-1 are implemented by the Ministry of Environment.

²¹² Articles 59 and 62 of ZDU-1.

3. Audit opinion

The objective of the audit was to express an opinion on the efficiency of the intervention management system in the case of a sudden pollution in the Adriatic Sea in period from 1 January 2017 to 31 December 2019. The system of managing interventions in case of sudden pollution in the Adriatic Sea involves several stakeholders, while the audit reviewed those that carry the main responsibilities to develop this system, namely the Ministry of Infrastructure, the Ministry of Defence, the Ministry of the Environment and Spatial Planning, the Maritime Administration of the Republic of Slovenia, the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief, the Slovenian Environment Agency, the Slovenian Water Agency, and LUKA KOPER, port and logistic system, public limited company (Port of Koper) responsible for preventing and fighting sea pollution within the area of a cargo port in Koper. The audit was a part of the international parallel audit, involving Supreme Audit Institutions of all countries along the Adriatic coast.

The audit opinion is based on the assessment whether measures for preventing sudden marine pollution are being implemented, whether procedures for intervention in case of sudden pollution are appropriate, whether basic conditions enabling appropriate intervention are established, whether functioning of the system in practice is being inspected and verified, and whether handling with collected substances is defined. The court of Audit issued an audit opinion that in the period from 1 January 2017 to 31 December 2019 the system of managing interventions in case of sudden pollution in the Adriatic Sea was **partially efficient**.

The Court of Audit found out that the auditees are focused on various measures preventing the occurrence of accidents and consequently pollution of the sea, and that they carry out those measures as well. In order to reach the desired level of monitoring and control over the maritime transport, the Maritime Administration purchases and upgrades the necessary equipment for several years, but in the period covered by the audit the Ministry of Infrastructure and the Maritime Administration did not yet start with the preparation of relevant content and necessary amendments to the provisions of the legal bases. Related to implementing the measure of regular maintenance of facilities for the safety of navigation and navigation routes the Court of Audit found out material weaknesses, since the implementation of the public service was based on a 17-year-old concession contract which was out of date and thus the situation is not appropriate in the long term neither for a concessionaire nor for the Maritime Administration. Regulations concerning the maintenance of water depth of navigation routes in the areas where water rights are granted were not clear enough to identify obligations for the maintenance. In the period covered by the audit, the upgrading of the system of meteorological and hydrological measurements and for providing data necessary for safe navigation at sea was carried out, but the system was not fully established. Among others, there were limitations in providing data and information of the Water Agency in the scope necessary for the operations of the Maritime Administration.

Legal bases for intervening at sea in case of sea pollution were adopted, there are international agreements and conventions providing bases for the Republic of Slovenia to cooperate with other countries when it needs help and to offer assistance as well. Thereby, the Court of Audit disclosed that legal bases clearly provide who is authorised for cleaning of sea, i.e. the Maritime Administration and the holders of water rights, while authorities for cleaning of the coast and coastal land are not clear. Additionally, tasks of the holders of water rights related to cleaning and remedy of consequences of

pollution including removal of collected waste and substances in the area of granted water rights were not clearly presented in all water right permits.

Procedures of intervening at sea in case of sea pollution were defined. In the period covered by the audit, smaller scope of pollutions were managed by regular units and services within their authorities. The audit found out that the Maritime Administration acted also in the areas where water rights are granted, services of cleaning and removing of collected waste and substances were not charged to the holders of water rights who should in line with Water Act bear the costs.

There was no major pollution of sea in the period covered by the audit, but the procedures of intervention for those cases were defined in the Emergency Response Plan that is in the Republic of Slovenia developed as regional plan. The audit disclosed several weaknesses related to the content of the Emergency Response Plan, among others also: not all foreseen plans of activities of state bodies were developed where tasks should be defined for each body in case of activating the Emergency Response Plan. According to the assessment of the Court of Audit it would be necessary to rethink whether in future the Emergency Response Plan should be adopted as a national plan, since commitment to cooperate would be better and more firm.

The Slovenian system of managing interventions in case of sudden pollution in the Adriatic Sea foresees gradual activation of forces and means for protection and rescue. In case of larger scope of pollution at sea respectively when capacities of the Maritime Administration would not suffice to remedy the consequences of the pollution, additional forces of protection, rescue and relief are activated. For this purpose, the Administration for Civil Protection and Disaster Relief concluded several contracts with organisations that can provide help. Procedures of activating forces, when it is not clear how large the scope of the accident is, are not defined in practice, namely who can activate additional forces when resources of the Maritime Administration do not suffice.

The audit presented several weaknesses related to providing human resources. The Maritime Administration proposed several times to increase the number of employments, but did not sufficiently explain and present the needs for additional staff to set up the desired level of control over the maritime transport. Furthermore, an inappropriate risk management related to providing appropriate level of continuous maritime inspection in future was detected and the issue of providing human resources in case of longer intervention was not addressed. In case of major pollution at sea the plan of protection and disaster relief foresees the inclusion of several forces at different levels and with different authorities. Until the end of the period covered by the audit, the analysis of the needs of personnel in case of major sea pollution was not developed, while the data in the Emergency Response Plan related to available human resources are not complete. There was thus no joint overview of human resources that could be involved in intervention when sudden pollution at sea occurred. Education and trainings were carried out regularly also in the form of drills where various participants were involved in the intervention what was assessed as best practice, since in case of sudden pollution at sea it is important that all stakeholders harmoniously cooperate. Auditees developed analyses of drills and emergency events related to sea pollution where they presented proposals for improvements. Added value can be seen in monitoring of the implementation of the recommendations and findings of undertaken analyses of drills and emergency events and in assessing whether the foreseen procedures of intervention in case of dangerous chemicals spill and the implementation are correct.

Financial resources for intervening in cases of minor pollution are provided by entities that carry out cleaning within their regular activities. In case of a major disaster at sea funds would be provided from budgetary reserve to cover costs of necessary protection, rescue and relief at sea. Until the end of the period covered by the audit, the auditees did not clarify the legal bases enough for the Maritime Administration and the Administration for Civil Protection and Disaster Relief to be able to impose on the polluters the costs of activities undertaken when fighting the pollution at the sea.

Nevertheless, the auditees estimated that they obtain sufficient equipment needed to intervene in case of smaller scope of pollution. In case of major pollution at sea or when auditees do not have enough equipment to intervene additional equipment can in line with the Emergency Response Plan be provided by the Maritime Administration and contractual parties. In case of a very large scope of pollution the auditees can request for the international help. The Court of Audit also established that there was no joint overview of the necessary protection and rescue equipment available in the State if an ecological disaster at sea occurred, further more there is no assessment of necessary equipment that should be at disposal of the Republic of Slovenia and which should consider the scope of maritime transport, the amount and type of cargo transferred in the Gulf of Trieste and in the wider area of the Adriatic Sea. The audit showed that auditees did not regularly cooperate in the field of purchasing necessary equipment, so the joint forces for protection and rescue do not have at their disposal the most optimal combination of the equipment.

Managing the collected waste is based on the principle that remedying of sudden smaller scope of pollution is undertaken by existing capacities. The Emergency Response Plan defines that consequences of the sea pollution must be remedied by services or organisations competent for the tasks. When available capacities are filled, the manner of management of collected waste and substances is decided on the spot, from case to case and not by following the procedure defined in advance, since there is no such procedure at the level of the State in case of occurrence of larger quantities of waste. Furthermore, in the Republic of Slovenia there is no temporary storage or waste disposal at the State level, i.e. in case of larger quantity of waste and substances collected at sea.

Considering issues regarding the operation of the intervention management system in case of a sudden pollution in the Adriatic Sea the Court of Audit is of the opinion that in the period covered by the audit the intervention system in case of smaller scope of pollutions was partially efficient. A special attention must be placed on the field of preparedness in case of major disaster which is not efficient. In case of sudden pollution at sea, good cooperation among all stakeholders authorised for preventing sudden sea pollution and for intervening when pollution occurs in the Republic of Slovenia is a crucial precondition for effective and efficient responding mainly in cases of a sudden sea pollution and a major emergency. Furthermore, full commitment to cooperating with the international community is of vital importance, since any major pollution along the Adriatic Sea can represent a significant ecological threat to all countries on the shores of the Adriatic Sea.

4. Request to submit a response report

The Ministry of the Environment and Spatial Planning, the Ministry of Infrastructure and the Maritime Administration of the Republic of Slovenia must in 90 days after receiving the audit report submit to the Court of Audit of the Republic of Slovenia a response report.

The response report must include:

- an indication of the audit to which it refers;
- a short description of the inefficiencies in the operations that were disclosed during the audit;
- corrective measures to be carried out.

Statement of corrective measures must indicate corrective measures and appropriate evidence of implemented corrective measures to remedy established inefficiencies.

The Ministry of the Environment and Spatial Planning must present in the response report:

1. that it presented to the company Drava Water Management Company an annex to a concession contract where obligations for cleaning the coast and coastal land in case of pollution shall be clearly stated, and its obligations related to management of waste and substances collected; the Ministry should in the annex define the term coastline or uses the terms as defined in Water Act (ZV-1) – point 2.2.2.2.1;
2. that it implemented activities to arrange the field of collecting waste from vessels in the Koper cargo port for a longer period, among them also a notice to the Government regarding difficulties in implementing procedures of selecting a concessionaire including a request that the Government defines who should manage the procedure – point 2.5.1.2;
3. that it reported on implemented and planned activities of the Ministry to develop a protocol for management of waste that occur at sea accidents when the existing capacities are full – point 2.5.2.

The Ministry of Infrastructure must present in the response report:

1. that it implemented activities to arrange the field of collecting waste from vessels in the Koper cargo port for a longer period of time, among them also a notice to the Government regarding difficulties in implementing procedures of selecting a concessionaire including a request that the Government defines who should manage the procedure – point 2.5.1.2.

The Maritime Administration of the Republic of Slovenia must present in the response report:

1. that it presented an analysis of the level of services provided by the VTS system and a list of matters of substance that must be included in legal bases for the VTS system operations; the analysis should among others include the plan of activities to address the issue of appropriate competences of harbour supervisors as VTS system operators as well as deadlines for implementation of needed activities; the Maritime Administration must present that the analysis was delivered to the Ministry of Infrastructure – point 2.1.1;

2. that it presented an analysis which clearly shows whether and which tasks of harbour supervisors and VTS system operators in the existing personnel structure were not appropriately implemented and whether tasks cannot be implemented by an appropriate internal reorganisation or different organisation of work at the Maritime Administration; the Maritime Administration must also present that the analysis was delivered to the Ministry of Infrastructure – point 2.1.3.1;
3. that it presented an analysis which clearly shows whether and which tasks of Safety of Coastal Sea Division in the existing personnel structure were not appropriately implemented and whether tasks cannot be implemented by an appropriate internal reorganisation or different organisation of work in case of emergency event at the Maritime Administration; the Maritime Administration must also present that the analysis was delivered to the Ministry of Infrastructure – point 2.4.1.1.1.

According to Article 29 of Court of Audit Act the response report is an official document verified by a responsible person of the user of public funds by their signature and seal.

The Court of Audit can test the credibility of response report, i.e. the truthfulness of the illustrated corrective measures adopted and if needed it shall implement an audit of a response report on the basis of Paragraph 4 of Article 29 of Court of Audit Act. The Court of Audit shall assess the appropriateness of corrective measures.

If the response report is not submitted within the time limits defined in the audit report, the responsible person of the budget user commits a violation in line with Article 38 of Court of Audit Act. If the user of public funds who should have submitted the response report did not submit the response report to the Court of Audit, not even within 15 days of the expiry of the time limit for the submission of the response report, it is considered that the user of public funds has been violating the requirement for operational efficiency²¹³. False allegations in the response report are considered as false allegations in official document (Paragraph 2 of Article 29 of Court of Audit Act).

If the Court of Audit in the post-audit procedure finds out that **the Ministry of the Environment and Spatial Planning, the Ministry of Infrastructure or the Maritime Administration of the Republic of Slovenia** violated the requirement for operational efficiency, it shall act in line with Paragraphs 7 to 14 of Article 29 of Court of Audit Act.

²¹³ Point 3 of Paragraph 1 of Article 37 of Rules of Procedure of the Court of Audit Act.

5. Recommendations

The Ministry of Infrastructure was recommended to:

- when amending the existing regulation of the field related to the implementation of a public utility service of maintaining sea navigation safety facilities, adequately regulate the field of maintenance of sea navigation safety facilities in the area of cargo port in Koper,
- in the relevant legal bases uniformly define facilities and devices designed for the purpose of sea navigation safety and safe mooring,
- after the Maritime Administration develops an analysis of VTS system services, review whether it is necessary to approach towards the amendments of regulations under the authority of the Ministry and, if needed, to perform the activities,
- after the analyses of tasks of harbour supervisors and VTS system operators and Safety of Coastal Sea Division developed by the Maritime Administration, review whether measures must be adopted from the field of the Ministry and, if needed, to perform the activities.

The Ministry of the Environment and Spatial Planning was recommended to:

- when amending or supplementing Water Act (ZV-1) clearly define Article 99 where it refers to defining the ministry or its subordinated body that is authorised for paying costs of accepting and disposing floating debris, waste and other abandoned or discarded objects or materials from the sea.

The Administration of the Republic of Slovenia for Civil Protection and Disaster Relief was recommended to:

- provide appropriate list of contacts from services or organisations from countries near the Adriatic Sea that are authorised to intervene in case of sea pollution, and to take care for setting up a mechanism for regular updating the contacts,
- when preparing amendments of the Emergency Response Plan appropriately include in the intervention system the coordination of services at sea and operational maritime coordination.

The Ministry of Defence and the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief were recommended to:

- when upgrading the Emergency Response Plan also update plans of activities of those stakeholders who are included in the intervention in case of accident at sea; thereby they should review which data are needed and have added value in case of intervention, they should provide regular review of the data from the plans of activities and their attachments.

The Maritime Administration of the Republic of Slovenia was recommended to:

- when cooperating with other stakeholders, provide that the content and manner of cooperation are clearly defined and that all involved are properly informed.

The Administration of the Republic of Slovenia for Civil Protection and Disaster Relief and the Maritime Administration of the Republic of Slovenia were recommended to:

- review the needs of services provided by the Port of Koper and, considering their authorities, approach towards signing a contract on cooperation with the Port of Koper; the contract should include also responsible persons who can activate the Port of Koper and a clear procedure of activating the Port of Koper that shall be known to all involved stakeholders;
- upgrade the existing manner of analysing emergency events in order to define, after the analyses are performed, all responsibilities and authorities for each activity and foreseen timetable;
- in future implement drills also for other types of pollution, mainly for the pollution with hazardous chemicals, and to review the availability of equipment to intervene and protective equipment for rescuers involved in such interventions; when carrying out future drills and trainings it should be reviewed whether all weaknesses which were disclosed in past drills and emergency events were remedied.

The Ministry of the Environment and Spatial Planning and the Slovenian Water Agency were recommended to:

- consider how water permits issued in future by the Water Agency should clearly and unambiguously define when the rights and obligations start for the holder of water right if the holder of water right permit does not start using water immediately. The Water Agency should provide that the wording of the permit includes all responsibilities of the holder of water right in case of pollution at sea where water right is granted and thus related implementation of measures to prevent the spread of pollution and to remedy the consequences of the pollution, also including collecting, storing and removing waste.

Legal notice

This report on the basis of Paragraph 3 of Article 1 of Court of Audit Act cannot be challenged before the courts and other state bodies.

Tomaž Vesel,
Auditor General

Sent to:

1. Ministry of Infrastructure, by registered mail with return receipt;
2. Ministry of Defence, by registered mail;
3. Ministry of the Environment and Spatial Planning, by registered mail with return receipt;
4. Maritime Administration of the Republic of Slovenia, by registered mail with return receipt;
5. Administration of the Republic of Slovenia for Civil Protection and Disaster Relief, by registered mail;
6. Slovenian Environment Agency, by registered mail;
7. Slovenian Water Agency, by registered mail;
8. LUKA KOPER, port and logistic system, public limited company, by registered mail;
9. dr. Peter Gašperšič, by registered mail;
10. mag. Alenka Bratušek, by registered mail;
11. Andreja Katič, by registered mail;
12. Karel Viktor Erjavec, by registered mail;
13. Irena Majcen, by registered mail;
14. Jure Leben, by registered mail;
15. Simon Zajc, by registered mail;
16. Tomaž Prohinar, by registered mail;
17. mag. Joško Knez, by registered mail;
18. mag. Gregor Sluga, by registered mail;
19. mag. Lilijana Kozlovič, by registered mail;
20. Dragomir Matić, by registered mail;
21. Andraž Novak, by registered mail;
22. Irena Vincek, by registered mail;
23. Stojan Čepar, by registered mail;
24. National Assembly of the Republic of Slovenia, by registered mail;
25. archive.

*Watching over
public money*

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