



Drills & Exercises

Annual Report 2020

Sustainability and Technical Assistance

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Summary

The European Maritime Safety Agency (EMSA) following the mandate given in Regulation (EC) No 1406/2002 of the European Parliament and of the Council (as amended) offers, in European waters, a range of oil pollution response services (PRS) consisting of a Network of stand-by oil spill response vessels, Equipment Assistance Service (EAS) arrangements, including specialised stand-alone equipment, and dispersant stockpiles as well as the MAR-ICE network of chemical experts. The PRS are available at the request of a coastal State¹, a Private Entity², and/or the European Commission for responding to oil and chemical spills at sea caused by ships as well as by oil and gas installations.

At the end of 2020, 17 fully equipped oil spill response vessels (of which 8 with RPAS capability), 8 dispersant stockpiles and 4 EAS arrangements were available for mobilisation.

To achieve the level of performance for pollution response required by the Agency, the contracted response arrangements have to perform regular trainings, drills, Equipment Condition Tests (ECTs) and exercises.

The evaluation of the contractors' performance during vessel drills, ECTs and exercises by the Agency's staff in line with the "Guidelines on Conducting Drills / ECTs and Exercises for the EMSA Contracted Vessels / EAS arrangements" is an effective tool to ensure that the adequate level of preparedness of the pollution response services is constantly maintained.

For the EMSA's Network of stand-by oil spill response vessels and EAS the year 2020 was different than the previous years due to COVID-19 pandemic causing travel and health safety restrictions and thus limiting possibilities of direct control of EMSA's contractors. Despite of these circumstances the Agency managed to maintain the service on the high level of performance, thanks to good co-operation with services providers and extended programme of reporting. Except the significantly lower number of operational and notification exercises arranged by the Member States the number of events performed by EMSA services remained on a similar level as in 2019.

Overall, the outcome of drills, ECTs and exercises carried out during 2020 demonstrated that the services were provided efficiently and in accordance with the EMSA services users expectations.

In addition to providing operational assistance in case of oil spills, the Agency is tasked to support Member States in case of marine incidents involving chemicals. Since 2009 EMSA is providing rapid access to expert advice for hazardous and noxious substances (HNS) through its MAR-ICE Network. This service offers rapid information transfer regarding chemical substances involved in marine pollution emergencies 24/7 to the EU/EFTA coastal Member States and EU Candidate Countries. In order to familiarise EU Member States with the service's activation procedures and to ensure high quality of this service, MAR-ICE exercises are performed each year.

The figures related to the pollution response preparedness activities in 2020 are summarised in the table below.

Table 1. Summary of drills, ETCs and exercises carried out in 2020

Acceptance Drills: Newly Contracted / Replaced Vessels	Acceptance Drills: Improvement projects / new equipment	New EAS stockpile acceptance	Quarterly Drills / ECTs	Operational Exercises Vessels/EAS	Notification Exercises Vessels/EAS	MAR-ICE Exercises
4	5	2	63 / 26	3 (4 vessels / 1 EAS / 2 RPAS)	4 (4 vessels / 1 EAS / 1 RPAS)	2
Total number of events	109					

¹ EU Member States, EU Candidate States, Norway and Iceland as well as those third countries sharing a regional sea basin with the European Union (Regulation (EU) 100/2013).

² Private Entity means the ship owner or oil and gas installation operator controlling the activity causing the marine pollution or the imminent threat of it, or their contractor.

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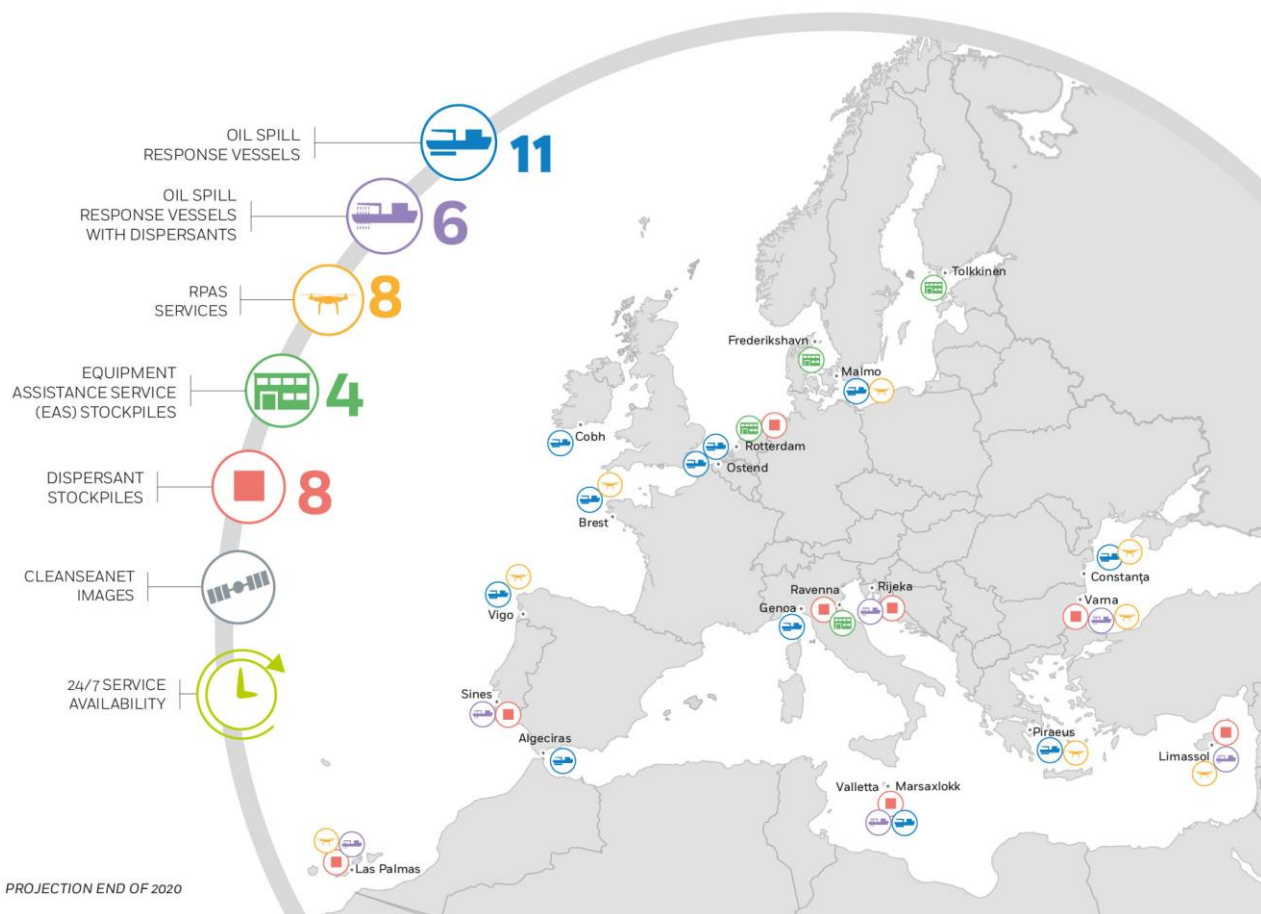
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1. Introduction

1.1 EMSA's oil pollution response services (PRS) - Overview

Through its “toolbox” of PRS, EMSA offers a European tier of response resources in order to top-up the capacities of coastal States for protecting their marine environment from oil pollution caused by ships and oil and gas installations. The map below provides an overview of EMSA's oil PRS and their geographical distribution.

Map 1. Distribution of EMSA's contracted vessels and EAS arrangements at the end of 2020



At the end of 2020, 17 fully equipped oil spill response vessels and 4 EAS stockpiles were available for mobilisation in case of marine pollution.

The main milestones for the Vessel Network in 2020 were:

- The entry into service of the new vessel arrangements contracted at the end of 2019 to replace the response capacity for the Adriatic Sea, West and Central Mediterranean Sea. The tankers *Kijac*, based in Rijeka (Croatia), *Monte Anaga*, based in Algeciras (Spain) and *Adelia*, based in Valletta (Malta), successfully completed the Preparatory Phase and entered into operational service in mid-2020;
- Three vessel contracts covering the Southern Atlantic coast, Central and Western Mediterranean Sea will expire without the possibility of further renewal in 2021. Accordingly, a procedure following publication of a Contract Notice in the Official Journal of the European Union to replace the response capacity in those three areas was launched and successfully concluded. As a result, new contracts were awarded;

- The response arrangement for the Southern Baltic, vessel *Norden*, based in Malmö (Sweden), and the arrangement for the Canary Islands and Madeira, vessel *Mencey*, based in Las Palmas (Spain), were renewed for an additional 4-year period;
- Improvement of spill detection and monitoring capacity by equipping three vessels with remotely piloted aircraft systems (RPAS) was completed;
- Improvement of the oil recovery capacity of the two vessels: *Interballast III* based in Ostende (Belgium) with the high capacity skimmer and *Aegis I* (back up vessel for the Aktea OSRV) based in Piraeus (Greece) with a boom replacement was successfully implemented;
- In addition, within the context of cooperation between EU Agencies on Coast Guard functions, EMSA continued providing support to the European Fisheries Control Agency (EFCA) chartered vessel *Lundy Sentinel* for oil pollution response duties, with oil spill response equipment and some dispersants.

The main activities implemented in 2020 related to EAS were:

- Bringing into operational service the new EAS arrangements contracted at the end of 2019 for the Baltic Sea, based in Frederikshavn (Denmark), and for the North Sea, based in Rotterdam (The Netherlands).
- Following the successful conclusion of a procurement procedure, award of a new contract to replace the EAS stockpile in Southern Europe (current contract will terminate in July 2021). The new equipment depot will be based in Ravenna (Italy) and will become operational by mid-2021.
- Furthermore, EMSA also topped up temporarily Croatian response capacities at the request of Croatian authorities by providing two equipment sets, Current Buster 6 and Trawl Net, from the EAS Southern Europe. This cooperation lasted until October, as agreed, following the entry into service of the vessel *Kijac* in the Adriatic Sea.
- Moreover, the response capacity in the Northern Baltic was enhanced through the delivery of two state-of-the-art arctic skimmers to the EAS based in Tolkkinen, Finland.

Details regarding the service of the Vessel Network and EAS arrangements in 2020 can be found in the table below.

Table 2. Summary of the OPR services at the end of 2020

Area covered	Contractor / Contract	Vessel(s) / Assets	Vessel type / storage capacity(m ³) / dispersant stock	Service 2020
1. Contracted vessels				
Southern Baltic	Stena Oil EMSA/NEG/1/2015 Lot 2	<i>Norden</i>	Oil Tanker / 2880	Whole year service
Channel and Southern North Sea	DC Industrial S.A. 2014/EMSA/NEG/1/2014 Lot 3.1	<i>Interballast 3</i>	Hopper Dredger / 1886	Whole year service
	DC Industrial S.A. 2014/EMSA/NEG/1/2014 Lot 3.2	<i>DC Vlaanderen 3000</i>	Hopper Dredger / 2744	Whole year service
Atlantic North	MOJO Maritime, France EMSA/NEG/1/2013 Lot 2	<i>Galway Fisher</i> until 22/07/2020 (<i>Mersey Fisher</i> as of 23/07/2020), <i>Corrib Fisher</i>	Product Tankers 4754 / 5028 / 6248	Whole year service
Atlantic Coast	Remolcadores Nossa Terra S.A. EMSA/NEG/1/2014 Lot 1	<i>Ria de Vigo</i>	Offshore Supply / 1522	Whole year service
Bay of Biscay	Seaowl 2017/EMSA/CPNEG/01/2017	<i>VN Partisan</i>	Offshore Supply / 1022	Whole year service

Southern Atlantic Coast	Mureloil EMSA/NEG/1/2012 Lot 1	<i>Bahia Tres</i>	Oil Tanker / 7413 / Dispersant 200 t.	Whole year service
Canary Islands and Madeira	Petrogas EMSA/NEG/1/2015 Lot 1	<i>Mencey</i>	Oil Tanker / 3500 / Dispersant 200 t.	Whole year service
Western Mediterranean Sea	Naviera Altube EMSA NEG/1/2011 Lot 4	<i>Monte Anaga</i>	Oil Tanker / 4096	The contract expired on 19/03/2020
	Naviera Altube EMSA CPNEG/1/2019 Lot 2	<i>Monte Anaga</i>	Oil Tanker / 4096	The vessel re-entered into service under new contract on 07/08/2020
	Ciane EMSA/NEG/34/2012	<i>Brezzamare</i>	Oil Tanker / 3288	Whole year service
Central Mediterranean Sea	Tankship EMSA NEG/1/2011 Lot 2	<i>Balluta Bay</i>	Oil Tanker / 2800 / Dispersant 200 t.	The contract expired on 14/05/2020
	Petronav 2019/EMSA/CPNEG/1/2019 Lot 3	<i>Adelia</i>	Oil Tanker / 7458 Dispersant 180 t.	Entered into service on 01/10/2020
	SL Ship Management Ltd EMSA/NEG/1/2012 Lot 2	<i>Santa Maria</i>	Oil Tanker / 2421	Whole year service
Aegean Sea	Environmental Protection Engineering S.A. EMSA/NEG/1/2013 Lot 3	<i>Aktea OSRV</i> (<i>Aegis I as a back-up vessel</i>)	Oil Tanker / 3000 Offshore Supply / 950	Whole year service
Adriatic Sea	Dinamarin Ltd 2019/EMSA/CPNEG/1/2019 – Lot 1	<i>Kijac</i>	Oil/Chemical Tanker / 1730 Dispersant 200 t.	The vessel entered into service on 12/08/2020
Eastern Mediterranean Sea	Petronav 2018/EMSA/CPNEG/1/2018	<i>Alexandria</i>	Oil Tanker / 7458 / Dispersant 200 t.	Whole year service
Northern Black Sea	Petronav EMSA/NEG/1/2014 Lot 2	<i>Amalthia</i>	Oil Tanker / 5154	Whole year service
Southern Black Sea	COSMOS 2016/EMSA/CPNEG/6/2016 – Lot 1	<i>Galaxy Eco</i>	Oil Tanker / 2969 Dispersant 200 t.	Whole year service
2. EAS				
Northern Baltic	Lamor Corporation AB EMSA/CPNEG/2/2018	20 stand-alone equipment sets	Contracted storage area: 800m ² (Tolkkinen, Finland)	Whole year service
Baltic Sea	Labelpoland.com EMSA/NEG/8/2015 Lot 2	18 stand-alone equipment sets	Contracted storage area: 900m ² (Gdansk, Poland)	In service until 8 March 2020
Baltic Sea	Stena EMSA/CPNEG/2/2019 Lot 1	18 stand-alone equipment sets	Contracted storage area: 900m ² (Frederikshavn, Denmark)	Operational as of 9 April 2020
North Sea	Ambipar EMSA/CPNEG/2/2019 Lot 2	19 stand-alone equipment sets Dispersant 200 tonnes	Contracted storage area: 900m ² (Rotterdam, The Netherlands)	Operational as of 16 April 2020
Southern Europe	Ottavio Novella EMSA/CPNEG/38/2016	23 stand-alone equipment sets Dispersant 200 tonnes	Contracted storage area: 900m ² (Ravenna, Italy)	Whole year service

1.2 Purpose and types of drills and exercises

The vessels and EAS arrangements contracted by the Agency are equipped with state-of-the-art, oil containment recovery and spill detection equipment. In addition, some of the vessel arrangements have dispersant spraying capabilities with dispersant stock available. The pollution response equipment provided by the Agency aims at achieving high recovery rates and high effectiveness of the pollution response activities.

Once the technical requirements of each contract are satisfied, the most important factors determining success of the pollution response system are the skills of the vessel's crews in the operation of the equipment, the capability of the oil spill response coordinators to lead the response action and to integrate EMSA's response assets within the pollution response mechanisms of the Member States. For the EAS the critical factor lies with the operational condition of the equipment. Therefore, regular training, drills, equipment condition tests (ECTs) and exercises are essential to achieving and maintaining the appropriate level of performance.

Every vessel and EAS contract defines the types and number of drills, ECTs and exercises to be carried out by each associated service:

- The vessels perform two types of drills: 1) acceptance drills (also referred to as acceptance tests) which entail the acceptance of a new vessel into service or of a vessel/equipment improvement project and 2) regular quarterly oil pollution response drills; and two types of exercises: 1) notification exercises and 2) at-sea operational exercises;
- With regard to the EAS arrangements, the contracts have defined a maximum number of six ECTs per year for the initial services. However, additional ECTs may be contracted by EMSA in case of additional equipment being stored in the EAS arrangements. With regard to exercises, there are the same two types of exercises as for the vessels. ECTs aim at guaranteeing that the technical support personnel is able to deploy and instruct Member State's operators on how to use the equipment, as EMSA's contractor technical support personnel does not operate the equipment during response operations.

Detailed instructions on conducting drills ECTs and exercises, including their methods of evaluation are provided in the "Guidelines on Conducting Drills/ECTs and Exercises for the EMSA Contracted Vessels/EAS arrangements". These Guidelines constitute a component of all contracts. They are periodically reviewed and updated taking into account new services development, new types of equipment/services acquired and lessons learned during drills and exercises.

2. Drills & ECTs performed in 2020

In 2020, a total of 63 quarterly drills, 9 acceptance drills related to vessels, 2 EAS acceptance tests and 26 equipment condition tests (ECTs) were performed by the vessels and the EAS arrangements under contract to the Agency.

The outburst of the COVID-19 pandemic from the beginning of 2020 has led to travel and border restrictions, including massive disruption to flight operations as well as to the establishment of special public health and safety measures throughout Europe. Consequently, in most cases EMSA's project officers were not able to participate in acceptance drills, quarterly drills, exercises and ECTs. For this reason the possibility of direct control and assessment of the vessel and equipment performance was limited.

To remedy this situation the Agency has developed and applied "Ad-hoc Remote Acceptance Test - Guidelines due to COVID-19".

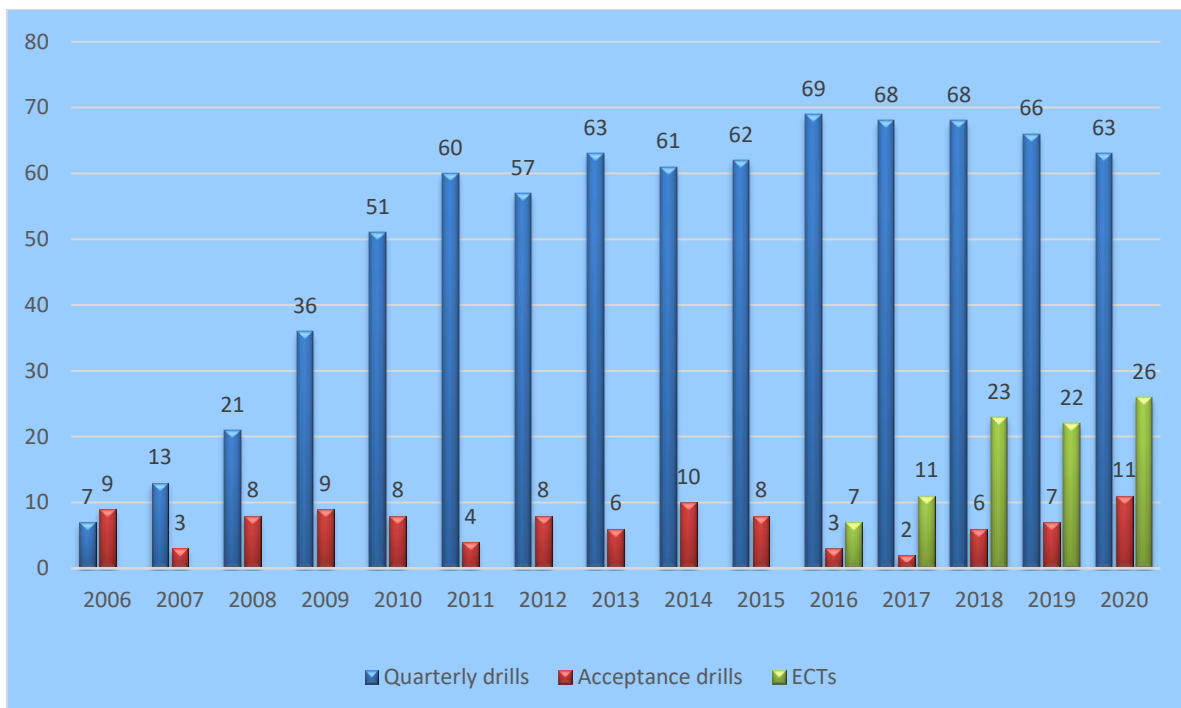
The purpose of these Guidelines was to present an alternative solution for the period of time when travel restrictions for EMSA staff were in place, thus allowing continuous implementation of the working plan of the Agency related to implementation of the existing and new Vessel and EAS contracts as well as Improvement projects.

For each Acceptance Test, the Guidelines were shared in advance with the relevant contractor in order to agree on the most suitable method of assessment for each of the elements of the “Acceptance Test Check-List / Template” developed in line with the “Guidelines on Conducting Drills and Exercises for the EMSA Contracted Vessels” and “EAS Guidelines for Equipment Condition Tests and Exercises”. The Remote Acceptance focused on the tasks requiring on-site assessment during the Acceptance Test and drills i.e. crew skills and equipment performance. To assess these remotely, several options for visual evidence have been identified: Videoconferences (Skype for Business, Teams), Live streaming, Video recording and/or Images. The acceptance of the drill / ECT was based on the assessment of the quality visual evidence provided by the contractor.

Thanks to this extended programme of reporting and good co-operation of the services providers the Agency managed to maintain control of the service quality and keep the performance of acceptance and quarterly drills as well as ECTs up to the required standards.

A summary of drills / ECTs performed by EMSA’s OPR services during the period 2006-2020 is shown in the chart below.

Chart 1. Number of drills and ECTs 2006 – 2020



2.1 Vessel drills

2.1.1 Acceptance drills

The acceptance drills are of particular importance as they are the major milestone for new vessels, new equipment as well as the overhauled equipment to enter into the pollution response service.

Acceptance drills conducted in 2020:

- Re-entry into operational service of the *Monte Anaga*, re-contracted at the end of 2019. The vessel, based in Algeciras, Spain, provides coverage of the West Mediterranean Sea;
- Entry into operational service of the *Adelia* contracted at the end of 2019 based in Valetta, Malta, covering the Central Mediterranean Sea;

- Entry into operational service of the *Kijac* contracted at the end of 2019 based in Rijeka, Croatia, covering the Adriatic Sea;
- Replacement of the vessel *Galway Fisher* with the *Mersey Fisher* stationed in Cobh, Ireland, covering North Atlantic;
- Acceptance of the newly contracted EAS Baltic Sea;
- Acceptance of the newly contracted EAS North Sea.

Three technical improvement projects to enhance the oil slick detection capacity with RPAS on board the following contracted vessels:

- *Galaxy Eco*, stationed in Varna, Bulgaria;
- *Amalthia*, stationed in Constanta, Romania;
- *Mencey*, stationed in Canary Islands, Spain.

Two improvement projects related to upgrading of the oil recovery arrangement:

- Upgrading the oil recovery capacity with a high-capacity skimmer on board *Interballast III* stationed in Ostende, Belgium covering Channel and Southern North Sea;
- Replacement of the boom on board *Aegis I* (back up vessel for the *Aktea OSRV*) stationed in Piraeus, Greece.

Summary of the acceptance drills is provided in the table below.

Table 3. Vessel / Equipment Improvements and Acceptance tests carried out in 2020

No.	Contract	Contractor	Vessel	Home port	Subject	Acceptance Test Date	Results
1	2019/EMSA CPNEG/1/2019 Lot 2 Western Mediterranean Sea	Naviera Altube	<i>Monte Anaga</i>	Algeciras, Spain	Acceptance test of the re-contracted vessel	06/07/2020	Acceptance effective from 07/07/2020
2	2019/EMSA/CPNEG/1/2019 Lot 1 Adriatic Sea	Dinamarin Ltd	<i>Kijac</i>	Rijeka, Croatia	Acceptance of the newly contracted vessel	11/08/2020	Acceptance effective from 12/08/2020
3	2019/EMSA/CPNEG/1/2019 Lot 3 Central Mediterranean Sea	Petronav	<i>Adelia</i>	Valetta, Malta	Acceptance of the newly contracted vessel	29-30/09/2020	Acceptance effective from 01/10/2020
4	Contract amendment No. 7 to Service Contract EMSA/NEG/1/2013 Lot 2 Atlantic North	MOJO	<i>Mersey Fisher</i>	Cobh, Ireland	Acceptance of the <i>Mersey Fisher</i> replacing the <i>Galway Fisher</i>	22/07/2020	Acceptance effective from 23/07/2020

5	2016/EMSA/CPNEG/6/ 2016 Lot 1 Southern Black Sea	COSMOS	<i>Galaxy Eco</i>	Varna, Bulgaria	RPAS improvement project	22/07/2020	Acceptance effective from 01/08/2020
5	EMSA/NEG/1/2014 Lot 2 Northern Black Sea	Petronav	<i>Amalthia</i>	Constanta, Romania	RPAS improvement project	30/07/2020	Acceptance effective from 01/08/2020
7	EMSA/NEG/1/2015 Lot 1 Canary Islands and Madeira	Petrogas	<i>Mencey</i>	Canary Islands, Spain	RPAS improvement project	01/12/2020	Acceptance effective from 02/12/2020
8	2014/EMSA/NEG/1/201 4 Lot 3.1 Channel and Southern North Sea	DC Industrial S.A.	<i>Interballast III</i>	Ostende, Belgium	High Capacity Skimmer improvement project	12-13/10/2020	Acceptance effective from 14/10/2020
9	EMSA/NEG/1/2013 Lot 3 Aegean Sea	Environment al Protection Engineering S.A.	<i>Aegis I</i>	Piraeus, Greece	Boom replacement	11/11/2020	Acceptance effective from 12/11/2020
10	2019/EMSA/CPNEG/2/ 2019 Lot 1 EAS Baltic Sea	Stena Oil	<i>EAS Baltic Sea</i>	Frederikshavn, Denmark	Acceptance of the newly contracted EAS	08/04/2020	Acceptance effective from 09/04/2020
11	2019/EMSA/CPNEG/2/ 2019 Lot 2 North Sea	Ambipar	<i>EAS North Sea</i>	Rotterdam, The Netherlands	Acceptance of the newly contracted EAS	15/04/2020	Acceptance effective from 16/04/2020

Fig. 1. RPAS flight - Acceptance drill on board *Mencey*.



2.1.2 Quarterly drills

According to the contract, the Contractor is obliged to train the vessel's crew and to maintain the oil pollution response equipment in order to be ready to carry out oil pollution response services efficiently. To demonstrate the fulfilment of these obligations the Contractor is obliged to carry out drills on a quarterly basis.

The Agency developed guidelines describing performance standards for the vessel, crew and equipment. These guidelines are an annex to the Vessel Availability Contract. The quarterly drill can be accepted only if all required standards have been achieved. The acceptance of the Contractor's Quarterly Drill Report by the Agency is a condition for the payment of the Vessel Availability Fee by the Agency.

In 2020 the Agency applied in addition the extended programme of reporting based on the "Ad-hoc Remote Acceptance Test - Guidelines due to COVID-19".

The summary of the quarterly drills carried out in 2020 is presented in the table below.

Table 4. Summary of the quarterly drills carried out in 2020

Baltic	Stena Oil AB EMSA/NEG/1/2015 - Lot 2 Southern Baltic Sea	Norden	1Q	29/01/2020	4 drills required in 2020. All drills were conducted and accepted by EMSA.
			2Q	20/05/2020	
			3Q	25/08/2020	
			4Q	27/11/2020	
Southern North Sea and the Channel	DC Industrial 2014/EMSA/NEG/1/2014 - Lot 3.1 Channel & Southern North Sea	Interballast III	1Q	13/03/2020	4 drills required in 2020. All drills were conducted and accepted by EMSA.
			2Q	26/05/2020	
			3Q	04/08/2020	
			4Q	12/10/2020	
	DC Industrial 2014/EMSA/NEG/1/2014 - Lot 3.2 Channel & Southern North Sea	DC Vlaanderen 3000	1Q	10/03/2020	4 drills required in 2020. All drills were conducted and accepted by EMSA.
			2Q	29/06/2020	
			3Q	08/09/2020	
			4Q	13/10/2020	
Atlantic North	MOJO Maritime, France EMSA NEG/1/2013 - Lot 2 Atlantic North	Corrib Fisher	1Q	20/05/2020	4 drills required in 2020. 3 drills conducted and accepted, 1 drill postponed to 2021 due to COVID-19.
			3Q	01/10/2020	
		Mersey Fisher	2Q	22/07/2020	
			4Q	postponed to 2021	
Atlantic coast	REMOLCANOSA EMSA/NEG/1/2014 - Lot 1 Atlantic Coast	Ria de Vigo	1Q	11/03/2020	4 drills required in 2020. All drills were conducted and accepted by EMSA.
			2Q	11/06/2020	
			3Q	12/08/2020	
			4Q	22/10/2020	
Bay of Biscay	SEAOWL 2017/EMSA/CPNEG/22/2017 Bay of Biscay	VN Partisan	1Q	24/02/2020	4 drills required in 2020. All drills were conducted and accepted by EMSA.
			2Q	20/05/2020	
			3Q	01/09/2020	
			4Q	10/11/2020	
Southern Atlantic coast	Mureloil EMSA NEG/1/2012 - Lot 1 Southern Atlantic Coast	Bahia Tres	1Q	15/03/2020	4 drills required in 2020. All drills were conducted and accepted by EMSA.
			2Q	26/03/2020	
			3Q	18/08/2020	
			4Q	02/11/2020	

Canary Islands and Madeira	Petrogas EMSA/NEG/1/2015 - Lot 1 Canary Islands and Madeira	Mencey	1Q	23/03/2020	3 drills required in 2020. All drills were conducted and accepted by EMSA.
			2Q	n/a	
			3Q	21/09/2020	
			4Q	04/11/2020	
Western Mediterranean	Naviera Altube EMSA NEG/1/2011 - Lot 4 Western Mediterranean Sea	Monte Anaga	1Q	11/02/2020	1 drill was required in 2020. It was conducted and accepted by EMSA. Contract expired on 19/03/2020.
			2Q	n/a	
			3Q	n/a	
			4Q	n/a	
	Naviera Altube EMSA CPNEG/1/2019 Lot 2 Western Mediterranean Sea	Monte Anaga	1Q	n/a	1 drill was required in 2020. It was conducted and accepted by EMSA. The vessel re-entered into service under new contract on 07/08/2020.
			2Q	n/a	
			3Q	n/a	
			4Q	04/11/2020	
	CIANE EMSA/NEG/34/2012 Western Mediterranean Sea	Brezzamore	1Q	12/03/2020	4 drills required in 2020. All drills were conducted and accepted by EMSA.
			2Q	27/05/2020	
			3Q	08/09/2020	
			4Q	31/10/2020	
Central Mediterranean	Tankship EMSA NEG/1/2011 - Lot 2 Central Mediterranean	Balluta Bay	1Q	18/03/2020	2 drills were required in 2020. Both drills were conducted and accepted by EMSA. The contract expired on 14/05/2020.
			2Q	08/05/2020	
			3Q	n/a	
			4Q	n/a	
	Petronav 2019/EMSA/CPNEG/1/2019 Lot 3	Adelia	1Q	n/a	1 drill was required in 2020. It was conducted and accepted by EMSA. The vessel entered into service on 01/10/2020.
			2Q	n/a	
			3Q	n/a	
			4Q	19/10/2020	
	Falzon EMSA NEG/1/2012 - Lot 2 Central Mediterranean	Santa Maria	1Q	03/03/2020	4 drills required in 2020. All drills were conducted and accepted by EMSA.
			2Q	03 and 09 /07/2020	
			3Q	18/09/2020	
			4Q	19/10/2020	
Aegean Sea	EPE EMSA NEG/1/2013 - Lot 3 Aegean Sea	Aktea OSRV	1Q	18/03/2020	6 drills required in 2020. All drills were conducted and accepted by EMSA.
			2Q	03/06/2020	
			3Q	16/09/2020	
			4Q	11/11/2020	
		Aegis I	2Q	03/06/2020	
			4Q	11/11/2020	
Adriatic Sea	Dinamarin Ltd 2019/EMSA/CPNEG/1/2019 – Lot 1 Adriatic Sea	Kijac	1Q	n/a	2 drills required in 2020. All drills were conducted and accepted by EMSA. The vessel entered into service on 12/08/2020.
			2Q	n/a	
			3Q	24/09/2020	
			4Q	04/11/2020	
Eastern Mediterranean	Petronav EMSA NEG/1/2010 - Lot 1 Eastern Mediterranean	Alexandria	1Q	10/03/2020	4 drills required in 2020. All drills were conducted and accepted by EMSA.
			2Q	09/06/2020	
			3Q	24/09/2020	
			4Q	07/10/2020	

Black Sea	Petronav 2014 EMSA/NEG/1/2014 - Lot 2 Northern Black Sea	Amalthia	1Q	27/03/2020	4 drills required in 2020. All drills were conducted and accepted by EMSA.
			2Q	24/06/2020	
			3Q	30/07/2020	
			4Q	14/10/2020	
	COSMOS 2016 EMSA/CPNEG/6/2016 - Lot 1 Southern Black Sea	Galaxy Eco	1Q	18/03/2020	4 drills required in 2020. All drills were conducted and accepted by EMSA.
			2Q	18/06/2020	
			3Q	12/08/2020	
			4Q	22/10/2020	
Total number of quarterly drills 2020			63		

The outcome of the quarterly drills carried out during 2020 demonstrated that the service was operated efficiently and in accordance with EMSA expectations.

Fig. 2. Quarterly drill on board *Norden*. High capacity skimmer and boom in J formation.



2.2 EAS - Equipment Condition Tests (ECTs) and training sessions

According to the contract, the EAS Contractors are obliged to train their staff and to maintain the equipment in a full state of readiness for carrying out oil pollution response services efficiently.

To demonstrate the fulfilment of these obligations, the Contractors are obliged to carry out ECTs. The Agency developed guidelines describing equipment performance standards. These guidelines are an integral part of the Framework Contracts. The ECT can be accepted only if all required standards have been achieved.

Within the framework of the ECTs one hands-on training session of 3 days for the equipment operators from the EU/EFTA Member States was organised in the EAS North Sea. The trainees were able to get familiarised and operate different equipment systems such as the Current Buster 6, the Speed Sweep and oil storage barges. Another training session was planned in EAS Southern Europe but it had to be called off due to COVID-19.

Due to limitations caused by the COVID-19 pandemic most of the activities were carried out during 3rd quarter of 2020. The results of were assessed remotely based on the visual evidence provided by the contractors.

In addition to ECTs the EAS Southern Europe participated in the Breeze Exercise 2020 in Bulgaria.

Moreover, The vessel contractor in the Southern Black Sea conducted two ECTs with the weir boom.

The summary of the ECTs and trainings carried out in 2020 is presented in the table below.

Table 5. Summary of the ECTs, Trainings for Equipment Operators and exercises carried out in 2020

Contractor	First Quarter	Second Quarter	Third Quarter	Fourth Quarter	Result
Ambipar EAS North Sea (Rotterdam)	EAS entered into service on 16/04/20	n/a	ECT & Training Current Buster 6 (07/2020)	n/a	Equipment was found in a good condition. All ECTs accepted by EMSA
			ECT & Training Speed Sweep (07/2020)		
			ECT & Training Oil Storage Barge (07/2020)		
			ECT & Training Current Buster 6 (09/2020)		
			ECT & Training Oil Storage Barge (09/2020)		
			ECT & Training Speed Sweep (09/2020)		
Stena Oil EAS Baltic Sea (Frederikshavn)	EAS entered into service on 09/04/20	n/a	ECT & Training Current Buster 6 (07/2020)	n/a	Equipment was found in a good condition. All ECTs accepted by EMSA
			ECT & Training Speed Sweep (07/2020)		
			ECT & Training HCS (07/2020)		
			ECT & Training Oil Storage Barge (07/2020)		
			ECT LFF400 (09/2020)		
			ECT Speed Sweep (08/2020)		
Ottavio Novella EAS Soutern Europe (Ravenna)	n/a	n/a	Breeze Exercise Bulgaria (07/2020)	n/a	Equipment was found in a good condition. All ECTs accepted by EMSA
			ECT Current Buster 6 (09/2020)		
			ECT Speed Sweep (09/2020)		
			ECT Ro-Trawl No 1 (09/2020)		
			ECT Ro-Trawl No 3 (09/2020)		
			ECT Oil Storage Barge (09/2020)		
LAMOR AB EAS Northern Baltic Sea (Tolkkinen)	n/a	n/a	ECT LAS125 Arctic Skimmer (08/2020)	n/a	Equipment was found in a good condition. All ECTs accepted by EMSA
			ECT LAS125 Arctic Skimmer (08/2020)		
			ECT HCS LUT 5 80 (08/2020)		
			ECT LFF100 + HDB2000 (08/2020)		
			ECT Ro-Trawl 1 (08/2020)		
			ECT Ro-Trawl 2 (08/2020)		

Cosmos CPNEG/17/2016 Lot 1 Southern Black Sea	ECT Weir boom (30/01/2020)	ECT Weir boom (11/06/2020)	n/a	n/a	Equipment was found in a good condition. Both ECTs accepted by EMSA
TOTAL:	ECTs: 26	Training sessions for: EAS personnel: 10 Equipment operators from the EU/EFTA MS: 1 session of 3 days with 10 MS's operators			Exercises: 1

Fig. 3. ECT of the Oil storage barge LSB 100. EAS Baltic South



2.3 Technical Issues Record

Checking the technical status and completeness of the oil pollution response equipment on board the vessels and the EAS stockpiles is an important element of each drill / ECT attended by EMSA observers.

Both vessels and EAS contracts provide for a mandatory reporting of incidents/malfunctions. Besides this, EMSA conducts annual verification of all equipment.

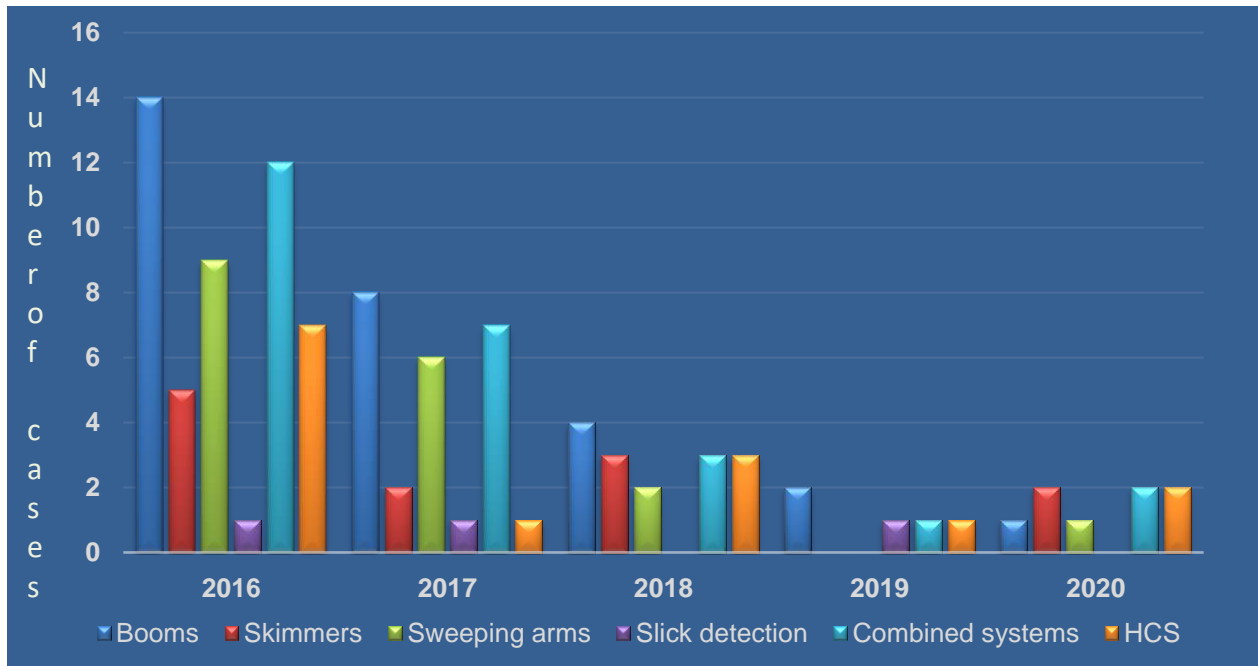
In 2020 due to COVID-19 pandemic restrictions the Agency was unable to conduct directly the equipment annual verification and assessment of the equipment condition.

All data related to the technical issues in 2020 are based on the reporting provided by the EMSA contractors.

For both services, Vessel Network and EAS, the number of the reported equipment technical issues was higher than in 2019. Reported cases were related mainly to the equipment stored in EAS (old skimmers) and some cases related to vessel equipment (HCS oil leak, boom failure and sweeping arm problems).

Generally, the technical issues were dealt with in efficient and effective way and the equipment was brought back to the operational state as quickly as possible.

Chart 2. Number of Technical issues 2016 - 2020



Despite the limitations set by COVID-19 pandemic in 2020 the OPR equipment under the Vessel and EAS contracts was maintained in constant operational condition ready to perform service for the Member States up to the EMSA required standards.

Nevertheless, a programme for a thorough equipment inventory and condition verification should be prepared and conducted in post-pandemic time for all of EMSA's OPR services.

3. Exercises performed in 2020

At-sea operational exercises assist the integration of EMSA's OPR services within the response mechanisms of Member States, improving the necessary coordination and cooperation of the EMSA resources with the coastal State response units. There are also rare opportunities for the member States' personnel to familiarize with the equipment available in the stockpiles.

It has to be pointed out that, with the exception of exercises within regional projects implemented by the Agency, EMSA does not organize exercises but participates when requested.

In 2020 the number of operational exercises in Europe dropped down significantly due to COVID -19 pandemic. Many events planned for this year were called off. Automatically, a number of the notification exercises usually associated with the operational exercises also went down.

Nevertheless, It should be noted that the notification exercises can be organised independently on the operational exercises and travel and personal health safety limitations.

EMSA participated only in three operational and four notification exercises.

The Agency is implementing a procedure for the internal/external exercise coordination in order to provide the full set of services (Vessels, EAS, Mar-ICE, CleanSeaNet and others) in a harmonised manner as well as to provide/receive feedback to and from the Member States after the performance of the exercises.

In this context the Agency participated in one exercise preparation conference and provided and received feedback related to two exercises.

3.1 Operational exercises

In the course of 2020, four EMSA contracted vessels (two of which were equipped with RPAS) and one equipment set from the EAS were deployed in three at-sea operational exercises, organised in cooperation with EU Member States and/or Regional Agreements.

These events took place in the Baltic Sea, East Mediterranean Sea and Black Sea. Feedback from the exercises organisers as well as reports from EMSA service providers indicate that all vessels participating in the operational exercises successfully completed the tasks assigned.

The summary of operational exercises performed by EMSA contracted vessels in 2020 is shown in the table below.

Table 6. Operational exercises at sea 2020

N°	Name of the Exercise	Exercise/date	Location	Participating Parties	EMSA vessel/s / EAS/RPAS
1	BREEZE	26 July	Varna, Bulgaria	Bulgaria, EMSA	<i>Galaxy Eco</i> <i>Amalthia, RPAS, EAS</i>
2	Balex Delta 2020	27-29 August	Tallin, Estonia	Parties to the Helsinki Convention, EMSA	<i>Norden, RPAS</i>
3	NEMESIS 2020	13-14 Oct	Limassol, Cyprus	Greece, France, United Kingdom, USA, State of Israel, the Republic of Cyprus and EMSA	<i>Alexandria</i>
Total: 3 operational exercises, 4 Vessels and 1 EAS arrangement deployed, 2 RPAS launched					

3.2 Notification exercises

Notification exercises are usually conducted in conjunction with operational exercises. In addition, 'stand-alone' notification exercises are occasionally carried out. The aim of these exercises is to test and implement agreed procedures and lines of communication for reporting incidents and for requesting and providing assistance. These exercises are usually launched by the Member States.

Notification exercises involve EMSA, one or more Requesting Parties³, EMSA's contractor(s) and the Emergency Response Coordination Centre (ERCC), operated by DG ECHO. The main criterion for the

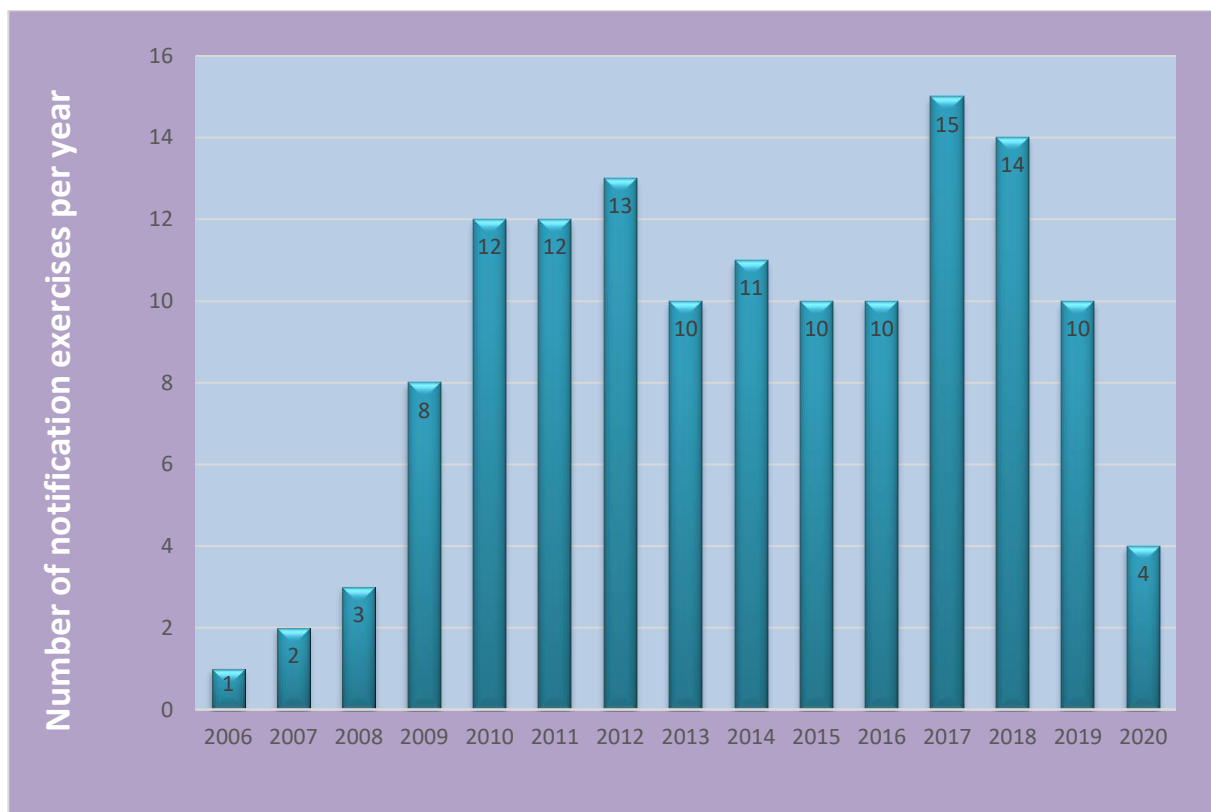
³ EMSA's OPR services can be activated by the following Requesting Parties: EU Member States, EU Candidate Countries, European Free Trade Association (EFTA)/European Economic Area (EEA) coastal Member States, Third countries sharing a regional sea basin with the Union, Private Entities and/or the European Commission.

evaluation of the notification exercise is the time needed for the Incident Response Contract (Vessel - IRC-V or EAS - IRC-E)⁴ to be signed by both the EMSA contractor and the Requesting Party.

In 2020, the Agency participated in four notification exercises, involving four activations of vessel contractors, one RPAS contractor one EAS arrangement.

The number of notification exercises carried annually over the years 2006-2020 is shown on the chart below.

Chart 3. Number of notification exercises 2006 – 2020



During the notification exercise, the time counting starts at the moment when the formal assistance request is received by EMSA. Taking into account variables such as the time of day, the day of the week, the contractor’s location and other factors, 6 hours is considered as an acceptable target deadline for all parties to complete the mobilisation process, including signature of the Incident Response Contract (IRC). During the exercise, the Agency provides any assistance necessary to the Member State for facilitating the process of completing and signing the IRCS.

It must be noted that out of the four notification exercises carried out in 2020, two exercises included the full procedure of EMSA Vessel and/or EAS mobilisation.

During each exercise EMSA Contractors reacted immediately and in line with standards set by EMSA. However, in two cases Member States terminated the procedure prior to the signature of the IRC Form.

It has to be stressed that the mobilisation of EMSA means is based on the signing of the Incident Response Contract and its annex the IRC Form. The contract contains important provisions related to the respective obligations of the Requesting Party and the Contractor.

Exercises are a good opportunity to ensure that response authorities are made aware of all clauses of this contract. In the same way, the IRC form describes which configuration of the vessel is requested or what

⁴ Incident Response Contract⁴: This contract is to be concluded between the EMSA contractor and the Requesting Party. This pre-established model contract addresses the actual response operations. It covers the terms and conditions of the service and includes the associated daily hire rates. Following a request for assistance, EMSA will activate or even pre-mobilise the vessel / equipment to facilitate the operation. The command and control during an incident rests with the affected coastal State using the vessel / equipment.

type of equipment from the EAS is requested. Experience has shown that completing this form could be challenging and therefore time should be devoted during exercises to go through the all process. It has to be reiterated that for exercises signing the IRC does not trigger the payment of any fee by the Requesting Party.

During the notification exercises 2020 it was also noted that in some Member States there is still need to provide CECIS training for the pollution response personnel responsible for requesting assistance from other Member States and EMSA.

A description of the notification exercises carried out in 2020 can be found in the table below.

Table 7. Outcome of the Notification exercises carried out in 2020

No.	Exercise name/date	Participating parties: MS / Service mobilised	Results
1	BALEX BRAVO 11 August 2020	Estonia, Parties to the Helsinki Convention, EMSA / Norden, EAS Baltic	The procedures of signing the IRC-V and IRC-E were not completed. MS opened an emergency in CECIS and requested assistance. A complex offer from EMSA (OSR Vessel and EAS (Speed Sweep, Nofi Current Buster and Ro-trawl) was presented to the requesting MS. MS accepted the assistance offer. Mobilisation notices for both vessel and EAS were sent and acknowledged within 1.5 hour. IRCs were sent to MS. MS didn't continue the procedure of the EMSA service mobilisation. IRCs were not signed. EMSA service reacted efficiently. MS missed the opportunity to exercise full EMSA service mobilisation procedure. CECIS was used by the MS incorrectly. The exercise event was open in the "operational mode" instead of the "command post exercise mode". The emergency was not closed at the end of the exercise.
2	BREEZE 15 July 2020	Bulgaria, EMSA/ Galaxy Eco, Amalthia	EMSA assistance mobilisation procedure was fully completed (2 IRCVs signed). MS requested in CECIS assistance of two OSR vessels. The reaction time of all parties involved was very good: 22 and 46 minutes for the EMSA vessel contractors to provide all the necessary information; 22 minutes for MSS to accept EMSA offer of assistance; 18 minutes for both the IRCVs and Notices of Pollution to be sent out; 2 hours 24 minutes for MS to fill in and sign the IRCs. Communication through CECIS went well.
3	CHARENTE 2020 / 07 October 2020	France, EMSA	The procedure of signing the IRC-V was not completed. MS opened an emergency in CECIS and requested assistance of EMSA vessel. EMSA reacted to MS request immediately by placing the assistance offer in CECIS. Although EMSA advised MS to accept or decline the offer in CECIS or by e- mail the exercise was not continued. CECIS was used by the MS incorrectly. The exercise event was open in the "operational mode" instead of the "command post exercise mode". The emergency was not closed at the end of the exercise.
4	NEMESIS 2020 / 06 October 2020	Cyprus / Alexandria, RPAS	MS requested EMSA assistance in CECIS. Procedure of signing the IRC-V was fully completed. Good reaction time of EMSA, EMSA contractor and the MS requesting assistance. Exercise went very smooth. Exercise went very smooth and the reaction time of all parties involved was good: - 40 minutes for MS to accept the offer; - 20 minutes for the IRC-V to be sent out; - 1 hour 10 minutes for MS to fill in, sign and send the IRC to EMSA contractor; - 30 minutes for EMSA contractor to fill in, countersign and send IRC-V back to MS; - RPAS pilot was available on board within 24 hours from the notice of mobilisation. Communication through CECIS went well.
TOTAL		EXERCISES: 4 VESSELS: 4 RPAS:1 EAS: 1 IRCs SIGNED BY EMSA CONTRACTORS: 3 (Vessels)	

4. MAR-ICE activations for drills and exercises

The MAR-ICE Network of chemical experts was established in October 2008 between EMSA, Cefic (European Chemical Industry Council) and Cedre (Centre de Documentation de Recherche et d'expérimentation sur les pollutions accidentelles des eaux). It became fully operational in January 2009 and currently runs through to October 2022. Requesting countries can activate the Network for real incidents, as well as drills and exercises by sending the MAR-ICE Activation Form (v.2020) to the MAR-ICE Contact Point, as per the activation procedures and contact numbers known to the relevant national authorities.

The MAR-ICE Network offers a 24 hours service to EU Member States, Coastal EFTA States and coastal EU Candidate Countries providing upon request rapid access to specialised information, documentation and expert advice on chemicals involved in marine spills to national authorities in charge of response operations, remotely (level-1) and on a case-by-case basis, also on-site at the command centre of the requester (level-2). The information provided is based on product specific characteristics and on advice from companies and chemical industry experts obtained through the ICE database.

In 2020, the network was activated:

Twice for real incidents, by Finland regarding a discharge of tall oil and by Bulgaria regarding the coastline pollution by suspected palm oil; and

Twice for exercises, by Latvia and Finland. Details are presented in the Table 8 below.

Table 8. MAR-ICE drills/exercises carried out in 2020

MAR-ICE SERVICE DRILLS / EXERCISES				
1	16/9/2020	Latvia Coast Guard Service under the national exercise NAMEJS	<p>Exercise scenario involved the loss of leaking containers at sea with the following substances: UN1005, UN1093, UN1806.</p> <p>Request asked for product specific information as well as trajectory and fate information for the three substances above.</p>	<p>MAR-ICE service provided the following documentation and explanatory information:</p> <ul style="list-style-type: none"> - MAR-CIS datasheet and ERICARD for UN1005 - MAR-CIS datasheet and HAZMAT datasheet for UN1093; - ERICARD for UN1806 - Outputs from CHEMMAP trajectory / fate numerical modelling for UN1005 and UN1093
2	9/12/2020	MRSC Helsinki, Finnish Border Guard during a MAR-ICE Information Session provided to Finnish experts	<p>Exercise scenario involved the collision of a crude oil tanker and a chemical tanker, resulting in the leaking of the substance UN 2364 from the chemical tanker.</p> <p>Request asked for product specific information regarding UN2364.</p>	<p>MAR-ICE service provided the following documentation and explanatory information:</p> <ul style="list-style-type: none"> - MAR-CIS datasheet for UN2364 - Outputs from CHEMMAP trajectory / fate numerical modelling for UN2364

In both exercises, some communication issues were noted. The requested information was provided within the established timelines.

5. Conclusions / Highlights

- The outburst of the COVID-19 pandemic from the beginning of 2020 has led to travel and border restrictions, including massive disruption to flight operations as well as to the establishment of special public health and safety measures throughout Europe. Consequently, in most cases EMSA's project officers were not able to participate in acceptance drills, quarterly drills, exercises and ECTs. For this reason the possibility of direct control and assessment of the vessel and equipment performance was limited.
- To ensure necessary level of EMSA's services supervision the Agency has developed and applied "Ad-hoc Remote Acceptance Test - Guidelines due to COVID-19". To assess Acceptance drills, Quarterly drills and ECTs remotely, several options for visual evidence have been identified: Videoconferences (Skype for Business, Teams), Live streaming, Video recording and/or Images. The acceptance of the drills / ECTs were based on the assessment of the quality visual evidence provided by the contractor.
- Thanks to the extended programme of reporting and good co-operation of the services providers the Agency managed to maintain control of the service quality and keep the performance of acceptance and quarterly drills as well as ECTs up to the required standards.
- In 2020 due to COVID-19 pandemic restrictions the Agency was unable to conduct directly the equipment annual verification and assessment of the equipment condition. All data related to the technical issues in 2020 were based on the reporting provided by the EMSA contractors. The record shows that OPR equipment under the Vessel and EAS contracts was maintained in constant operational condition ready to perform service for the Member States up to the EMSA required standards.
- A programme for a thorough equipment inventory and condition verification will be required in post-pandemic time for all of EMSA's OPR services.
- In 2020 the number of operational exercises in Europe dropped down significantly due to COVID -19 pandemic. Many events planned for this year were called off. Automatically, number of the notification exercises usually associated with the operational exercises also went down. However, it should be noted that the notification exercises can be organised independently on the operational exercises and travel and personal health safety limitations.
- During the notification exercises 2020 it was noted that in some Member States there is still need to provide CECIS training for the pollution response personnel responsible for requesting assistance from other Member States and EMSA.

Fig. 4. Improvement project. High capacity skimmer onboard *Interballast III*.



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