

Guidelines for the revision and update of the sub - regional contingency plan for the Adriatic sea

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Draft Guidelines for the revision and update of the sub-regional Adriatic contingency plan – *Abstract*

These Guidelines were developed in the framework of the activities performed within the North Adriatic Maritime Incident Response System (NAMIRS), co-financed by the European Union, through funds made available by the European Commission, the Directorate-General for European Civil Protection and the Humanitarian Aid Operations (DG ECHO).

As planned at the beginning of the project, during the application phase, the purpose of the guidelines was to present a revision to the Sub-regional Contingency Plan for the Prevention of, Preparedness for and Response to Major Marine Pollution Incidents in the Adriatic Sea from 2005 (hereinafter Sub-regional CP), which was not ratified by the governments of all the three partner countries and thus never entered into force, in order to strengthen transnational cooperation and interoperability, and ensure efficient preparedness and intervention measures in case of an oil spill occurring in the North Adriatic basin.

By integrating knowledge, tools, and available resources, Partners aim at showing the necessity for a ready-for-operations sub-regional mechanism and, with the Guidelines, provide recommendations on how to make the mechanism effective, also thanks to the elaboration of the Standard Operating Procedures (hereinafter SOPs) that are being developed within the project and will constitute the operational framework for an intervention at sea.

SOPs and Guidelines for the Revision and Update of the Sub-regional CP are the two most important outcomes of this project. They represent the elaboration of the entire set of activities performed in the past two years. While SOPs provide, as the title itself suggests, the operating procedures for response action, including the definition of the NAMIRS framework, response elements and planning, checklists, contact information of the designated competent authorities, warning, nomination, and message forms, etc., the Sub-regional CP encloses all the necessary structures to support the very existence of the Plan and its potential activation, including its purpose and objectives, scope, legal aspects, measures for the prevention of pollution from ships, the policy and responsibilities in the field of preparedness and response, response operations and planning, communication lines and reporting procedures, logistics, funding, and administration, and, last but not least, public relations.

The former Sub-regional CP was developed in accordance with the “Protocol Concerning Cooperation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea (the Prevention and Emergency Protocol)” and the “Convention for the Protection of the Mediterranean Sea against Pollution (the Barcelona Convention)”.

The Plan of 2005 was prepared as part of the project for the development of a Sub-regional System for Preventing and Combating Major Marine Pollution Incidents affecting

or likely to affect the territorial sea, coasts, and other related interests of the Republics of Croatia, Italy, and Slovenia in the Adriatic Sea. It was prepared with technical assistance from REMPEC within the framework of the Mediterranean Action Plan (MAP).

These Guidelines were drafted by the Faculty of Maritime Studies and Transport of the University of Ljubljana (UL FPP) under the supervision of the Secretariat of the Central European Initiative (CEI) and in close cooperation with other project Partners, namely, the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief (ACPDR), the Italian national Institute of oceanography and Applied Geophysics (OGS), the Italian Coast Guard Headquarters – Coast Guard Trieste (CG TS), the Croatian Adriatic Training and Research Centre for Accidental Marine Pollution Preparedness and Response (ATRAC), and the Ministry of Sea, Transport and Infrastructure of the Republic of Croatia (MSTI).

The document is a revised complete collection of suggestions for the improvement of the Sub-regional CP. It was developed with careful consideration of the evolving regional political situation, changes in national and international legislation, amendments to relevant international conventions, protocols, and agreements, the advance in both shore-based and shipboard systems and technology, the introduction of new methods and software for the performance of scientific studies, analyses, and assessments, etc.

Conclusion

NAMIRS represented a unique opportunity to develop common systems and methods for response operations as well as for making available a common set of tools for the performance of analyses, assessments, and mappings. The results presented in the deliverables have, for the first time ever, lead to common analyses and assessments for all three countries, encompassing the entire North Adriatic area and yielding uniform and comparable data, ready to be used effectively when planning an international response.

Taking into account all the preliminary work done by the Partners during the course of the project, the elaboration of the common risk assessment, coastal sensitivity mapping, and mapping of existing resources, numerous training courses, the drafting and testing of SOPs, and the analysis of the Joint NAMIRS Anti-pollution Exercise at sea of November 2023, the project Partners confirm the need to treat the North Adriatic basin as a common resource that needs specific attention and transnational coordination for its safeguard, in order to prevent and manage potential threats or accidents at sea.

Specifically, the Partners reaffirm:

- The need for a renewed and strengthened collaboration among the parties in view of a possible incident;
- The need for a ready-for-operation mechanism in view of the extreme importance and value of the area;
- The need to consider the NAMIRS recommendations for the new contingency plan for the whole Adriatic, already in the preparation phase by REMPEC.

Partners recommend that:

- SOPs are integrated as Annex V to the Plan;
- The sharing of traffic data is regular;
- The analysis of traffic data is performed as proposed within the project;
- The analysis of sensitive areas is conducted as proposed within the project;
- The mathematical models developed and used in the NAMIRS project are used;
- Joint training curricula is established, and periodic training takes place;
- Simulators (OGS, UL FPP) are used for training and the preparation of scenarios;
- A technical board for the revision of changes is nominated, and that their meetings take place not less than once a year;
- Time intervals for the conduction of risk assessments, and updating of anti-pollution resource lists and contact details are determined;
- The resource-listing fill-out forms developed by UL FPP within WP 2.2 (see Deliverable 2.2) are used;
- The format of annexes is determined (UL FPP designed the proposed format for the annexes in the project);
- Regular checks of the operability of the communication lines between authorities are conducted (communication issues during the joint exercise);
- Strong collaboration with REMPEC and EMSA is maintained, and other Adriatic-Ionic countries are liaised with in order to develop a joint plan of cooperation;
- Findings of the project are included in the new Adriatic Contingency Plan;
- Prevention phases and preliminary activities defined in the Sub-regional CP are merged into one chapter;
- Smoother communication among countries and respective operational authorities are established;
- A permanent cooperation mechanism for environmental management in the North Adriatic is established, one similar to the RamogePOL model;
- Particulars are explained in detail in the Annexes, being filled out by competent authorities.

Smjernice za reviziju i ažuriranje sub-regionalnog Plana intervencija - *Sažetak*

Ove smjernice su razvijene unutar okvira aktivnosti provedenih u Sjevernojadranskom pomorskog sustava za odgovor na nezgode (NAMIRS), sufinanciranog od strane Europske Unije, kroz fondove koje su omogućili Europska Komisija, direktorat Europske Civilne Zaštite I Operative za humanitarnu pomoć (DG ECHO).

Kao što je bilo planirano na početku projekta, tijekom faze primjene, uloga smjernica je bila predstaviti reviziju Sub-regionalnog plana intervencija za sprječavanja, pripravnost i reagiranje na slučajeve iznenadnog onečišćenja mora velikih razmjera u Jadranskom moru iz 2005. godine (u daljnjem tekstu Sub-regionalni PI), koji nije bio ratificiran od strane vlade svih triju država, te nikada nije stupio na snagu. S ciljem ojačanja međunarodne suradnje i interoperabilnosti, te osiguravanja učinkovite pripravnosti i interventnih mjera u slučaju izlivanja nafte u Sjevernom Jadranu.

Putem integracije znanja, alata i dostupnih resursa, Partneri nastoje ukazati na potrebu za operativnim i provedivim sub-regionalnim mehanizmom, te uz korištenje Smjernica, pružaju se preporuke za stvaranje funkcionalnog mehanizma. Također, zahvaljujući elaboraciji novih Standardnih Operativnih Postupaka (u daljnjem tekstu SOP-ova) koji se razvijaju unutar projekta i koji će sadržavati operativni okvir za intervencije na moru.

SOP-ovi i Smjernice za reviziju i ažuriranje sub-regionalnog Plana intervencija su dva najvažnija rezultata ovog projekta. Oni predstavljaju elaboraciju cijelog seta aktivnosti provedenih kroz posljednje dvije godine. Dok su SOP-ovi, kao što i njihovi ime predlaže, operativni postupci za reagiranje, uključujući definiciju okvira NAMIRS-a, elemente reagiranja i planiranja, popise bitnih komponenti, informacije o kontaktima zaduženih kompetentnih tijela, upozorenja, imenovanja i predložaka za prenošenje informacija, itd., Sub-regionalni PI sadržava sve strukture potrebne za potporu postojanja Plana i njegovog potencijalnog aktiviranja, uključujući njegovu svrhu i ciljeve, doseg, legalne aspekte, mjere prevencija onečišćenja sa brodova, politike i odgovornosti po pitanju pripravnosti i reagiranja, aktivnosti reagiranja i planiranje, komunikacijske kanale i procedure izvještavanja, logistiku, financiranje, administraciju i odnose s javnošću.

Prijašnja verzija Sub-regionalnog PI je bila razvijena u skladu s Protokolom za suradnju u prevenciji onečišćenja sa brodova i, u slučajevima nužde, suzbijanja onečišćenja Sredozemnog mora (Protokol prevencije i nužde) i Konvencije za zaštitu Sredozemnog mora od onečišćenja (Barcelonska konvencija). Plan je pripremljen kao dio projekta za razvoj Sub-regionalnog sustava prevencije i suzbijanja iznenadnih onečišćenja velikih razmjera koja zahvaćaju ili potencijalno zahvaćaju teritorijalna mora, obale i slične interese Republike Hrvatske, Republike Italije i Slovenije u Jadranskom moru. Plan je pripremljen uz tehničku podršku od strane REMPEC-a u okviru Sredozemnog akcijskog plana (MAP).

Smjernice je sastavio Fakultet za pomorstvo i promet Sveučilišta u Ljubljani (UL FPP) pod nadzorom Izvršnog Tajništva Srednjeeuropske Inicijative (CEI) i u bliskoj suradnji sa ostalim partnerima, poimence, Uprava Republike Slovenije za civilnu zaštitu i pomoć

u katastrofama (ACPDR), Nacionalni institut za oceanografiju i primijenjenu geofiziku (OGS), Glavna lučka uprava – Obalna straža Trst (CG TS), Jadranski edukativno-istraživački centar za reagiranja na iznenadna onečišćenja mora (ATRAC) i Ministarstvo mora, prometa i infrastrukture Republike Hrvatske (MMPI).

Ovaj dokument je revidirana potpuna zbirka prijedloga za poboljšanje Sub-regionalnog PI. Razvijen je s pažljivim razmatranjem razvijanja regionalne političke situacije, promjena u narodnim i međunarodnim legislativama, izmjena bitnih međunarodnih konvencija, protokola, sporazuma, napredaka obalnih i brodskih sustava i tehnologija, novih predstavljenih metoda i software-a za izvođenje znanstvenih istraživanja, analiza i procjena.

Zaključak

NAMIRS je predstavio jedinstvenu priliku za razvijanje zajedničkih sustava i metoda u aktivnostima reagiranja, kao i kod omogućivanja zajedničkog seta alata za provođenje analiza, procjena i mapiranja. Predstavljeni rezultati su, po prvi put ikada, doveli do zajedničkih analiza i procjena za sve tri države, te na ovaj način obuhvatili cijelo područje sjevernog Jadrana i stvorili uniformne i usporedive podatke koji su spremni za efektivno korištenje pri planiranju međunarodnog reagiranja.

Uzimajući u obzir sav rad proveden od strane projektnih partnera tijekom trajanja projekta, elaboracija analize uobičajenih rizika, mapiranje osjetljivih područja na obali, mapiranje postojećih resursa, provođenje brojnih treninga, izrađivanje koncepta i testiranje SOP-ova, te analiza NAMIRS-ove vježbe suzbijanja onečišćenja na moru, projektnim je partnerima dokazao potrebu za tretiranjem sjevernog Jadrana kao zajedničkog područja i resursa koji treba specifičnu pažnju i međunarodnu koordinaciju za održavanje sigurnosti sa ciljem prevencije i upravljanja potencijalnim prijetnjama i iznenadnim onečišćenjima mora.

Partneri su potvrdili:

- Potrebu za obnovljenom i ojačanom suradnjom među strankama uključenim u moguće incidente,
- Potrebu za operativnim i provedivim sub-regionalnim mehanizmom u pogledu ekstremne važnosti i vrijednosti ovog područja
- Potrebu za razmatranjem NAMIRS-ovih preporuka za novi Plan intervencija za cijeli Jadran, koji je već u fazama pripreme od strane REMPEC-a.

Partneri preporučuju:

- Integraciju SOP-ova kao Dodatak V Planu;
- Dijeljenje podataka o prometu;
- Analizu podataka o prometu prema preporukama iz projekta;
- Analizu osjetljivih područja prema preporukama iz projekta;
- Korištenje matematičkih modela razvijenih i korištenih u NAMIRS-u
- Stvaranje zajedničkog kurikuluma treninga i provođenje treninga u odgovarajućim vremenskim periodima;

- Simulatori (OGS, UL FPP) se koriste u treninzima i pripremama scenarija;
- Nominaciju tehničke grupe za reviziju promjena, te da se njihovi sastanci održavaju bar jednom godišnje;
- Određivanje vremenskih intervala za provođenje procjena rizika i obnovu popisa resursa i ključnih kontakata uključenih u suzbijanje onečišćenja;
- Korištenje formulara za sastavljanje popisa resursa koje je razvio UL FPP unutar WP 2.2. (Isporučevina 2.2);
- Odabir formata dodataka (UL FPP je dizajnirao preporučeni format za dodatke),
- Redovitu provjeru funkcionalnosti komunikacijskih kanala između vlasti (komunikacijske poteškoće tijekom zajedničke vježbe);
- Održavanje snažne kolaboracije između REMPEC-a i EMSA-e, te ostalih Jadransko-jonskih država kako bi se razvio zajednički plan suradnje;
- Uključivanje zaključaka iz projekta u novi jadranski Plan intervencija;
- Spajanje preventivnih faza i preliminarnih aktivnosti definiranih u Sub-regionalnom PI u jedno poglavlje;
- Uspostavljanje jednostavnije komunikacije između država i odgovarajućih operativnih vlasti;
- Uspostavljanje stalnog mehanizma suradnje za upravljanje okolišem u sjevernom Jadranu, sličnog RamogePol modelu;
- Detalji su pomno objašnjeni u Dodacima, te su precizno ispunjeni od strane kompetentnih vlasti.

Linee guida per la revisione e l'aggiornamento del piano di emergenza sub-regionale Adriatico - *Sintesi*

Le presenti Linee Guida sono state sviluppate nel quadro delle attività svolte nell'ambito del progetto NAMIRS (North Adriatic Maritime Incident Response System), attraverso un co-finanziamento messo a disposizione dalla Direzione Generale per la Protezione Civile Europea e per le operazioni di aiuto umanitario (DG ECHO).

Come previsto durante la fase di stesura del progetto, lo scopo delle linee guida era quello di proporre una revisione del Piano di emergenza subregionale del 2005 per la prevenzione, preparazione e risposta all'inquinamento marino accidentale nel Mare Adriatico (di seguito CP subregionale) - che non è mai entrato in vigore - al fine di rafforzare la cooperazione e l'interoperabilità transnazionale e garantire misure di preparazione e intervento efficaci in caso di sversamento di idrocarburi nel bacino dell'Alto Adriatico.

Avvalendosi delle competenze, degli strumenti e delle risorse disponibili nei tre Paesi, i Partner mirano a promuovere un meccanismo subregionale di pronto per l'intervento e, attraverso le Linee Guida, a fornire raccomandazioni su come renderlo efficace, anche grazie all'elaborazione delle Procedure Operative Standard (di seguito POS) del progetto, che costituiscono il quadro operativo per l'intervento in mare.

Le POS e le Linee Guida per la revisione e l'aggiornamento del CP Subregionale sono tra i risultati più importanti di questo progetto e rappresentano il punto di arrivo dell'intero insieme di attività svolte negli ultimi due anni. Mentre le POS si concentrano, come suggerisce il titolo stesso, sulle procedure operative per le attività di risposta, inclusi la definizione del quadro di riferimento NAMIRS, le modalità di pianificazione della risposta, le checklist da utilizzare in caso di intervento, le informazioni di contatto delle autorità competenti, i moduli di allarme, di nomina e la messaggistica, ecc., il CP subregionale stabilisce le strutture necessarie a sostenere l'esistenza stessa del Piano e la sua possibile attuazione, comprese le finalità e obiettivi dello stesso: gli aspetti giuridici, le misure per la prevenzione dell'inquinamento provocato dalle navi, le politiche e le responsabilità riguardo le operazioni di preparazione, pianificazione e intervento, le procedure di comunicazione e di segnalazione, la logistica, i finanziamenti e l'amministrazione e, ultimo ma non meno importante, le pubbliche relazioni.

Il precedente CP subregionale è stato sviluppato in conformità con il "Protocollo relativo alla cooperazione nella prevenzione dell'inquinamento provocato dalle navi e, in casi di emergenza, nella lotta contro l'inquinamento del Mar Mediterraneo (Protocollo sulla prevenzione e l'emergenza)" e con la "Convenzione per la protezione del Mar Mediterraneo contro l'inquinamento (Convenzione di Barcellona)". Il Piano del 2005 è stato elaborato come parte del progetto per lo sviluppo di un sistema subregionale per la prevenzione e la lotta contro i gravi incidenti di inquinamento marino che colpiscono o potrebbero colpire il mare territoriale, le coste e altri interessi correlati delle Repubbliche di Croazia, Italia e Slovenia nel Mar Adriatico. È stato predisposto con l'assistenza tecnica di REM-PEC, nel quadro del Piano d'azione per il Mediterraneo (MAP).

Le presenti linee guida sono state redatte dalla Facoltà di studi marittimi e dei trasporti dell'Università di Lubiana (UL FPP) sotto la supervisione del Segretariato dell'Iniziativa Centro Europea (InCE) e in stretta collaborazione con altri partner del progetto, vale a dire l'Amministrazione della Repubblica di Slovenia per la protezione civile e i soccorsi in caso di calamità (ACPDR), l'Istituto nazionale di oceanografia e geofisica sperimentale (OGS), il Comando della Guardia costiera italiana – Guardia costiera di Trieste (CG TS), il Centro croato di formazione e ricerca per la preparazione e la risposta all'inquinamento marino accidentale (ATRAC) e il Ministero del mare, dei trasporti e della Infrastrutture della Repubblica di Croazia (MSTI).

Il documento rappresenta una raccolta di raccomandazioni e suggerimenti per il miglioramento del CP subregionale. È stato sviluppato tenendo in attenta considerazione l'evoluzione della situazione politica regionale, i cambiamenti nella legislazione nazionale e internazionale, gli emendamenti alle pertinenti convenzioni, protocolli e accordi internazionali, il progresso nei sistemi e nella tecnologia sia a terra che a bordo, l'introduzione di nuovi metodi e software per l'esecuzione di studi scientifici, analisi e valutazioni, ecc.

Conclusioni

NAMIRS ha rappresentato un'opportunità unica per sviluppare sistemi e metodi condizi per le operazioni di risposta nell'Alto Adriatico, nonché per rendere disponibile una serie di strumenti comuni per l'esecuzione di analisi, valutazioni e mappature. I risultati presentati nei deliverable del progetto hanno portato, per la prima volta in assoluto, ad analisi congiunte per tutti e tre i paesi, abbracciando l'intera area del Nord Adriatico e producendo dati uniformi e comparabili, pronti per essere utilizzati efficacemente nella pianificazione di una risposta internazionale, in caso di incidente.

Tenendo conto, e a seguito di tutto il lavoro preliminare svolto nel corso del progetto, a partire dalla valutazione del rischio, dalla mappatura della sensibilità costiera e delle risorse esistenti, passando per numerosi corsi di formazione, per la stesura e la sperimentazione di POS e concludendo con i risultati dell'Esercitazione Congiunta Anti-inquinamento in mare del novembre 2023, i partner del progetto confermano la necessità di trattare il bacino dell'Alto Adriatico come una risorsa comune che necessita di attenzione specifica e che richiede un coordinamento transnazionale integrato per la sua salvaguardia, al fine di prevenire e gestire potenziali minacce o incidenti in mare.

Nello specifico i Partner riaffermano:

- La necessità di una rinnovata e rafforzata collaborazione tra le parti in vista di un possibile incidente;
- La necessità di un meccanismo pronto all'uso, vista l'estrema importanza e il valore dell'area;
- La necessità di considerare le raccomandazioni NAMIRS a completamento del nuovo piano di emergenza per l'intero Adriatico (già elaborato grazie al sostegno di REMPEC).

I partner raccomandano che:

- Le POS siano integrate come Allegato al Piano;
- La condivisione dei dati di traffico tra i Paesi venga effettuata regolarmente;
- L'analisi dei dati di traffico venga eseguita congiuntamente, come proposto all'interno del progetto;
- L'analisi delle aree sensibili venga condotta su base periodica come proposto all'interno del progetto;
- Vengano utilizzati i modelli matematici sviluppati e utilizzati nel progetto NAMIRS;
- Vengano stabiliti programmi di formazione congiunti e si svolgano periodicamente percorsi di formazione;
- I simulatori (OGS, UL FPP) vengano utilizzati per l'addestramento e la predisposizione di scenari;
- Sia nominato un tavolo tecnico per l'aggiornamento dei dati e che le sue riunioni si svolgano almeno una volta all'anno;
- Vengano stabilite scadenze per aggiornare la valutazione dei rischi, gli elenchi delle risorse antinquinamento disponibili e i dati di contatto;
- Vengano utilizzati i moduli di compilazione dell'elenco delle risorse sviluppati da UL FPP all'interno del WP 2.2 (vedere Deliverable 2.2);
- Venga determinato il formato degli allegati (UL FPP ha progettato il formato proposto per gli allegati nel progetto);
- Vengano effettuati controlli regolari sull'operatività delle linee di comunicazione tra le autorità dei diversi Paesi (problemi di comunicazione emersi durante l'esercizio congiunto);
- Venga mantenuta una forte collaborazione con REMPEC ed EMSA e si collabori con altri paesi adriatico-ionici per sviluppare un piano congiunto di cooperazione;
- I risultati del progetto siano inclusi nel nuovo Piano di emergenza dell'Adriatico;
- Le fasi di prevenzione e le attività preliminari definite nel CP subregionale siano accorpate in un unico capitolo;
- Venga stabilita una comunicazione più agevole tra i paesi e le rispettive autorità operative;
- Venga istituito un meccanismo di cooperazione permanente per la gestione ambientale nell'Alto Adriatico, simile al modello RamogePOL;
- I dettagli vengano definiti negli Allegati dalle autorità competenti.

Osnutek smernic za revizijo in posodobitev podregionalnega načrta ukrepov za preprečevanje večjega onesnaženja jadranskega morja - *Povzetek*

Smernice so bile oblikovane v okviru aktivnosti, ki so potekale v sklopu projekta NAMIRS (Sistem za odzivanje na pomorske incidente v severnem Jadranu). Projekt je sofinancirala Evropska unija s sredstvi, zagotovljenimi s strani Generalnega direktorata za evropsko civilno zaščito in evropske operacije humanitarne pomoči (DG ECHO) Evropske komisije. Kot je bilo načrtovano že ob začetku projekta, še v fazi prijave, naj bi Smernice predstavljale revizijo Podregionalnega načrta ukrepov za preprečevanje večjega onesnaženja jadranskega morja, za pripravljenost in odzivanje nanj (v nadaljevanju Podregionalni načrt), zasnovanega leta 2005, ki pa ni bil ratificiran s strani vlad vseh treh partnerskih držav in tako nikoli ni vstopil v veljavo. Namen posodobitve Podregionalnega načrta je okrepitev mednarodnega sodelovanja in interoperabilnosti ter zagotovitev boljše pripravljenosti in vzpostavitev učinkovitejših intervencijskih ukrepov za slučaj izlitja olja v severno-jadranskem bazenu.

Partnerji so prepoznali nujnost vzpostavitve podregionalnega mehanizma za takojšnje ukrepanje na tem območju, zato so zbrali vse znanje, orodja in sredstva, ki so jim bila na voljo, da bi v Smernicah podali priporočila za izboljšanje učinkovitosti takšnega sistema. Smernice naj bi skupaj s Standardnimi operativnimi postopki (v nadaljevanju SOP), prav tako izdelanimi tekom projekta NAMIRS, predstavljale operativni okvir za posredovanje na morju.

SOP in Smernice za revizijo Podregionalnega načrta sta najpomembnejša rezultata tega projekta. Sta nadgradnja vsega, kar je bilo ugotovljeno tekom izpeljanih dejavnosti v preteklih dveh letih. Kot namiguje že samo ime, so v SOP zbrani operativni postopki za posredovanje, vključno z opredelitvijo splošnega okvirja projekta NAMIRS, elementi za ukrepanje in načrtovanjem, sezname, kontaktnimi informacijami imenovanih pristojnih služb, obrazci za opozorila, nominacije in sporočila, itd. Podregionalni načrt pa predstavlja skupek vseh struktur potrebnih za sam obstoj načrta in njegovo morebitno aktivacijo. Načrt vsebuje opredelitev namena, ciljev in obsega, pravno podlago, in predpisuje ukrepe za preprečevanje onesnaževanja z ladij, politiko in odgovornosti na področju pripravljenosti in ukrepanja, posredovanje in načrtovanje, komunikacijske povezave in postopke poročanja, logistične in administrativne zadeve, financiranje in nenazadnje tudi odnose z javnostjo.

Prejšnji Podregionalni načrt je bil oblikovan v skladu s Protokolom o sodelovanju pri preprečevanju onesnaževanja z ladij in ob izrednih dogodkih v boju proti onesnaževanju Sredozemskega morja (Preventivni in nujni protokol) in Konvencijo o varstvu Sredozemskega morja pred onesnaževanjem (Barcelonska konvencija). Pripravljen je bil kot del projekta za razvoj Podregionalnega sistema za preprečevanje in boj proti večjemu onesnaženju Jadranskega morja, ki bi lahko vplivalo na teritorialno morje, obale in druge sorodne in-

terese republike Hrvaške, Italije in Slovenije, pod tehničnim nadzorom Regionalnega pomorskega centra za ukrepanje ob izrednih dogodkih onesnaženja Sredozemskega morja (REMPEC) v okviru Sredozemskega akcijskega načrta (MAP).

Smernice je pripravila Fakulteta za pomorstvo in promet, članica Univerze v Ljubljani (UL FPP) pod nadzorom Srednjeevropske pobude (CEI), v tesnem sodelovanju z ostalimi partnerji: Upravo RS za zaščito in reševanje (URSZR), Italijanskim nacionalnim inštitutom za oceanografijo in aplikativno geofiziko (OGS), Italijanskim generalnim poveljstvom pristaniških oblasti – Obalno stražo Trst (CG TS), hrvaškim Jadranskim izobraževalno-raziskovalnim centrom za odziv na nenadno onesnaženje morja (ATRAC) in Ministrstvom RH za morje, transport in infrastrukturo (MSTI).

Smernice predstavljajo dovršeno zbirko predlogov za izboljšanje Podregionalnega načrta. Dokument je bil oblikovan ob skrbnem upoštevanju razvijajoče se politične situacije v regiji, sprememb v nacionalni in mednarodni zakonodaji, dopolnil k relevantnim mednarodnim konvencijam, protokolom in sporazumom, napredka sistemov in tehnologije tako na ladjah kot na kopnem, uvedbo novih metod in programske opreme za izvajanje znanstveno-raziskovalnih študij, analiz in vrednotenja, itd.

Ugotovitve in predlogi

Projekt NAMIRS je predstavljal edinstveno priložnost za razvoj skupnih sistemov in metod za ukrepanje kot tudi za pridobitev skupnega nabora orodij za izvajanje analiz, vrednotenja in popisov. Slednje je prvič v zgodovini pripeljalo do skupnih rezultatov za vse tri države, z enotnimi in primerljivimi podatki za celoten severni Jadran, primernimi za učinkovito načrtovanje mednarodnega posredovanja.

Z obzirom na vse predhodno delo, ki so ga partnerji opravili med projektom, izdelavo skupne ocene tveganja, popisa ranljivih območij in popisa sredstev proti onesnaženju, številne prirejene tečaje in usposabljanja, pripravo in preizkus SOP ter analizo Skupne NAMIRS vaje proti onesnaženju na morju, se partnerji strinjajo, da se mora severno-jadranski bazen obravnavati kot skupno površino, skupni vir, ki za svojo zaščito zahteva posebno pozornost in mednarodno sodelovanje, da lahko zagotovimo ustrezne ukrepe za preprečevanje in obvladovanje morebitnih groženj ali nesreč na morju.

Partnerji se strinjajo, da obstaja:

- Glede na možnost incidenta, potreba po prenovljenem dogovoru in okrepljenem sodelovanju med deležniki,
- Glede na izjemen pomen in vrednost območja, potreba po vzpostavitvi mehanizma za takojšnje ukrepanje,
- Potreba po upoštevanju predlogov, izpeljanih tekom projekta NAMIRS, za zasnovano kriznega načrta za celotno Jadransko morje, ki je sicer že v fazi priprave s strani REMPEC.

Partnerji predlagajo, da:

- Se SOP integrirajo v Podregionalni načrt kot Aneks V,
- Je izmenjava podatkov o prometu bistvena,
- Bi morala biti analiza prometa izpeljana, kot je predlagano v projektu,
- Bi morala biti analiza ranljivih območij izvedena, kot je predlagano v projektu,
- Bi se morali uporabljati matematični modeli, razviti in uporabljeni tekom projekta,
- Se moral vzpostaviti skupni načrt usposabljanja in izvajati periodična usposabljanja,
- Bi se morali za usposabljanja in pripravo scenarijev uporabljati simulatorji (OGS, UL FPP),
- Bi se moral ustanoviti tehnični odbor, ki bi obravnaval spremembe in se sestajal najmanj enkrat letno,
- Bi se morali določiti časovni intervali za izvedbo ocen tveganja in posodabljanja seznama sredstev proti onesnaženju ter kontaktnih podatkov,
- Bi se morali za popis sredstev uporabiti obrazci za izpolnjevanje, ki jih je oblikovala UL FPP v sklopu WP 2.2,
- Bi se morala določiti oblika aneksov (UL FPP je v projektu predlagala format vsakega aneksa),
- Bi se redno moralo preverjati delovanje komunikacijskih povezav med službami (zaznane težave pri komunikaciji tekom skupne vaje),
- Bi se moralo ohranjati tesno sodelovanje z REMPEC in EMSA ter se bolje povezati z drugimi jadransko-jonskimi državami in izdelati načrt sodelovanja z njimi,
- Bi se moralo ugotovitve projekta vključiti v nov Jadranski krizni načrt,
- Bi se morale stopnje preprečevanja in predhodne dejavnosti omenjene v Podregionalnem načrtu združiti v eno poglavje,
- Bi se morala vzpostaviti boljše komunikacija med državami in njihovimi pristojnimi organi,
- Bi se moral v severnem Jadranu vzpostaviti trajen mehanizem za sodelovanje pri upravljanju z okoljem, podoben kot pri RamogePOL modelu,
- Bi se morale podrobnosti opredeliti v aneksih (glej tabelo spodaj), ki bi jih morale natančno izpolniti pristojne službe.

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Introduction

Purpose of the guidelines

These Guidelines are developed in the framework of the activities performed within the North Adriatic Maritime Incident Response System (NAMIRS), co-financed by the European Union, through funds made available by the European Commission, the Directorate-General for European Civil Protection and the Humanitarian Aid Operations (DG ECHO).

As planned at the beginning of the project, during the application phase, the purpose of the guidelines was to present a revision to the Sub-regional Contingency Plan for the Prevention of, Preparedness for and Response to Major Marine Pollution Incidents in the Adriatic Sea from 2005 (hereinafter Sub-regional CP), which was not ratified by the governments of all three partner countries and thus never entered into force, in order to strengthen transnational cooperation and interoperability, and ensure efficient preparedness and intervention measures in case of an oil spill occurring in the North Adriatic basin.

As better explained in the following chapters, the regional context has evolved not only since 2005 but also in recent months after the NAMIRS approval. Therefore, the proposed revision takes into account not only the Sub-regional CP, but also the work done within the NAMIRS project, the new geopolitical context, recent sub-regional initiatives, and newly available technology.

By integrating knowledge, tools, and available resources, partners aim at showing the necessity for a ready-for-operations sub-regional mechanism and, with the present Guidelines, provide recommendations on how to make the mechanism effective, also thanks to the elaboration of the new Standard Operating Procedures (hereinafter SOPs) that are being developed within the project and will constitute the operational framework for an intervention at sea.

1

Evolution of the regional context since 2005

1/ Evolution of the regional context since 2005

Since the development of the Sub-regional CP, proposed in 2005, the North Adriatic Sea region has significantly changed in terms of development as well as in terms of available technology and national preparedness, Slovenia and Croatia having adopted their own national contingency plans.

Over the last decade, several regional and international mechanisms and instruments have been developed in order to strengthen the cooperation for the prevention, preparedness, and response to natural disasters. Furthermore, with Croatia joining the Schengen area in 2023, the cross-border movement of people and goods has greatly improved, facilitating cross-border operations.

Organizations such as the International Maritime Organization (IMO), the International Association of Lighthouse Authorities (IALA), the European Union (EU), the European Maritime Safety Agency (EMSA), the Regional Marine Pollution Emergency response Centre for the Mediterranean Sea (REMPEC), the Adriatic Ionian Initiative, the European Union Strategy for Adriatic-Ionian Region (EUSAIR), and the EU Civil Protection Mechanism have all developed a large set of rules, recommendations, and guidelines for a prompt response in case of maritime accidents or natural disasters at sea.

For example, the EU Civil Protection Mechanism developed a Common Emergency Communication and Information System for Maritime Incidents (CECIS Marine) for requesting and offering international assistance. CECIS Marine also has a database listing resources of all EU Member States and EMSA, that can be made available to any country in need following a request for assistance. EMSA capacities in the Northern Adriatic include an oil recovery vessel “Kijac”, whose homeport is Rijeka, that has to be ready to intervene within 24 hours upon receiving a request for assistance, and extra anti-pollution equipment stockpiled in Ravenna, ready to be mobilized around the clock. Other EMSA contracted vessels and equipment from other stockpiles can also be mobilized in case of need.

The latest technology available in maritime traffic monitoring and especially the obligatory use of Automatic Identification System (AIS) on merchant ships and Vessel Monitoring System (VMS) on fishing vessels are very efficient for collecting data and analyzing critical points related to maritime traffic. The Long Range Identification and Tracking (LRIT) has also been introduced, and it allows tracking ships even outside the range of VHF frequencies, the frequency band where AIS is working. New modern radars were developed primarily for the monitoring of maritime traffic, but they can be also used to detect oil spills. At the same time, the quality of satellite monitoring has significantly improved together with simulation technology, capable of simulating the behavior of

oil spills with great accuracy including backtracking that allows for the detection of the source of pollution.

Over the last decade, national centers for monitoring traffic in territorial waters, the so-called Vessel Traffic Service (VTS) centers, have been upgraded in all the NAMIRS partner countries. Today, the state-of-the-art equipment allows for an immediate identification of critical situations at sea, giving the possibility to react promptly and prevent an accident. In case an accident still fails to be averted, VTS can instantly alert appropriate pollution-combating services within a country. Having done so, it should then immediately inform the VTS centers of neighboring countries about the accident and potential consequences.

Furthermore, in 2022, the Regional Marine Pollution Emergency Response Centre for the Mediterranean Sea (REMPEC) launched the first cooperation of the Competent National Authorities for the Development of the Sub-regional Marine Oil Pollution Contingency Plan between Albania, Bosnia and Herzegovina, Croatia, Italy, Montenegro, and Slovenia. Following successful meetings held in Durres, Opatija, and Rome, the countries agreed and elaborated a new Adriatic Contingency Plan, this time extended to the whole Adriatic Sea.

These Guidelines endorse the international mechanisms mentioned above and urge national authorities of the parties to utilize all the facilities already in place to the maximum possible extent in case of an emergency. However, the Guidelines recognize that the North Adriatic basin, a densely trafficked area with shallow waters, rich biodiversity, and many other peculiarities, requires special attention. In this sense, NAMIRS represents a key step towards the prevention of maritime incidents and, in case of an oil spill, a coordinated response ensuring the safeguard and protection of common areas and resources.

2

NAMIRS findings

2 / NAMIRS findings

NAMIRS is co-financed by the European Union in the framework of the EU Civil Protection Mechanism. It aims at preventing and protecting from the effects of marine disasters in the North Adriatic Sea through better preparedness and enhanced cooperation at trans-national level.

The Central European Initiative – Executive Secretariat (CEI-ES) led a consortium of seven partners from Croatia, Italy, and Slovenia to elaborate these specific Guidelines for the Revision and Update of the Sub-regional Contingency Plan for the Adriatic Sea.

During the course of the project, partners engaged in several activities and training courses in order to improve preventive measures and to increase preparedness for responding to a potential oil spill in the Northern Adriatic Area. Activities were divided into work packages (WPs), each bringing significant contribution to the effectiveness of response operations and the overall elaboration of these Guidelines.

NAMIRS WP 2 – State of Art

Work package WP2 is titled “NAMIRS State of Art”. The lead beneficiary is the Administration of the Republic of Slovenia for Civil Protection and Disaster Relief (ACPDR). The ACPDR have been working on the WP2 in close cooperation with project partners, the Faculty of Maritime Studies and Transport of the University of Ljubljana (UL FPP) and the Italian National Institute of Oceanography and Applied Geophysics (OGS).

Upon realization of each segment of the WP2, findings were elaborated in three separate deliverables:

- 2.1 Environmental Risk Assessment,
- 2.2 Mapping of Existing Resources,
- 2.3 Draft Guidelines for the Revision and Update of the Sub-regional Contingency Plan for the Adriatic Sea.

Prior to NAMIRS, competent authorities of the partner countries would carry out environmental risk assessments, map anti-pollution resources, and develop, revise, and amend their contingency plans, but strictly on a national level. NAMIRS represented a unique opportunity to develop common systems and methods for response operations as well as for making available a common set of tools for the performance of such activities. The results presented in the deliverables will, for the first time ever, lead to common analyses and assessments for all three countries, encompassing the entire North Adriatic area and yielding uniform and comparable data, ready to be used effectively when planning an international response.

In the WP 2.1, experts from UL FPP and the Italian National Institute of Oceanography and Applied Geophysics (OGS) performed a maritime traffic risk assessment (collision risk assessment). To do that, they inspected all the Automatic Identification System (AIS) data for the past years and determined the expected density of maritime traffic in the overall area. Making use of the IALA Waterway Risk Assessment Program (IWRAP), they isolated the positions where incidents are most likely to occur.

As to particularly sensitive areas, the partners developed their own method for the mapping of coastal sensitivity and vulnerability. The method is based on a 1-9 sensitivity scale, taking into account geomorphological factors, protected areas, and socio-economic consequences. It is intended to identify the prioritized, most sensitive coastal areas, and aid the command in choosing proper action in case of an event.

Within the WP 2.2, UL FPP conducted a survey among the partner-countries authorities to gather information on available anti-pollution resources, namely, marine craft, aircraft, and equipment. Very importantly, the overall analysis of resources was thoroughly revised after the Joint NAMIRS Anti-pollution Exercise that took place on 20 November 2023. By the time the project is concluded, the partner countries will have had a complete and uniform mapping of assets and equipment, facilitating the command's choice of proper assets to mobilize and equipment to deploy in case of a specific incident. For the mapping, UL FPP developed specialized fill-out forms, which could prove very useful also for other countries.

As part of the WP, a feasibility study was carried out for a training centre in Slovenia. In addition, the hardware of the simulation centre for oil spills at FPP was renewed. The results of the feasibility study and the modernisation of the hardware could improve the preparation for possible oil spills and should be taken into account in these guidelines.

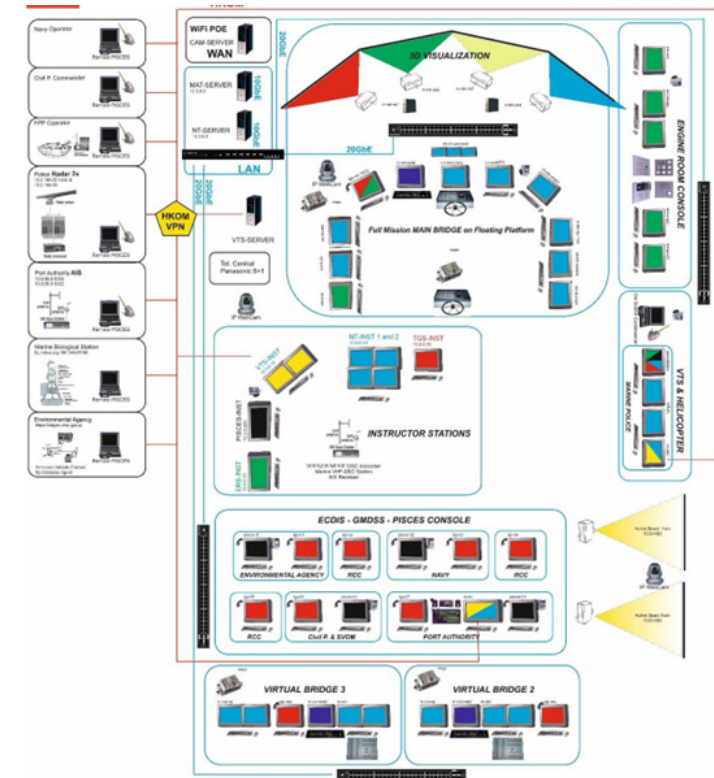


Figure 1: Scheme of the UL FPP simulation center



Figure 2: New equipment in the UL FPP simulation center

Taking into account the findings and results of the analyses and assessments conducted by NAMIRS partners, concrete suggestions for the update and revision of the Sub-regional CP are given in Chapter 3 of this report.

NAMIRS WP 3 – Training

Within the WP 3, various activities, whose main goal was improving the knowledge and skills of oil-spill responders, were conducted.

The following training courses were performed:

- Maritime English course, organized by UL FPP,
- Maritime English course, organized by the Italian Coast Guard - Trieste (CG TS),
- Tactical Pollution Response Training Using Crisis Management Oil-spill Response Simulator, organized by UL FPP,
- At-sea Response course, held in three locations (Koper, Trieste, and Rijeka), organized by the Adriatic Training and Research Centre for Accidental Marine Pollution Preparedness and Response (ATRAC),
- Shoreline Clean-up course, held in three locations (Koper, Trieste and Rijeka), organized by ATRAC,
- Familiarization with the Use of Aircraft in Oil Spills, organized by CG TS.

Taking place in the second half of the project, there was a total of 35 days of training activities. All together, 228 people attended.

One of the greatest contributions of this project to the effort is that teams have acquired new competencies and improved their spill-combating skills as well as their understanding of SOPs and the new Plan.

NAMIRS partners are recalling North Adriatic countries to continue with appropriate trainings also in the future.

NAMIRS WP 4 – SOPs and Testing

SOPs are one of the main outcomes of this project. Partners are strongly recommended to follow the procedures laid down by SOPs as well as to keep constantly revising and amending them as need be. In the future, the Plan and its annexes should be updated within a common framework composed by all the partners and lead by a body similar to the Secretariat to the existing RamogePOL Plan (Ramoge Agreement, 1976, signed by France, Italy, and Monaco).

The SOPs were developed by the Italian Coast Guard – Trieste Harbor Master’s Office with the aim of offering first response operators an easy-to-consult guide providing information on how to manage a response at sea in a simple but effective way in all its phases: from an early warning to the deployment of vessels and the commencement of

anti-pollution operations, in compliance with national and local contingency plans.

The SOPs also respond to the need of establishing direct communication channels between governmental institutions and private partners operating at sea, providing pre-formatted messages and updated contact lists, and standardizing the operational structures to be put in place in case of need (crisis units, coordination, intervention teams, etc.)

The SOPs are divided into 3 parts:

- general context,
- a checklist that guides the Coordinator of Operations (Leading Country and National/Supreme On-scene Coordinators (NOSC/SOSC)) in managing the event, further divided into several operational phases,
- a collection of annexes of primary importance for managing communications and sharing information among partners.

SOPs, communication procedures, the coordination of naval units, and oil-recovering equipment were put to test at the Joint NAMIRS Anti-pollution Exercise, performed in the Gulf of Trieste on 20 November 2023. In the hypothesized scenario, a collision between an oil tanker and a vehicle carrier was simulated. The site of the collision was selected according to the risk assessment developed within the project.



Figure 3: Collision site

The exercise focused on oil-spill response capacity by using naval units from all partners and a CG TS helicopter for the boarding activity. A team of firefighters, partners to the North Adriatic Maritime Incident Response Group (NAMIRG) project, was also involved in order to check the safety of the damaged ship.

During the exercise the simulators of OGS, UL FPP, ARPA and ARSO were independently tested. The comparison of results from the different simulators will be discussed in the near future to find the best solution for forecasting in the event of oil spill.

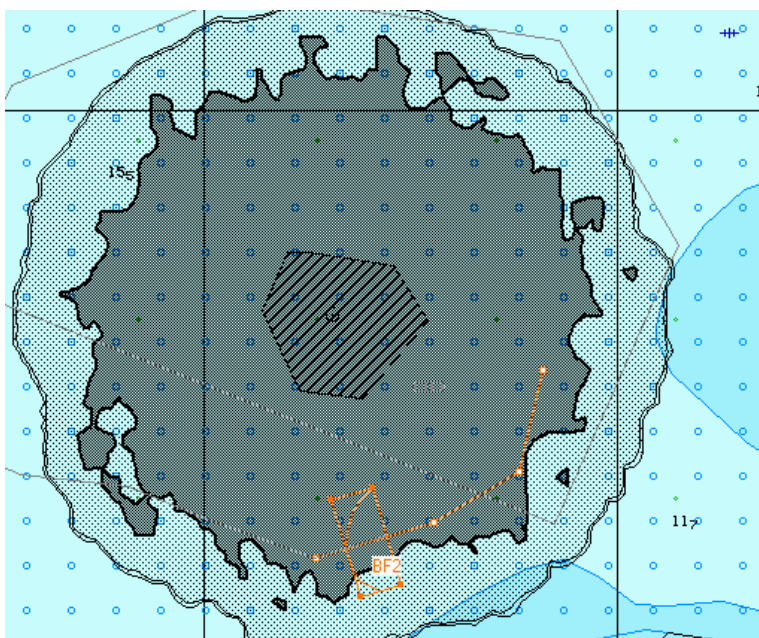


Figure 4: Simulation of the deployed boom formation

Following the conclusion of the exercise, a debriefing was carried out among the partners of the NAMIRS project, technical observers of the Italian Ministry of the Environment, the European Commission and EMSA, where deficiencies exposed during the exercise were discussed. Details on the exercise including criticalities are included in a separate report. All partners agreed on the importance of such events as well as the importance of continuous collaboration among the competent authorities.

Deficiencies were thoroughly analyzed and are now included in the SOPs, and also considered in Chapter 3.

NAMIRS WP 5 – Communication and Dissemination

WP 5 is led by the Central European Initiative (CEI). CEI drafted the project’s communication and dissemination strategy and took charge of its implementation, ensuring that NAMIRS goals, scope, and results are properly conveyed and disseminated. CEI also liaised with projects that share similar goals, such as the Improving the Integrated Response to pollution Accident at sea and chemical risk in port (IRA-MAR) and regional mechanisms, such as REMPEC, which has a similar scope, in order to acquire information on the latest regional developments and ensure that the Draft Guidelines for the revision and update of the Sub-regional Contingency Plan are as thorough and comprehensive as possible.

With regard to the participation to external events, NAMIRS partners have made an effort to participate in as many external and thematic events as possible to leverage the dissemination of the project’s goals and outcomes. NAMIRS partners have attended about 10 external events, several international gatherings where a variety of stakeholders took the stage. A more detailed description of the dissemination events is the object of a separate report. Noticeable is also the mediatic attention that the Joint NAMIRS Anti-pollution Exercise received, with a large number of media outlets (TV, radio, newspapers) from the three countries covering the event.

Finally, CEI took care of the professional formatting and digital printing of the main deliverables, providing the Risk Assessment with an ISBN number through the University of Ljubljana in order to make the publication available to a large public for future research and reference.

3

Recommendations for the revision of the Sub-regional CP 2005

3 / Recommendations for the revision of the Sub-regional CP 2005

The Sub-regional CP was developed in accordance with the Protocol Concerning Co-operation in Preventing Pollution from Ships and, in Cases of Emergency, Combating Pollution of the Mediterranean Sea (the Prevention and Emergency Protocol) and the Convention for the Protection of the Mediterranean Sea against Pollution (the Barcelona Convention) in 2005. The Plan was prepared as part of the project for the development of a Sub-regional System for Preventing and Combating Major Marine Pollution Incidents affecting or likely to affect the territorial sea, coasts, and other related interests of the Republics of Croatia, Italy, and Slovenia in the Adriatic Sea. It was prepared with technical assistance from REMPEC within the framework of the Mediterranean Action Plan (MAP). The Sub-regional CP constituted a valid source of information, but unfortunately, it was never adopted.

The 2005 Plan was divided into 8 chapters and had 10 annexes. These Guidelines should be considered for its revision and update.

The main chapters of the proposed Plan were the following:

- Chapter 1: Introduction;
- Chapter 2: Prevention of pollution from ships;
- Chapter 3: Policy and responsibilities in the field of preparedness and response;
- Chapter 4: Response elements and planning;
- Chapter 5: Response operations;
- Chapter 6: Communications and reporting;
- Chapter 7: Logistics, funding, and administration;
- Chapter 8: Public information.

The 10 annexes to the Plan were:

- Annex 1: Directory of competent national authorities,
- Annex 2: Communications with REMPEC,
- Annex 3: National contingency plans (or relevant parts thereof),
- Annex 4: Directory of response personnel and inventory of response equipment, products and other means
- Annex 5: Communications system,
- Annex 6: Guidelines for reporting oil spills (aerial surveillance),
- Annex 7: POLREP pollution reporting system,
- Annex 8: Standard format for requesting assistance,
- Annex 9: Claims manual,
- Annex 10: Prevention, preparedness, and response organization flows.

UL FPP was tasked with drafting the Guidelines for the Update and Revision of the Sub-regional CP. Deliverable 2.3 is a revised complete collection of suggestions for the improvement of the Plan from all project partners. It was developed with careful consideration of the evolving regional political situation, changes in national and international legislation, amendments to relevant international conventions, protocols, and agreements, the advance in both shoreside and shipboard systems and technology, the introduction of new methods and software for the performance of scientific studies, analyses, and assessments, etc. The latter is further described in chapters 1.1 and 1.2 of the Draft Guidelines.

The amended Plan should consist of the same 8 chapters with minor to moderate modifications. However, it should be supplemented by a much larger number of annexes including much more detail. The non-exhaustive list of annexes is included in this report.

It should also be stated that significant changes to the Plan are due to the newly conducted common maritime risk assessment and coastal sensitivity mapping, the ongoing mapping of anti-pollution resources, and the recently developed SOPs.

All the technical modifications deemed necessary for the improvement, sustainability, and, ultimately, flawless operability of the Plan are included in the following chapters.

1. Introduction

1.1 Context

This chapter should be revised taking into consideration the latest technical and political situation including:

- International regulations, recommendations, and guidelines, prepared within the international and regional organizations as: IMO, IALA, EU, EMSA, REMPEC, EUSAIR;
- All three countries are now EU members and part to the Schengen area;
- Within the EU, Union Civil Protection Mechanism (UCPM), facilitates cooperation among the UCPM Member and Participating States to improve prevention, preparedness, and response to disasters;
- The request for in-kind or expert assistance through the UCPM, should be sent to the Emergency Response Coordination Centre (ERCC) via CECIS Marine,
- EMSA anti-pollution services, including satellite images, vessels and specialized equipment, located around European coastline should also be requested via CECIS Marine;
- The latest technology used in maritime traffic including shipboard equipment and shore-based monitoring systems, and the latest recommendations from different maritime organizations on how to use that equipment,
- Renewed VTS centers in all three Northern Adriatic countries with state-of-the-art equipment and trained personnel.

- Guidelines recommend that particulars should be explained in detail in the annexes to the Plan. For this purpose, an extensive set of annexes was added. A list of proposed annexes is attached at the end of the Guidelines.

1.2 Purpose and objectives

This chapter should be revised taking into consideration the above-mentioned changes.

Specific objectives of the Plan are defined as follows:

- To determine the extent of cooperation among the relevant authorities of the Parties to the Plan, in the field of prevention of marine pollution incidents;
- To determine the extent of cooperation for the implementation of the Plan in cases of emergency, between the responsible authorities, at an operational level;
- To define areas of responsibility of the Parties to the Plan;
- To divide the responsibilities and to anticipate the transfer of responsibility from one Country to another;
- To establish the principles of command and liaison, and to define the corresponding structures;
- To provide arrangements concerning the operation of ships and aircraft of one of the Parties, within the area of responsibility of the other Parties;
- To specify the type of assistance which might be provided and the conditions under which it will be provided;
- To determine in advance the financial conditions and administrative modalities related to cooperative actions in case of emergency.

In order to achieve these objectives, the Parties intend to take the following actions through the implementation of the Sub-regional Contingency Plan:

- Develop adequate activities and take appropriate measures aimed at reducing the risks of incidents or the environmental consequences thereof;
- Develop appropriate network(s) for the exchange of information concerning prevention of marine pollution incidents;
- Develop appropriate preparedness measures and effective systems for detecting and reporting pollution incidents affecting or likely to affect the areas of responsibility of the Parties;
- Promote and implement sub-regional cooperation in the fields of prevention of accidental oil pollution from ships, contingency planning, pollution control and clean-up operations;
- Implement the necessary measures to restrict spreading and to minimize the hazard posed by marine pollution incidents;
- Develop and implement a program of training courses and practical exercises for different levels of personnel involved in oil pollution prevention and combating;
- Develop procedures for increasing regional cooperation.

The new flow chart related to operational organization should be designed.

1.3 Scope and geographic coverage

This chapter should be revised and agreed among the Parties, who should establish the geographical coverage.

1.4 Definitions and abbreviations

The Partners propose that the content of this point is included in Annex A, so this point should be discarded.

2. Prevention of pollution from ships

2.1 Joint policy for the prevention of pollution from ships

The Partners recommend that this chapter is revised taking into consideration the latest rules and agreements adopted by various international organizations.

2.2 National Authorities responsible for the prevention of Pollution from ships and designation of Pollution Prevention Coordination Centres (PPCCs)

The Partners recommend that this chapter is revised taking into consideration the latest national rules and governmental organizations within each of the three countries.

2.3 Meetings of Pollution Prevention Coordination Centres

The Partners recommend that only parts of this chapter are revised. The Partners strongly suggest annual meetings to take place.

2.4 Prevention phases

The content of Point 2.4 should remain unchanged.

2.5 Preliminary activities

2.5.1 Monitoring the Sea

Point 2.5.1 should be changed completely, taking into consideration:

- Latest technology on ships and shore,
- Organization within the countries,
- Guidelines and directives of international organizations.

2.5.2 Traffic Data Collection and Traffic Analysis

The Partners recommend that this chapter is revised taking into consideration the methods recommended by IALA.

The Partners recommend that the Parties establish a common system. The traffic data analysis should be done every year by each country. The common analyses of the factors which could lead to risk of pollution by oil should be done by an authorized institution at least one month before the regular annual meeting. At the meeting, it should be defined which institution is tasked to perform next year's traffic data analyses.

The Partners recommend that more details related to the traffic survey are included in Annex T.

2.5.3 Maritime Traffic Risk Assessment

The Partners recommend that this chapter is revised taking into consideration the method developed in the project NAMIRS and taking into account international guidelines.

Based on the traffic analyses, the parties should perform a risk assessment for the territory of the agreement. The first risk assessment was done within the NAMIRS project. Parties should nominate an organization whose task it will be to update the risk assessment regularly, every year. Final acceptance of the risk assessment should be approved at the regular annual meeting. For performing the risk assessment, a common method, one of the worldwide recognized methods proposed by IALA should be used.

More details related to the traffic survey should be included in Annex U.

2.5.4 Particularly Sensitive Areas

The Partners recommend that this chapter is revised taking into consideration the method developed in the project NAMIRS and taking into account international guidelines.

The Parties should recognize the importance of designating certain zones in the area covered by the Plan, taking into consideration the implementation of Biodiversity strategy 2030 in the EUSAIR and synergies with UN/MAP as well as the Mediterranean Coast and Macro-Regional Strategies.

Due to the various types of coasts, protected areas and the different socio-economic value of the coast, the parties should carry out a Coast Vulnerability Assessment (CVA) to establish priority criteria in the case of oil spill for the territory of the agreement. A scheme on figure shown which factors must be considered. CVA would help both the SOSC and NOSC to make correct decisions in the priority of protecting certain areas without any outside pressure.

The first CVA was performed within the NAMIRS project. The CVA should be updated regularly, at least once every 5 years, but in case of need and upon request of the parties, this time frame could be reduced (e.g., every 2 years). Final acceptance of the CVA should be

approved at the regular annual meeting. To perform the CVA, a NAMIRS model should be used until appropriate new state-of-the-art worldwide recognized model appears.

A CVA of the Plan should be displayed on large-scale maps and should be used for international interventions. For a detailed CVA, each party should do it within their National Contingency Plans (NCP).

Details related to sensitivity mapping should be included in Annex J.

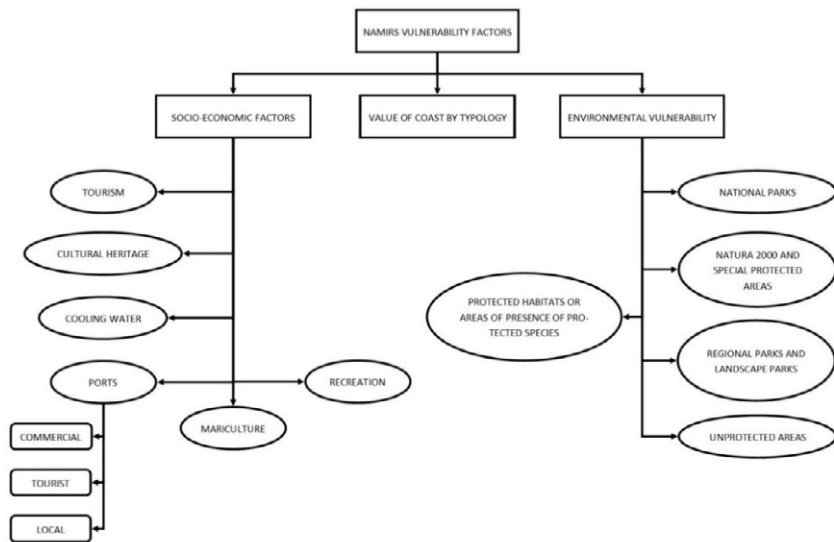


Figure 5: Schematic representation of the vulnerability factors considered in NAMIRS CVA

2.5.5 Vulnerability Mapping and Assessment

The Partners recommend that this chapter is revised taking into consideration the method developed in the project NAMIRS.

To facilitate rapid interventions of the Response Teams and decisions on priority areas to protect in case of an oil spill event, detailed information and maps on coastal vulnerability would be required for decision makers to easily and quickly consult.

Priority intervention scores of the must be categorized into four classes and visualized in GIS with different colors: very low vulnerability (1-2, green), low vulnerability (3-5, yellow), medium vulnerability (6-7, orange), high vulnerability (8-9, red) to help commanders take proper decisions.

A CVA of the Plan is on the large-scale maps and will be use for the international interventions. For a detailed CVA each party should do it within the National contingency plan (NCP). Relevant information on CVA shall be attached to the Plan in Annex J.

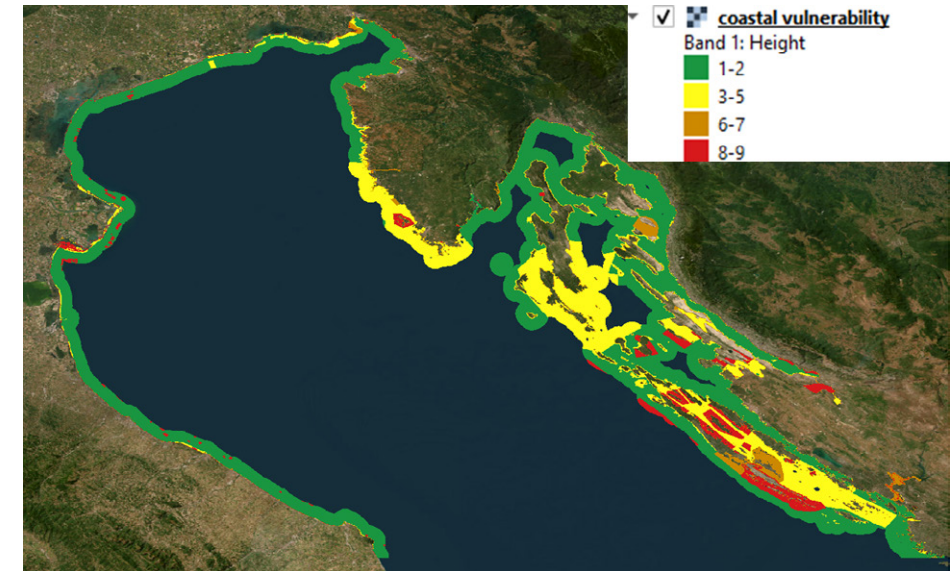


Figure 6: Intervention priorities according to CVA

2.5.6 Traffic Control Systems

The Partners recommend that this chapter is revised taking into consideration updated traffic schemes and reporting systems as well as international guidelines.

2.5.7 Facilities and Services

The Partners recommend that this chapter is revised taking into consideration the findings of the project NAMIRS, especially the suggestions on how to rectify the gaps. Furthermore, the use of CECIS Marine database for the collection of data on regional resources should be considered.

During the collection and analysis of data on available anti-pollution resources including stakeholders, services, assets, and equipment, we have detected the following gaps:

- Data on assets and equipment are incomplete (should be clearly stated in the Plan what data should be collected and exchanged);
- Assets and equipment are categorized in a non-uniform way (the Plan should clearly define which categories and particulars should be listed, in a uniform way).

Details related to assets and equipment should be included in Annex K.

2.5.8 Planning

The Partners recommend that this chapter is revised taking into consideration changes in international regulations and technology. The joint training of personnel from all Parties should be included in this part of the Plan.

Updates should be agreed at annual meetings.

2.6 Preventive measures

The Partners recommend that this chapter is revised taking into consideration changes in international regulations and technology.

3. Policy and responsibilities in the field of preparedness and response

Partners recommend that Parties express more clearly common interest in joint cooperation and organization, resource exchange, and response in the event of sea pollution or another contingency.

3.1 Joint preparedness and response policy

This part of the Plan needs only minor corrections.

3.2 Responsibilities of competent national Authorities

This part of the Plan needs only minor corrections.

3.3 Designation of national Operational Authorities responsible for the implementation of the Plan in case of emergency, and of national Operations Centres

This part of the Plan needs only minor corrections related to national terminology.

3.4 Mechanism for activating the Plan in case of emergency

This part of the Plan needs only minor corrections. The activation of the Union Civil Protection Mechanism should be reflected in the renewed Plan.

3.5 Meetings of national Operational Authorities responsible for the implementation of the Plan in case of emergency

Point 3.5 should be merged with Point 3.7. The coordination of the Partners, training, and exercises as well as other technical details and agreements at the technical level should

be covered here. Meetings and exercises are recommended to take place once a year, at the same time.

3.6 Exchange of information

This part of the Plan needs to be corrected. Sections f and h should be revised (customs procedures). Communication channels or means of data exchange should be determined in more detail. Data containing personal data should be excluded (GDPR).

Section h that deals with equipment, resources, supplies, etc., to be used in disaster response should be raised to a higher level and given more weight. It is more important than all other information. Also, constituting an independent point of data exchange, it would be easier to update and amend.

3.7 Joint training and exercises

Merged with Point 3.5 (see Point 3.5).

4. Response elements and planning

The word “planning” should be deleted from the basic chapter because it can be misleading and a very broad term. The content of Chapter 4 refers only to the response of the Partners to the situation.

The chapter must define the organization of disaster response, the management of actions, lines of command and control, communication, and the ongoing planning, and adjustment of tactics and response measures.

4.1 Assumption of Lead role

This part of the Plan needs only minor corrections.

4.2 National On-Scene Commander (NOSC) / Supreme On-Scene Commander (SOSC)

Individual response units or strike teams already have their leaders and as such they need not be appointed on site. Partners should have qualified people lead major interventions, acting as NOSCs. The country leading the intervention should designate the supreme on-scene commander to whom other national commanders and team leaders shall be subordinate. This should be clearly stated in the Plan.

4.3 Emergency Response Centres / Joint Emergency Response Centre

Emergency Response Centres/Joint Response Centre. The terminology is incorrect and should be agreed. The Parties already have their national competent authorities/orga-

nizations or services for such cases. Their organization and engagement should correspond to the command-and-control structure.

4.4 Support teams

This part of the Plan needs only minor corrections.

4.5 Command structure

The organization of command in this chapter, with its three subchapters and three more subchapters of Section c, is far too demanding for the conditions in the field. The orientation should be such that the line of command and control is as straight and clear as possible without too many intermediaries. If necessary, liaison officers could assume other roles.

Details related to command structure should be included in Annex E1.

4.6 Communications arrangements

This part of the Plan needs only minor corrections. Telefax as a means of communication should be removed from the text. It would make sense to focus on maritime channels intended for this purpose.

Details related to communications should be included in Annex G.

4.7 Response planning

The title needs to be renamed because it does not reflect the content of the chapter. The chapter is about which national plans could be used in the common plan for such cases. Information from national plans is necessary for the smooth course of the intervention. This chapter could be titled Applicability of National Plans.

Details related to national plans should be included in Annex Q.

4.8 Response strategy

The terminology is incorrect and should be agreed. The content needs to be in accordance with the SOPs developed within NAMIRS. The content should basically be a description of the course of the activity, or the course and conclusion of the response to the accident.

5 Response operations

5.1 Response phases

This part of the Plan needs only minor corrections. The role of the REMPEC regional center in Malta should be defined as well as the role of the Union Civil Protection Mechanism (UCPM) and EMSA. In the Point 5.1.2, "Activation of the Plan", it should be defined whether the Plan shall be activated only within the framework of the Plan mechanism or wider (UCPM, EMSA, REMPEC).

5.2 Spill surveillance

In "Spill Control", the latest technologies and monitoring techniques should be defined, and the existing capacities made use of, especially in satellite observation.

The Partners recommend that details related to spill surveillance are included in Annex I.

5.3 Requests for assistance within the framework of the Plan

The same dilemma exists with the formal request for help, as the one in Point 5.1. In any case, a new request form for help should be created. This should be a mandatory part of the SOPs (Annex V), as addenda to the Plan.

5.4 Joint response operations

This part of the Plan needs only minor corrections.

5.5 Use of dispersants

This part of the Plan needs only minor corrections. For Slovenia, nothing has changed regarding dispersants.

5.6 Termination of joint response operations and deactivation of the Plan

This part of the Plan needs only minor corrections.

6. Communications and reporting

The chapter, from Point 6.1 through 6.4, needs only minor corrections. Regarding the forms that are mentioned, it should be checked whether they are still valid or not. Namely, the forms from the Barcelona Convention are defined.

The Union Civil Protection Mechanism communication procedure via CECIS Marine should be absolutely implemented if Parties agree.

6.1 Communication system

This part of the Plan needs only minor corrections.

6.2 Pollution reporting system (POLREP)

This part of the Plan needs only minor corrections.

6.3 Situation reports (SITREPs)

This part of the Plan needs only minor corrections.

6.4 Post incident reports

This part of the Plan needs only minor corrections.

6.5 Reports to and communication with REMPEC

This chapter should be redefined, considering the role and weight of this organization in the Plan. Most likely, it will be necessary to add reports and communication with the Union Civil Protection Mechanism and EMSA.

7. Logistics, funding and administration

7.1 Logistics

This part of the Plan needs only minor corrections.

7.2 Financial procedures

The Chapter refers to The Prevention and Emergency Protocol of the Barcelona Convention. It should be checked whether the document is still valid or not.

In Point 7.2 a, the guidelines should be such that the provision of assistance is free of charge. The sending country shall cover the costs of its units and equipment, except for the costs incurred during the intervention, or whatever shall be stipulated in the Plan. Everything else has proven unfeasible, based on previous experience.

In Point 7.2 c Costs, it is necessary to redefine and determine the principles of covering costs.

Details related to the reimbursement of the costs of assistance will be included in Annex F3.

7.3 Transboundary movements of response personnel, equipment, products and self-contained units

Most of the Point 7.3 should be discarded. Only restrictions due to regulations other than customs or border regulations remain.

7.4 Medical insurance and medical assistance

This part of the Plan needs only minor corrections.

7.5 Responsibility for injury and damage

The guidelines should be such that units and personnel are already insured against causing harm to a third party prior to leaving their home country.

7.6 Documentation of response operation and related costs

This part of the Plan needs only minor corrections.

8. Public information

The chapter is almost entirely fine and needs only minor corrections.

8.1 Public Relations Officer (PRO)

This part of the Plan needs only minor corrections.

8.2 Press releases

This part of the Plan needs only minor corrections.

8.3 Press conferences

This part of the Plan needs only minor corrections.

8.4 Public information through REMPEC

The content of the Point 8.4 should be redefined and also take into consideration other organizations such as the EU and the EMSA.

4

Conclusion

Taking into account the preliminary work done by the NAMIRS partners, the elaboration of the risk assessment, the numerous training courses, the drafting and testing of the SOPs, the project partners reaffirm the need to treat the North Adriatic basin as a common area, a common resource that needs specific attention and transnational coordination for its safeguard in order to prevent and manage potential threats or accidents at sea.

Specifically, the Partners reaffirm:

- The need for a renewed and strengthened collaboration among the parties in view of a possible incident;
- The need for a ready-for-operation mechanism in view of the extreme importance and value of the area;
- The need to consider the NAMIRS recommendations for the new contingency plan for the whole Adriatic, already in the preparation phase by REMPEC.

Partners recommend that:

- SOPs are integrated as Annex V to the Plan;
- The sharing of traffic data is essential;
- The analysis of traffic data is performed as proposed within the project,
- The analysis of sensitive areas is conducted as proposed within the project,
- The mathematical models developed and used in the NAMIRS project are used,
- Joint training curricula is established, and periodic training takes place,
- Simulators (OGS, UL FPP) are used for training and the preparation of scenarios;
- A technical board for the revision of changes is nominated, and that their meetings take place not less than once a year;
- Time intervals for the conduction of risk assessments, and updating of anti-pollution resource lists and contact details are determined;
- The resource-listing fill-out forms developed by UL FPP within WP 2.2 (see Deliverable 2.2) are used;
- The format of annexes is determined (UL FPP designed the proposed format for the annexes in the project);
- Regular checks of the operability of the communication lines between authorities are conducted (communication issues during the joint exercise),
- Strong collaboration with REMPEC, Union Civil Protection Mechanism, and EMSA is maintained, and other Adriatic-Ionic countries are liaised with in order to develop a joint plan of cooperation;
- Findings of the project are included in the new Adriatic Contingency Plan,
- Prevention phases and preliminary activities defined in the Sub-regional CP are merged into one chapter;
- Smoother communication among countries and respective operational authorities are established;
- A permanent cooperation mechanism for environmental management in the North Adriatic is established, one similar to the RamogePOL model,
- Particulars are explained in detail in the Annexes (see table below), being precisely filled out by competent authorities.

Annex	Content
Annex A	Definitions, and Acronyms and Abbreviations
Annex B	Alerting and Reporting Procedures
Annex C	National Contact Details
Annex D	International Contact Details
Annex E1	Command and Control
Annex E2	Staff Functions
Annex F1	List of Services and Service Availability
Annex F2	Descriptions of National Stakeholders
Annex F3	Reimbursement of Costs of Assistance
Annex G	Communications
Annex H	Legislation
Annex I	Spill Monitoring and Surveillance
Annex J	Maps of Sensitive Areas
Annex K	Assets and Equipment
Annex L	Disposal of Recovered Oil and Oily Substances
Annex M	Health and Safety
Annex N	Identification of the Polluter and the Establishment of Evidence to Court
Annex O	Information to the Public and Mass-media Relations
Annex P	Education, Training, and Exercises
Annex Q	List of Other Contingency Plans
Annex R	Salvage
Annex S	Wildlife Care
Annex T	Traffic Data Summary
Annex U	Risk Assessment
Annex V	Standard Operating Procedures
Annex Z1	Guidelines for Risk Assessment Methodology
Annex Z2	Guidelines for Oil-spill Response
Annex Z3	Oil Properties and Classification
Annex Z4	Conversion Tables and Unit Systems

Table 1: List of the proposed annexes

