Appendix 3 Estimated Cost of Implementation of the Regional Strategy

Estimated Cost of Implementation of the Regional Strategy

Notes:

- The cost estimations tabulated below have been assessed on the basis of the Draft estimation of required means for the implementation of the Mediterranean Offshore Action Plan and drawing from data and assumptions made in the 2005 Study Concerning the Estimate of Costs of the Implementation of the Regional Strategy for Prevention of and Response to Marine Pollution from Ships in the Mediterranean. The estimated costs represent rough estimates and, therefore, should not be taken as representing a proper implementation budget which, if required, should be undertaken as a separate exercise.
- 2. The estimated means required by the Secretariat (REMPEC) assume that the Centre is adequately staffed. The implementation of the Regional Strategy should require additional dedicated staff, preferably funded through a project or external donors, or a succession of officers seconded by the States. The present estimated cost of implementation of the Regional Strategy does not include the cost related to any additional staff.
- 3. Where the activity concerned is deemed to be part of the Administration's or REMPEC's habitual responsibilities, once the additional staff have been engaged, the estimated cost is given as nil.
- 4. No attempt has been made to quantify the cost of providing adequate port reception facilities as this will vary greatly from country to country and depends on many variables (reference may be made to the Study concerning the estimate of costs of the implementation of the regional strategy for prevention of and response to marine pollution from ships in the Mediterranean REMPEC/WG.25/6).
- 5. The services of external expert consultants and the holding of regional seminars and training activities have been considered necessary for the timely and thorough implementation of specific objectives 3, 5, 6, 9, 12, 14, 15, 17, 19, 20 and 21.

	SPECIFIC OBJECTIVE		OUPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
1.	Ratification of relevant international maritime conventions related to the protection of the marine environment.	a)	Necessary actions are taken to ratify and implement, with <i>high priority</i> , the MARPOL Convention and its six annexes, to ensure their transposition into national law, placing special emphasis on revised Annex V (Regulations for the prevention of pollution by garbage from ships) and Annex VI (Regulations for the prevention of air pollution from ships) as amended, and to cooperate through REMPEC to ensure full compliance with its provisions	Appropriate action by the maritime administration	Nil
		b)	Necessary actions are taken to ratify and implement, with <i>high priority</i> , other IMO relevant international conventions and to ensure their transposition into national law by the same time and full compliance with their provisions	Appropriate action by the maritime administration	Nil
		c)	Advice and assistance provided to Mediterranean coastal States, which so request, in order to meet the priorities set forth in sub-paragraphs (a) and (b) above	Staff time.	Nil
		d)	Assistance provided to Mediterranean coastal States, which so request, in their efforts to ratify and implement the International Convention for the Control and Management of Ships' Ballast Water and sediments, 2004, in conjunction with the implementation of the BWM Mediterranean Strategy and of the GloBallast Partnerships Project in the Mediterranean in collaboration with the RAC/SPA	Staff time	Nil
		e)	Assistance provided for the above purposes under the IMO's ITCP	Staff time	Nil

	SPECIFIC OBJECTIVE	OUPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
2.	To control and manage ships' biofouling to minimise the transfer of invasive aquatic species.	a) Application of the 2011 Guidelines for the control and management of ships' biofouling to minimise the transfer of invasive aquatic species, with <i>medium priority</i> , when adopting measures to minimise the risk of introducing such species via biofouling, and any experience gained in their implementation is reported to IMO	Appropriate action by the maritime administration, with additional support	Nil
		b) Dissemination of the Guidelines to the shipping industry and other interested parties, which are requested to cooperate in minimising the risks involved	Ditto.	Nil
		c) Advice and assistance provided to Mediterranean coastal States, which so request, in order to fulfil the aims under sub- paragraphs (a) and (b) above	Staff time	Nil
3.	Ensuring effective maritime administrations.	a) NAP prepared, with <i>high</i> <i>priority</i> , with the assistance of REMPEC if necessary, to enable the assessment of the progress made, and to guide the full implementation of the Regional Strategy in a tailored manner, and to conduct a national assessment of the capabilities and define the necessary remedial action	Appropriate action by the maritime administration Regional seminar	Nil 75,000 ²²
		 b) All Mediterranean coastal States that have not already done so, have enhanced, with <i>high</i> <i>priority</i>, the performance of their maritime administrations on the basis of the NAP mentioned above, by conducting a self-assessment of their national capabilities and performance in giving full and complete effect to MARPOL and other applicable conventions, by using the guidance set out in the relevant IMO Resolution dealing with the self-assessment of flag State performance and other relevant 	Ditto.	Nil

²² Estimated cost of a two-day seminar held in Malta, with two participants per country in attendance plus the help of an external expert consultant.

SPECIFIC OBJECTIVE	OUPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
	IMO recommendations and guidelines		
	c) All Mediterranean coastal States that have not already done so, in their efforts to protect the marine environment and once the self-assessment mentioned in subparagraph a) above has been carried out successfully and any remedial action taken, have undertaken the IMO Member State Audit Scheme, using the III Code as the audit standard and following the Framework and Procedures for the IMO Member State Audit Scheme, once it is fully institutionalised when the said III Code becomes mandatory under MARPOL and other Conventions	Ditto.	Nil
	 d) Assistance provided to the Mediterranean coastal States which so request in the development of the NAP mentioned in sub-paragraph a) above, designed to enable them to assess progress made, to guide them in the full implementation of the Regional Strategy in a tailored manner, and to conduct a national assessment of their capabilities and define the necessary remedial action 	Staff time and travel ²³ External consultancy assistance	See footnote 2 210,000 ²⁴
	 e) Continuous assistance provided to Mediterranean coastal States which so request in enhancing the performance of their maritime administrations in line with new IMO developments, in particular IMSAS 	Ditto.	Ditto.
	 f) Support provided to the Mediterranean coastal States which so request to prepare for undertaking the IMO Member State Audit Scheme, having explored the possible technical assistance to which some of them may be entitled under the IMO's ITCP and other sources 	Ditto.	Ditto.

 ²³A travel budget for the Secretariat amounting to 15,000 euro for six years (2016-2021) has been estimated, as reflected at the end of the table.
 ²⁴A technical support budget amounting to 10,000 euro per country has been estimated.

	SPECIFIC OBJECTIVE	OUPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
		g) Continuous improvement of the knowledge and expertise of flag State inspection officers by establishing, through REMPEC, a programme of training activities related to relevant international instruments, in particular MARPOL, ensuring appropriate training for ship inspectors	Staff time External consultancy assistance	Nil 15,000
4.	To strengthen the Memorandum of Understanding (MoU) on port State control (PSC) in the Mediterranean region (Mediterranean MoU).	a) The mandate to REMPEC whereby the Centre should, if and when possible, offer its assistance to the Mediterranean MoU on port State control in order to improve its effectiveness and, if so requested, to facilitate cooperation between the Paris MoU and the Mediterranean MoU is maintained	Appropriate action by the maritime administration	Nil
		 b) The necessary resources and means to enable the Mediterranean MoU to function efficiently are made available, with <i>high priority</i> 	Ditto.	Nil
		c) Participation in the meetings of the MoLL Committee	Staff time and	See footnote 4
		the MoU Committee d) The Secretariat is associated with port State control training activities addressing environmental matters, including those related to Anti Fouling Systems, Ballast Water Management and biofouling, where appropriate, in collaboration with recognised training institutions within the region	Ditto.	Ditto.
		e) The Secretariat works in association with the MoUs on port State control, in particular with the Paris MoU, on the organisation and follow-up analysis of concentrated inspection campaigns on MARPOL-related deficiencies	Ditto.	Ditto.

 $^{^{25}}$ A travel budget for the Secretariat amounting to 15,000 euro per year for six years (2016-2021) has been estimated, as reflected at the end of the table.

	SPECIFIC OBJECTIVE		OUPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
5.	Provision of reception facilities in ports.	a)	Provision (including activities b) to g)) of adequate reception facilities in their ports, with <i>high priority</i> , unless specified otherwise and if appropriate action has not been already taken and procedures related to the cost of the use of such facilities have been considered, enabling their use as soon as they are available at a fee which should be reasonable and should not serve as a disincentive for their use	Appropriate action by the maritime administration, in conjunction with other agencies	See note 4 above
		h)	Well-structured advice provided	Staff time	Nil
			to Mediterranean coastal States, which so request, that may	External	$15,000^{26}$
			include, but not necessarily limited to, assessing the type, specifications, and capacity of	consultancy assistance	60,000 ²⁷
			the equipment necessary at major ports to efficiently and effectively handle shipboard residues and mixtures. Such assistance may also include preparation of guidelines or sample form of operation plans. All this should be based on previous work done on this matter and taking into account the latest edition of the IMO Comprehensive Manual on Port Reception Facilities, the IMO Guide to Good Practice for Port Reception Facility Providers and Users and the new requirements incorporated since 2005 in the relevant mandatory instruments, to assist Contracting Parties in the accomplishment of this objective	Regional seminar	

 ²⁶External consultant to prepare required advice and assist with the holding of the regional seminar.
 ²⁷ Estimated cost of a two-day seminar held in Malta, with two participants per country in attendance, plus the help of an external expert consultant.

SPECIFIC OBJECTIVE	OUPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
	 i) Contribution to the implementation of the Regional Plan on Marine Litter Management, as deemed appropriate, in preparing the advice mentioned in subparagraph h) above, in particular for the preparation of specific guidelines to determine the application of charges at reasonable costs for the use of port reception facilities or, where appropriate, the application of a No-Special-Fee system, in consultation with various relevant regional and global institutions and initiatives 	Staff time External consultancy assistance	Nil 75,000 ²⁸
6. Delivery of ship- generated wastes.	 a) Establishment, with <i>high</i> <i>priority</i> and if appropriate action has not been already taken, of a system of notification to a vessel's next port of call of the status of its on board retention of bilge waters, oily wastes, HNS residues, sewage, garbage, ozone-depleting substances and exhaust gas cleaning residues 	Appropriate action by the maritime administration	Nil
	 b) Implementation by all Mediterranean coastal States, with <i>high priority</i>, of national regulations empowering maritime authorities to require, if they deem it necessary, the Masters of vessels to discharge wastes into designated port reception facilities before sailing 	Ditto.	Nil
	 c) Advice provided on the subject as may be requested by Contracting Parties, possibly in association with the well- structured advice requested under the Specific Objective on the provision of reception facilities in ports, taking also into account, where appropriate, the Regional Plan on Marine Litter Management 	Staff time and external consultancy assistance under activity 5 h) above	Nil

 $^{^{28}}$ External consultant to support the preparation of specific guidelines and to provide technical support to up to 10 main ports in the region.

	SPECIFIC OBJECTIVE		OUPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
7.	Improved follow-up of pollution events as well as monitoring and surveillance of illicit discharges.	a)	Establishment, with <i>high</i> <i>priority</i> and if appropriate action has not been already taken, of systems and procedures for national and sub-regional monitoring and surveillance including, where practicable, regular individual or coordinated aerial surveillance in the waters under the jurisdiction of Contracting Parties, if the Parties so agree, and to report the results reported to the regular meetings of REMPEC Focal Points	Appropriate action by the maritime administration	Nil
		b)	Establishment, with <i>high</i> <i>priority</i> , of sub-regional systems, including procedures to over-fly the waters under the jurisdiction of a neighbouring State if the neighbouring Parties so agree, for surveillance of environmentally sensitive and/or high risk zones of the Mediterranean Sea	Appropriate action by the maritime administration	Nil
		c)	Analysis, as far as practical, through direct correspondence with the Contracting Parties, of the reasons behind the poor record of compliance with this objective by many Contracting Parties	Staff time	Nil
		d)	Continue organisation and participation in, funding and human resources permitting, any new activities on this issue where the Centre is requested to play a role, building on the experience gathered from the activities carried out on national monitoring and surveillance	Staff time and travel ²⁹	See footnote 8
		e)	Facilitation of the organisation of regular coordinated or individual aerial surveillance operation for illicit ship pollution discharges	Staff time	Nil

²⁹A travel budget for the Secretariat amounting to 15,000 euro per year for six years (2016-2021) has been estimated, as reflected at the end of the table.

	SPECIFIC OBJECTIVE	OUPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
		 f) The continuation of the CleanSeaNet services offered by EMSA available to all Contracting Parties to the Barcelona Convention that are not Member States of the EU, currently through the SAFEMED III Project, until 2021 and beyond, have been explored 	Staff time	Nil
		 g) Cooperation with other Regional Agreements and EMSA in carrying out the above requests 	Staff time	Nil
8.	To improve the level of enforcement and the prosecution of discharge offenders.	a) All Mediterranean coastal States have ensured, with <i>high</i> <i>priority</i> , the existence of a national legal framework (regulations) as a basis for prosecuting discharge offenders for infringements of the MARPOL Convention or of any national legal framework implementing it	Appropriate action by the maritime administration	Nil
		b) Active participation, with <i>high</i> <i>priority</i> , in the MENELAS in accordance with its terms of reference	Ditto.	Nil
		c) Continuous support provided to Contracting Parties, acting as the Secretariat of MENELAS and reports on its activities are submitted to the Contracting Parties at each of their Ordinary Meetings	Staff time	Nil
		d) Maintenance of the MENELAS information system	Staff time and IT maintenance	6,000 ³⁰
		 e) Collaboration system e) Collaboration with UNEP/MAP Secretariat to further exploit possible synergies with the Regional Seas framework such as NSN, ENPRO and EMSA in the framework of MENELAS 	Staff time and travel ³¹	See footnote 10

³⁰A website maintenance budget of 2,000 euro per biennium for six years (2016-2021) has been estimated. ³¹A travel budget for the Secretariat amounting to 15,000 euro per year for six years (2016-2021) has been estimated, as reflected at the end of the table.

SPECIFIC OBJECTIVE	OUTPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
9. To reduce the pollution generated by pleasure craft activities.	a) Implementation, with <i>high</i> <i>priority</i> , of the Guidelines concerning Pleasure Craft Activities and the Protection of the Marine Environment in the Mediterranean, in conjunction with the relevant provisions of the MARPOL Convention and the Regional Plan on Marine Litter Management	Appropriate action by the maritime administration	Nil
	b) Measures undertaken to implement the said Guidelines reported to the Secretariat	Ditto.	Nil
	c) Assistance provided to Mediterranean coastal States in the implementation of the	Staff time Regional seminar	Nil 75,000 ³²
	Guidelines referred to in subparagraph a) above, taking into account the relevant provisions of the MARPOL Convention and the Regional Plan on Marine Litter Management	plus external consultancy	
	 d) Recordkeeping of the reports sent by the Contracting Parties under sub-paragraph b) above and submission of periodical synthetic reports to the relevant meetings of the Contracting Parties 	Staff time	Nil
10. Reduced risk of collisions by establishing Ship's Routeing Systems.	a) Additional appropriate routeing systems in the Mediterranean are proposed to IMO, where necessary, for possible adoption in accordance with international law	Appropriate action by the maritime administration	Nil
	 b) Establishment of MSPs under national jurisdiction is considered, when and where possible, and without prejudice to the sovereign right of the States, in close collaboration with the relevant national competent authorities and in cooperation with other Mediterranean coastal States ensuring that their MSPs are coherent and coordinated across the Mediterranean region 	Appropriate action by the maritime administration	Nil

³² Estimated cost of a two-day seminar held in Malta, with two participants per country in attendance plus the help of an external expert consultant.

SPECIFIC OBJECTIVE	OUTPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
	c) Assistance provided to Contracting Parties that so request, either individually or collectively, in the identification of possible sea areas where a routeing system might be deemed necessary and in the preparation of the relevant documentation to initiate the process at IMO	Staff time	Nil
	 d) Support is provided, in close cooperation with other MAP components, to Contracting Parties which so require in their efforts toward the establishment of MSPs 	Staff time and travel ³³	See footnote 12
11. Improved control of maritime traffic.	a) Areas of the Mediterranean where control of maritime traffic could be improved by the establishment of a regime based on the use of AIS in conjunction with VTS and mandatory ship reporting systems, are identified and the approval procedures is completed as soon as possible thereafter	Appropriate action by the maritime administration	Nil
	 a) Improvement, on a continuous basis, of technical cooperation among VTS Centres of neighbouring countries and, according to the need, information is exchanged about ships by using AIS and other related systems in the common surveillance area 	Ditto.	Nil
	 b) The international financial assistance required to establish the regime referred to in sub-paragraph a) above, taking also into account, where appropriate, possible synergies with actions undertaken on the establishment of MSPs referred to under Specific Objective 10, is negotiated, with <i>high priority</i>, with appropriate organisations and agencies on behalf of the Contracting Parties which so request 	Staff time	Nil

 $^{^{33}}$ A travel budget for the Secretariat amounting to 15,000 euro per year for six years (2016-2021) has been estimated, as reflected at the end of the table.

SPECIFIC OBJECTIVE	OUTPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
12. Identification of Particularly Sensitive Sea Areas (PSSAs).	a) Maritime areas within their jurisdiction which need the protection afforded by their designation as PSSAs are ascertained, with <i>medium</i> <i>priority</i> , and the support of REMPEC and RAC/SPA and, if so ascertained, the process of requesting IMO to enable such designation is initiated	e the maritime r administration	Nil
	 b) Initiation, on the request of Contracting Parties and in conjunction with RAC/SPA, of the process of identification of those areas which, after examination by the REMPEC Focal Points, could be proposed for designation as PSSAs taking also into account, where appropriate, possible synergies with actions undertaken on the establishment of MSPs referred to under Specific Objective 10 		Nil
	 c) Assistance is provided, in cooperation with IMO, to the Mediterranean coastal States which so request, to conduct the necessary studies and to prepare the relevant submissions to IMO for the designation of PSSAs, if any, in strict compliance with the applicable IMO Guidelines 		Nil 15,000
	 d) Possibility of obtaining assistance for the above purposes under the IMO's ITCP explored 	Staff time	Nil

SPECIFIC OBJECTIVE	OUTPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
13. Reduction of marine noise caused by ships.	a) Awareness raised, with <i>medium priority</i> , through the dissemination of the advice contained in the IMO Guidelines for the reduction of underwater noise from commercial shipping to address adverse impacts on marine life among their national designers and shipbuilders, as well as operators of ships flying their flag, urging them to implement noise mitigation strategies on board their ships	Appropriate action by the maritime administration	Nil
	 b) Advice and assistance is provided to Mediterranean coastal States, which so request, in order to fulfil the objective under sub- paragraphs (a) above 	Staff time	Nil
14. To establish procedures for the designation of places of refuge in order to minimise the risks of widespread pollution.	a) Identification, with <i>high</i> <i>priority</i> , at the national level, of appropriate procedures as outlined in the relevant IMO Guidelines and relevant EU guidelines supplemented by the associated Guidelines and Principles prepared by REMPEC, in order to facilitate the decision making when designating a place of refuge for ships in need of assistance	Appropriate action by the maritime administration	Nil
	 b) All Mediterranean coastal States have drawn up plans to deal with ships in distress, including, appropriate equipment and means, as required, and have defined the modalities of the response according to its nature and to the risk incurred 	administration	Nil
	c) Continuous assistance provided to countries, which so request, to define procedures and draw up plans as specified in sub- objectives a) and b) above, and to raise funds, <i>inter</i> <i>alia</i> , from the IMO's ITCP	Staff time External consultancy assistance	Nil 15,000

SPECIFIC OBJECTIVE	BJECTIVE OUTPUT		MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
15. To examine the possibility of designating the Mediterranean Sea or parts thereof as a SOx emission control area under MARPOL Annex VI and effectively implement the existing energy efficiency measures.	a)	Establish a technical committee of experts nominated by the Contracting Parties, which works through correspondence, which will carry out a technical and feasibility study to examine if it is appropriate, at the current stage, to put in place a roadmap for preparation of a submission to the International Maritime Organisation to designate as a SOx ECA in certain areas of the Mediterranean Sea requiring specific environmental protection, and to explore possible further steps;	Appropriate action by the maritime administration and the Secretariat	Nil
	b)	Once a decision is made and having ratified MARPOL Annex VI, a proposal to designate as a SOx ECA the area or areas of the Mediterranean Sea identified under sub- paragraph a) above is submitted to IMO, with <i>medium priority</i>	Ditto.	Nil
	c)	Participation in relevant debates at the IMO on possible future further measures for enhancing the energy efficiency of international shipping, in particular, the development of a data collection system for fuel consumption of ships, <i>inter alia</i> by informing the Secretariat of the existence of data collection and reporting systems for fuel consumption of ships	Ditto.	Nil
	d)	Preparation, with <i>high priority</i> , of a study based	Staff time	Nil
		on the input of Contracting Parties, aimed at assessing the feasibility of the alternatives referred to in sub-paragraph a) above	External consultancy assistance	15,000

SPECIFIC OBJECTIVE	OUTPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
	e) Assistance provided to the Mediterranean coastal States which so request, either individually or collectively, to prepare a submission to IMO proposing the designation as a SOx ECA of the area or areas of the Mediterranean Sea identified under sub- paragraph a) above	Staff time Regional seminar	Nil 60,000 ³⁴
	 f) Relevant information provided to Contracting Parties, which so request, on possible future further measures for enhancing the energy efficiency of international shipping 	Staff time	Nil
	 g) Assessment of existing data collection and reporting systems for fuel consumption of ships in the Mediterranean region and pilot studies on voluntary "Data Collection and Reporting" carried out 	Staff time	Nil
	 h) Possibility of obtaining assistance for the above purposes under the IMO's ITCP explored 	Staff time	Nil
16. To ensure that adequate emergency towing capacity is available throughout the Mediterranean to assist vessels, including tankers, in distress.	 a) Agreements with neighbouring coastal States considered, with <i>high</i> <i>priority</i>, if appropriate action has not been already taken, to enable them to share emergency towing equipment and arrangements to assist ships in distress in the Mediterranean, using as appropriate the Mediterranean guidelines on emergency towing b) Assistance provided to Contracting Parties that so request in preparing and implementing the 	Staff time Staff time	Nil
SPECIFIC OBJECTIVE	agreements referred to in sub-paragraph a) above OUTPUT	MEANS REQUIRED	INDICATIVE ESTIMATED

³⁴ Estimated cost of a two-day seminar held in Malta, with two participants per country in attendance.

			ADDITIONAL COST (EURO)
	 c) Assessment of the capability of the Mediterranean coastal States in terms of emergency towing equipment, and support provided to those Contracting Parties, which so request 	Staff time	Nil
17. To enhance the levels of pre-positioned spill response equipment under the direct control of Mediterranean coastal States.	 a) Information concerning national practices for financing the acquisition of spill response equipment, shared or exchanged, with high priority, with a view to assist Mediterranean Coastal States in determining all feasible methods to finance spill response equipment 	Appropriate action by the maritime administration	Nil
	b) Establishment, with <i>medium priority</i> , of national stockpiles of State controlled and private pre- positioned oil and HNS spill response equipment and the related inventory a national level and regional level is kept updated through REMPEC		Nil
	 c) Assistance provided to the States which so request in identifying the minimum required level of pre- positioned State-controlled spill response equipment 	Staff time and external consultancy	210,000 ³⁵
	 d) Dissemination to the Contracting Parties of information concerning the applicable ways of financing the acquisition of such equipment and continuous assistance provided in this regard, as necessary 		Nil
	e) Maintenance of the RIS and updated inventory of pre-positioned spill response equipment	IT maintenance	6,000 ³⁶

 ³⁵ A technical support budget amounting to 10,000 euro per country has been estimated.
 ³⁶ An IT maintenance budget of 2,000 euro per biennium for six years (2016-2021) has been estimated.

SPECIFIC OBJECTIVE	OUTPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
	 f) Possible synergies to interconnect the Regional Information System (RIS) with CECIS to facilitate the access to the information at any time and in particular in case of emergency, and facilitate the update of these databases through an interconnected system, is envisaged 	Staff time	Nil
18. To encourage the participation of the regional scientific and technical institutions in research and development activities and to facilitate transfer of technology.	 a) Scientific and technical institutions, as well as the industry, actively participate in R&D activities and programmes related to accidental marine pollution prevention, preparedness and response 	Appropriate action by the maritime administration	Nil
	 b) National institutions and industry presents the results of their R&D activities and programmes at international fora 	Ditto.	Nil
	c) National R&D activities are presented using the page created by REMPEC within the Country Profiles website	Ditto.	Nil
	 d) Continuous assistance provided to regional institutions and industry in identifying fields of research in which there is a need for enhancement of the state-of-the-art of spill preparedness and response technologies and techniques 	Staff time	Nil
	e) Continuous assistance provided in the dissemination and exchange of results of national R&D activities and programmes within and outside the Mediterranean region	Staff time	Nil

SPECIFIC OBJECTIVE	OUTPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
	 f) Participation of national and regional research institutions and industry in the relevant international fora is facilitated with a view to making better known the results of R&D activities undertaken in the Mediterranean region 	Staff time and travel ³⁷	See footnote 16
	g) Cooperation with other Regional Agreements, in carrying out the above requests.	Staff time	Nil
19. To improve the quality, speed and effectiveness of decision-making process in case of marine pollution incidents through the development and introduction of technical and decision support tools.	a) The development and improvement of specific regional decision support tools are stimulated by promoting active participation of national scientific institutions and programmes, and through providing REMPEC with relevant data-sets and other information that might be available in the respective countries	Appropriate action by the maritime administration	Nil
	 b) Active participation, through a country lead approach in the implementation of the programme of work of the MTWG as defined by the Meetings of Focal Points of REMPEC 	Ditto.	Nil
	 c) National oceano- meteorological institutes have joined the MONGOOS and contributed to the maintenance of the above Mediterranean tools through regular data update 	Ditto.	Nil
	 d) Contribution to the development of a quality assurance programme for data reporting and collection in line with the EcAp Monitoring Programme 	Ditto.	Nil

³⁷A travel budget for the Secretariat to implement the Regional Strategy amounting to 15,000 euro per year for six years (2016-2021) has been estimated, as reflected at the end of the table.

SPECIFIC OBJECTIVE	OUTPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
	e) Continuous revision and upgrade of the existing IT based decision support	Staff time Regional seminar plus	Nil 75,000 ³⁸
	tools, and development of new IT based decision support tools available to the competent national authorities of the Contracting Parties, taking into account national or regional initiatives in this	external consultancy IT development	150,000 ³⁹
	field f) Coordination and the implementation of the programme of work of the MTWG facilitated	Staff time	
	 g) Possible interaction and capitalisation of decision support tools available at Mediterranean and European levels, including those developed by other Regional Agreements or under other regional initiatives explored, in carrying out the above requests 	Staff time	Nil
	 h) Support provided for the development of a quality assurance programme for data reporting and collection in line with the EcAp Monitoring Programme 	Staff time in connection with activity e) above	Nil
	 i) Integration of any developments on decision support tools under Specific Objectives 20, 21 and 22 	Staff time	Nil

 ³⁸ Estimated cost of a two-day seminar held in Malta, with two participants per country in attendance plus the help of an external expert consultant.
 ³⁹ Estimated cost of IT developments

SPECIFIC OBJECTIVE	OUTPUT		MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
20. To increase as much as practical, the level of knowledge in the field of preparedness and response to accidental marine pollution by oil and other harmful substances.	a)	Establishment, with <i>high</i> <i>priority</i> , if appropriate action has not been already taken, of national training programmes for response to incidents involving oil and other HNS, based inter alia on IMO Model training courses Levels 1 and 2, for training national operating level and supervisory personnel respectively, with a view to ensuring a continuous education of such personnel	Appropriate action by the maritime administration, including training	Nil
	b)	Dissemination of the knowledge acquired through train the trainer courses and replication of the training courses at local and national level	Ditto.	Nil
	c)	Regular exercises carried out to test national response capacity in cooperation with all relevant stakeholders and to the possible extent involving neighbour coastal states to enhance bilateral and sub-regional cooperation	Appropriate action by the maritime administration	Cost of regular exercises ⁴⁰
	d)	Assistance provided to Contracting Parties which so request in the development and implementation of their national training programme	Staff time	Nil
	e)	Continuous delivery of "Training of Trainers" courses, based in particular on the work developed under POSOW Projects	Two regional training courses plus external consultancy support	150,000 ⁴¹
	f)	Regional training courses on specific, highly specialised issues, identified at regular basis	Three regional training courses	180,00042

⁴⁰ The cost of regular exercises to test response capacity could not be quantified, as they involve several State departments and administrations.

⁴¹ Estimated cost of two two-day training courses held in Malta, with two participants per country in attendance plus the help of an external expert consultant. ⁴² Estimated cost of three two-day Regional training held in Malta, with two participants per country in

attendance

	by the Meetings of		
	REMPEC Focal Points		
SPECIFIC OBJECTIVE	OUTPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
	 g) The relevant model training courses updated b the IMO Sub-Committee on Pollution Prevention and Response (PPR); other Regional Agreements, and EMSA under its relevant Action Plans are taken into account, when preparing and supporting the implementation of nationa training programmes 	r	Nil
	 h) Promotion of the organisation of regular exercises to test national and sub-regional response capacity in cooperation with all relevant stakeholders 	Staff time and travel ⁴³	See footnote 22
	 The possibility of obtaining assistance for the above purposes under the IMO's ITCP is explored and external resources and means inter alia from external donors, the private sector and the UCPM are mobilised 		Nil
21. To revise the existing recommendations, principles and guidelines, and to develop new ones aimed at facilitating international cooperation and mutual assistance within the framework of the 2002 Prevention and Emergency Protocol.	a) Revision, with <i>high</i> <i>priority</i> if appropriate action has not been already taken, of the existing recommendations, principles and guidelines concerning accidental marine pollution preparedness, response and mutual assistance, as well as prevention of pollution from ships, that were adopted since 1987, paying particular attention to thos that aim at removing possible obstacles which might hinder mutual assistance	d g	Nil

⁴³A travel budget for the Secretariat to implement the Regional Strategy amounting to 15,000 euro per year for six years (2016-2021) has been estimated, as reflected at the end of the table

SPECIFIC OBJECTIVE	OUTPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
	 b) Identification, with <i>high</i> <i>priority</i>, if appropriate action has not been already taken, of all such recommendations, principles and guidelines that need to be revised, updated and/or amended 	Ditto.	Nil
	 c) Indication, with <i>high</i> <i>priority</i>, if appropriate action has not been already taken, of additional recommendations, principles and guidelines which should be adopted at the regional level with a view to facilitating the implementation of the 2002 Prevention and Emergency Protocol in the field of international cooperation and mutual assistance 	Ditto.	Nil
	 d) Indication, with <i>high</i> <i>priority</i>, if appropriate action has not been already taken, of additional recommendations, principles and guidelines which should be adopted at the regional level with a view to facilitating the implementation of the 2002 Prevention and Emergency Protocol in the field of international cooperation and mutual assistance 	Ditto.	Nil
	e) The use of the CECIS Marine Pollution is considered in order to enhance coordination of requests and offers of international assistance	Staff time External resources	Nil

SPECIFIC OBJECTIVE		OUTPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
	the necc is in ha of the a procedu entry ir within a territory person that mig mutual of emen prepara recomm improv procedu	ation, as soon as essary information nd, of an inventory pplicable national ures governing the tto, movement and exit from their y of specialised nel and equipment ght be provided as assistance in case rgency, and ttion of nendations for ing those national ures that could ly hamper providing	Staff time External consultancy assistance, to cover activities e), f), g) in two separate but related missions	Nil 30,000
	g) Prepara priority with RI Focal P updated texts of regiona princip to be pu to the N	sistance tion, with <i>high</i> o, in cooperation EMPEC national coints revised, 1 and/or amended the relevant 1 recommendations, les and guidelines ropose for adoption Aeetings of the cting Parties	Ditto.	See above
	arises a with RI Focal P recomm princip as nece propose Meetin	pment, as the need nd in cooperation EMPEC national Points, new mendations, les and guidelines, ssary, and to be e for adoption to the gs of the cting Parties	Ditto.	See above
	 i) In carry request IMO, o Agreen its relevand the Protect taking in new de international destructions 	ving out the above s, cooperation with ther Regional nents, EMSA under vant Action Plans Union Civil ion Mechanism, nto account any velopments on tional cooperation tual assistance	Staff time	Nil

SPECIFIC OBJECTIVE	OUTPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
	 j) Possibility of obtaining assistance for the above purposes under the IMO's ITCP is explored and external resources and means inter alia from external donors, the private sector and the UCPM are mobilised 	Staff time	Nil
22. To strengthen the capacity of individual coastal States to respond efficiently to marine pollution incidents through development of sub- regional operational agreements and contingency plans.	a) Assessment, preparation, or revision and adoption, with <i>high priority</i> if appropriate action has not been already taken, of national contingency plans and establishment of national systems for preparedness for and response to oil and HNS spills from ships, sea ports and oil handling facilities, with a view to creating the necessary conditions for the development of sub- regional agreements	Appropriate action by the maritime administration and the Secretariat	Nil
	 b) Sub-regional agreements covering the entire Mediterranean region negotiated, concluded and implemented including the relevant sub-regional contingency plans c) Continuous assistance provided to the Contracting Parties that have not yet adopted their national contingency plans or need to review their national contingency plans to integrate HNS and/or offshore components, in the development or update and implementation of national preparedness and response systems 	Ditto. Staff time	Nil

SPECIFIC OBJECTIVE	OUTPUT	MEANS REQUIRED	INDICATIVE ESTIMATED ADDITIONAL COST (EURO)
	 d) Assessment of national contingency plans and national response systems, facilitated through self-assessment or peer reviews to commensurate national response capacities with the existing oil and HNS spill risks from ships, sea ports and oil handling facilities and to evaluate gaps between national plans in order to define appropriate actions to ensure the compatibility of operational arrangements in view of the conclusion of bilateral and/or sub-regional agreements⁴⁴ 	Staff time and travel ⁴³	See footnote 23
	e) Continuous assistance provided to Contracting Parties, which so request, in preparing or reviewing sub-regional contingency plans and in drafting agreements on their implementation	Ditto.	Ditto.
	 f) Advice and material which may be made available by other Regional Agreements utilised in carrying out the above requests 	Staff time	Nil
	 g) The possibility of obtaining assistance for the above purposes under the IMO's ITCP is explored and external resources and means inter alia from external donors, the private sector and the UCPM are mobilised 	Staff time	Nil

⁴⁴ The reference to southern eastern Mediterranean contingency plans is agreeable for Turkey only on the condition that there exists no reference to maritime jurisdiction areas and sovereignty issues in the respective contingency plan

SUMMARY OF INDICATIVE COSTS OF IMPLEMENTATION OF THE REGIONAL STRATEGY 2016-2021, ADDITIONAL TO THE COST OF ENGAGING ONE DEDICATED OFFICER FOR EACH ADMINISTRATION

Travel budget for the	Travel required, <i>inter alia</i> , under activities 3 d) to f); 4 c) to e); 7	90.000
Secretariat 2016-2021	d); 8 e); 10 d); 18 f); 20 h) and 22 d) and e)	90,000
External consultancy	Approximate cost of external consultants engaged under	600,000
support	activities 3 d) to g); 5 h) and i); 6 c); 9 c); 12 c); 14 c); 15 d); 17	
	c) and e); 19 e); 20 e) and 21 e) to g)	
Seminars and training	Approximate cost of holding regional seminars and training	675,000
activities	under activities 3 a) to c); 5 h); 9 c); 15 e); 19 e); and 20 a) and b)	
	and e) to f), including external support where appropriate	
IT Maintenance	Approximate cost for IT development and maintenance under	162,000
	activities 8 d) and 19 e)	
TOTAL		
		1.527.000