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## MEDITERRANEAN ACTION PLAN

Eighth Meeting of National Focal Points for SPAs

Palermo, 6-9 June 2007

### REPORT ON THE PROGRESS MADE IN THE IMPLEMENTATION OF THE ACTION PLAN CONCERNING SPECIES INTRODUCTIONS AND INVASIVE SPECIES IN THE MEDITERRANEAN SEA

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## Report on the progress made in the implementation of the Action Plan concerning species introductions and invasive species in the Mediterranean Sea

### I. Introduction

The Barcelona Convention (1976) and its Protocols, initially aimed at reducing pollution, have been brought up to date as new Protocols were adopted.

The Protocol on Specially Protected Areas and Biological Diversity in the Mediterranean (SPA/BD), adopted in 1995 and entering into force in 1999, invites the Contracting Parties to “take all appropriate measures to regulate the intentional or accidental introduction of non-indigenous species to the wild” (Article 13).

In 2003, the United Nations Environment Programme’s Mediterranean Action Plan (UNEP/MAP) adopted an “Action Plan on species introductions and non-indigenous species in the Mediterranean Sea”.

Paragraph 7 of this Action Plan recognizes that maritime transport constitutes a major vector of introduction into the Mediterranean Sea.

Paragraph 23 of the Plan strongly recommends that “Given the importance of shipping-mediated introductions of non-indigenous species into the Mediterranean, it is strongly recommended that a regional project be developed to overcome gaps for the Mediterranean countries, and strengthen the capacities of the countries to reduce the transfer of aquatic organisms via ships’ ballast water and sediments and hull fouling”.

National law enabling introductions of marine species to be controlled is set out in Paragraph 17.

Regional actions of coordination, assistance, and elaboration of guidelines are enumerated in Paragraph 13.

Programmes of data collection, boosting scientific programmes and monitoring are presented in Paragraphs 14, 15 and 16.

A summary of all these actions of the Plan is given in detail in Table 1.

Table 1: Reminder of the Action Plan, its deadlines, its actions and its actors

Action	Deadline	Responsible
1. Developing programmes to raise the awareness of the general public and target groups, including decision-makers, concerning the risks associated with species introduction	2004	Contracting Parties
2. Setting up a mechanism to promote and coordinate the actions listed in paragraph 18	2004	Contracting Parties
3. Preparation of National Reports	2004	Contracting Parties
4. Inventorying introduction vectors	2004	Contracting Parties
5. Elaborating the regional project on fouling, ballast water and sediment	2004	RAC/SPA

6. Elaborating education and awareness material	2004	RAC/SPA and Contracting Parties
7. Establishing a directory of relevant specialists and organisations	Beginning 2005	Contracting Parties
8. Setting up a group of experts who will be responsible for assessing suggestions for introduction, and analysing risks and possible consequences	Beginning 2005	Contracting Parties
9. Convening a Workshop	Beginning 2005	RAC/SPA
10. Launching the procedures for enacting or strengthening national legislation governing the control of non-indigenous species introduction	2005	Contracting Parties
11. Organising the regional training session	2005	RAC/SPA
12. Developing programmes for data collection and monitoring	2004-2006	Contracting Parties
13. Strengthening and where necessary setting up systems to control the intentional import and export of non-indigenous marine species	2004-2006	Contracting Parties
14. Developing and implementing risk-assessment techniques	2004-2007	Contracting Parties
15. Preparing the Guidelines for controlling the vectors of non-indigenous species and invasive marine species introduction into the Mediterranean	2004-2006	RAC/SPA
16. Preparing the Guide for risk analysis and impact assessment as regards the introduction of non-indigenous species	2004-2006	RAC/SPA
17. Setting up the Regional Mechanism for collecting, compiling and circulating information on invasive non-indigenous species	2004-2006	RAC/SPA
18. Compiling an inventory of introduced species. Identifying and inventorying public and private actors whose activity could introduce marine non-indigenous species	2004-2007	Contracting Parties
19. Elaborating the National Plan	2004-2007	Contracting Parties
20. Preparing the report on the progress made in implementing the Action Plan	Beginning 2007	RAC/SPA

## II. Evaluating the implementation of the Action Plan at regional level

During the Action Plan's implementation period from early 2004 until the present day, RAC/SPA has:

- organised, jointly with ICRAM (the Central Institute for Scientific and Technological Research Applied to the Sea, Italy), a Workshop on non-indigenous species in the Mediterranean (Rome, 6 and 7 December 2005) (Action 9, Paragraph 21) (See Conclusions and Recommendations of the workshop in Annex I to the present report)
- elaborated Draft Guidelines for controlling the vectors of introduction into the Mediterranean of non-indigenous species and invasive marine species (Action 15, Paragraph 20) (See Document UNEP(DEPI)/MED WG.308/12)

- elaborated a Draft Guide for risk analysis assessing the impacts of the introduction of non-indigenous species (Action 16, Paragraph 20) (See Document UNEP(DEPI)/MED WG.308/11)
- taken part, in collaboration with REMPEC, in elaborating a regional project to manage ballast water and sediments. This was the second phase of the GEF/UNDP/IMO's Global Ballast Water Management Programme (GloBallast), Building a partnership to assist developing countries to reduce the transfer of harmful aquatic organisms via ships (GloBallast Partnerships: GBP). RAC/SPA and REMPEC would act as Coordinating Unit for the Mediterranean of this 5-year project. It should start up when the PDF-B proposal is approved by the GEF Council in June 2007 (Action 5, Paragraph 23)
- planned for the last quarter of 2007 to organise a regional training course on managing marine invasive species (Action 11, Paragraph 24)
- for the biennium 2008-2009, intended to set up a system of data collection, compilation and circulation on non-indigenous species in the Mediterranean (Action 17, Paragraph 22)
- for the biennium 2008-2009, intended to boost national awareness programmes on the risks associated with non-indigenous species in the Mediterranean (Action 6, Paragraph 25).

Despite all the efforts made at regional level, there was a delay in implementing certain actions. This delay, according to RAC/SPA, was basically due to the lack of funding and to a schedule that was too tight timewise.

### III. Evaluating the implementation of the Action Plan at national level

According to the actions and their respective deadlines, an assessment of the national element was made, based on the answers given by the various Contracting Parties to the questionnaire drawn up by RAC/SPA (See Annex II) and on the biennial national reports presented at each Meeting of the National Focal Points for SPAs. The data provided by the national reports will only be kept for those countries which did not answer the questionnaire.

#### III. 1. Evaluation on the basis of national report

Twenty countries sent in their reports to RAC/SPA by the given date; these were: Albania, Algeria, Bosnia-Herzegovina, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Morocco, Slovenia, Spain, Syria, Tunisia and Turkey.

Table 2 gives the information provided by the Contracting Parties in their national reports.

Table 2: Summary of main actions for the fight against non-indigenous species

Country	Actions for the fight against non-indigenous species
Albania	<ul style="list-style-type: none"> <li>▪ Law no. 9587 on "Protecting biodiversity" (20 July 2006) regulating species introduction and research activities</li> <li>▪ No mention of concrete action plans was made in the report</li> </ul>
Algeria	<ul style="list-style-type: none"> <li>▪ -</li> </ul>
Cyprus	<ul style="list-style-type: none"> <li>▪ Law on fishing legislation which regulates species introductions (implemented)</li> <li>▪ Fishing law (Article 11) regulating the protection of species (against possession, collection, trade, etc.)</li> <li>▪ The importation of aquatic species including invasive species and those intended for aquaculture is subject to a permit</li> </ul>

France	<ul style="list-style-type: none"> <li>▪ The passage of ships is regulated in SPAs, as is species introduction or fishing or leisure activities, without reference to the recent legal instruments regarding this</li> <li>▪ Species introduction is regulated by the Environment Code, the implementation decrees of which have not yet been finalized</li> <li>▪ A national watchdog on the expansion of <i>Caulerpa</i>s has been formed, but the report does not mention the instrument related to its creation</li> </ul>
Israel	<ul style="list-style-type: none"> <li>▪ Preventing the introduction of all new species</li> </ul>
Libya	<ul style="list-style-type: none"> <li>▪ 20 Lessepsian species were identified in Libyan waters</li> <li>▪ The introduction of non-indigenous species or GMOs is subject to a permit</li> </ul>
Morocco	<ul style="list-style-type: none"> <li>▪ The regulation on species introduction is described but without giving an exact reference</li> <li>▪ Administrative measures have been taken to elaborate a project aimed at eliminating <i>Erisma</i>tura</li> </ul>
Monaco	-
Montenegro	<ul style="list-style-type: none"> <li>▪ Allusion is made to the national report prepared as part of the SAP BIO programme which will be the framework within which action plans will be elaborated</li> </ul>
Slovenia	<ul style="list-style-type: none"> <li>▪ The 2004 Law on nature conservation bans the introduction of non-indigenous species except in cases when these have no harmful effect on biodiversity</li> <li>▪ A National Action Plan was elaborated as part of SAP BIO on biological invasions and their possible effects on biodiversity</li> <li>▪ A list of introduced species (particularly via ballast water) was prepared</li> </ul>
Syria	<ul style="list-style-type: none"> <li>▪ No recent measures taken to regulate the passage of ships or species introduction</li> <li>▪ No reference to measures taken for the protection and conservation of species, or species introduction</li> <li>▪ A National Action Plan on invasive species and their impact on marine biodiversity was elaborated as part of SAP BIO</li> </ul>
Turkey	-

It emerged from these reports that the actions which the national reports referred to were:

- Action 10 (Paragraph 17) – National laws

In all, 14 laws were passed, most of them in 2003, 5 decrees and legal notices (5) in Malta, a regional act in Spain and a non-specified legal action for Turkey. Law no. 9587 on the Protection of Biodiversity (20 July 2006), regulating species introduction and research activities in Albania

- Actions related to Paragraph 18 – Inventorying, research, training and cooperation

In general these relate to decisions by Ministerial Councils, acts to fund activities, especially at regional level (Spain), encouraging work on databases and study and research projects, etc. In several countries, technical and scientific activities are being carried out to enable legal texts to be prepared

- Action 18 (Paragraph 18) – Inventorying introduced species

In most of the reports it was noted that species introductions were either not allowed, or not yet signalled, or subject to a permit. However, in Spain a list of non-indigenous species was identified; in France, two species of *Caulerpa* (*C. taxifolia* and *C. racemosa*) were being monitored attentively; in Italy, 541 non-indigenous species were identified in the Mediterranean; in Lebanon, 22 invasive species were identified; in Libya, 22 invasive species were also identified; a list of identified Lessepsian species was provided by Tunisia.



- Action 4 (Paragraph 18) – Inventorying vectors of introduction

Three countries cite studies aimed at listing non-indigenous species, including a summary that references 128 species. These studies confirm that the source of introduction of these species is preferentially the Suez Canal, while other straits (Gibraltar, Dardanelles) and aquaculture seem to play a less important part.

### III. 2. Evaluation on the basis of the questionnaire

The countries that replied on time to the questionnaire on the evolution of actions (Annex I) were:

Bosnia-Herzegovina, Croatia, Egypt, Greece, Italy, Lebanon, Malta, Spain and Tunisia.

The questionnaire asked the Contracting Parties to answer by action:

Action 1, 2, 3, 4, 5, 6, 7, 8, 9, 11 and 13 correspond to the actions in Paragraph 18 of the Action Plan. Action 14 corresponds to Action 3 (Paragraph 15); Action 15 corresponds to Action 10 (Paragraph 17); Action 16 corresponds to Action 12 (Paragraph 16); and Action 12 corresponds to Action 19 (Paragraph 19).

Table 3 shows how the questionnaire corresponds to the Action Plan

Table 3: Correspondence between the actions of the questionnaire and those of the Action Plan

Questionnaire	Action Plan
Action 1	Action 1, paragraph 18
Action 2	Action 4, paragraph 18
Action 3	Action 18, paragraph 18
Action 4	Action 7, paragraph 18
Action 5	Action 8, paragraph 18
Action 6	Action 2, paragraph 18
Actions 7 and 10	Action paragraph 18
Action 8	Action 13, paragraph 18
Action 9, 11, 13	Action 14, paragraph 18
Action 14	Action 3, paragraph 15
Action 15	Action 10, paragraph 17
Action 16	Action 12, paragraph 16
Action 12	Action 19, paragraph 19

The countries that replied on time to the questionnaire on the progress made in implementing the Action Plan on species introductions and invasive species in the Mediterranean Sea (See Annex II to the present report) were: Bosnia-Herzegovina, Croatia, Egypt, Greece, Italy, Lebanon, Malta, Spain and Tunisia.

The questionnaire suggests that the Contracting Parties answer according to the actions enumerated in the Action Plan implementation timetable.

It emerges from a reading of the questionnaires, summarized in Table 4, that out of the 9 countries that answered, 5 have developed awareness programmes (Action 1, Paragraph 18), 6 have inventoried vectors or ways of introduction (Action 4, Paragraph 18), 8 have made inventories of introduced species (Action 18, Paragraph 18), 5 have made a directory of concerned specialists and bodies (Action 7, Paragraph 18), 5 have decided on a group of experts responsible for assessing proposals of introduction, analysing risks and possible consequences (Action 8, Paragraph 18), only 3 have enhanced systems of checking on intentional imports and exports of non-indigenous species (Action 13, Paragraph 18), and on average 3 countries have developed and implemented risk assessment techniques (Action 14, Paragraph 18). Though 3 countries seem to have answered Yes for national reports (Action 3, Paragraph 15), these are not reports that are specific to the Action Plan on species introductions and invasive species in the Mediterranean Sea.

Lastly, only 4 countries have launched procedures concerning legislation (Action 10, Paragraph 17), 4 countries have developed data collection and monitoring programmes (Action 12, Paragraph 16), and the elaborating of national action plans (Action 19, Paragraph 19) seems to be under way, whatever the answer.

Table 4 : Summary of the Contracting Parties' answers to the questionnaire

<b>ACTION</b>	<b>A.1</b>	<b>A.2</b>	<b>A.3</b>	<b>A.4</b>	<b>A.5</b>	<b>A.6</b>	<b>A.7</b>	<b>A.8</b>	<b>A.9</b>	<b>A.10</b>	<b>A.11</b>	<b>A.12</b>	<b>A.13</b>	<b>A.14</b>	<b>A.15</b>	<b>A.16</b>	<b>A.12</b>
<b>COUNTRY</b>																	
<b>Bosnia-Herzegovina</b>	No	No	No	No	No	Yes	No	Yes	No	No	Yes	Yes	No	No	Yes	No	No
<b>Croatia</b>	Yes	No	Yes	No	Yes	No	Yes	Yes	No	Yes	Yes	No	Yes	No	Yes	Yes	No
<b>Egypt</b>	Yes	No	Yes	Yes	Yes	No	No	No	No	Yes	No	Yes	No	Yes	No	No	Yes
<b>Spain</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>Greece</b>	No	Yes	Yes	Yes	No	No	No	No	No	Yes	No	Yes	Yes	Yes	No	No	No
<b>Italy</b>	No	Yes	Yes	Yes	No	No	No	No	No	Yes	No	No	No	No	No	Yes	No
<b>Lebanon</b>	No	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes	Yes	Yes	Yes	No	No	No
<b>Malta</b>	Yes	Yes	Yes	No	Yes	No	No	Yes	Yes	No	No	No	No	No	Yes	Yes	No
<b>Tunisia</b>	Yes	Yes	Yes	No	No	No	Yes	No	Yes	Yes	No	No	No	No	No	Yes	No

Even if introduced species and invasive species hold the attention of most of the countries, there is generally not nearly enough implementation of the Action Plan on species introductions and invasive species in the Mediterranean Sea, even for those countries that answered the questionnaire. The timetable established by the Action Plan is thus far from being implemented, whatever the given country. Figure 1 illustrates this state of things very well.

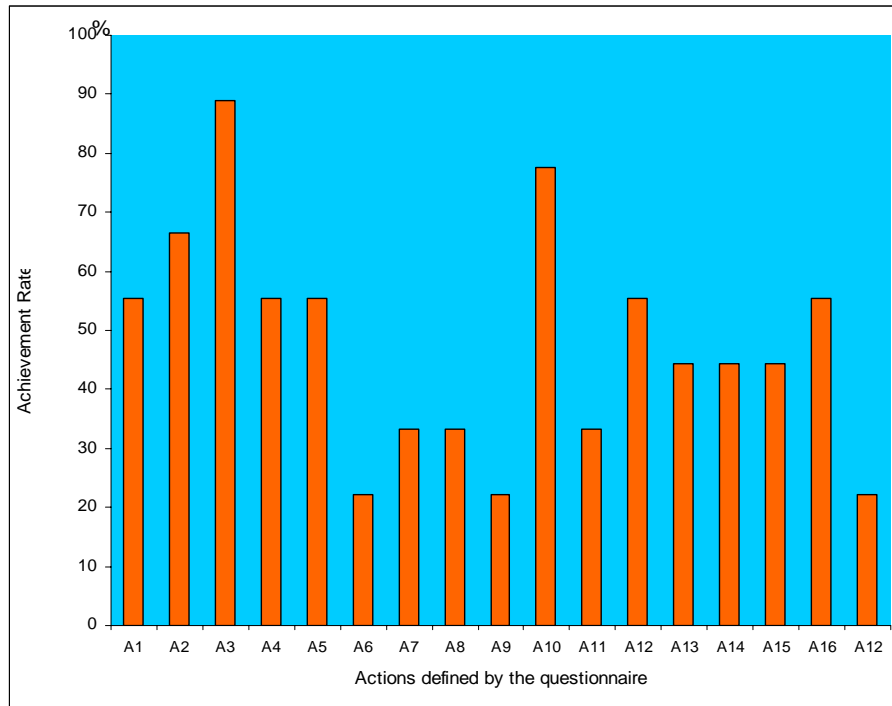


Figure 1: Percentage of actions carried out by the Contracting Parties as part of the Action Plan

According to the conclusions of the national reports of the various Contracting Parties (Table 4), this state of things is due to the fact that:

- some of them suffer from a lack of the human and financial means that would allow them to monitor and assess the risks and impacts of these species on native species and their habitats (lack of taxonomists, particularly in the developing countries)
- some countries, particularly those on the southern shores of the Mediterranean, count on RAC/SPA's and the SAP BIO project's assistance to help them implement their national action plans
- the problems raised arise from in fact that at national level there is not enough coordination and human resources (specialists, especially taxonomists) and also, at this level, the lack of financial means
- in the case of the countries of the European Union, priority is given to implementing the European Directives.

All these problems are summarized in Table 5.

Table 5 : Problems and constraints encountered in implementing the Action Plan

Albania	Main constraint: lack of qualified staff and funds
Algeria	-
Bosnia-Herzegovina	Nothing mentioned on this subject in the report
Cyprus	Nothing mentioned on this subject in the report
Spain	Nothing mentioned on this subject in the report
Egypt	Insufficient funds, knowledge and data; lack of taxonomists; insufficient coordination; weakness of human capacities
France	Nothing mentioned on this subject in the report
Greece	European Union regulations a first priority; those of the Protocol (marine and coastal element) a second priority
Italy	No particular problem mentioned
Israel	-
Lebanon	Need to strengthen cooperation regarding invasive species and non-indigenous species, ballast water and hull hosing
Libya	Need of more coordination at national level
Malta	Need of coordination and synergy between the European regulations and those of the UN to establish sustainability indicators and norms, especially for the marine environment
Morocco	Need of coordination and synergy; it is suggested that at national level the action of the various MAP Focal Points and those concerned by SPA/BD be coordinated
Monaco	Nothing mentioned as regards problems and constraints
Montenegro	Lack of qualified staff and funds
Slovenia	Delay in implementing the Protocol due to the in the field reorganisation of nature conservation (1999-2003); lack of staff for implementing the Protocol and Action Plans; need of coordination and cooperation
Syria	Insufficient public awareness of nature conservation; lack of appropriate training and funds
Tunisia	Nothing mentioned on this subject in the report
Turkey	Nothing mentioned on this subject in the report

Additionally, the fact that the Action Plan on species introductions and invasive species in the Mediterranean Sea was so recently introduced means that the timetable has never been respected, even for the actions whose setting up is short-term; out of the 9 countries that answered the questionnaire, only 5 had carried out this action.

#### **IV. Conclusions and recommendations**

At the Meeting of the Contracting Parties in Catania in 2003, several recommendations were adopted. These concerned data collection and the regular assessing of the situation, planning and management, implementing Action Plans and adopting new Action Plans, including the Action Plan on species introductions and invasive species in the Mediterranean Sea.

Although introduced species and invasive species have held the attention of most of the countries, it is clear that despite the progress made, much still needs to be done to reach the objectives set out in the Action Plan, for there has been an enormous delay in implementing the Plan both at regional and national level.

The reasons for this delay are:

- the relatively recent date at which the Action Plan on species introductions and invasive species in the Mediterranean Sea was adopted
- the lack of human and financial means to enable the risks and impacts of these species on native species and their habitats to be monitored and assessed (too few taxonomists, especially in the developing countries)
- the lack of means at regional level
- a timetable that was too demanding even for very short-term actions.

The recommendations to optimize the implementing of this Action Plan are:

- an extension of the timetable
- increasing the financial means of the regional bodies for implementing those actions which it is incumbent on them to carry out
- increasing the financial and human assistance given to the Contracting Parties to carry out those actions which concern them, in order to optimize the Action Plan.

#### **V. New Implementation Timetable for the Action Plan concerning species introductions and invasive species in the Mediterranean Sea**

Based in particular on the state of implementation of the Action Plan achieved at national and regional level, and on the recommendations made by the regional workshop on non-indigenous species in the Mediterranean, the new implementation timetable is suggested as follows:

<b>Action</b>	<b>Deadline</b>	<b>Responsible</b>
1. Preparation of National Reports (paragraph 15)	2008	Contracting Parties
2. Setting up a mechanism to promote and coordinate the actions listed in paragraph 18	2008	Contracting Parties
3. Inventorying introduction vectors (paragraph 18)	2008	Contracting Parties
4. Establishing a directory of relevant specialists and organisations (see paragraph 18)	2008	Contracting Parties
5. Elaborating education and awareness material (paragraph 25)	2008	RAC/SPA
6. Developing programmes to raise the awareness of the general public and target groups, including decision-makers, concerning the risks associated with species introduction (paragraph 18)	2009	Contracting Parties
7. Setting up a group of experts who will be responsible for assessing suggestions for introduction, and analysing risks and possible consequences (paragraph 18)	2009	Contracting Parties
8. Compiling an inventory of introduced species. Identifying and inventorying public and private actors whose activity could introduce marine non-indigenous species (paragraph 18)	2009	Contracting Parties

9. Setting up the Regional Mechanism for collecting, compiling and circulating information on invasive non-indigenous species (paragraph 22)	2009	RAC/SPA
10. Launching the procedures for enacting or strengthening national legislation governing the control of non-indigenous species introduction (paragraph 17)	2010	Contracting Parties
11. Developing programmes for data collection and monitoring (paragraph 16)	2011	Contracting Parties
12. Strengthening and where necessary setting up systems to control the intentional import and export of non-indigenous marine species (paragraph 18)	2011	Contracting Parties
13. Developing and implementing risk-assessment techniques (paragraph 18)	2012	Contracting Parties
14. Elaborating the National Plans (paragraph 19)	2012	Contracting Parties





## Annex I

### *Workshop on non-indigenous species in the Mediterranean Rome, 6-7 December 2005*

## CONCLUSIONS AND RECOMMENDATIONS

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The Mediterranean Sea is exceptionally susceptible to biological invasions. Alien macrophytes, invertebrates and fish are found in most coastal habitats in the Mediterranean.

In the **First Session** we identified:

- **Taxonomic gaps:** almost all the smaller invertebrates.
- **Geographic gaps:** most of the southern rim of the Mediterranean, lacunae in the Levant, in the eastern Adriatic, **and elsewhere**, next to ports and mariculture facilities.

Recommendations:

- Increase **awareness** of the issue of alien marine biota as a major issue affecting native biodiversity in the Mediterranean, prepare and disseminate material to stakeholders and the public.
- Increase scientific knowledge of the alien marine biota and its impacts, particularly in the areas and taxonomical groups where data is scarce.
- Improve availability of that knowledge.

**We need to:**

- Ensure that **funding exists** to develop an adequate knowledge base (distribution, biology, invasive characteristics, impacts and control options of alien species).
- Provide **assistance for capacity-building** related to developing an adequate knowledge base in the region.
- Provide an **open-access, transparent database**, balancing scientific rigor with practicability, and timelines, easily accessible through a global database (or linked databases), for receiving and disseminating data.

In the **Second Session**, we identified the principal vectors of introduction in the Mediterranean in descending order of importance, passage through the Suez Canal, mariculture and shipping. In this workshop we concentrated on the latter primary pathways – ballast water, fouling and mariculture.

In the **Third Session**, definitions were discussed. As there was a diversity of opinions, RAC/SPA will call on regional scientists to discuss and recommend a set of definitions concerning marine alien species.

And then, in the **Forth and Fifth Sessions**, we have been discussing the draft Guidelines for controlling the vectors of introduction into the Mediterranean of non-indigenous species and invasive marine species and Guide for risk analysis assessing the impacts of the introduction of non-indigenous species.

These tools, as come up from your discussions and amendments will be endorsed by the Contracting Parties to the Barcelona Convention.



## **Annex II**

### QUESTIONNAIRE

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Sent to the Focal Points for SPAs in view of the preparation of a Report on the progress so far made in implementing the Action Plan concerning species introduction and invasive species in the Mediterranean Sea, to be submitted to the Eighth Meeting of Focal Points for SPAs (June 2007)

## 1- Action Plan Objectives

The main objective of the Action Plan concerning Species Introductions and Invasive Species in the Mediterranean Sea is to promote the development of coordinated measures and efforts throughout the Mediterranean region in order to prevent, control and monitor the effects of species introduction, particularly by:

- strengthening the capacity of the Mediterranean countries to deal with the issue of non-indigenous species introduction;
- strengthening the institutional and legislative frameworks at the level of the countries of the region;
- collecting reliable and pertinent scientific data that can be used for decision-making where necessary;
- setting up mechanisms for cooperation and the exchange of information between the states of the region;
- elaborating guidelines and any other technical documentation.

## 2- Action Plan implementation timetable

(as adopted by the Thirteenth Meeting of the Contracting Parties to the Barcelona Convention, Catania 2003)

The advocated actions, at national level, are the following:

Action	Deadline
1. Developing programmes to raise the awareness of the general public and target groups, including decision-makers, concerning the risks associated with species introduction ( <i>paragraph 18 of the Action Plan</i> )	May 2004
2. Setting up a mechanism to promote and coordinate the following actions: <ul style="list-style-type: none"> <li>- Inventorying paths of introduction ;</li> <li>- Compiling an inventory of introduced species;</li> <li>- Establishing a directory of relevant specialists and organisations;</li> <li>- Setting up a group of experts who will be responsible for assessing suggestions for introduction, and analysing risks and possible consequences, in close consultation with the other Parties and relevant International Organisations;</li> <li>- Identifying and inventorying public and private actors whose activity could introduce marine non-indigenous species;</li> <li>- Developing relevant training programmes ;</li> <li>- Strengthening and where necessary setting up systems to control the intentional import and export of non-indigenous marine species;</li> <li>- Developing and implementing risk-assessment techniques;</li> <li>- Promoting relevant scientific research ;</li> <li>- Cooperating with the concerned authorities in neighbouring states regarding the detection of introduced species and risk assessment;</li> <li>- Participating in international initiatives on invasive species;</li> <li>- Developing programmes to raise the awareness of the general public and target groups, including decision-makers, concerning the risks associated with species introduction;</li> <li>- Developing monitoring programmes for hotspots (ports, coastal lagoons, aquaculture sites, sensitive zones, etc.). (<i>paragraph 18</i>)</li> </ul>	Mai 2004
3. Preparation of National Reports assessing the situation as regards the introduction of marine species and compile the available information to prepare national reports using the relevant forms available within the framework of the international organisations. These national reports will particularly deal with: (i) Known or potential vectors for the introduction of marine species into the national territory; (ii) Steps taken at national level to prevent and control the introduction of marine species; (iii) The national institutional framework that governs the controlling of species introduction; (iv) Inventorying the non-indigenous marine species reported in the national territory; (v) The relevant documentation available; (vi) Participation at pertinent international initiatives, including joining international agreements and bilateral cooperation ( <i>paragraph 15</i> ).	August 2004
4. Inventory of introduction vectors ( <i>paragraph 18</i> )	August 2004
5. Elaborating education and awareness material ( <i>paragraph 25</i> )	August 2004
6. Establishing a directory of relevant specialists and organisations ( <i>paragraph 18</i> )	November 2004
7. Setting up a group of experts who will be responsible for assessing suggestions for introduction, and analysing risks and possible consequences ( <i>paragraph 18</i> )	November 2004
8. Launching the procedures for enacting or strengthening national legislation governing the control of non-indigenous species introduction, expressing the provisions of the pertinent international treaties and guidelines and codes adopted on the subject within the context of international organisations ( <i>paragraph 17</i> )	May 2005
9. Developing programmes for data collection and monitoring, particularly of: (i) The presence of non-indigenous marine species and the state of their population trends, including those used in aquaculture; (ii) The impact of non-indigenous species on the indigenous biodiversity (iii) The origin of ballast water discharged into their territorial waters, using the monitoring protocols used by relevant International Organisations ( <i>paragraph 16</i> ).	November 2005
10. Strengthening and where necessary setting up systems to control the intentional import and export of non-indigenous marine species ( <i>paragraph 18</i> )	November 2005
11. Developing and implementing risk-assessment techniques ( <i>paragraph 18</i> )	November 2006
12. Compiling an inventory of introduced species. Identifying and inventorying public and private actors whose activity could introduce marine non-indigenous species ( <i>paragraph 18</i> )	November 2006
13. Elaborating the National Plans to control the introduction of non-indigenous marine species and to mitigate their negative impact. Taking into account the concerned country's specific features, each National Plan must suggest appropriate institutional and legislative measures. The National Plan shall be based on the available scientific data and will include programmes for: (i) The collection and regular updating of data; (ii) Training and refresher courses for specialists; (iii) Awareness-raising and education for the general public, actors and decision-makers; and (iv) Coordination and collaboration with other states. The national plans must be brought to the attention of all concerned actors and, when possible, coordinated with the relevant National Plans. ( <i>paragraph 19</i> )	November 2006

COUNTRY: \_\_\_\_\_

Official(s) responsible for answering the questionnaire: \_\_\_\_\_

<b>Action 1: Developing programmes to raise the awareness of the general public and target groups, including decision-makers, concerning the risks associated with marine non-indigenous species introduction (paragraph 18)</b>
<ul style="list-style-type: none"> <li>▪ Have any awareness programme concerning the risks associated with species introduction been developed in your country? <ul style="list-style-type: none"> <li><input type="checkbox"/> No</li> <li><input type="checkbox"/> Yes, since ..... (complete / ongoing)</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>▪ Which themes do these awareness programmes deal with?</li> </ul>
<ul style="list-style-type: none"> <li>▪ Which media do these awareness programmes use (booklets, leaflets, posters, TV spots, etc.)?</li> </ul>
<ul style="list-style-type: none"> <li>▪ Which are the target groups of these awareness programmes (large public, sea users, school children and students, scientists, decision-makers, etc.)?</li> </ul>
<ul style="list-style-type: none"> <li>▪ Do these awareness programmes seem efficient?</li> </ul>
<b>Action 2: Inventory of introduction paths and/or vectors (paragraph 18)</b>
<ul style="list-style-type: none"> <li>▪ Have any inventory of paths/vectors of introduction of non-indigenous species been undertaken in your country? <ul style="list-style-type: none"> <li><input type="checkbox"/> No</li> <li><input type="checkbox"/> Yes, since ..... (complete / ongoing)</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>▪ If yes, which is/are the body(ies) responsible for the inventory? (Please give their full address and contacts)</li> </ul>
<b>Action 3: Inventory of introduced species (paragraph 18)</b>
<ul style="list-style-type: none"> <li>▪ Have any inventory of the introduced species been undertaken in your country? <ul style="list-style-type: none"> <li><input type="checkbox"/> No</li> <li><input type="checkbox"/> Yes, since ..... (complete / ongoing)</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>▪ If yes, which is/are the body(ies) responsible for this inventory? (Please give their full address and contacts)</li> </ul>
<ul style="list-style-type: none"> <li>▪ Is this inventory subject to updating (periodic / occasional)?</li> </ul>
<b>Action 4: Establishing a directory of relevant specialists and organisations (paragraph 18)</b>
<ul style="list-style-type: none"> <li>▪ Have your country established a directory of relevant specialists and organisations? <ul style="list-style-type: none"> <li><input type="checkbox"/> No</li> <li><input type="checkbox"/> Yes, since ..... (complete / ongoing)</li> </ul> </li> </ul>
<ul style="list-style-type: none"> <li>▪ If yes, which is/are the body(ies) responsible for the establishment of this directory? Is there any specific objective beyond the directory elaboration?</li> </ul>
<b>Action 5: Setting up a group of experts who will be responsible for assessing suggestions for introduction, and analysing risks and possible consequences, in close consultation with the other Parties and relevant International Organisations (paragraph 18)</b>
<ul style="list-style-type: none"> <li>▪ Have your country set up a group of experts responsible for assessing suggestions for introduction, and analysing risks and possible consequences of non-indigenous species introductions?</li> </ul>

<input type="checkbox"/> No <input type="checkbox"/> Yes, since .....
<ul style="list-style-type: none"> <li>▪ If yes, could you describe the composition of this expert group, its role and its functioning modalities?</li> </ul>
<b>Action 6: Identifying and inventorying public and private actors whose activity could introduce marine non-indigenous species (paragraph 18)</b>
<ul style="list-style-type: none"> <li>▪ Have your country inventoried public and private actors whose activity could introduce marine non-indigenous species ?</li> </ul>
<input type="checkbox"/> No <input type="checkbox"/> Yes, since ..... (complete / ongoing)
<ul style="list-style-type: none"> <li>▪ If yes, which is/are the body(ies) responsible for this inventory ?</li> </ul>
<ul style="list-style-type: none"> <li>▪ Is this inventory subject to updating (periodic / occasional)?</li> </ul>
<b>Action 7: Developing training programmes concerning marine species introductions and non indigenous speceis (paragraph 18)</b>
<ul style="list-style-type: none"> <li>▪ Have your country developed training programmes concerning marine species introductions and non indigenous speceis?</li> </ul>
<input type="checkbox"/> No <input type="checkbox"/> Yes
<ul style="list-style-type: none"> <li>▪ If yes, would you describe briefly these training programmes (responsible, subjects dealt with, target public, periodicity, etc.)?</li> </ul>
<b>Action 8: Strengthening, and where necessary, setting up systems to control the intentional import and export of non-indigenous marine species (paragraph 18)</b>
<ul style="list-style-type: none"> <li>▪ Have your country set up systems to control the intentional import and export of non-indigenous marine species?</li> </ul>
<input type="checkbox"/> No <input type="checkbox"/> Yes, since .....
<ul style="list-style-type: none"> <li>▪ If yes, did they seem efficient? Did they need any strengthening? Is there any strengthening measures underway/planned?</li> </ul>
<b>Action 9: Developing and implementing risk-assessment techniques (paragraph 18)</b>
<ul style="list-style-type: none"> <li>▪ Have your country developed and implemented any risk-assessment techniques concerning the risks associated with species introduction and invasive species?</li> </ul>
<input type="checkbox"/> No <input type="checkbox"/> Yes, since ..... (complete / ongoing)
<ul style="list-style-type: none"> <li>▪ If yes, which are they? Would you please comment them briefly?</li> </ul>
<b>Action 10: Promoting scientific research concerning species introductions and invasive species (paragraph 18)</b>
<ul style="list-style-type: none"> <li>▪ Is there, in your country, any scientific research programmes concerning species introductions and invasive species?</li> </ul>
<input type="checkbox"/> No <input type="checkbox"/> Yes
<ul style="list-style-type: none"> <li>▪ If yes, Which are these programmes? Would you please specify the organisms responsible of these programmes, the subjects dealt with and, if possible, the progress made within them.</li> </ul>
<b>Action 11: Cooperating with the concerned authorities in neighbouring states regarding the detection of introduced species and risk assessment (paragraph 18)</b>
<ul style="list-style-type: none"> <li>▪ Is your country cooperating with the concerned authorities of the neighbouring states regarding</li> </ul>

the detection of introduced species and risk assessment?	
<input type="checkbox"/> No <input type="checkbox"/> Yes, since .....	
<input type="checkbox"/> If yes, with which states this kind of cooperation is set up? And which are its mechanisms?	
<b>Action 12: Participation to global initiatives on invasive species (paragraph 18)</b>	
<input type="checkbox"/> Have your country participated to global initiatives on invasive species?	
<input type="checkbox"/> No <input type="checkbox"/> Yes, since .....	
<input type="checkbox"/> If yes, which are these initiatives? And what is the extent of your country participation?	
<b>Action 13: Developing monitoring programmes for hotspots (ports, coastal lagoons, aquaculture sites, sensitive areas, etc.) (paragraph 18)</b>	
<input type="checkbox"/> Have your country developed monitoring programmes for hotspots (ports, harbours, coastal lagoons, aquaculture sites, sensitive areas, etc.) ?	
<input type="checkbox"/> No <input type="checkbox"/> Yes, since .....	
<input type="checkbox"/> If yes, could you describe and comment briefly these monitoring programmes mechanisms?	
<b>Action 14: Preparation of National Reports (paragraph 15)</b>	
<input type="checkbox"/> Have your country prepared report(s) evaluating the situation concerning non-indigenous marine species introductions?	
<input type="checkbox"/> No <input type="checkbox"/> Yes (report(s) dated ..... / ..... / ..... )	
<input type="checkbox"/> If yes, at which occasion(s) this/these report(s) has/have been elaborated and using which format(s)?	
<b>Action 15: Launching the procedures for enacting or strengthening national legislation governing the control of non-indigenous species introduction (paragraph 17)</b>	
<input type="checkbox"/> Have your country have national legislations governing the control of non-indigenous species introduction?	
<input type="checkbox"/> No <input type="checkbox"/> Yes (under the way of being elaborated / elaborated since ..... )	
<input type="checkbox"/> If yes, which are they (Please, specify the reference(s) of the concerned law(s)) ?	
<input type="checkbox"/> Are these legislations expressing the provisions of the pertinent international treaties and guidelines and codes adopted on the subject within the context of international organisations?	
<input type="checkbox"/> No <input type="checkbox"/> Yes, partially <input type="checkbox"/> Yes, totally	
<input type="checkbox"/> Is there any envisaged or ongoing amendments/improvements on that line?	
<input type="checkbox"/> No <input type="checkbox"/> Yes	
<b>Action 16: Developing programmes for data collection and monitoring (paragraph 16)</b>	
<input type="checkbox"/> Have your country developed data collection and monitoring programmes on one or several of the following subjects?	
1. The presence of non-indigenous marine species (included those used in aquaculture) and the state of evolution of their populations	<input type="checkbox"/> No <input type="checkbox"/> Yes, under the way of being established <input type="checkbox"/> Yes, since .....
2. The impact of non-indigenous species on native biodiversity	<input type="checkbox"/> No <input type="checkbox"/> Yes, under the way of being established

<p>3. The origin of ballast water discharged into their territorial waters, using the monitoring protocols used by relevant International Organisations.</p>	<p><input type="checkbox"/> Yes, since .....</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes, under the way of being established</p> <p><input type="checkbox"/> Yes, since .....</p>
<p><b>Action 12: Elaboration of National Plans (paragraph 19)</b></p>	
<p>▪ Have your country developed a National Plan for the control of non-indigenous marine species introductions?</p>	
<p><input type="checkbox"/> No, It is not necessary</p> <p><input type="checkbox"/> No, not yet</p> <p><input type="checkbox"/> Yes, under the way of being elaborated</p> <p><input type="checkbox"/> Yes, since .....</p>	
<p>▪ If yes, which are the proposed legal and institutional measures advocated by this National Plan?</p>	
<p> </p>	
<p>▪ Which are the different programmes and intervention fields proposed by this National Plan ((i) The collection and regular updating of data; (ii) Training and refresher courses for specialists; (iii) Awareness-raising and education for the general public, actors and decision-makers; and (iv) Coordination and collaboration with other states)?</p>	
<p> </p>	
<p>▪ Which are the body(ies) responsible of the coordination and the implementation of this National Plan?</p>	
<p> </p>	
<p>▪ Has this National Plan been brought to the attention of all concerned actors?</p>	
<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes, partially</p> <p><input type="checkbox"/> Yes, totally</p>	
<p>▪ Is this National Plan coordinated with the other relevant National Plans?</p>	
<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes, partially</p> <p><input type="checkbox"/> Yes, totally</p>	