MEDITERRANEAN ACTION PLAN

Training course for the preparation of Sectoral Plans and National Action Plans in the framework of the strategic Action Programme (SAP)

Izmit (Turkey), 4-6 March 2004

STRATEGIC ACTION PROGRAMME

GUIDELINES

PREPARATION OF NATIONAL ACTION PLANS FOR THE REDUCTION OF POLLUTION OF THE MEDITERRANEAN FROM LAND BASED SOURCES

In cooperation with

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1- INTRODUCTION

The formulation of National Action Plans (NAPs) represents the operational long-term aim of the Strategic Action Programme (SAP), as the National Action Plans are expected to make use of the results of the individual activities identified in the SAP. According to the SAP Programme, the Contracting Parties will develop or review and adopt, by the end of 2003 at the latest, National Action Plans (NAPs) addressing pollution from land based sources. This implies the adoption of the targets and activities identified in the SAP. Action towards the implementation of the NAPs is to be pursued *inter alia* through bilateral, regional and international cooperation.

National programmes of action are iterative processes that call for the phased implementation of priorities identified within a cross-sectoral, participatory framework. By enabling long-term prioritisation, a country’s national programme of action becomes a cyclical process that enables stakeholders to progressively identify and address threats and impacts to the marine and coastal environments. Its fundamental goal is to develop concrete projects that:

- mobilise both stakeholders and resources,
- build upon National Diagnostic Analysis (NDA),
- are mainstreamed into relevant institutional, budgetary and policy frameworks, and
- incorporate lessons learnt in the process.

National Action Plans are foreseen to focus on sustainable, pragmatic and integrated environmental management approaches and processes, such as integrated coastal area management, harmonized, as appropriate, with river basin management and land-use plans. Towards this end the work actually executed under the sustainability of the SAP MED on the development of economic instruments and on their implementation at the national level will play a significant role, as is capacity building of national professionals in the use of these instruments.

2- OBJECTIVES OF THE NAP

The basic objectives of NAPs are to:

1. **Set Integrated Management Objectives**

For the priority problems identified in the NDA, it is important that integrated management objectives be defined via a process involving as many stakeholders as possible. Objectives should be set forth in terms of:

- overall goals, targets and timetables;
- specific targets and timetables for the geographical areas affected; and
- specific targets and timetables for industrial, agricultural, urban and other sectors.

While the national team may develop an initial work plan and timetable for the consideration of other stakeholders, the process of setting integrated management objectives for national action should not be carried out by a single government department or stakeholder in isolation of other stakeholders. A key element to successful implementation of the NAP is ownership by all stakeholders and therefore they must be engaged when setting management objectives.

Management objectives can be both quantitative and qualitative. They must be realistic. They should also demonstrate a commitment to action on the ground, and generate
awareness, support, and incentives for the continued development of the national programme.

As with the process establishing priority problems, once management objectives have been articulated, it is important to proceed to the next step of selecting appropriate strategies and measures for meeting those objectives.

2. Establish an Institutional Framework

The process of initiating a national action plan NAP should endeavour to build upon existing capacity and institutions. Therefore, the following activities should be carried out:

- An assessment of existing institutions, agencies and associations with relevant mandates, both in the private and public sectors;
- Evaluation existing capacity for the allocation of human, financial and technical resources; and,
- Identification of capacity building requirements, at the national, sub-national and local levels. Capacity requirements that may be associated with specific projects, particularly at the local level, should continue to be identified within the programme development process.

Such an assessment should provide necessary information for mainstreaming the NAP into the relevant policy and strategy frameworks at the national and administrative region(s) level, into the institutional arrangements of relevant government agencies, and into budget definition processes. As a long-term process, a national programme of action should also have sustainability mechanisms built in.

3. Formulate principles, approaches, measures, priority actions and deadlines for the implementation of SAP within the national framework

The definition and assignation of responsibilities for identified tasks and activities is an ongoing process that evolves in parallel with the development of the NAP.

The SAP team should ensure that responsibilities are clearly defined and assigned throughout the process, with their respective timetables. Because of the multi-disciplinary and cross-sectoral approach the NAP requires, a lack of clarity in the assignment of tasks may result in duplication or fragmentation of work, or oversight of given activities. The definition of a calendar of implementation or timetable will help participants to co-ordinate the delivery of various outputs.

A national programme of action should incorporate a strong monitoring and evaluation component, because:

- Ongoing monitoring and assessment of activities under the national programme are essential for their sustainability and continued relevance;
- Evaluation is necessary both during the implementation of a project and once it is finalised; and,
- Evaluation of the effectiveness of proposed steps and projects sets the basis for the iterative process of adjusting and updating the NAP.

4. Prepare the resulting Investment Portfolio (IP)
A concrete financial strategy, that mobilises public-private partnerships, is required for:

- Development of the overall NAP framework; and
- Development and implementation of selected priority actions.

**i) Definition of financial resource needs**

The financial strategy for the implementation of concrete projects, both actions and those undertaken within the scheme of phased implementation, should include, where feasible:

- Detailed cost estimates, including the cost of no action, whenever possible;
- Assessment of benefits derived from the project, both in general terms and in terms of specific stakeholder groups;
- Evaluation of relevant resources and environmental services;
- Technical / feasibility studies, if available;
- Pre-investment studies, if available;
- Identification of further investment opportunities;
- Identification of opportunities for promoting public-private partnerships (both domestic and foreign).

In addition, and as feasible, the financial strategy should also assess the cost of support elements such as capacity building, training, monitoring and evaluation, and enforcement.

**ii) Identification and mobilisation of partners**

Required tasks:

Assessment of existing financial mechanisms and of the availability of financial resources for investment in the environment.

- Assessment of the specific requirements, budget cycles, priorities, and financial services and products offered by each potential partner; and,
- Assessment of availability of funding sources for the private sector, through *inter alia*, development grants, subsidies, “soft loans”, and/or new lending facilities that provide credit at preferential rates.

**iii) Development of Public-Private Partnerships (PPP)**

Given the need to mobilise new and additional financial resources to address priority pollution and degradation problems, these PPP between public authorities, the private sector, and financial institutions, must be mobilised.

In this task, the capacity of the public sector to negotiate sustainable investment contracts with the private and financial sectors needs to be strengthened. It is recommended that:

- Checklists on issues to address when negotiating contracts be developed;
- Overviews of alternative options for each of these issues be prepared;
- Clear guidance on sustainable practices be developed; and,
• Projects that have a solid demonstration function be identified and developed.

As noted above, it is strongly recommended that round table or partnership meetings with representatives from key sectors and financial institutions be convened in order to involve them as stakeholders from the outset, and promote the investment process. Similarly, pre-investment and feasibility studies should be carried out as solid inputs into the process.

5. Define the baselines and the priority activities for issues/actions of a transboundary nature

Because the NAP should build upon current information, NDA, databases and inventories, it is strongly recommended that a comprehensive evaluation be undertaken in order to evaluate current status, and identify research and information gaps. The evaluation should be carried out regardless of the number of existing assessments in order to gauge their quality and level. It is necessary to develop an integrated basis of analysis because assessments, databases or inventories can overlap, present gaps, or be impossible to compare and conciliate. Projects must be based on sound science. The identification of research gaps will assist in the definition of responsibilities and tasks.

In order to develop a comprehensive framework for action, the NAP should build upon the existing national policy framework. Therefore, an assessment of relevant policies, legislation, and regulations is essential.

6. Identify NGOs’ and stakeholders’ role in the process, and encourage Regional Cooperation

In most instances, successful actions to protect the marine environment from land-based activities are dependent on regional and sub-regional cooperation. This is particularly relevant in enclosed or semi-enclosed seas. Regional cooperation supports an ecosystem approach to environmental management, and produces more efficient and cost-effective actions. Consequently, the activities and objectives of regional bodies, such as the respective Regional Seas programmes and regional economic organisations, must also be considered when determining national management objectives for the national programme of action.

7. Elaborate monitoring and reporting system

Monitoring and the establishment of an environmental-quality reporting system imply not only the collection and analysis of information that can assist in evaluating project performance and decision making, but also mechanisms for ensuring that such results are communicated to all stakeholders, given that effective participation is based on access to sufficient and relevant information. Document (UNEP (DEC)/MED WG.231816: Guidelines for the evaluation of the effectiveness of the Strategic Action Programme for the Mediterranean region) describes the reporting system adopted by the CPs for the evaluation of the effectiveness and compliance to SAP.

PHASE BY PHASE APPROACH

The adoption of the SAP Operational Plan by the CPs in their 12th meeting in Monaco 2001 constituted a milestone in the implementation of the SAP through the elaboration and implementation of SAP/NAPs.

The SAP Operational Plan was elaborated to increase the prospects of the SAP’s success. It provides detailed flexible institutional and technical instructions, information and basic knowledge that would enable the SAP national and regional partners during the lengthy
period of 25 years set out by the SAP to fulfil their commitments. Thus the elaboration of the NAPs passes through **consecutive phases** that should be performed to reach the phase of the formulation of the NAPs. The different phases are indicated in the following flow charts:
Fig-1a - BOTTOM – UP APPROACH FOR THE FORMULATION OF THE ADMINISTRATIVE REGION(S) PLAN

1. NATIONAL DIAGNOSTIC ANALYSIS AND BASELINE BUDGET AT ADMINISTRATIVE REGION(S) LEVEL
2. ISSUE/IMPACTS MATRIX FOR RELEASES AT ADMINISTRATIVE REGION(S) LEVEL
3. IDENTIFICATION OF PRIORITY ISSUES
4. SET UP ADMINISTRATIVE REGION(S) PLAN TO REDUCE RELEASES
Fig-1b- BOTTOM – UP APPROACH FOR THE FORMULATION OF THE SAP/NAP

1. ADMINISTRATIVE REGION(S) PLAN

2. SECTORAL NATIONAL ACTION PLANS

NATIONAL ACTION PLAN

SET UP THE LIST OF PRIORITY ACTIONS FOR 2010
According to figures -1a- and -1b- it is suggested that the countries would implement the following phases:

**PHASE-1-The National Diagnostic Analysis and Baseline Budget**

The first phase is the achievement of the National Diagnostic Analysis (NDA) that covers all the sectors included in the SAP (see PHASE -4- of this document) and the calculation of the Baseline Budget for all SAP targeted pollutants.

The NDA and Baseline Budget for industrial sectors should be fulfilled according to the “guidelines for the preparation of Baseline Budget” (UNEP/MAP 2002).

As a result of the preparation of the NDA and Baseline Budget, countries should succeed to:

- identify the nature and severity of problems;
- identify the contaminants;
- identify the physical alterations and degradation of habitats;
- identify the sources of degradation;
- identify the areas (spatial) of concern.

As to the calculation of Baseline Budget for industrial SAP targeted pollutants, a detailed methodology is given in the “guidelines for the estimation and calculation of the Baseline Budget” (UNEP/MAP2002). It is worthwhile to remind that the Baseline Budget for SAP targeted pollutant X is, by definition, the sum of the quantity of the releases of X from each coastal administrative region(s) in the national (jurisdiction) border. The Baseline Budget enables the country and the secretariat to fix a reference level of pollutant releases upon which tracking of the achievements (reductions) could be reliable and traceable.

**PHASE-2- NATIONAL / ADMINISTRATIVE REGION(S) ISSUE/IMPACTS MATRIX**

Following the preparation of a National Diagnostic Analysis (NDA) and the estimation of the Baseline Budget, the national authorities should perform a national matrix on the basis of administrative region(s) issues/impacts matrix. The matrix should be used to scale/score the environmental issues according to their relevance to the national socio-economic and environmental priorities and to the NEAP (National Environmental Action Plan), if available, taking into consideration the SAP targets and commitments.

The overall purpose of the matrix is to make the preliminary assessment of the relative importance of the different impacts on the coastal areas including marine environment. This information is needed to help in selecting the priority issues at national and administrative region(s) level for the final preparation of the NAP.

**Administrative region(s) matrix (Fig-1a-)**

In order to achieve the matrix and the scoping/scaling exercise at the administrative region(s) level, the administrative region(s) local authority should consider setting up a management body (SAP Team) composed of administrators, technicians, scientists, representatives from local NGOs and other. The team would review the issue/impact matrix and impacts should be scored by each member of the SAP team using the information in Annex (I).

Once the individual scoring of impacts is completed, the team would reassemble and, through discussion, reach a consensus on the scores and set up the list of priority issues for the concerned administrative region(s).
The scoring and scaling of issues should be based on existing data and NDA on impacts of individual environmental issue together with the administrative region expert’s perception. The Interministerial Committee should consider the administrative region(s) plan as an integrated part of the National Action Plan.

PHASE-3-SET UP ADMINISTRATIVE REGION(S) PLAN

As per Fig –1a- The Administrative region(s) SAP team should, as a result of the elaboration of the administrative region(s) matrix in phase -2-, score and scale the major issues that would be considered in 2010 administrative region(s) plan as it was adopted in the SAP operational strategy and guidelines for BB. The plan consists of a list of priority issues to be considered and a list of specific related actions that could ensure the reduction of releases of specific pollutants.

PHASE-4- SET UP NATIONAL SECTORAL PLANS

Phase -4- consists of setting up Sectoral programmes that will start to be prepared by small national working teams under the supervision of the interministerial committee. It will consist of plans necessary to fulfil the relevant provisions adopted on a regional level such as regional plans, guidelines, common measures, environmental quality criteria, emission/effluent limits, capacity building activities etc. and taking into consideration the administrative region(s) plans. Fig -1b-

According to the SAP, sectoral programmes should cover the following:
- sewage management
- urban solid waste
- air pollution
- pollution caused by Hg, Cd, Pb
- organohalogens: halogenated aliphatic hydrocarbons halogenated aromatic hydrocarbons, chlorinated phenolic compounds, organohalogened pesticides
- wastewater and solid waste from industrial installations.

Sectoral programmes will form the basis of the National Action Plans and will therefore be prepared for all the priority areas for action to control pollution from land based sources identified in the SAP.

As stated in the SAP, Mediterranean countries should elaborate their NAP to comply with SAP commitments. In case that some Mediterranean countries adopt a sectorial environmental plan approach to combat the pollution rather than National Action Plans, sectorial plans should be considered at the same level as NAP.Fig-1b-

A description is provided below of proposed activities related to a number of priority areas of particular relevance to the MED POL Programme:

i) The development of national programmes for the environmentally sound management of sewage.

National programmes for the environmentally sound management of sewage are expected to include the following activities, which have been specified in the SAP:

- The connection, by 2005, of all coastal cities and urban agglomerations of more than 100,000 inhabitants, to a sewer system as well as the disposal of sewage in conformity with a national regulation system
• The location of coastal outfalls so as to obtain or maintain agreed environmental and health quality criteria.
• The promotion of primary, secondary and where appropriate and feasible tertiary treatment of municipal sewage.
• The satisfactory operation and maintenance of sewage treatment facilities;
• The reuse of treated effluents for the conservation of water resources, accompanied by infrastructural measures, treatment at source and the segregation of industrial effluents, where required.
• The appropriate design of treatment plants and controls of the quality of effluent wastewaters in accordance with national regulations, for the beneficial reuses of sewage effluents and sludge.
• The environmentally sound treatment of combined domestic and compatible industrial effluents.
• The separate collection of rain water and municipal wastewater and treatment of the first rain water considered particularly polluting
• The environmentally sound disposal and/or use (composting, landfilling etc.) of sewage sludge.
• The prohibition of sludge discharge into water in the Protocol Area.

ii) The development of national programmes for the reduction at source and environmentally sound management of urban solid waste in coastal area.

National programmes for the reduction at source and environmentally sound management of urban solid waste are expected to take into account the following targets specified in the SAP

- The establishment, by 2005, of environmentally sound and economically feasible systems of collection and disposal of urban solid waste in coastal cities and urban agglomerations of more than 100,000 inhabitants
  In relation to the implementation of this target of the SAP, the following could also be taken into consideration:
  - The creation of selective garbage collection systems;
  - The environmentally sound location of urban solid waste disposal sites;
- The promotion of urban solid waste reduction and recycling
- The implementation of national training programmes proposed to commence in 2002-2003, on effective waste reduction policies and on the environmentally sound management of urban solid waste in coastal area, including options for recycling and environmentally sound elimination

iii) The development of national programmes to control air pollution from mobile sources

Taking into consideration the regional policy to be developed on the promotion of measures to implement the Framework Convention on Climate Change (Kyoto Protocol), national authorities are expected to adopt, wherever feasible, measures to control emissions of carbon dioxide, e.g. through the promotion of energy conservation and energy efficiency. National programmes to control air pollution form mobile sources are expected to include the following activities, which have been specified in the SAP:
• Measures to promote and provide incentives for public transportation;
• Measures for the promotion of improved traffic management, giving priority to the use of public transport;
• Measures for the promotion of lead-free petrol, also containing low level aromatic hydrocarbons;
• Measures for the improved inspection and maintenance of vehicles and the replacement of old-technology vehicles through economic incentives;
• Measures to promote increased regional and domestic introduction of natural gas;
• Measures to promote the introduction of gaseous fuel or other alternative forms of energy to substitute diesel fuel in public transportation, particularly buses;
• Measures to support and encourage the participation of public transport services in the above activities;

iv) To prepare national programmes for the reduction and control of pollution by the heavy metals, mercury, cadmium and lead.

National programmes for the reduction and control of inputs of the heavy metals mercury, cadmium and lead are expected to include the following activities, which have been specified in the SAP:

• The adoption at the national level by 2005 at the latest and application of the common measures for preventing mercury pollution adopted by the Parties in 1987 (releases into the sea max. conc. 0.050 mg/l);
• The adoption at the national level by 2005 at the latest and application of the pollution prevention and control measures for cadmium and cadmium compounds adopted by the Parties in 1989 (releases into the sea max. conc. 0.2 mg/l);
• The adoption and application by 2005 at the latest in the industries of the alkaline chloride electrolysis sector, the maximum value of 0.5g of mercury in the water per tonne of chlorine production capacity (brine recirculation), 5g of mercury in the water per tonne (lost brine technology) and, 2g of mercury from total releases into water, air and products.

v) To prepare national programmes for the reduction and control of pollution by the following organohalogen compounds:

- Halogenated Aliphatic Hydrocarbons (chlorinated solvents, chlorinated paraffins)
- Halogenated Aromatic Hydrocarbons [Chlorobenzenes, polychlorinated naphtalenes, polybrominated diphenyl ethers (PBDEs) and polybrominated biphenyls (PBBs)]
- Chlorinated Phenolic compounds
- Organohalogenated pesticides

National programmes for the reduction and control of pollution by the above organohalogen compounds are expected to include the following activities, which have been specified in the SAP:

• To adopt at the national level and apply by 2005 at the latest, the common measures for the control of pollution by organohalogen compounds adopted by the Parties;
• To reduce the use of short-chained chlorinated paraffins in accordance with the LBS Protocol and internationally agreed provisions for the safeguarding of the environment and human health;
• To regulate, by the year 2005 at the latest, releases of organochlorines by the paper and paper pulp industries by limiting discharges measured as AOX (adsorbable organic halogen) to 1 kg per ton of paper pulp produced and by reducing it further in accordance with internationally agreed provisions, through the promotion of BEP and BAT and the promotion of alternative bleaching to the use of molecular chlorine;

• To reduce and control the manufacture of PBDEs and PBBs in accordance with the LBS Protocol and other regionally and internationally agreed provisions;

• To reduce and control the manufacture and use of certain pesticides, such as lindane, 2,4-D and 2,5-T herbicides, and tri- tetra- and penta- chlorophenols, used in the treatment of wood, in accordance with the LBS Protocol and other regionally and internationally agreed provisions for the safeguarding of the environment and human health.

vi) To develop national programmes for the environmentally sound management of wastewater and solid waste from industrial installations which are sources of BOD.

National programmes for the environmentally sound management of wastewater and solid waste from industrial installations are expected to include the following activities, which have been specified in the SAP:

• The disposal of all wastewater from industrial installations, which are sources of BOD, nutrients and suspended solids, located in areas of concern, in conformity with a national regulation system to be formulated and adopted by 2002;

• The location of coastal outfalls so as to obtain or maintain agreed environmental quality criteria;

• The promotion of primary, secondary and where appropriate and feasible tertiary treatment of BOD wastewater discharged into rivers, estuaries and the sea;

• The sound operation and proper maintenance of facilities, to be promoted through the organisation of relevant training programmes;

• The implementation of measures for the reduction and beneficial use of wastewater or other measures appropriate to specific sites such as no-water and low-water solutions, to be facilitated through the organisation of relevant training programmes and/or workshops;

• The environmentally sound disposal and/or use (composting, landfilling, etc.) of sludge and other wastes, to be facilitated through the organisation of relevant training programmes and/or workshops.

Additional activities to be included in the Plans

The following activities which have been specified in the SAP and are considered as priority areas for action, are also expected to be taken into full account in the preparation of National Action Plans to control pollution from land based activities:
**i) Updating and adopting of national regulations on sewage discharges to the sea and rivers**

National regulations on sewage discharges into the sea and rivers are expected to be updated taking into account the provisions of the LBS Protocol, particularly Annex II and, where appropriate, the common measures on sewage discharges into the sea and rivers already adopted by the Contracting Parties. Regional guidelines for sewage treatment and disposal, environmental quality criteria and standards will assist Mediterranean countries to establish national legislation according to existing conditions. The work on the process for updating the regulations will start in the period 2001-2002. Parties requiring assistance in the formulation of updated regulations, will be eligible for expert legal and/or technical assistance to be provided through the project.

**ii) Establishing a system of previous authorization by competent national authorities for works which cause physical alterations of the natural state of the coastline or the degradation of coastal habitats**

The preparation of national regulations will be initiated in the biennium 2001-2002, for the establishment of a system of previous authorisation by competent national authorities for projects having a potential impact on the natural state of the coastline or on coastal habitats.

**iii) Phasing out the use of the nine pesticides, except for those for which WHO recommendations related to the safeguarding of human life suggest otherwise**

A report on the implementation of this activity according to the requirements of the SAP will be prepared and submitted, through the Secretariat, to the Contracting Parties. Requests by the Parties may be made for expert legal and/or technical assistance from the project in the timely implementation of this action.

**iv) Prohibiting the manufacture, trade and new uses of PCBs**

A report on the adoption of national regulation prohibiting the manufacture, trade and new uses of PCBs according to the requirements of the SAP will be prepared and submitted, through the Secretariat, to the Contracting Parties. Requests by the Parties may be made for expert technical and/or legal assistance from the project in the timely implementation of this action.

**PHASE-5-National Action Plans**

*As stated in the SAP, Mediterranean countries should elaborate their NAP to comply with SAP commitments. In case that some Mediterranean countries adopt a sectorial environmental plan approach to combat the pollution rather than National Action Plans, sectorial plans should be considered at the same level as NAP. Fig-1b-*

In phase -5- National experts, in consultation and with assistance from the MAP/GEF project, will, in 2003-2004, prepare, on the basis of the sectoral programmes, the National Action Plans, which are expected to be submitted to the interministerial committee for formal adoption.

If needed, international experts could be recruited to assist in the preparation of the National Action Plans according to an issues/impacts matrix.

National Action Plans should be developed as a result of the NDA, BB and the sectoral programmes. Targets and activities identified by SAP should be respected as much as possible. In addition, national plan for action will take into account national reports on “pollution hot spots and sensitive areas” as well as the provisions of the LBS Protocol.
Adoption of the NAP

NAPs, once prepared, will have to be officially adopted by the relevant national authorities and bodies, in order to ensure the necessary legal basis, resources and institutional arrangements for their implementation.

As a long-term strategic programme designed to change government, corporate and public behaviour, the NAP, including the initial planning phase, must be formally endorsed by relevant government authorities at both national and administrative region(s) levels in order to ensure that it is adequately incorporated into planning and budgetary processes at the national and administrative region(s) levels.

One of the key requirements for the successful implementation of the NAP, and activities or strategies developed within its framework, including actions, is solid political, institutional and financial support from relevant government authorities at all appropriate levels. Precisely because it addresses a complex and cross-sectoral range of issues, the NAP must be mainstreamed into relevant frameworks, including policy, legal and budget provisions, enforcement mechanisms, and technical and scientific information and expertise.

Official adoption of the NAP is also necessary in order to confer the process with the legitimacy and support that will be required in order to bring on board a wide range of stakeholders, both from the public and private spheres.

In the countries where National Environmental Action Plans (NEAPs) have been adopted, the National Action Plans for LBS must be consistent with the NEAPs.

An example of the NAP outlines is shown in Annex (III)

PHASE-6-SET UP THE NATIONAL LIST OF PRIORITY ACTIONS FOR 2010

1. Define Criteria for the Establishment of Priorities

The first goal of the S.A.P. (after the establishment of the Baseline Budget in 2003) is the reduction by 50% of the listed pollutants. For some pollutants this reduction should be achieved by the year 2005, while for most of them the same result should be achieved by the year 2010. The industries of the Mediterranean region can be categorized as: those which have already implemented measures for the reduction of pollutants releases (to different degrees of success) and those which have done very little (or nothing) to prevent the pollutants releases to the environment. As a result, it is not logical to expect 50% reduction from an industry that has already a good pollutant's reduction system, using the Best Available Technology (B.A.T.) and keeps its effluent's quality in conformity with the existing national environmental legislation. Such an approach could lead to a complete failure of the SAP implementation, because these technologically advanced industries could not perform the required reduction of pollutants.

In order to deal with the above problem in a realistic manner, we could emphasize on the reduction of pollutant's releases from industries that do not use B.A.T. in their effluents treatment or to their production process. More specifically, we could consider two groups of industries; a) those which comply with national or/and international standards for the releases of pollutants and b) those which do not comply with the above mentioned standards. In the first phase of the implementation of SAP (year 2010) the goal will be the reduction by 50% of pollutants releases from industries that do not comply with the national/international standards. However, all industries (complying or non-complying with
the standards) should be included in the list and their pollutant’s releases reported: the Baseline Budget of the region (and the country) will then be calculated using all of them.

The Flow diagram in Figure 5 presents the logical flow chart for setting priority actions:

1. NDA for a SAP target X
2. Identification of different sources of X
3. Logical analysis of each source of X
4. Are releases in compliance with Standards?
   - YES
   - NO
5. Source included in the BB
   - Included in the year 2010 plan
6. Source included in the BB
   - Not included in the year 2010 plan

NDA: National Diagnostic Analysis,
SAP: Strategic Action Programme
NAP: National Action Plan,
BB: Baseline Budget,
X: Specific pollutant

The list of priority actions for 2010 is an important milestone in the implementation of the NAP. It should consider environmental and socio-economic issues, policy and legislative frameworks, and the management, institutional, and technical infrastructure available.

Clear and explicit issue/impact matrix for prioritising action will generate the following benefits:

• decisions within the process are transparent;
• a climate of equity and consistency, and therefore trust, will be created;
• effective participation by different stakeholder groups is encouraged;
• short term perspectives are transcended;
• a consistent and coherent approach to the progressive identification and characterisation of issues is generated; and,
• socio-economic considerations are included.

The list of priority actions includes the actions or specific projects that would be implemented at the administrative region(s) level to reduce effectively the releases of a SAP targeted pollutants from a defined sources located in the administrative region(s). It should demonstrate a commitment to action on the ground. Actions could be of technical, institutional and management nature.

These actions should describe the following:

• the reduction that would be performed by the implementation of the action;
• identification of the stakeholders;
• the definition of the financial and administrative responsibilities of the stakeholders;
• the time framework for the implementation of the action; and
• the reduction tracking method.

An example sheet is shown in Annex (II)

2. Identify the Stakeholders

Actions are expected to be widely participatory and consultative. Therefore, the first objective of the core team is the identification and involvement, as early as possible, of key stakeholders, from both the public and private sectors, as well as civil society. The objectives are:

• To make potential investors and/or donors aware of the benefits and scope of the project;
• To ensure that the interests of all relevant stakeholders, including those of the private sector, are represented; and,
• To generate a sense of ownership, and of commitment, to the proposed activities and measures.

3. Endorse Project at the National, and as appropriate, Sub-National Levels

Actions must have adequate political, institutional and financial support from relevant government authorities at all appropriate levels. The action should be officially endorsed by relevant authorities, and be integrated into existing planning and budgetary processes. Similarly, the action should be mainstreamed into relevant frameworks, including policy and legal provisions, enforcement mechanisms, and technical and scientific information and expertise.

In the short-term, domestic financial resources must be allocated to the actions from the annual budget; longer-term financial mechanisms should also be identified, earmarked or developed, that will ensure sustainability. Mainstreaming at all levels is a prerequisite for the effective implementation of an action.
4. **Strengthen the Institutional & Policy Framework**

The actions should be mainstreamed into, and build upon, existing national capacity and institutions. Therefore, key requirements are:

- Assessment of existing capacity for the allocation of human, financial and technical resources;
- Identification of possible capacity building requirements, particularly at the local level – depending on the type of project; and,
- Assessment of relevant policies, legislation, and regulations.

This exercise should be undertaken with a view to adequately providing for the sustainability of the actions. Aspects such as the need to harmonise legislation or clarify agency mandates may be decisive in the successful implementation of the actions.

5. **Participation of the Private Sector**

As key partners for sustainability, the **private sector** should be specifically targeted and engaged in the development of the proposed actions as early as possible. However, the private sector should not be approached merely as a potential source of financial resources, but as a **partner** that can benefit from the actions (in terms, for example, of corporate image, or of operational savings in possible fines for non-compliance with environmental regulations). Sectors such as tourism or fisheries, which depend directly on the health and sustainable development of coastal and marine resources, already have vested interests.

The participation of the private sector from the outset of the process creates solid public-private partnerships whereby:

- Specific interests, concerns and needs can be addressed;
- Ongoing or proposed projects and initiatives of the private sector can be built upon;
- Resources & expertise are maximised, and the duplication of initiatives is avoided; and,
- Potential sources of conflict can be resolved.

6. **Consider Information Needs, Research & Monitoring**

Given that actions will most likely build upon current information, assessments, data bases and inventories, these should be analysed in order to:

- Evaluate their current state, and,
- Identify potential data-collection, information, and research needs.

The sustainability of the project may require the development of a monitoring and evaluation system.

7. **Prepare a Financial Strategy**

The financial strategy should:

- Assess existing domestic financial sources and mechanisms in order to identify solid funding possibilities for the specific project;
• Define concrete steps for the mobilisation of financial resources and partners (closely linked with the identification of stakeholders, during the actual definition phase of the project); and,
• Build upon existing projects and identify opportunities for linkages with ongoing initiatives/programmes

Financial resource needs should be defined in detail. Project proposals should have realistic, detailed and targeted budgets which include, where feasible:
• Detailed cost estimates, including the cost of no action whenever possible;
• Assessment of benefits derived from the project, both in general terms and in terms of specific stakeholder groups; and,
• Valuation of relevant resources and environmental services.

A key objective of the financial strategy is the establishment of sustaining financial mechanisms.

If feasible, the financial strategy should also assess the cost of support elements such as capacity building, training, monitoring and evaluation, and enforcement.

The actions may provide an opportunity to develop or strengthen relevant feasibility and pre-investment studies. Similarly, efforts should be made to identify of further investment opportunities.

Potential financial partners include:
• Industry and Trade sectors
• Financial Institutions: National, Regional (regional development banks), and Global (e.g. World Bank and GEF)
• Bilateral donors
• Non-governmental organisations

Protection of the marine environment from land-based activities cannot be achieved through government action alone or by depending entirely on public funds. It is therefore important to also create an “enabling” scenario for private sector investments in actions. This is a fundamental component in the mobilisation of the private sector, at both domestic and international levels, as well as of international financial institutions.
ANNEX I

ISSUES/IMPACTS MATRIX

GUIDELINES FOR SCORING ISSUES ASSOCIATED WITH EACH ENVIRONMENTAL ISSUE
HUMAN HEALTH AND MARINE ENVIRONMENT IMPACTS
# ISSUES/IMPACTS MATRIX

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issues</td>
<td>Indicator of magnitude</td>
<td>Impacts</td>
<td>Root causes</td>
<td>Possible solutions</td>
<td></td>
</tr>
<tr>
<td>Human Health</td>
<td>Marine Environment</td>
<td>Socio-Economic Loss</td>
<td>Global Environment</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Step-1:** Indicate the issue and identify the site

**Step-2:** It is advisable to give data or trends as appropriate

**Step-3:** Score the impacts as follows:
- 1-no known impact
- 2-slight impact
- 3-moderate impact
- 4-severe impact

**Step-4:** Indicate the root causes of the issue

**Step-5:** Indicate legal, institutional and technical possible solution

**Step-6:** Indicate the weight of the individual impact from a total weight of 10. The weight should reflect the importance of the impact in the national policies

**Step-7:** Multiply the score by the weight.

As the result of this exercise, the individual impacts are classified by relevance according to the results of step-7.

**EXAMPLE:** the weight of individual impact fixed by the administrative region SAP team is as follows:

4  public health  
3  marine environment  
2  socio-economic  
1  global environment  

The SAP team scored the impacts of issue X as follows:

3  public health  
1  marine environment  
2  socio-economic  
1  global environment
The final scale of the impacts for issue X is as follows:

- $4 \times 3 = 12$ public health
- $3 \times 1 = 3$ marine environment
- $2 \times 2 = 4$ socio economic
- $1 \times 1 = 1$ global environment

So the matrix should be filled in as follows:

<table>
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<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issues</td>
<td>Indicator of magnitude</td>
<td>Impacts</td>
<td>Root causes</td>
<td>Possible solutions</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Human health</td>
<td>Marine environment</td>
<td>Socio-Economic Loss</td>
<td>Global Environment</td>
</tr>
<tr>
<td>X</td>
<td>Nb. of people affected</td>
<td>12</td>
<td>3</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Y</td>
<td>Reduction of fisheries by %</td>
<td>Y1</td>
<td>Y2</td>
<td>Y3</td>
<td>Y4</td>
</tr>
</tbody>
</table>
**Guidelines for Scoring Issues Associated with Each Environmental Issue**

**Human Health and Marine Environment Impacts**

<table>
<thead>
<tr>
<th>Issue</th>
<th>Score 0 = No concern</th>
<th>Score 1 = Slight concern</th>
<th>Score 2 = moderate concern</th>
<th>Score 3 = major concern</th>
</tr>
</thead>
</table>
| Trace Metals (Pb, Hg, Cd) | • No evidence of production or product contamination  
• No evidence of air emissions  
• No evidence of emissions from solid residues  
• No evidence of chemical stockpiled  
• No evidence of chemical being contaminant in production of other chemicals  
• No evidence of use of the chemical  
• No evidence of release from liquid effluent | • Evidence of limited production  
• Presence of small sources with possible emissions (e.g. small incineration plants)  
• Some limited evidence of releases but on a small scale invoking local concerns  
• Some use of the chemical in small areas  
• Some limited evidence of releases according to national standards | • Historical production evident and production for local use ongoing  
• Present as contaminant in other chemical production  
• Presence of major combustion related sources e.g. large municipal or industrial incinerators  
• Evidence of stockpiles of the chemical  
• Use of chemical in agriculture or industry sub-regionally | • Major production of chemical for local and export use  
• Chemical evident as contaminant in large scale production of other chemicals  
• Known emission of chemical from large scale  
• Evidence of leakage from major stockpiles of the chemical poorly packaged  
• Large-scale use of the chemical throughout the region |

<p>| | | | | |</p>
<table>
<thead>
<tr>
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</thead>
</table>
|   | • No known or historical levels of chemical contaminant in the environment except background levels of naturally occurring substances  
• No available data to quantify evidence of the chemical found in fish, wildlife animal or human tissue | • Chemical contaminants are detectable in the environment but below threshold limits defined for the country or region  
• Chemical contaminants are detectable from fish, wildlife, foodstuff or human samples but below threshold limits established for the country or region | • Chemical contaminants are found in the environment marginally above threshold limits defined for the country or region  
• Limited data available to support chemical existing within fish, wildlife, foodstuff or human tissue at marginal levels above threshold standards for the country or region | • Chemical contaminant is analysed repeatedly well above threshold limits in the environment defined for the country or region  
• Known contamination of fish, wildlife, foodstuff or humans at levels far exceeding the threshold established for the country or region |
<table>
<thead>
<tr>
<th>Issue</th>
<th>Score 0 = No concern</th>
<th>Score 1 = Slight concern</th>
<th>Score 2 = moderate concern</th>
<th>Score 3 = major concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organohalogens</td>
<td>- No evidence of production or product contamination</td>
<td>- Evidence of limited production</td>
<td>- Historical production evident and production for local use ongoing. Present as contaminant in other chemical production</td>
<td>- Major production of chemical for local and export use</td>
</tr>
<tr>
<td></td>
<td>- No evidence of air emissions</td>
<td>- Presence of small sources with possible emissions (e.g. small incineration plants or bleached kraft/pulp mills using chlorine)</td>
<td>- Presence of major combustion related sources e.g. large municipal or industrial incinerators or large bleached kraft pulp mills</td>
<td>- Chemical evident as contaminant in large scale production of other chemicals</td>
</tr>
<tr>
<td></td>
<td>- No evidence of emissions from solid residues</td>
<td>- Some limited evidence of releases but on a small scale invoking local concerns</td>
<td>- Evidence of stockpiles of the chemical</td>
<td>- Known emission of chemical from large scale incinerators or chlorine bleaching of pulp or other related combustion facilities</td>
</tr>
<tr>
<td></td>
<td>- No evidence of chemical stockpiled</td>
<td>- Some use of the chemical in small areas</td>
<td>- Use of chemical in agriculture or industry</td>
<td>- Evidence of leakage from major stockpiles of the chemical poorly packaged</td>
</tr>
<tr>
<td></td>
<td>- No evidence of chemical being contaminant in production of other chemicals</td>
<td>- Some limited evidence of releases in compliance with national standards</td>
<td></td>
<td>- Large-scale use of the chemical throughout the region</td>
</tr>
<tr>
<td></td>
<td>- No evidence of use of the chemical</td>
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<td></td>
<td>- No evidence of release from liquid effluent</td>
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<td></td>
<td>- No known or historical levels of chemical contaminant in the environment except background levels of naturally occurring substances</td>
<td>- Chemical contaminants are detectable in the environment but below threshold limits defined for the country or region</td>
<td>- Chemical contaminants are found in the environment marginally above threshold limits defined for the country or region</td>
<td>- Chemical contaminant is analysed repeatedly well above threshold limits in the environment defined for the country or region</td>
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<tr>
<td></td>
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<td>- Chemical contaminants are detectable from fish, wildlife, foodstuff or human samples but below threshold limits established for the country or region</td>
<td>- Limited data available to support chemical existing within fish, wildlife, foodstuff or human tissue at marginal levels above threshold standards for the country or region</td>
<td>- Known contamination of fish, wildlife, foodstuff or humans at levels far exceeding the threshold established for the country or region</td>
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<tr>
<td>Issue</td>
<td>Score 0 = No concern</td>
<td>Score 1 = Slight concern</td>
<td>Score 2 = moderate concern</td>
<td>Score 3 = major concern</td>
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</tr>
<tr>
<td>BOD from industrial sources</td>
<td>• No evidence of releases from solid residues • Evidence of BOD levels in Rivers in compliance with national standards • Evidence of releases of all liquid industrial effluents in compliance with the national standards</td>
<td>• Presence of small sources from small size industries • Some limited evidence of releases but on a small scale invoking local concerns</td>
<td>• Historical releases of BOD from medium size industry • Evidence of periodical high BOD levels in coastal rivers</td>
<td>• BOD releases are evident as contaminant in large scale industries • Known releases of BOD from large scale industries • Evidence of leakage from major municipal solid waste landfills • Evidence of leakage from major industrial solid waste landfills</td>
</tr>
<tr>
<td>PCBs</td>
<td>• No evidence of production or product contamination • No evidence of air emissions • No evidence of emissions from solid residues • No evidence of chemical stockpiled • No evidence of chemical being contaminant in production of other chemicals</td>
<td>• Evidence of limited production • Presence of small sources with possible emissions (e.g. small incineration plants or bleached kraft/pulp mills using chlorine); • Some limited evidence of releases but on a small scale invoking local concerns • Some use of</td>
<td>• Historical production evident and production for local use ongoing. Present as contaminant in other chemical production • Presence of major combustion related sources e.g. large municipal or industrial incinerators or large bleached kraft pulp mills</td>
<td>• Major production of chemical for local and export use • Chemical evident as contaminant in large scale production of other chemicals • Known emission of chemical from large scale incinerators or chlorine bleaching of pulp or other</td>
</tr>
<tr>
<td>Issue</td>
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</tbody>
</table>
|       | • No evidence of use of the chemical  
• No evidence of release from liquid effluent  
|       | the chemical in small areas  
• Some limited evidence of releases associated with liquid effluents  
|       | Evidence of stockpiles of the chemical  
• Use of chemical in agriculture or industry  
|       | related combustion facilities  
• Evidence of leakage from major stockpiles of the chemical poorly packaged  
• Large-scale use of the chemical throughout the region  
|       | No known or historical levels of chemical contaminant in the environment except background levels of naturally occurring substances  
• No available data to quantify evidence of the chemical found in fish, wildlife animal or human tissue  
|       | Chemical contaminants are detectable in the environment but below threshold limits defined for the country or region  
• Chemical contaminants are detectable from fish, wildlife, foodstuff or human samples but below threshold limits established for the country or region  
|       | Chemical contaminants are found in the environment marginally above threshold limits defined for the country or region  
• Limited data available to support chemical existing within fish, wildlife, foodstuff or human tissue at marginal levels above threshold standards for the country or region  
|       | Chemical contaminant is analysed repeatedly well above threshold limits in the environment defined for the country or region  
• Known contamination of fish, wildlife, foodstuff or humans at levels far exceeding the threshold established for the country or region  

**Solid Waste**  
• Evidence of convenient solid waste management system in the region  
• No noticeable interference with the recreational use of beaches due to litter  
• Evidence of temporary failure of the solid waste management system  
• Some evidence of marine derived litter on beaches  
• Occasional  
|       | Evidence of solid waste landfill  
• Widespread litter on beaches giving rise to public concern regarding recreational use of beaches  
• High frequency  
|       | No evidence of solid waste landfill system  
• Incidence of litter on beaches sufficient to deter the public from recreational activities  
• Trawling  
|       | No evidence of solid waste landfill system  
• Incidence of litter on beaches sufficient to deter the public from recreational activities  
• Trawling  


<table>
<thead>
<tr>
<th>Issue</th>
<th>Score 0 = No concern</th>
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<th>Score 2 = moderate concern</th>
<th>Score 3 = major concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Batteries and chemicals associated to its manufacturing</td>
<td>• No evidence of production</td>
<td>• Evidence of limited production</td>
<td>• Historical production evident and production for local use ongoing</td>
<td>• Major production of batteries for local and export use</td>
</tr>
<tr>
<td></td>
<td>• No evidence of air emissions</td>
<td>• Presence of small sources with possible emissions (e.g. small incineration plants and landfills)</td>
<td>• Presence of major combustion related sources e.g. large municipal or industrial incinerators</td>
<td>• Chemicals from Batteries production are evident as contaminant in large scale production</td>
</tr>
<tr>
<td></td>
<td>• No evidence of emissions from solid residues</td>
<td>• Some limited evidence of releases but on a small scale invoking local concerns</td>
<td>• Evidence of stockpiles of batteries</td>
<td>• Evidence of leakage from major stockpiles</td>
</tr>
<tr>
<td></td>
<td>• No evidence of batteries stockpiled</td>
<td>• Presence of small stockpiles</td>
<td>• Evidence of small scale recycling (50%) of batteries</td>
<td>• Large-scale use of batteries throughout the region</td>
</tr>
<tr>
<td></td>
<td>• No evidence of release from liquid effluent</td>
<td>• Evidence of medium scale recycling (80%)</td>
<td>• Evidence of stockpiles of batteries</td>
<td>• Evidence of no recycling of batteries</td>
</tr>
<tr>
<td></td>
<td>• Evidence of extensive recycling (100%) of batteries</td>
<td></td>
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<tr>
<td>• No known or historical levels of chemical contaminant in the environment except background</td>
<td>• Chemical contaminants are detectable in the environment but below threshold limits defined for the</td>
<td>• Chemical contaminants are found in the environment marginally above threshold limits</td>
<td>• Chemical contaminant is analysed repeatedly well above threshold limits in the environment</td>
<td></td>
</tr>
<tr>
<td>Issue</td>
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<td>levels of naturally occurring substances</td>
<td>country or region</td>
<td>defined for the country or region</td>
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<tr>
<td></td>
<td>• No available data to quantify evidence of the chemical found in fish, wildlife animal or human tissue</td>
<td>• Chemical contaminants are detectable from fish, wildlife, foodstuff or human samples but below threshold limits established for the country or region</td>
<td>• Limited data available to support chemical existing within fish, wildlife, foodstuff or human tissue at marginal levels above threshold standards for the country or region</td>
<td></td>
</tr>
<tr>
<td>Lub Oil</td>
<td>• No evidence of production</td>
<td>• Evidence of limited production</td>
<td>• Historical production evident and production for local use ongoing</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• No evidence of air emissions</td>
<td>• Presence of small sources with possible emissions (e.g. small incineration plants and landfills)</td>
<td>• Presence of major combustion related sources e.g. large municipal or industrial incinerators</td>
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<tr>
<td></td>
<td>• No evidence of emissions from solid residues</td>
<td>• Some limited evidence of releases but on a small scale invoking local concerns</td>
<td>• Evidence of stockpiles of lub oil</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• No evidence of lub oil stockpiled</td>
<td>• Presence of small stockpiles</td>
<td>• Evidence of limited recycling of lub oil</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• No evidence of release from liquid effluent</td>
<td>• Evidence of medium scale recycling of lub oil</td>
<td>• Major production of lub oil for local and export use</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Evidence of full recycling of lub oil</td>
<td></td>
<td>• Chemicals from Batteries production are evident as contaminant in large scale production</td>
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<td></td>
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<td></td>
<td>• Evidence of leakage from major stockpiles of the chemical poorly packaged</td>
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<td></td>
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<td></td>
<td>• Large-scale use of lub oil throughout the region</td>
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<td></td>
<td></td>
<td></td>
<td>• Evidence of no recycling of lub oil</td>
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<td>• Chemical contaminants from lub oil are detected in the environment marginally</td>
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<td></td>
<td></td>
<td></td>
<td>• Chemical contaminants from lub oil are found in the environment marginally</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>• Chemical contaminants from lub oil are analysed repeatedly well above</td>
<td></td>
</tr>
<tr>
<td>Issue</td>
<td>Score 0 = No concern</td>
<td>Score 1 = Slight concern</td>
<td>Score 2 = moderate concern</td>
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<tr>
<td></td>
<td>environment except background levels of naturally occurring substances</td>
<td>but below threshold limits defined for the country or region</td>
<td>above threshold limits defined for the country or region</td>
<td>threshold limits in the environment defined for the country or region</td>
</tr>
<tr>
<td></td>
<td>• No available data to quantify evidence of the chemicals originated from lub oil found in fish, wildlife animal or human tissue</td>
<td>• Chemical contaminants originated from lub oil are detectable from fish, wildlife, foodstuff or human samples but below threshold limits established for the country or region</td>
<td>• Limited data available to support chemicals originated from lub oil existing within fish, wildlife, foodstuff or human tissue at marginal levels above threshold standards for the country</td>
<td>• Known contamination of fish, wildlife, foodstuff or humans by chemical originated from lub oil at levels far exceeding the threshold established for the country</td>
</tr>
</tbody>
</table>
### Guidelines for Scoring Issues Associated with Each Environmental issue

#### Socio Economic Loss

<table>
<thead>
<tr>
<th>Issue</th>
<th>Score 0 = No concern</th>
<th>Score 1 = Slight concern</th>
<th>Score 2 = moderate concern</th>
<th>Score 3 = major concern</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALL ISSUES</strong></td>
<td>• No evidence of increased cost of human health protection</td>
<td>• Evidence of increase in cost of human health protection</td>
<td>• Modification or loss of cultural heritage</td>
<td>• Complete loss of tourism and recreational activities</td>
</tr>
<tr>
<td></td>
<td>• No evidence of loss of tourism or recreational values</td>
<td>• Temporary reduction of beaches frequented</td>
<td>• Increased cost of clean up</td>
<td>• Considerable loss of property values</td>
</tr>
<tr>
<td></td>
<td>• No evidence of loss of property values</td>
<td>• Evidence of changes in land use plans</td>
<td>• Reduced options for aquaculture</td>
<td>• Noteascable local population immigration</td>
</tr>
<tr>
<td></td>
<td>• No evidence of changes in land use plans</td>
<td>• Loss of aesthetic values</td>
<td>• Evidence of temporarily loss of economic returns</td>
<td>• Loss of economic returns</td>
</tr>
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<td></td>
<td></td>
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<td></td>
<td>• Loss of protected areas</td>
</tr>
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<td></td>
<td>• Loss of wild and aquatic life</td>
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<td></td>
<td></td>
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<td>• Complete changes in land use plans</td>
</tr>
</tbody>
</table>

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### Guidelines for Scoring Issues Associated with Each Environmental issue

#### Regional and Global environment

<table>
<thead>
<tr>
<th>Issue</th>
<th>Score 0 = No concern</th>
<th>Score 1 = Slight concern</th>
<th>Score 2 = moderate concern</th>
<th>Score 3 = major concern</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ALL ISSUES</strong></td>
<td>• No evidence of violation of Bilateral environmental agreements</td>
<td>• Potential transboundary impacts</td>
<td>• Increase of GHG emissions</td>
<td>• Evidence of violation of regional and global environmental agreements</td>
</tr>
<tr>
<td></td>
<td>• No evidence of violation of regional and global environmental agreement</td>
<td></td>
<td></td>
<td>• Potential bilateral conflict</td>
</tr>
<tr>
<td></td>
<td>• No evidence of transboundary impacts</td>
<td></td>
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</tr>
</tbody>
</table>
ANNEX II

NATIONAL / ADMINISTRATIVE REGION PRIORITY LIST OF ACTIONS FOR 2010
**NATIONAL / ADMINISTRATIVE REGION PRIORITY LIST OF ACTIONS FOR 2010**

<table>
<thead>
<tr>
<th>Administrative Region</th>
<th>Site</th>
<th>Pollutant</th>
<th>Expected Reduction %</th>
<th>Stakeholders</th>
<th>Time Framework</th>
<th>Tracking Method</th>
</tr>
</thead>
</table>
ANNEX III

EXAMPLE OF NAP OUTLINES
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- PREFACE
- EXECUTIVE SUMMARY
- CHAPTER -1-SCOPE

Define the Scope of National Action

Given the complex and interlinked range of issues that should be addressed in a national programme of action, and taking into account other national plans, priorities and circumstances, national governments will determine the focus of their initiative. The methodology chosen will assist in defining the scope of the undertaking. The GPA, for example, outlines a process for action (as described above), which has been applied by several countries, and which provides a useful referent in determining the ambit of the initiative.

The nature of the issues, and the cross-cutting interactions among them, indicate that national programmes of action should be an iterative and phased process, whose scope may be progressively broadened.

Two additional specific aspects may also assist in defining the scope of a national programme of action:

Thematic: It may be based, inter alia, on environmental issues, sectoral approaches, or pollutant source categories. A decision may be taken for including priority issues which might not constitute land-based activities but are impacted by them, such as fisheries or accessibility and quality of associated freshwater resources.

Geographic: This often reflects the relative size of a country. Whereas the national programme of action for a small island state might cover the entire territory, larger countries might wish to focus their action on specific sub-national region(s) or site(s), and develop a national programme progressively. It may also reflect a decision to organise the national programme on the basis of, for example, catchment areas.

- OVERVIEW OF THE NATIONAL ISSUE RELATED TO LBS PROTOCOL AND SAP
- ADMINISTRATIVE REGION(S) JURIDICTION
- DEVELOPPING THE SAP/NAP:STRATEGY AND APPROACH
- METHODS OF IDENTIFICATION AND ASSESSMENT OF ISSUES

- CHAPTER -2- NATIONAL ISSUES

- INTRODUCTION
- IDENTIFICATION AND ASSESSMENT OF ISSUES
  - sewage management
  - urban solid waste
  - air pollution
  - pollution caused by Hg,Cd,Pb
- organohalogens: halogenated aliphatic hydrocarbons, halogenated aromatic hydrocarbons, chlorinated phenolic compounds, organohalogened pesticides
- wastewater and solid waste from industrial installations.
- additional activities

- IDENTIFICATION OF PRIORITIES ACTIONS
  - sewage management
  - urban solid waste
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  - organohalogens: halogenated aliphatic hydrocarbons, halogenated aromatic hydrocarbons, chlorinated phenolic compounds, organohalogened pesticides
  - wastewater and solid waste from industrial installations.
  - additional activities

- SETTING GOALS AND MANAGEMENT OBJECTIVES
- IDENTIFICATION OF CRITERIA FOR EVALUATION OF EFFECTIVENESS
- DEVELOPMENT OF PROGRAMME SUPPORT ELEMENTS

- CHAPTER -3- ADMINISTRATIVE REGION (A) ISSUES

- INTRODUCTION

- IDENTIFICATION AND ASSESSMENT OF ISSUES
  - sewage management
  - urban solid waste
  - air pollution
  - pollution caused by Hg, Cd, Pb
  - organohalogens: halogenated aliphatic hydrocarbons, halogenated aromatic hydrocarbons, chlorinated phenolic compounds, organohalogened pesticides
  - wastewater and solid waste from industrial installations.
  - additional activities

- IDENTIFICATION OF PRIORITIES ACTIONS
  - sewage management
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  - additional activities

- SETTING GOALS AND MANAGEMENT OBJECTIVES
- IDENTIFICATION OF CRITERIA FOR EVALUATION OF EFFECTIVENESS
- DEVELOPMENT OF PROGRAMME SUPPORT ELEMENTS

- CHAPTER -4- ADMINISTRATIVE REGION (B) ISSUES

- INTRODUCTION

- IDENTIFICATION AND ASSESSMENT OF ISSUES
  - sewage management
  - urban solid waste
  - air pollution
  - pollution caused by Hg, Cd, Pb
  - organohalogens: halogenated aliphatic hydrocarbons, halogenated aromatic hydrocarbons, chlorinated phenolic compounds, organohalogened pesticides
  - wastewater and solid waste from industrial installations.
Additional activities

- IDENTIFICATION OF PRIORITIES ACTIONS
  - sewage management
  - urban solid waste
  - air pollution
  - pollution caused by Hg, Cd, Pb
  - organohalogen: halogenated aliphatic hydrocarbons, halogenated aromatic hydrocarbons, chlorinated phenolic compounds, organohalogened pesticides
  - wastewater and solid waste from industrial installations.

- additional activities

- SETTING GOALS AND MANAGEMENT OBJECTIVES
- IDENTIFICATION OF CRITERIA FOR EVALUATION OF EFFECTIVENESS
- DEVELOPMENT OF PROGRAMME SUPPORT ELEMENTS