CAPACITY BUILDING STRATEGY TO ENHANCE THE MANAGEMENT OF MPAs IN THE MEDITERRANEAN SEA

REPORT: CAPACITY BUILDING STRATEGY TO ENHANCE THE MANAGEMENT OF MPAs IN THE MEDITERRANEAN SEA

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CONTENTS

INTRODUCTION

RATIONALE

Marine protected areas (MPAs) have been accepted as one of the most effective tools for biodiversity protection and to combat ever-increasing demands on coastal and marine resources. In the Mediterranean, the number of MPAs is fast-growing (185 at present[1]), however not all MPAs are fully functional or have qualified staff, resulting in poor planning and ineffective management. Capacity building is a mechanism to deliver skills and transfer knowledge to MPA staff, through a series of tailored actions that begin in the classroom and are carried into the field. Tailored programmes for MPAs are now becoming more common (see this report), offering a variety of capacity building approaches and outcomes.

In the Mediterranean, MPAs are short-staffed or have, more often than not, staff without a management, conservation or planning background. To respond to this, several efforts have addressed the need to build MPA management capacity. At the same time, the demand for more effective planning and management continues to increase.

The scope of this report is specifically coastal and marine protected areas. The goals of this study were to: a) assess current capacity building needs and priorities at both the national and the MPA levels; b) analyse existing capacity building programmes and activities in the region; c) evaluate current capacity building achievements; d) formulate a capacity building strategy that responds to the management needs of the Mediterranean MPAs at the regional, national and local levels and e) develop integrated and feasible delivery mechanisms with the collaboration of regional and national actors.

APPROACH

Between June and October 2011, 137 questionnaires (Q) were sent to organizations that deliver capacity in the region (Q1), to national authorities (Q2), and to MPA managers (Q3). Annex I presents the list of recipients and respondents. Aside from questions on staff capacities and training facilities, the questionnaires included a list of 20 topics - or thematic areas - to be evaluated and scored depending on priority capacity building needs. These topics were identified by members of WWF's Capacity Building Programme (in partnership with NOAA), with additional information collected from a list of Mediterranean experts, actors and institutions. The capacity building assessment developed by CaMPAM (Caribbean Marine Protected Areas Management Network under the UNEP-CEP and the Specially Protected Area and Wildlife Protocol of the Cartagena Convention) was also consulted.

An MPA Group, with the role to support and advice the process – was created. This group included several MPAs scattered throughout the region and the mentors in WWF's MedPAN South Project, who played a significant role in engaging partners at the country level and in gathering information on local capacity building efforts.

A parallel Project launched by RAC/SPA, MedPAN and WWF assessed management tools needs for MPAs, evaluating the applicability of existing tools and a strategy for the development of future management tools. The results of this effort are summarised in Section IV.

[1]Source MedPAN

SECTION I: ASSESSMENT OF NEEDS AND PRIORITIES

Out of 137 questionnaires, 61 were received from 16 countries (Q1 7/29 - Q2 12/33 - Q3 42/75, received/sent). Countries from which no response was obtained were Bosnia & Herzegovina, Cyprus, Israel, Monaco and Libya.

Specific management weaknesses identified by MPAs:

• MPAs lack management planning and zoning;

• Staff do not have appropriate management skills for addressing impacts from both recreational activities (divers and nautical) and for local fisheries (commercial and sport);

• Staff do not have the skills to facilitate stakeholder participation processes;

• Staff has insufficient or often non-existent monitoring and evaluation skills;

• Insufficient financial resources, infrastructure, equipment, etc.

Key issue areas where MPAs need support:

• Skills to address conflicts with user groups;

• Insufficient enforcement plans and enforcement chains;

• Appropriate and sustainable funding, limited self-financing options (even in EU countries).

Although we did not include in the questionnaire topics such as climate change, invasive species, and Natura 2000 at sea, these should be considered as emerging issues that also need attention and for which managers capacity should be built.

Capacity building needs and priorities identified:

Each country or MPA was asked to list their top three capacity building needs in order to establish training priorities. The top three needs were assigned with 3 points each; additional training needs were assigned 1 point each. Once these scores were summed up, a training priority list for the whole region was created (see Table 1).

These results are also consistent with the management tools assessment (Ben Haj, 2012[2]) conducted over a sample of 12 MPAs in 8 Mediterranean countries (see Section IV), which identified similar challenges for MPAs such as: fisheries management, sustainable tourism development, visitor's management, scientific monitoring (this includes species/habitat monitoring), environmental education, and self-financing.

Interestingly, these priorities match almost exactly with the MPA management needs assessment (Gombos et al., 2011[3]) over a sample of 27 MPAs in 10 countries in the Caribbean. It must be noted that our results may be biased towards the institutions that responded and the individual perceptions of respondents. However, we normalised the results by cross referencing the priorities identified by each country and by cluster of countries. This allowed us to homogenise results and remove potential outliers. That being accounted for, we still found differences between national and site-level (MPA staff) respondents, both within countries and among countries. This reflects different interests among practitioners in receiving trainings, mostly linked with their job description, roles and responsibilities, and career development goals.

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[2]Ben Haj S., 2012. Development of Guidebooks for Marine Protected Areas Managers in the Mediterranean – Assessment. Commissioned by MedPAN, UNEP/MAP-RAC/SPA and WWF-MedPO. 27 pages + Annexes.

[3]Gombos, M., A. Arrivillaga, D. Wusinich-Mendez, B. Glazer, S. Frew, G. Bustamante, E. Doyle, A. Vanzella-Khouri, A. Acosta, and B. Causey. 2011. A Management Capacity Assessment of Selected Coral Reef Marine Protected Areas in the Caribbean. Commissioned by the National Oceanic and Atmospheric Administration (NOAA) Coral Reef Conservation Program (CRCP), the Gulf and Caribbean Fisheries Institute (GCFI) and by the UNEP-CEP Caribbean Marine Protected Area Management Network and Forum (CaMPAM). 269 pp.

Table 1. Regional Training Needs for MPAs		
Rank	Capacity building topic	Score
1	Conservation of particular habitats/spp (*)	108
2	Stakeholder engagement	88
3	Marine Biodiversity and Ecology	85
4	Enforcement, patrolling	83
5	Scientific Monitoring	82
6	Visitors management (diving, nautical)	75
7	Self-financing mechanisms	73
8	Fisheries management	67
9	MPA Zoning	64
10	Sustainable tourism development, ICZM	58
11	MPA management planning	56
12	MPA Basics (or MPA 101)	54
13	Regional Conventions, Networks	51
14	Environmental Education & Communications	44
15	Legal and institutional background for MPA	42
16	GIS as a tool for marine resource management	41
17	MPA Network level planning	38
18	Web-based data management	31
19	Development of regulations	30
20	Other (foreign languages, volunteers…)…	26

	Very high
	High
	Medium
	Low

Table 1: Capacity building priority list in the Mediterranean region

Needs by Target Group

Some differences were found concerning the needs of national and MPA level practitioners. For example, fisheries management and visitor management is a top priority for most MPA managers across the region, but not particularly so for national authorities, who identified priorities such as legal frameworks and regional conventions.

However, there are also many similarities among responses. Some priorities are comparable across target groups and across the region such as the management/conservation of species, stakeholder engagement, marine ecology, MPA basics, scientific monitoring, and enforcement. The 10 highest demand trainings across the region are listed in Table 2 by target group.

Table 2. Regional Training Needs for MPAs		
Rank	Capacity building topic	Score
1	Management of particular habitats/spp (*)	108
2	Stakeholder participation	88
3	Marine Biodiversity and Ecology	85
4	Enforcement, patrolling	83
5	Scientific Monitoring	82
6	Visitors management (diving, nautical)	75
7	Self-financing mechanisms	73
8	Fisheries management	67
9	MPA Zoning	64
10	Tourism industry	58
11	MPA management planning	56
12	MPA 101	54
13	Regional Conventions, Networks	51
14	Environmental Education	44
15	Legal and institutional background MPA	42
16	GIS as a tool for marine resource management	41
17	MPA Network level planning	38
18	Web-based data management	31
19	Development of regulations	30
20	Other (foreign languages, volunteers...)...	26

	Very high
	High
	Medium
	Low

Table 2: The 10 highest demand trainings across the region

NEEDS BY COUNTRY

The significant number of responses from MPA sites (42) allows for a preliminary understanding of the needs on a country-by-country basis; the tables presenting the results by country are listed in Annex II. Here again, out of an original list of 20 topics, the same 10 topics are identified as training priorities for the greatest majority of countries. However, each country has specific needs and priorities, and the results from Annex II will allow tailoring specific capacity building initiatives at the national level.

At the MPA site level, differences are also found when separating the specific needs of MPA managers from those of the field rangers. Managers are interested in zoning, conservation of species, stakeholder engagement, fisheries management, and sustainable financing mechanisms. While the rangers prioritized their capacity building needs in the areas of education, visitors management, data collection, and patrolling.

Similarities between countries were researched to identify whether the results per country align well when clustered into sub-regional groups. For example, enforcement and education seem relevant only for MPA managers in non-EU countries.

PRIORITIES AT THE SUB-REGIONAL LEVEL

The questionnaires assessed the list of training needs by country and their three main priority topics (Table 3). Adding scores, these training needs per topic were organised into 4 priority classes and clustered into three sub-regions. These sub-regions are identified on the basis of similar needs or similar MPA management status. These three sub-regions are: francophone North Africa (Algeria, Morocco, Tunisia), eastern Mediterranean (Egypt, Lebanon, Libya, Syria, Turkey and all the Adriatic countries), and Mediterranean EU-member States. While sub-regions may have different priorities, some topics are applicable across the whole Mediterranean, for example: species conservation plans, stakeholder engagement, marine ecology and MPA basics, scientific monitoring, and enforcement.

TABLE 3 - Priority training topics by sub-region	North Africa sub-region	Eastern Med sub-region	EU countries sub-region	Mediterranean wide
1 Conservation of particular habitats/spp	11	46	51	108
2 Stakeholder engagement	12	28	48	88
3 Marine Biodiversity and Ecology	13	18	49	85
4 Enforcement, patrolling	9	43	31	83
5 Scientific Monitoring	4	43	35	82
6 Visitors management (diving, nautical)	4	32	39	75
7 Self-financing mechanisms	2	33	38	73
8 Fisheries management	3	16	42	67
9 MPA Zoning	6	35	23	64
10 Tourism industry	2	21	35	58
11 MPA management planning	8	22	26	56
12 MPA Basics	4	18	32	54
13 Regional Conventions, Networks	8	16	27	51
14 Environmental Education	4	21	19	44
15 Legal/Institutional background for MPAs	10	19	13	42

Table3: Priority training topics by sub-region

MPA Development Stage

In this report, we considered two development stages for Mediterranean MPAs, a) MPAs that have acquired a good capacity for planning and management, that are implementing monitoring programmes and have skilled staff, and b) MPAs that are still in the process of developing their capacity, their management objectives, and have staff that needs to further build their management capacity.

MPAs that are still in a "developing" stage appear to be more interested in planning-related topics, such as MPA management planning, MPA spatial planning and zoning, the application and participation ito regional conventions and networks, and legal/institutional frameworks for MPAs.

MPAs that are in a more "advanced" stage require more targeted skills, such as visitor management, local fisheries management, scientific monitoring, GIS and database development, or sustainable financing.

A few topics are common to both "developing" and "advanced" MPAs, such as MPA basics, Conservation of species and habitats, stakeholder engagement, and enforcement/patrolling.

Number of Staff in MPAs

At present there are 185 MPAs in the region, for which we estimate that a minimum of 5-10 well trained marine staff are necessary to effectively implement their management plans. The questionnaire assessed the current number of MPA staff present in MPAs and their skill level. Four MPA staff categories were considered: 1) managers, both at the national and the MPA level; 2) scientists; 3) technical staff, including guides and educators; 4) rangers and maintenance personnel.

The questionnaires provided information on the number of staff available for each of these 4 categories, however many gaps and incomplete information were found within the responses. The mean number of staff currently present (out of the questionnaires received) is 0.9 managers, 1.4 scientists, and 3.9 "guides and rangers" per MPA. However, these figures are strongly biased by countries planning to hire large numbers of staff in the near future, or include volunteer or NGO support. To date, most MPAs do not have dedicated staff, and most of their staff have a terrestrial background, of which about a third are only available either seasonally, work on a voluntary base, or belong to universities or NGOs.

According to the MedPAN database – for those MPAs that have not yet provided information about available staff - the regional assessment indicates that 784 persons are working permanently in 86 MPAs; these figures are biased by Brijuni with 200 staff, and Port-Cros with 79; additionally, there are 292 staff working only temporarily in 72 MPAs (with a bias from Brijuni (50), El Kala (30) and Zakynthos (28)); and finally, 412 staff are working only during the summer season in 74 MPAs (biased by Brijuni (50), El Kala (60), Isole Egadi (30), Arcipelago della Maddalena (30), Telascica (25), Zakynthos (25), Mljet (23)). If Brijuni, El Kala, Port-Cros and others were excluded from this estimate, we would get the more realistic mean of 6 permanent staff, 2.6 part-time and 2.5 in the summer season, for each of the responding MPAs in the Mediterranean, figures which are closer to the results of this assessment.

SECTION II: ESTABLISHING THE BASELINE

EXISTING CAPACITY WITHIN MPA TO TRANSFER KNOWLEDGE

Our assessment identified MPAs that have acquired capacity in specific fields and are capable of sharing this expertise or lessons learned with other MPAs. This would enable MPA – to – MPA training mechanisms to be implemented, and open up the possibility for the further development of a learning network based on experience, lessons learned and case study sharing. MPAs in France, Greece, Italy, Lebanon, Spain, Tunisia and Turkey have listed specific topics for which they can host capacity building activities, including visitor's management, stakeholder engagement, local fisheries management, patrolling techniques, conservation of species and scientific monitoring. A summary of MPAs with current capacity to train other practitioners is provided in Table 4.

Training Topic	MPAs with acquired capacity to train others
Marine Ecology and MPA basics	Miramare, Gaiola, Palm Isl., Kas-Kekova, Galite
MPA spatial planning and zoning	Kas-Kekova
MPA management planning	Miramare
Stakeholder engagement	Kas-Kekova
Development of regulations	Plemmirio
Enforcement, patrolling	Medas islands
Conservation of spp / habitats	Palm Island, La Galite, and Zakynthos (mostly Turtles)
Local fisheries management	Portofino, T. Guaceto
Visitors management, diving, nautical	Medas, C. Creus, Zakynthos, Miramare, Gaiola, Portofino
Environmental education, communications	Miramare, Gaiola
Scientific monitoring, data processing	Palm Island, Portofino
GIS for marine management	C. Creus, Cerbere-Banyuls, Medas, Miramare
Volunteer Programs	Kas-Kekova

Table 4: MPAs with current capacity to train other practitioners.

EXISTING TRAINING PROGRAMMES

We identified 250 training opportunities related or applicable to MPA management, delivered in the last 5 years by 51 national and international organizations.

Almost one hundred of these were omitted from the assessment, being either extensive university post-graduate courses, or focused only on the coastal (not marine) part of the "Integrated Coastal Zone Management" concept. The remaining 150 opportunities, in English or French, are relevant to the 15 priority topics and could be applicable to MPAs. Annex III displays these 150 training opportunities arranged by topics, including relevant details and website links. Out of these 150 trainings, just 17 cover the full range of issues on MPA management; of these 17, only 4 are extensive courses (run by ATEN, CaMPAM, NOAA, TNC), the other 13 being basic short courses (1-3 days long) on MPA basics (3 of them are offered on-line).

The remaining 133 courses cover the rest of the priority topics, most in the format of 2-4 day classroom courses. Other are specialised workshops for 5 to 10 days (including a field trip), but these may typically cost over 300€. A closer look reveals that most courses – and certainly all the workshops - are delivered only once and do not belong to any regular training programme. It is assumed that on demand the courses could be repeated and adapted to particular needs. With a few exceptions, only online courses, which are generally free, are continously available and can be taken at any time.

The most applicable courses for MPA are currently run by either regional (WWF/NOAA have the largest number of trainings, followed by RAC/SPA, Conservatoire du Littoral, ACCOBAMS) or international facilitators (NOAA, CaMPAM, UNEP-Doalos), but short courses aimed at protected areas staff are also delivered by public administrations and national institutions in Algeria, Croatia, Cyprus,

France, Italy, Malta, Spain, Tunisia, and Turkey. Specialised courses – with variable fees - are also available from universities or NGOs in several countries. Finally, we found 13 on-line management courses, but these are related to protected areas in general, some of them including a few modules specific on marine areas (for a full list see Annex III).

SELECTION CRITERIA

The whole set of 150 training opportunities in Annex III were checked against the selection criteria elaborated by the WWF MedPAN South mentor's meeting (Barcelona 2009). These criteria for selecting training programmes are: a) topic relevance (considering the priority needs in the region); b) capacity (experience in the region and the ability to immediately implement the capacity building activity); c) enabling environment (authority or political will); d) benefit level (number of MPAs/ institutions for whom this activity is a priority).

Later, other operative criteria were added to the selection: curriculum / regularity of the training programmes / regional or international experience and networking opportunities / existing fees, funding opportunities or possible voluntary contributions / complementarity between existing initiatives / adequate formats / course languages / support materials.

Following these criteria, a final selection of 32 training opportunities was analysed (strengths and weaknesses) as presented in detail in Annex IV and summarized in Table 5.

Table 5: Key training opportunities for Mediterranean MPAs, listed by organization and topic.

TRAINING TOPIC	International covering multi-subjects					Regional-specialized					National				Online			
	WWF, NOAA & RAC/SPA	Cons. du Littoral	ATEN	CAmPAM	WWF/NOAA	FAO Marine & Inland Fisheries Serv.(FIRF)	ACCOBAMS	Wageningen Univ.-Int'l Agric. Centre	Univ.Alicante-CIMAR	CIHEAM	Croatia SINP	Spain Min. Environ. Rural & Marine	Tunisia APAL	Turkey DGPNA	EUCC-Coastleam	Unesco-IODE	CMSi	TNC-WWF-CI-GtZ
Management of particular habitats and spp: e.g. seagrasses, marine turtles, marine birds, cetaceans, invasive species)																		
Stakeholder participation; conflict resolution																		
Basic marine biodiversity and ecology																		
Enforcement of MPA regulations																		
Monitoring systems, biological and socio-economic indicators																		
Visitors management, diving, nautical																		
Self-financing and business plans																		
Local fisheries management																		
Marine spatial planning and MPA zoning																		
Sustainable tourism and tourism industry																		
MPA management planning																		
MPA basics, administration and maintenance																		
Regional Conventions and Networks																		
Environmental education and Communications																		
Legal/Institutional background for MPAs																		
GIS, data collection and management																		
Natura 2000 at sea																		

Table 5: Key training opportunities for Mediterranean MPAs, listed by organization and topic (see extended information in Annex IV-Table and Annex V-Text).

SECTION III: LESSONS LEARNT

- Developing and implementing effective MPA capacity building programmemes, that offer a range of learning opportunities with the intent of translating the skills and knowledge learnt into improved capacity for addressing challenging resource management issues, requires a complex range of programmeme design considerations. Each of the MPA capacity building design stages becomes increasingly complex as the network of MPAs being serviced by the programmeme includes a geographically wider scope. This includes wider ranges of existing MPA management capacity amongst practitioners; varying ranges of institutional and management frameworks across countries; varying levels of political will and engagement; and most of all, levels of interest and commitment from MPA practitioners in taking on the responsibility for translating the skills and knowledge learnt through the capacity building programmeme and creatively and boldly applying them in the field.

- The capacity building programmeme within the MedPAN South Project (with joint effort from the MedMPAnet Project-RAC/SPA) is a prime example of a geographically widespread programmeme exhibiting many of the complexities described above. With12 countries participating in the programmeme, each exhibits different levels of commitment to and support for MPAs. Participants in this capacity building programmeme also represent different relationships to MPAs within their respective countries, many of them not actually MPA practitioners or directly engaging with the management of MPAs. MedPAN South Capacity Building Programmeme participants include academics, in-country NGOs, government agencies and, to a lesser degree, MPA staff and managers. Many of the countries do not actually have MPAs, or may be in the designation process, but few of them have functional networks of MPAs – Croatia being the exception, while Turkey, Tunisia and Algeria are making the most progress in that direction.

- Given the diversity of the participants, and the wide range of their professional backgrounds, much has been learnt about structuring a programmeme that meets all of their interests and needs. From the informal evaluations and assessments developed on past training activities, and from related literature (Hockings et al., 2005; Kopylova and Danilina Eds. 2011), some relevant lessons can be learnt and applied to future trainings developed for these types of mixed audiences;

- The selection of course facilitators needs to strike a balance between professional trainers and experienced MPA practitioners in the topical areas covered by the training curriculum (direct experience and personal case studies proving to be the most valuable to the classroom learning experience);

- Curriculum content is best received if made relevant to the Mediterranean setting, including geographically representative case studies, and cited management approaches, however, when there is a lack of actual or documented points of reference, it may be necessary to identify examples from a wider geographic reach;

- The best classroom learning experiences are those that allow for hands on experiential approaches to learning how to address complex resource management issues and appropriate management responses;

- Post-training coaching and experience sharing are often cited as being of significant value to continuing the learning process;

- Including a diversity of approaches – from classroom learning to site exchanges, provides a more dimensional approach to learning and allows for the inclusion of a broader target audience from stakeholders to agencies;

- The most efficient training modalities, scored (1 to 4) by participants, are on-the-job training, local on-site short courses, international training courses, and exchanges (all scored over 3); followed by advanced degree and nationally-based training courses (scored 2.5 to 3); and by web-based training, distance education, and written materials (scored under 2.5) (Hockings et al., 2005);

- A successful capacity building programmeme is equally dependent on the selection of programmeme participants who are willing and interested in making a professional investment in building their own capacity, sharing that capacity with other practitioners, and structuring their MPA responsibilities with the intent of implementing new skills and knowledge in the field;

- Every successful MPA capacity building programmeme needs an infrastructure support system for programmeme coordination, communication, evaluation, and to provide a framework for implementation from providing technical support in the field, to small grants programmeme for taking next steps;

- If MPA capacity building programmemes are to be truly used as a springboard for improving management effectiveness of MPAs that are not meeting their management objectives, then longer term commitments need to be made to capacity building to ensure that at the end of a programmeme, capacity is secured within each country, expertise resides within each country and is shared, and there is a continuous flow of learning opportunities for MPA practitioners.

SECTION IV: EXISTING TOOLS AND RESOURCES FOR MPA MANAGERS

GUIDEBOOKS AND MANAGEMENT TOOLS

Guidebooks and management tools allow for learning and management support outside of the classroom setting. Although there are several resources readily available to MPA practitioners, not many of them are accessed or regularly used. In an attempt to understand what could make these resources more user friendly, a number of MPAs were asked to rate existing management tools to better understand their limitations and how to improve their usefulness.

Existing guidelines/tools to inform Mediterranean MPAs on management issues (including monitoring, visitor management, communication, etc.) are listed in Annex VI. At present, MPA practitioners rate most existing tools as "not useful", as many of these tools:

• Are not well adapted to the Mediterranean or local (MPAs) context;

• Lack practical information and concrete case studies for implementation;

• Are not disseminated and readily available to MPA managers;

• Are not interactive enough to serve as effective tools for awareness building and dissemination;

• Are mostly available in English or French language (a few exceptions exists in Arabic, Italian, Turkish, etc);

• Emerging issues such as biological invasions and climate change are not addressed or only beginning to be addressed at Mediterranean level.

Based on the input from the survey respondents, the MedPAN Network (MedPAN and partners) are planning to develop several new tools to respond to the needs of managers. Potential future tools are detailed in Annex VII. Some examples of the on-line resources on which the MedPAN network is working, include:

ON-LINE RESOURCES

Some examples of the on-line resources on which the MedPAN network is working, include:

Expert's database

WWF-MedPO, RAC/SPA and MedPAN built an Experts' Database (http://experts.medpan.org) for Marine Protected Areas in the Mediterranean providing information about experts, best practices, management solutions and tools regarding marine conservation and MPA management. It includes the expert organization and contact details, fields of expertise, nationality, and publications or training materials developed by the expert or their organizations. This database is updated and maintained by MedPAN.

Web Portal

WWF, in collaboration with MedPAN and RAC/SPA, will developing a new, interactive learning and networking tools to enhance the capacity of local decision makers, practitioners, civil society organisations (CSOs) across the Mediterranean. This tool should include joint-learning opportunities, training material, curricula content, etc. Also the platform will be a forum for practitioners to share information, for remote tutoring and discussion with the Mediterranean environmental community. The portal would help MPA practitioners communicate with each other at almost no cost, sharing best practices, and consulting colleagues and experts; it would allow both download and upload of information (publications, case studies, upcoming meetings and events) and may offer translation services for selected materials. The platform shall provide links to MPA database (MAPAMED), to "open-sky laboratories" locations and the Mediterranean experts' directory. The portal will be linked with the MedPAN network (www.medpan.org) and relevant partners websites.

SECTION V: RECOMMENDATIONS FOR CAPACITY BUILDING PROGRAMME DEVELOPMENT

Building on lessons learned from past capacity building initiatives, recommendations can be provided to inform and guide future capacity building efforts in the Mediterranean, and include the following considerations:

TARGET AUDIENCE

The primary target audience for a future capacity building programme, tailored to MPAs and delivered under the MedPAN Network, should be MPA practitioners and specifically:

1. National staff and MPA managers;
2. MPA field technicians and field staff (field management topics);
3. NGOs and other CSOs working in MPAs or giving direct support to MPA institutions.

Specific participants will be selected through an application process and based on their commitment to learning, making contributions to the learning process, sharing what they have learned at the site level, and purposefully structuring opportunities to apply skills and knowledge learned to their own work in the field. Additionally, a letter of recommendation and support from each participant's supervisor or institution would be preferable to ensure there is ample support and intent to commit to the time to both learn and apply new skills and knowledge.

GEOGRAPHICAL SCOPE

Capacity building efforts can be tailored at several different geographic scales:

Regional level: capacity building activities can address regional level processes, can enable cooperation and exchanges, favour good practices and experience sharing. Regional trainings may also guide national trainings, under the "training the trainers" approach.

Sub-Regional level: capacity building activities may also aggregate countries that identified similar training priorities, or language commonalities (e.g. English, French, Arabic). Practitioners may also be grouped by MPAs in different development stages, if they have similar issues or needs. Finally, MPAs may be grouped to enable trans-boundary cooperation, facilitate sub-regional processes and allow access to sub-regional funding schemes.

Country level: capacity building activities may be tailored to specific needs within national institutions and/or at the MPA network level in a given country. This type of training – supported by regional experts and capacity - would preferably be delivered by national experts, potentially trained under the "training the trainers" approach. Country level training should not favour personal or professional development of individuals, but rather trainees should be involved in national programmes and committed to implementing follow-up trainings and field activities in their countries.

MPA level: capacity building activities may be delivered through MPA networks, or to individual MPAs according to their needs. MPAs training other MPAs could be a training formula that can be promoted, where capacity exists, to encourage cooperation and knowledge transfer, and it may be particularly useful within the context of national capacity building programmes.
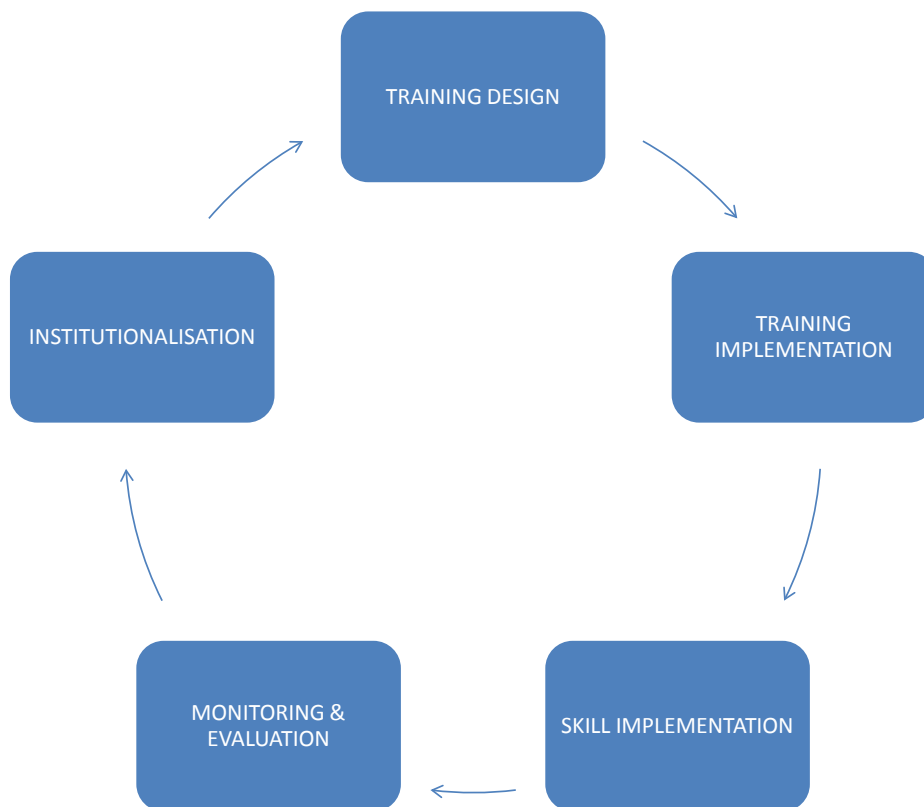
TRAINING CYCLE

Figure 1: Training cycle

Each training cycle consists of four different phases:

1. Training design

Design of the curriculum, training objectives, agendas, and identification of trainers need to be prepared well in advance of the scheduled training. Participants should have an active role in guiding the content of the curriculum before it is developed to ensure it is meeting their objectives for each training activity. This direct engagement of training participants ensures that their priorities are met.

2. Training workshops

Classroom trainings are to be preferred over any e-learning opportunities. This seems key in the Mediterranean where much of the knowledge is transferred through face-to-face learning exchanges. Training participants greatly benefit from trainers with a diversity of background and first hand knowledge and experience that is complementary to the subject matter. Additional case studies are key to show success stories and understanding challenges, particularly when coming from the Mediterranean context.

Training participants should have a clearly defined background and professional role that is as homogenous as possible to level the teaching target and to minimise knowledge gaps. The course contents should balance well both theory and practice, and apply a learning-by-doing approach. Trainings are preferred when participatory, supported by skilled facilitators and group dynamics, whereby trainees provide direct input to the curriculum content, the course has activities, tests and case studies that do not fall into the "lecture style" presentation format.

Trainings are preferable free of charge and between 3 and 7 days max, plus a potential field visit. Participants shall not exceed 30-35 per training session to maximise skill transfer and peer-to-peer learning. Careful attention should be given to logistics such as location, time of the year and field visit organisation.

3. Skill implementation

It is critical that what is learned in the classroom is applied after each training at the MPA site level. Supporting tools and programmes should be made available to ensure that training participants MPA staff and practitioners have the resources on hand to apply the newly acquired skills. These learning tools can include: a) the sharing of best practices - through field exchanges/twinning, such as study visits to other MPAs in a partner country; or by specific practical courses in "open sky labs" held in MPAs where best field practices have been developed. Table 4 shows an example of MPAs that have the skill sets and the ability to host training activities on specific topics. Additional MPAs that can transfer knowledge to other MPAs should be identified and included as a new data layer into the Mediterranean MPA Database (MAPAMED); b) supporting the implementation of field activities/ projects: trainers should encourage participants to prepare projects at the end of each training (see WWF-RAC/SPA-NOAA implementation agreements). Small grants may also be available to facilitate field exchanges, to implement knowledge gained during trainings, to enable monitoring programmes, or to attend specific international events.

4. Monitoring and Evaluation

Evaluating capacity building achievements, training effectiveness, curricula, participants feedback and skill implementation is an important component of the capacity building programme to constantly adapt and tailor it to the audience's needs and ensure that capacity is actually being built (which is incumbent on the training participant). The two types of evaluations to be used are:

a) Short term evaluation: typically carried out at the end of each training at a questionnaire in order for training participants and facilitators to evaluate the learning experience and value of content of a specific training, and

b) Long term evaluation: typically carried out after 3-5 years of capacity building and used to assess whether learning activities are actually resulting in increased management capacity for MPA practitioners. Evaluation may focus on either specific management activities (outputs) or the results (outcomes) of these activities.

Needs assessments should be carried out every five years to provide an updated snapshot of the regional capacity building situation, and to re-evaluate priorities. On this basis, curricula will most likely need to be redesigned and updated. Trainings may also need to be adapted to a changing target audience, from MPA staff to national level practitioners, or adapted to a particular country or geographical sub-region.

5. Institutionalization

MPA capacity building should always be considered a long term institutional investment, however, if built into the initial design of the programme it should not have to be a long term financial investment. MPA staff change jobs and take their capacity elsewhere; new staff come onboard that requires training; existing staff are facing new and emerging issues and needs; and MPA management authority can change both institutionally and in terms of responsibility and authority. So where does the tailored curricula, lessons learned, knowledge and skill expertise reside so that it can continually be accessed over time? How can it be structured into a capacity building programme? How can it continually be made available? Below are some examples for building an institutionalized capacity building programme:

- **Learning Networks**: as experience has shown elsewhere (WIOMSA in the Western Indian Ocean or CaMPAM in the Caribbean), capacity building networks may be useful to share information, promote knowledge sharing, and mainstream capacity building efforts. These networks can also facilitate peer-to-peer exchanges among trainers and trainees.

- **A coaching, mentoring and/or technical support team**: to provide and prompt continued support to MPAs as acquired skills are being applied, in the field.

- **A core group of trainers**: it may be necessary to develop curricula and represent a core team that

can support trainings. This may not be a group of specialists, but rather a team of capacity building experts with a general understanding of Mediterranean MPAs and MPA management needs. The group would contribute towards the development of curricula, preparation of manuals and materials, and collaborate to the training for trainers and to all the stages in the training cycle. Ad-hoc experts or speakers would be engaged by this group for each specific training.

- **A pool of experts**: it may be important to complement the group of trainers, to provide additional skills. A network of resource persons, experts and/or training organizations, should be completed and available through the existing Experts' Database (experts.medpan.org). The pool will be anchored by tested CVs and skilled trainer/facilitators who are not only familiar with the curricula but to the extent possible have direct experience working in marine protected areas.

- **Training of Trainers (ToT) programme**: a ToT program is highly recommended to support both regional and the national efforts. Regional MPA experts, scientists, government practitioners and MPA personnel may access this program. The main objective is to provide trainees with basic trainer skills, enabling the acquisition of practical means to improve and facilitate interaction with an audience, teaching on how to use training methods (games, brainstorming, work in small groups, etc.) and to communicate with a group. Trained experts would acquire a certified common background and approach to MPA regional training. According to Kopylova and Danilina (2011), a typical course may last 4 days including a final session where the alumni profile their own project, which can be later finished at home with the coach's assistance.

- **National trainers**: national trainers may also be part of the ToT team. Trainees shall be selected from those inserted into national initiatives or training organizations, and committed to implement trainings in their countries. National trainers may be formed nationally and can benefit from trouble-shooting programs, the ToT program and other support tools. Available material can be passed to them for adaptation to national context and translation into national languages.

- **Training field staff and rangers**: a training set, coached by a national trainers, would typically be delivered in the national language and include familiarization with on-line materials, followed by 2-5 days course - with few classroom sessions but extended practical hands-on approach - to organising and solving local management needs. As an incentive, the trainees may receive a certification, and their learning be followed by peer networking and thematic field exchanges. Field staff and ranger may benefit from MPA to MPA exchanges to share best practices, to enable knowledge transfer and to acquire field expertise.

- **Programme certification**: partnering with accredited institutions, training courses may offer attendees to become certified and receive credits towards an undergraduate or graduate degree. This certification will ensure quality, monitoring and evaluation of the programme. Currently the Mediterranean has no certified capacity building programmes. Value and interest in the programme may grow if a certification is provided (see the cases of NEETCE, or MPA-PRO/IUCN-WCPA in Annex V), and may help in maintaining staff and trainers, promote career development, motivation, and further membership into a professional network.

- **Institutional management**: it requires identification of an appropriate national institution that can support on-going curriculum development, coordination of trainers, coordination and execution of capacity building activities, administrative support and on-going communication with participating MPA networks and countries.

- **Building political will and support**: it is an on-going process with government agencies, ministries and decision makers that are guiding the future success of MPAs through establishing consistent policy, planning and budgeting decisions that include conservation and protected area management in their present and future planning processes. Education, awareness, and capacity building on an on-going basis is just as important at the highest levels of government – whether it be local, provincial, or national, if we are going to truly build capacity for MPAs.

- **MPA level**: capacity building activities may be delivered through MPA networks, or to individual MPAs according to their needs. MPAs training other MPAs could be a training formula that can be promoted, where capacity exists, to encourage cooperation and knowledge transfer, and it may be particularly useful within the context of national capacity building programmes.

SECTION VI: CAPACITY BUILDING PROGRAMME DELIVERY MECHANISM

COORDINATION

To ensure an effective delivery mechanism, several organisations in the Mediterranean will need to work jointly to respond to the needs of MPA practitioners. The coordinated delivery mechanism should allow for the flexibility of cooperative actions, while keeping individual organizations to operate independently to fulfil their own missions. Coordinated trainings, activities, and other capacity building efforts can be planned and implemented according to the needs of the programme (see geographical scope above). Joint fundraising opportunities should be sought as well to secure funding for the delivery mechanism. MoUs and other cooperation tools can be applied to ensure transparent and efficient cooperation.

The delivery mechanism shall be implemented in two steps: the first step will be the development of a common umbrella under which existing initiatives of different organisations can continue to be conducted. This first step will secure coherence and coordination. The second step, where several organisations may contribute to directly, will be implemented once good cooperation and coordination is achieved on existing activities among organisations.

COORDINATION TEAM

It shall be integrated by regional institutions engaged in capacity building activities for MPAs, and committed to contributing with available resources and staff to the implementation of step 1 of the delivery mechanism; The coordination team currently involves the Conservatoire du Littoral, EUROPARC, IUCN-Med, MedPAN, RAC/SPA, WWF, ATEN, French MPA Agency.

The overall objectives of the Coordination Team are to develop and maintain the strategic vision and objectives, and to support programme development.

The Team will ensure the necessary coherence and coordination among organizations, it will commit to communicate programme contents, outcomes and opportunities, and to mainstream these into their own activities. Participant organizations will also assist in programme development with technical support, monitoring and evaluation, and with fundraising activities.

At its early stage, the programme will not have a formal coordinator, but may appoint an operative focal point as a general contact, and establish a common image for the programme. WWF may be best suited to host the operative focal point.

ACTIVITIES IN THE FIRST DEVELOPMENT PHASE

Partners in the Coordination Team have reached an agreement to share their expertise and resources to launch the first step of the delivery mechanism for the capacity building programme. Each organisation can contribute to the programme as detailed below:

Conservatoire du Littoral (CdL): CdL expertise is in field, on-the-job trainings. The CdL can apply the learning-by-doing method on subjects such as management of particular habitats and species, MPA management planning, visitor's management, and scientific monitoring (Table 6).

Europarc Federation: EuroParc has acquired expertise in several fields and can develop regional trainings on specific topics (see Table 6), such as environmental education, sustainable tourism, and visitor's management, including MPA issues into their communications activities and helping with the sharing of best practices between field sites.

IUCN Centre for Mediterranean Cooperation: IUCN-Med has access to its regional member

organizations and to experts in their Commissions on Protected Areas, Species Survival, and particularly on Environmental Education, has experience on trainings and e-learning activities and tools.

MedPAN: MedPAN operates as a network and links different ongoing training activities, facilitates MPA-to-MPA exchanges and training and disseminates information and tools across the region. MedPAN can identify and generate a database on "open-sky labs" for field experiences and can maintain the MPA database. MedPAN can improve the experts' database adapting it to the new capacity building needs.

RAC/SPA: RAC/SPA can develop regional and national level trainings applying already developed curricula on different topics, such as legal issues and regional conventions, management of particular habitats and species, and MPA management planning. RAC/SPA can support national capacity building efforts and support WWF in implementing the ToT programme.

WWF (in partnership with NOAA): WWF can manage the overall coordination of the programme, and in particular the development of the regional component, the "Trainer-of-Trainers" programme, and MPA-to-MPA field exchanges. WWF can also run a series of regional trainings using existing expertise and developed curricula on several topics (Table 6). WWF can support the development of national capacity building programmes and be part of the trouble-shooting team. WWF can support skill implementation following regional trainings. WWF will also manage the web portal.

ATEN: ATEN has a developed network of experts that have experience and capacity to deliver trainings. ATEN will act as liaison with available experts and may open some of their scheduled trainings to a larger audience of MPA managers (from francophone countries). ATEN will share its expertise on competence-based training engineering.

Other regional organizations can support the programme development on specific topics, such as FAO/GFCM on fisheries management, ACCOBAMS on cetaceans, and several universities that can contribute trainers and expertise on specific subjects.

Training Level	Organisation	Topic	2013	2014	2015	2016	2017
ToT	WWF/NOAA	TBD	■	■	■	■	■
Regional	WWF-EUROPARC	Sustainable tourism					■
Regional	WWF/NOAA-RAC/SPA	MPA management planning		■			■
Regional	WWF/NOAA	Stakeholder Engagement		■			
Regional	WWF/NOAA	Enforcement/patrolling			■		
Regional	WWF/NOAA	Self-financing		■			
Regional	WWF/NOAA	Fisheries management				■	
Regional	WWF/NOAA	MPA zoning			■		
Regional	WWF/NOAA	MPA basics	■				
Regional	Universities	Marine Biology	■	■	■	■	■
extras	TBD	Management of Natura 2000 sites			■		
Regional	RAC/SPA	Conservation of habitats and spp	■				
Regional	RAC/SPA	Regional Conventions			■		■
extras	MedPAN-WWF-IUCN	Climate change basics	■				
Regional	EUROPARC	Visitor management		■		■	
Regional	EUROPARC	Environmental Education		■		■	
Field training/subregional	CdL	Scientific monitoring	■	■	■	■	■
Field training/subregional	CdL	Conservation of habitats and spp	■	■	■	■	■
Field training/subregional	CdL	MPA management planning	■	■	■	■	■
Field training/subregional	CdL	Visitor management	■	■	■	■	■

Table 6: Proposed implementation plan for delivery mechanism step 1.