Stage 3 Report:

Technical and Functional Specifications

MAIA and OSPAR MPA database comparison and pooling scenarios

June 2013

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1. Presentation

1.1 Context

Global and regional targets for the area based protection of the marine environment have been set (e.g. CBD Aichi Target 11, OSPAR target) and a number of initiatives have been established in order to work towards these commitments at different scales. Some examples include:

> The OSPAR North East Atlantic Environment Strategy (especially the Biodiversity and Ecosystem Strategy)

- The MAIA cooperation programme (Marine Protected Areas in the Atlantic Arc, Bay of Biscay and Celtic Sea zone),
- The PANACHE cooperation project (Channel),

OSPAR established a database to hold data on MPAs nominated to the OSPAR MPA network in response to OSPAR Recommendation 2003/3 updated by OSPAR Recommendation 2010/2.

The OSPAR MPA database is an access database that was developed by and managed by BfN.

BDC 2012 agreed that the database in its current form was outdated and required modernisation to improve ease of reporting to the database, facilitate access by Contracting Parties and visibility to a broader audience. The modernised database should also meet the requirements of the OSPAR data and information management strategy, as endorsed by OSPAR 2013.

HOD 2013 agreed that the OSPAR MPA database development should use the MAIA database structure under the lead of France. The ambition would be to have a web accessible, spatially explicit database that meets international data and metadata standards to facilitate assessment of progress to regional and global commitments.

At the same time the database will be adapted to incorporate MPA data for a third initiative in the North East Atlantic. These projects and programmes of work within the North East Atlantic will have shared data structures.

1.2 OSPAR Convention

OSPAR (http://www.ospar.org/) is a regional seas convention governing international cooperation on the protection of the marine environment of the North-East Atlantic and particularly offshore sites beyond national jurisdiction

(Areas Beyond National Jurisdiction or 'ABNJ'). Its implementing body is the OSPAR Commission.

Developing a network of marine protected areas is one of its strategic missions.

OSPAR Tool

To fulfil its missions, the OSPAR Commission has developed a database containing exclusively alphanumeric information. The database lists and describes marine protected areas designated under the OSPAR Convention. It includes MPAs under and beyond national jurisdiction (ABNJ).

The database currently contains approximately 150 records. It is developed in MS Access 2003 and offers consultation and update forms.

The Access database is detailed in Appendix 1.

Data update

New marine protected areas are designated according to formal processes involving several validation steps (at national level, and then by the OSPAR Commission).

The OSPAR MPA designation process should be clearly distinguished from the actions of updating the database.

The database updating operations have been adapted to the current technical framework. The team in charge of the OSPAR MPA database (Bundesamt f*ûr Naturschutz BfN - Germany) periodically sends the OSPAR MPA (MS Access) database file to the national focal points the 'OSPAR MPA' (MS Access) database file. The national focal points update the database and return the MS Access file to the team in charge of the database, which integrates the data into the Access reference base, then performs analyses and produces reports that are sent to the national focal points.

Contracting Parties report their new MPA nominations annually to BfN in the form of a nomination proforma sheet and shape files. BfN as convenor of the ICG-MPA carries out quality assurance of the date prior to data analysis and reporting procedures

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1.3 MAIA Network

The MAIA programme (*Marine Protected Areas in the Atlantic Arc*) aims to build a network for sharing and communication among various stakeholders involved in the management of marine protected areas (MPA) in the Atlantic Arc. The project:

- Fosters and structures experience-sharing,
- Leads to the development of joint actions or methods,
- Establishes a point of reference with respect to the situation of marine protected areas in the Atlantic Arc,
- Contributes to the emergence of a network of people, that of Atlantic Arc MPA managers.

MAIA seeks to be a point of convergence and reference in terms of information issued by marine protected area managers, on a European scale.

When the MAIA network was founded (in 2010), nine partners based in four countries (Spain, France, Portugal and the UK) were involved. In addition to those nine partners, the network is open to other stakeholders concerned by marine protected areas, i.e. primarily MPA managers.

The MAIA project is led by the French *Agence des aires marines protégées* (AAMP), the technical project manager in charge of coordination.

MAIA Working Space

To facilitate cooperation and information-sharing among project stakeholders, a structured and shared space has been developed and offers a range of functionalities to encourage networking.

This space can be accessed by the project players, by MPA managers and, subject to certain functional limitations, by the general public.

The working space is structured based on various functional modules:

- Editorial pages containing static and dynamic information
- Collaborative project management tools:
  - Directories
  - Calendar
  - Task monitoring tool
- A tool for viewing spatial data (Dynamic map)
- A structured document base, linked to the spatial objects.

A single database contains the attribute and geographic data and documents.

A single interface (MMI) provides access to these various components.

The MAIA portal can be schematically represented as shown below:
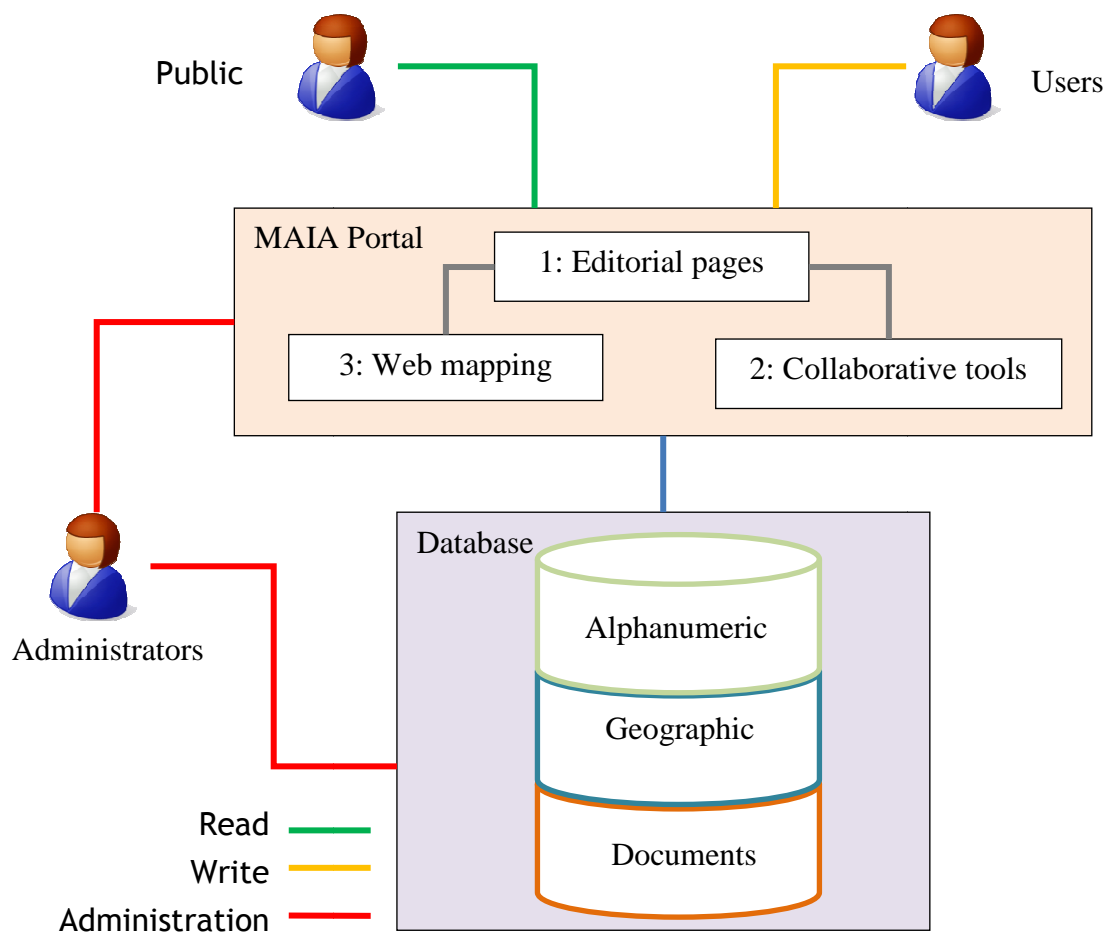
Structure of the MAIA portal

1.4 The PANACHE project

The PANACHE project aims to establish a coherent network of marine protected areas in the English Channel. Like MAIA, the project seeks to establish relations between MPA stakeholders and managers.

PANACHE also aims to:

- Study the ecological coherence of the MPA network.
- Pool knowledge gained in MPA monitoring and share positive experiences.
- Consolidate coherence and encourage consultation for improved MPA management.
- Increase overall awareness of marine protected areas: create a sense of belonging and shared expectations by developing participative research programmes.
- Establish a public MPA GIS database.

Initiated early in 2013, the PANACHE project does not, to date, have a dedicated tool to support its activities. Given the goals of PANACHE, the functional needs are very similar to those covered by the MAIA portal. In this context, the future PANACHE tool will be based on what has been done for MAIA, while complying with the specific PANACHE project style guide. The complete PANACHE portal is therefore to be developed.

1.5 Findings

MAIA, PANACHE and the OSPAR Convention have some major similarities in terms of:

- The target audience
- The type of information managed or issued.

In Stage 1 of the study on the pooling of MAIA and OSPAR databases, high convergence was found as regards the standard fields. They both have a minimum of basic fields describing the MPA (name/surface area/category, etc.).

Furthermore, for the 'management' theme, the match rate is good between the MAIA database, the OSPAR management effectiveness scorecard and the OSPAR Access database (even though the latter only includes few management fields).

In the light of the goals of the OSPAR Convention as regards marine protected areas and the need to monitor/assess effective management of these MPAs, it was it was considered appropriate to align the structures to achieve coherence between these regional MPA databases (OSPAR HOD meeting, 10 May, 2013).

Developing the North Atlantic MPA database is a first step in meeting the shared need (OSPAR, MAIA and PANACHE) to assess the **effective management of MPAs.**

There are, however, differences in the techniques implemented and the skills of each entity.

Elements of convergence

Uses

MAIA, PANACHE and OSPAR strive for improved knowledge and management of marine protected areas in the North-East Atlantic.

OSPAR, MAIA and PANACHE are therefore of interest to the same "pool" of stakeholders.

Content

Data managed by OSPAR (data concerning the management of marine protected areas) are likely to be referenced by the MAIA portal and the future PANACHE portal which both cover all MPA categories (and not solely the OSPAR MPA category), for the relevant countries and geographic areas (and possibly by other such sub regional projects in the future).

Functions

The respective MAIA and OSPAR tools offer similar types of action on their respective data:

- Consultation
- Update
- Use and analysis

- Dissemination

The PANACHE project has the same needs in terms of action.

Diverging elements

Functions

The OSPAR Convention has the ability to **designate** marine areas beyond national jurisdiction) and to **validate** proposals made by Convention State Parties. OSPAR is therefore a 'regional competent body nominating' marine protected areas in waters beyond national jurisdiction within the OSPAR maritime area.

MAIA and PANACHE are projects designed to create networks of MPA managers. The data communicated by MAIA are official and comes from responsible entities, including OSPAR. Neither MAIA nor PANACHE create or propose the creation or management of MPAs.

Technologies

The tools used by MAIA and OSPAR are not based on the same technologies:

MAIA tool: GIS Web portal
- Web technology, OGC compliant
- Open Source software components
- PostGreSQL/PostGIS database
- Multi-user (read and write).

OSPAR tool: MS Access file (data, forms and queries)
- Proprietary format
- Single-user

The OSPAR database thus has the following limits:

- Absence of the geographical aspect of data in the OSPAR base, which restricts its use
- Technical choice of the OSPAR base (MS ACCESS file) which burdens and weakens updating operations due to the need to duplicate data
- Difficulty in of disseminating information in good and reliable condition. Need to have an MS Access licence.

So far, no tool has been developed for the PANACHE project.

1.6 Goals

Given these findings, by pooling technical infrastructure and sharing information (MPA data and documentation) each entity's action can be optimized:

For OSPAR:
- Improve data reliability via online collection processes;
- Facilitate dissemination;
- Add the geographic dimension to the data.

For MAIA:
- Easier exploitation of the OSPAR Commission's data.

For PANACHE:
- Collect information about MPAs in the Channel area on the same bases and with the same tools as MAIA.

For MAIA, OSPAR and PANACHE
- Have a source of common, reliable and globally referenced MPA data (general and management descriptors);
- Have interfaces (for consultation, contribution and administration) dedicated and specific to each entity thus enabling them to be distinguished;
- Have a document base relative to MPAs in the North-East Atlantic that is shared and accessible via the specific, dedicated interfaces.
- To contribute to global assessment

In order to maximise efficiencies and ensuring compatibility of MPA data and information, a single database of marine protected areas will be constructed to service the needs of the three initiatives. This development requires:
- adaptations of the existing MAIA tools,
- the development of an interface to exploit the OSPAR data (consultation, contribution and administration),
- the development of an interface to exploit the PANACHE data (consultation, contribution and administration).

MAIA, OSPAR and PANACHE will therefore ultimately have specific front ends (MMI), leading to a single database (NEA MPA) structured into four data families.

NEA MPA DB
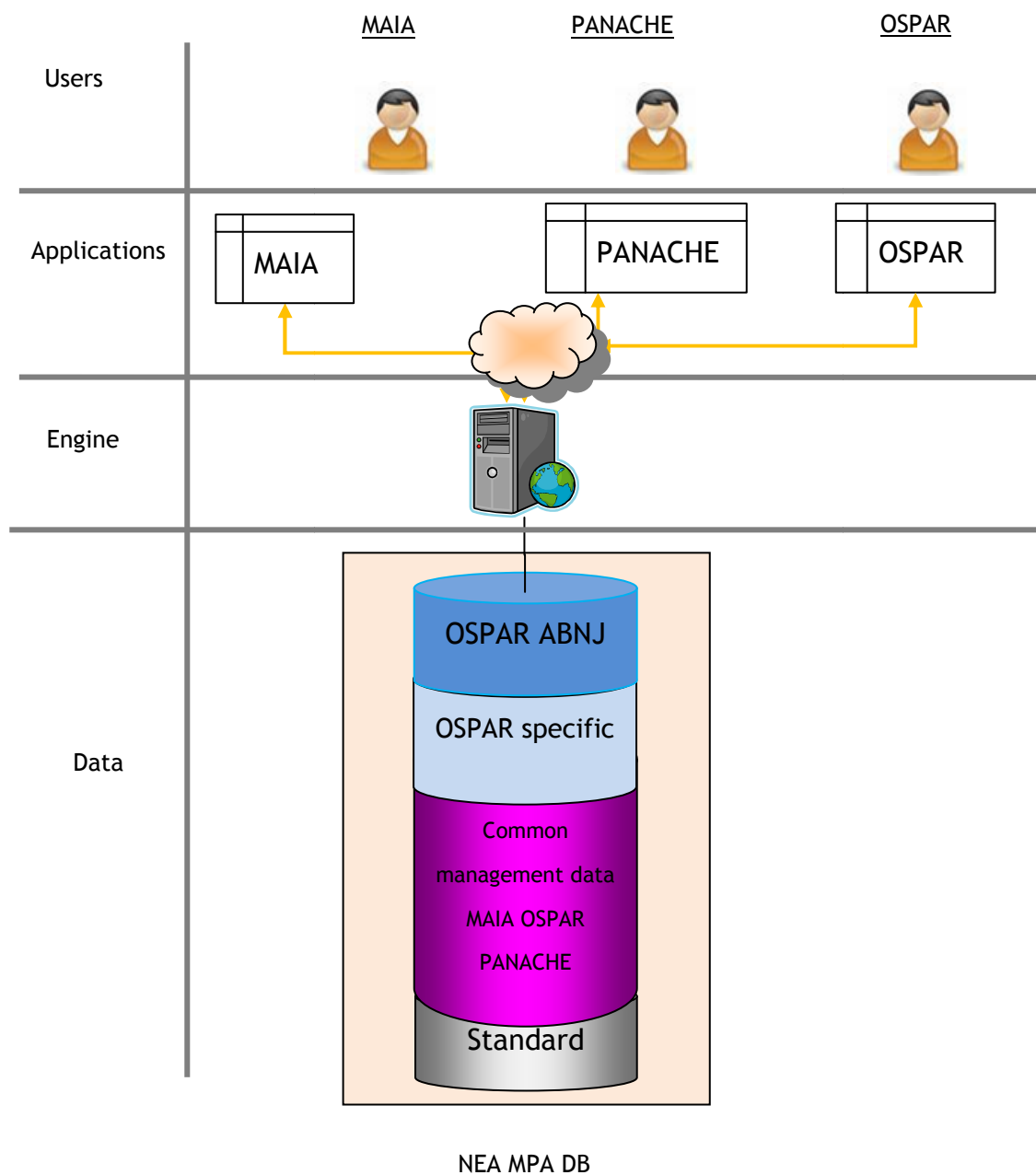
Therefore, the aim is to:

- Build a database concerning marine protected areas in the North-East Atlantic integrating the MAIA, OSPAR and PANACHE data (standard MPA data and data about the management of the MPAs);
- Develop an OSPAR-specific functional space;
- Develop a PANACHE-specific functional space;
- Adapt the MAIA functional space to the database changes.

Given the significant functional similarities and the current technologies, the OSPAR and PANACHE portals will be developed based on the technical and functional structure of the current MAIA space. It will be ensured that this is also coherent with the OSPAR data and information management strategy

2. Presentation of changes

2.1 Creation of the North-East Atlantic marine protected areas database

The North-East Atlantic MPA database is structured based on four data groups. These groups are defined based on:

- The data theme
- The data source and the responsible and producing entity
- The field of use (specific or global)

Groups	Details
OSPAR ABNJ	Data specific to marine protected areas located beyond national jurisdiction. Descriptive approach to management measures implemented in the MPAs. Input from international organisations (e.g. NEAFC) Alphanumeric data only, without any geometry
OSPAR	Data specific to marine protected areas managed by OSPAR Contracting Parties located under national jurisdiction. Descriptive approach to the MPA. Alphanumeric data only, without any geometry
MANAGEMENT	Common MAIA – OSPAR - PANACHE data relative to MPA management (measures, efforts, etc.). Alphanumeric data only, without any geometry
STANDARD	'Standard' data used by MAIA, OSPAR and PANACHE based on the WDPA international standard, with geometry. The WDPA identifier is the single key for all the theme-based tables of the related groups (OSPAR ABNJ, OSPAR, MANAGEMENT)

Key

— Baseline data (WDPA standard)

— Common 'management' data

— OSPAR ABNJ MPA specific management data

— OSPAR specific management data

Standard alphanumeric data

Standard spatial data (points and polygons)

WDPA STANDARD DATA

General characteristics

Management scheme

Governance

Means and resources

Monitoring

Regulations

Uses and activities

Marine habitats and species

OSPAR ABNJ MPA management data

OSPAR specific management data

DATA RELATIVE TO MPA

MANAGEMENT

2.2 Development of supplementary OSPAR modules

Use of current MAIA functions

The supplementary OSPAR Web modules are based on the functional fields of the MAIA portal. They are developed using technical elements from the MAIA portal adapted to the OSPAR context.

The diagram below shows the current organisation of the MAIA portal. The elements in red are used to implement the OSPAR modules.
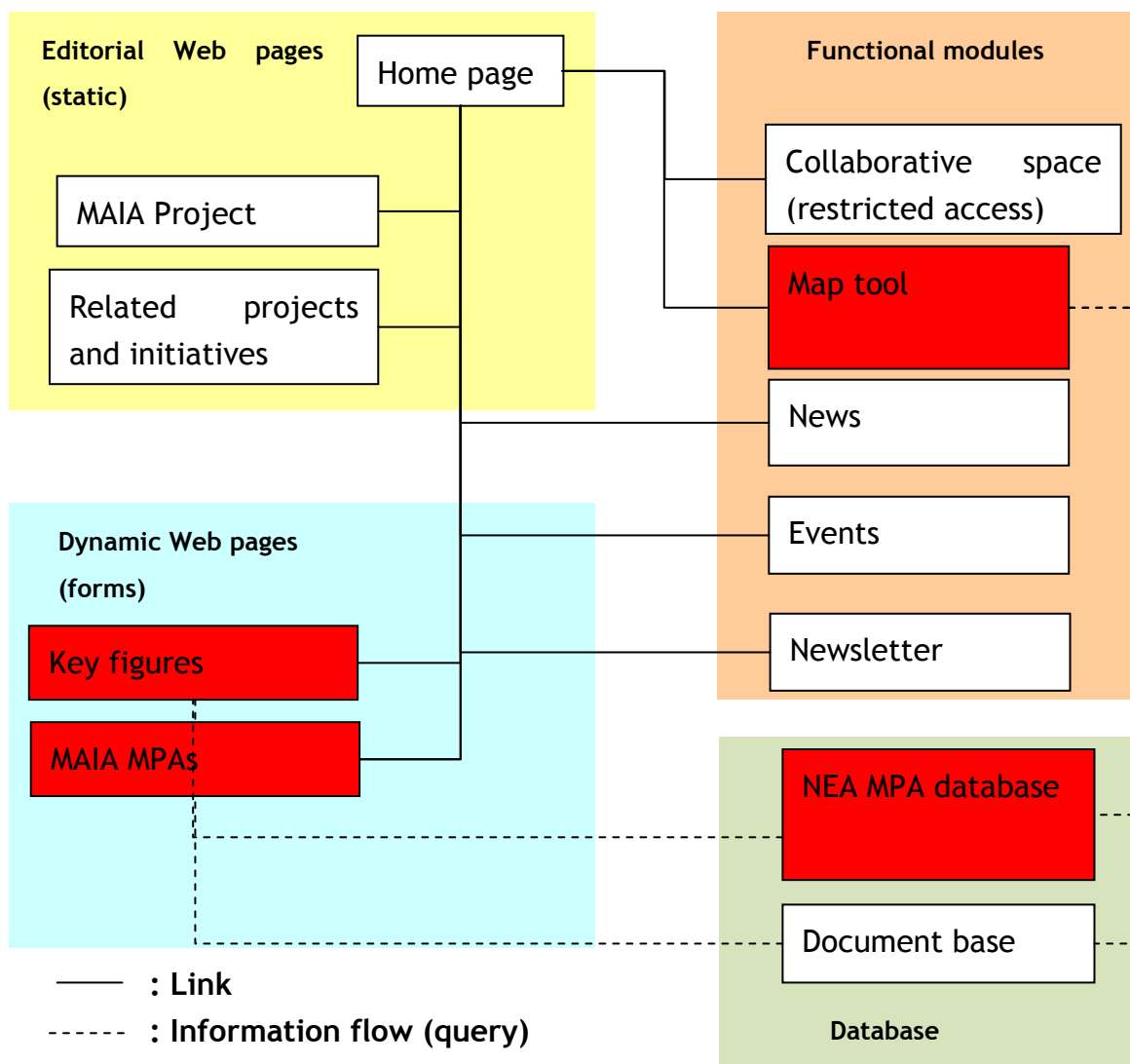
OSPAR Schematic Organisation

A link from the official OSPAR website (www.ospar.org) should allow access to the map tool (hosted from the global server dedicated to the North East Atlantic database), to the OSPAR marine protected area datasheets and to key figures (dynamic statistics). These tools are grouped together in the OSPAR space.

The OSPAR Space means all of the functions and data dedicated to OSPAR MPAs. The concept of portal relates to the method of accessing such functions and data.
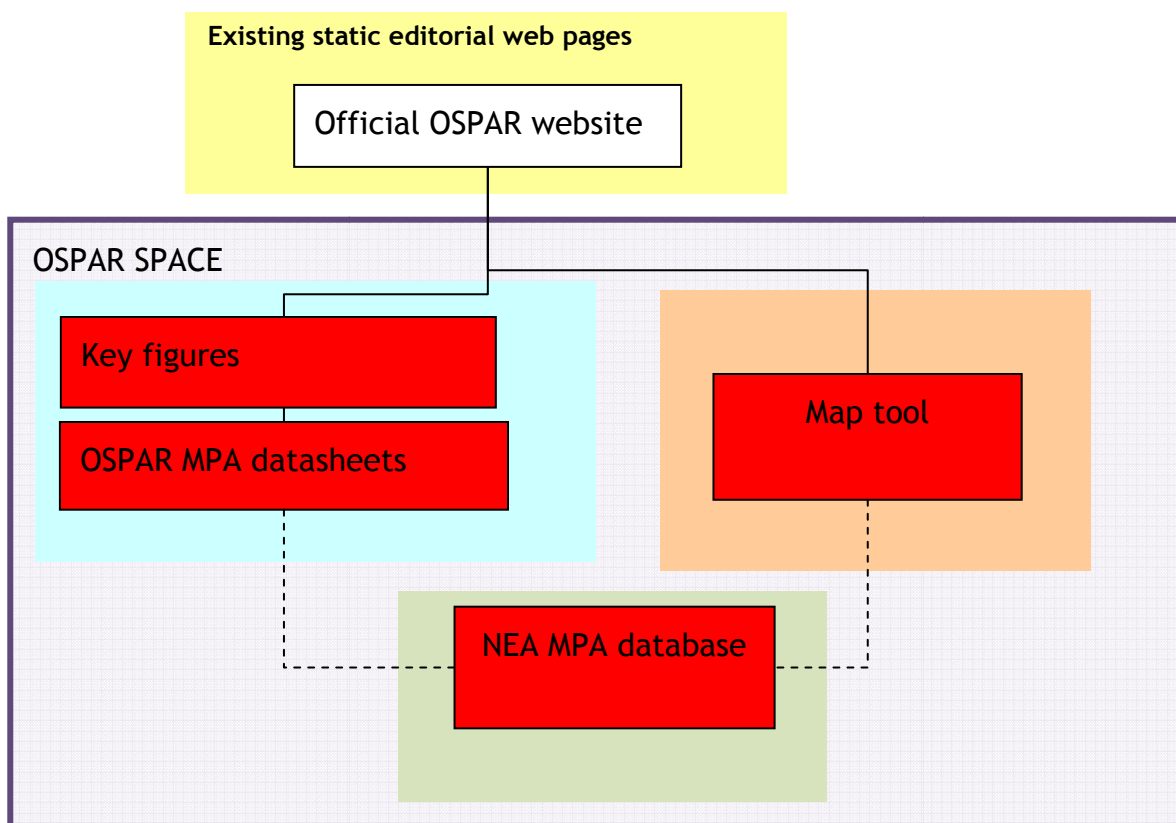
──── : **Link**

------ : **Information flow (query)**

Users

Like the MAIA space, three user groups are identified in the OSPAR space:

- Administrator
- Contributor
- Reader

Administrator

The administrator has administration rights for the entire OSPAR space and may therefore:

- Manage other users' rights
- Manage the content of the various pages
- Manage the document base: structure, tree structure, add, delete, change files, etc.
- Manage MPAs and maps
- Etc.

It should be noted that the administration rights for the OSPAR space are shared with BfN, the previous operator of the OSPAR MPA database and converor of the intersessional working group on MPAs (ICG_MPA) within the OSPAR Commission.

Contributor

A contributor can add, delete and update content. He/she cannot however, change the site structure, or the document base, or any MPA datasheet.

Reader

A reader has access to all the pages that do not require any identification.

The general public is part of the reader group.

Functionalities

The current OSPAR space will be completed with the following functional modules:

- Dynamic map
- Data update (OSPAR MPA nomination proforma)
- Consultation of MPA information (OSPAR MPA datasheets visible in the front office)
- Key figures

Note that these functions correspond to the reproduction of the current functions of the MAIA portal.

Associating the relevant administration functions with the functions above is also proposed based on the current MAIA model.

Style guide

The supplementary OSPAR modules will comply with the OSPAR Commission style guide including:

- Contributor MPA nomination proforma
- Front office OSPAR MPA datasheets
- Dynamic map
- Print model (maps and sheets)
- Etc.

The items of the style guide are given in the appendix.

2.3 Development of the PANACHE space

Use of current MAIA functions

The future PANACHE space will use the entire functional field of the MAIA portal (except collaborative tools which are not wished for). It is developed using the MAIA portal technical elements adapted to the PANACHE context.

Style guide

The PANACHE space will comply with the style guide of the PANACHE project.

The items of the style guide are given in the appendix.

The style guide applies to all of the elements of the PANACHE website developed:

- Web pages
- Forms
- Dynamic map tool
- Print model (maps and sheets)
- Etc.

2.4 MAIA Portal Adaptation

The integration of the MAIA and OSPAR databases into a single database for marine protected areas in the North-East Atlantic also hosting the PANACHE MPA data will impact the MAIA portal. While the information available will remain the same in terms of content, its structure will change. All of the elements of the portal must therefore be adapted to the new data structure:

- Forms
- Queries
- Update tools
- Etc.

3.1 Presentation

The services cover five fields of action:

a: Creation of the database of marine protected areas in the North-East Atlantic
b: Creation of the supplementary OSPAR modules
c: Creation of the PANACHE space
d: Adaptation of the MAIA portal
e: Cross-cutting actions (project management services)

These five fields of action are interrelated. Given its importance for the other two, action 'a' "Creation of the database of marine protected areas in the North-East Atlantic" must be done as a priority.

Project management services will be integrated into each of the operations wherever necessary. The service provider will indicate the amount of such services on the schedule of prices (compulsory Excel template).

Detail of actions

The following operations are expected:

Operation 1: Technical and functional specifications, graphic design and productions

> A/ North-East Atlantic MPA database
> B/ Supplementary OSPAR modules
> C/ PANACHE Space
> D/ MAIA adaptations

Operation 2: Establishment of the North-East Atlantic MPA database and integration of existing data

> A/ Establishment of the North-East Atlantic MPA database
> B/ Integration of existing OSPAR data
> C/ Migration of MAIA data to the updated North-East Atlantic MPA database model

Operation 3: Development of the OSPAR space (supplementary modules)

Operation 4: Development of the PANACHE space

Operation 5: Adaptation of the MAIA portal

Operation 6: Tests, Acceptance and fixes

>A/ North-East Atlantic MPA database
>B/ Supplementary OSPAR modules
>C/ PANACHE space
>D/ MAIA adaptations

Operation 7: Migration of the system to the hosting entity DRI

Operation 8: Training

>A/ Administrators
>B/ Contributor trainers

Operation 9: Documentation

>A/ Administration manual (for all tools)
>B/ Contributors manual

Operation 9: Warranty, support and maintenance

>A/ North-East Atlantic MPA database
>B/ Supplementary OSPAR modules
>C/ PANACHE space
>D/ MAIA space

Some of these operations must be done in parallel.

3.2 Operation 1: Technical and functional specifications, graphic design and production

The aim of this operation is to define the data model of the North-East Atlantic marine protected areas database, the technical and functional specifications and the graphic productions where required (PANACHE / OSPAR):

- For the supplementary OSPAR Web modules

- For the PANACHE Space

- For the changes to the MAIA portal.

This operation will be done in two stages:

1: Kick-off and specifications meeting (2 days in Brest)
2: Development of the technical and functional specifications and the graphic designs and productions.

Kick-off meeting

The first meeting aims to:

- Present the structural context of the three projects: OSPAR/ MAIA / PANACHE and their requirements
- Review the working methodology
- Finalise and validate the forecast schedule (distribution of tasks, key validation milestones for the Agency, etc.)
- Initialise the Quality Assurance Plan (QAP)

Specification meeting

This meeting aims to establish a conceptual data model (CDM), to define the system's overall organisation and to validate the interactions between the modules.

Technical and functional specifications, graphic design and productions

On the basis of these specifications, the specification meeting and various communications between the service provider and the project manager, the service provider shall draft the final functional and technical specifications. The specifications will cover:

- The data models
- The functions (read, update and administration)
- The technical elements
- Scaling

The specifications document will be approved by the validating organisation.

Expected deliverables

Minutes of meetings Conceptual module of the North-East Atlantic marine protected areas database (NEA MPA DB) Supplementary OSPAR modules PANACHE space MAIA adaptations
Schedule of work, prioritization of actions
General scenario and interactions between modules (North-East Atlantic marine protected areas database / Document base / OSPAR, MAIA and PANACHE portals) Technical organisation
Quality Assurance Plan (QAP)
Finalised conceptual data model of the NEA MPA DB
Finalised tree structure of the PANACHE space (website outline)
Graphic display models of the PANACHE space
Graphic display models of the supplementary OSPAR modules (organisation of the various modules).
Technical and functional specifications of the dedicated parts presenting the elements relative to: the supplementary OSPAR modules, the PANACHE space the MAIA adaptations
Chart of user rights and roles for PANACHE / MAIA / OSPAR

3.3 Operation 2: Establishment of the database and integration of existing data

This operation aims to:
- Establish the North-East Atlantic marine protected areas database
- Integrate the existing OSPAR data
- Migrate the MAIA data to the updated model

Operations 2, 3, 4 and 5 shall be done in a test environment, and then the checking operations will be done on the production environment (hosted at the service provider of the Agence des aires marines protégées).

Expected deliverables

> SQL scripts for the integration and migration of the OSPAR and MAIA data into the North-East Atlantic marine protected areas database

3.4 Operation 3: Development of the OSPAR space (supplementary modules)

The service provider shall develop the OSPAR space:

- Function parameter-setting
- Integration of the style guide
- Etc.

Expected deliverables

Following this operation, the following OSPAR modules will be functional:

- Dynamic map
- Administration of maps and OSPAR MPAs
- Data loading tools
- Contributor forms and OSPAR MPA datasheet validation process
- OSPAR MPA datasheets for the front office
- Key figures

3.5 Operation 4: Development of the PANACHE space

The service provider will develop the PANACHE space based on the structure of the MAIA space and integrating the PANACHE style guide.

Expected deliverables

Following this operation, the PANACHE space will be functional.

- Editorial pages of the Web site
- Dynamic map
- Administration of the Web GIS and the PANACHE MPAs
- Data loading tools
- Contributor forms and PANACHE MPA datasheet validation process
- PANACHE MPA datasheets for the front office
- Key figures

3.6 Operation 5: MAIA portal adaptation

The service provider shall carry out the operations required to adapt the elements of the MAIA portal (form, query, etc.) to the new data structure induced by the creation of the North-East Atlantic marine protected areas database.

Expected deliverables

Following this operation, the MAIA portal will be functional and use data stored in the North-East Atlantic marine protected areas database.

3.7 Operation 6: Tests, acceptance and fixes

The OSPAR modules, the newly created PANACHE space and the adapted MAIA website will undergo acceptance tests in compliance with the Operational Acceptance Test (OAT) process (done on the test/development environment) and then with the Operational Health Check (OHC) process (on the production environment) following component migration (see operation 7).

The acceptance testing procedures are described in Chapter 5, Terms of Performance.

Expected deliverables

Operating manuals and instructions
Spatial data integration and extraction instruction
Installation maintenance documentation
Software manuals
Back-up of installed system configurations
Transmission of technical server and performance information to the project manager

3.8 Operation 7: System migration to the hosting entity DRI

Following the operational acceptance operation without any reservations and prior to initiating the Operational Health Check, the systems will be installed at the hosting entity of the Agence des aires marines protégées (DRI).

This migration operation is sensitive. The service provider must ensure a smooth operation taking all appropriate precautions. In particular, the hosting entity must be given all the technical specifications required to correctly host the solution and the service provider must check that they have been correctly implemented. It shall also check the quality of service (QoS).

The Agency shall provide the service provider with the various parameters of the target platform (IP addressing, mapping, firewall(s), ports, etc.).

The service provider shall test post-migration functioning, particularly the system scalability (MAIA users + OSPAR users + PANACHE users + general public).

Expected deliverables

Following the migration, the MAIA, OSPAR and PANACHE web spaces will be operational (in read, contribution and administration mode).

Approved migration plan
Technical information (that must be sent to the hosting entity prior to the migration)

3.9 Operation 8: Training

The service provider shall organise training sessions for the:

- Administrators

- 'Contributors' trainers who will be responsible for providing technical support to the OSPAR and PANACHE contributors of the OSPAR, PANACHE and MAIA spaces.

No training is requested for Reader-type users.

Administrator Training

The Administrator training must enable future administrators to quickly and fully take over the solution.

This training will be necessary for five people at the most.

The training must be customized and will be done in Brest in the premises of the Agence des aires marines protégées.

The service provider will:

- Define the training plan,
- Deliver the user manuals (a paper version will be handed out to each user and an electronic version will also be provided),
- Deliver the complete technical documentation,
- Run one or more training sessions.

The training course will be given in English.

The training materials will be provided in English and French.

The service provider should specify the necessary pre-requisites for the training, and the number and length of sessions planned.

Expected deliverables

Training materials (hard copy and electronic version)

Training for OSPAR and PANACHE Contributor trainers

The training must enable future trainers to quickly and fully take over the solution and be capable of providing OSPAR and PANACHE contributors in the different countries with efficient technical support.

These trainers will be in charge of supporting the uptake of other contracting parties.

Training will be required for eight to ten people at the most.

The training must be customized and will be done in Brest or in Le Havre in the premises of the Agence des aires marines protégées.

The service provider will:

- Define the training plan,
- Deliver the user manuals (a paper version will be handed out to each user and an electronic version will also be provided),
- Deliver the complete technical documentation,
- Run one or more training sessions.

The training course will be given in English.

The training materials will be provided in English and French.

The service provider should specify the necessary pre-requisites for the training, and the number and length of sessions planned.

Expected deliverables

Training materials (hard copy and electronic version)

3.10 Operation 9: Documentation

The service provider shall supply all the documents necessary for the administration and use of the various functional spaces.

Expected deliverables

User manuals (administrator, users)

3.11 Operation 10: Warranty, support and maintenance

Once the acceptance operations have been validated, the warranty, support and maintenance phases will commence for the OSPAR modules, the PANACHE space and the MAIA portal.

The details are described in Chapter 5 Terms of Performance.

Expected deliverables

Final acceptance report (following unconditional OHC)
Maintenance contract approved and signed by the two parties

3.2 Client station configuration (all profiles)

The application will be compatible with standard market browsers for PC and Mac. The following are expected:

- Mozilla Firefox 3.0 and subsequent versions,
- Internet Explorer 7.0 and subsequent versions,
- Apple Safari 2.0 and subsequent versions,
- Google Chrome 27.0 and subsequent versions.

The tenderer shall specify the browser(s) and their version that are best suited to the solution.

Without knowledge of the future client work stations, **a full Web Client solution will be proposed that does not require (compulsory) any additional components** (plug in, ActiveX, JVM, applet, etc.) **for all the website elements (collaborative space, Web GIS, web page).**

Screen resolution

The website and all its components will be optimised to display, if possible, without a horizontal slider box in 1024×768 pixel resolution.

4.1 Scaling

Number of users

The table below shows the user distribution based on their roles.

User profile	MAIA Estimation	PANACHE Estimation	OSPAR Estimation
Administrators	1 to 2	1 to 2	1 to 2
Contributors	30-50	30-50	15-20
Readers	Not defined (> 200) cf. MAIA	Not defined (> 200) cf. MAIA	Not defined (> 200) cf. MAIA

Number of simultaneous connections

The number of simultaneous connections on each one is estimated at 20% of the total number of users for the administrator and reader profiles and up to 50% for the contributor profile at certain times.

The tenderer must scale its offer based on the estimations above.

Volume of documents

The number of files to be stored in the document base is between 1,000 and 2,000. 75% of these files are office-type documents (.doc, .pdf, .xls) of 1Mb on average.

The other documents will be photos and videos.

4.2 Languages

PANACHE Space

All the pages of the portal and the map tool that are read accessible will be available in:

- English
- French

The switch from one language to the other will occur simply by clicking on an icon (e.g. country flag).

OSPAR

The supplementary OSPAR modules (dynamic map, forms, MPA datasheets) will be available in:

- English
- French

The updating tools (contributor interfaces) will be available in the two languages.

The administration tool will be in French and English

Read and updating tools must offer online help in the two languages.

The administration tools must offer online help in French and in English.

4.3 Hosting

The development and OAT phases will be carried out on the service provider's infrastructures.

Hosting in production will be done by the service provider of the Agence des aires marines protégée: DRI.

The service provider will supply the technical specifications necessary for hosting, as soon as possible.

5. Terms of performance

5.1 Timeframe

On-lining of the OSPAR modules expected for 15 November 2013 at the latest.

On-lining of the PANACHE site requested for 1 December 2013.

On-lining of the updated version of the MAIA geo-portal requested for 1 December 2013.

In its proposal, the service provider shall detail the organisation it wishes to put in place. It will clearly indicate in this schedule the design and validation meetings and workshops it plans to hold.

Throughout the project, the service provider shall ensure that deadlines are met, anticipate any deviations and suggest to the Agency any project reorganisation required to meet the deadlines.

5.2 Meetings and travel

Meetings in person will be held at the head office of the Agence des aires marines protégées in Brest.

Conference calls and video-conferencing will be preferred overall.

The Agency has a video-conferencing tool.

Interviews, in English, are to be planned with the OSPAR managers.

5.3 Organisation

One contact person

The project manager wishes to be in touch with a single contact person at the service provider's.

Project manager's single contact person

The main contact person at the Agency for the service provider will be the project manager. She is in charge of supervising the entire project and is assisted by a project management assistant.

Project manager: Amandine Eynaudi

amandine.eynaudi@aires-marines.fr / Tel: +33 2 98 33 94 58

The PANACHE project manager, Gérald Mannaerts, will be the main contact person concerning operation 4: gerald.mannaerts@aires-marines.fr / +33 2 32 85 38 67

Steering Committee

A Project Steering Committee will be put in place.

This Steering Committee will validate each stage or document requiring approval, within five working days at the most.

The Steering Committee members are:

- Steven Piel, head of the geomatics department
- Marie-Odile Patin, head of the IT department
- François Gauthiez, head of the public policy support department, deputy director of the Agence des aires marines protégées.
- Nathalie Metzler, head of the Atlantic unit
- Gérald Mannaerts, PANACHE project manager
- Amandine Eynaudi, Atlantic unit Mission Officer

Role of the Agence des aires marines protégées

Throughout the project, the Agency will:

- Validate the deliverables of the various project stages,
- Ensure compliance with the specifications,
- Ensure that deadlines are met,
- Provide the basic content (texts, brochures, logos, images and photos) that will be integrated and optimised by the service provider for adaptation to the media and the target.

More specifically, the Agency's project officer will:

- Coordinate the service provider's teams with those of the Agency,
- Convene project and steering committee meetings, validate and disseminate the minutes/reports of decisions,
- Validate all of the service provider's deliverables.

Role of the OSPAR technical task group and OSPAR Secretariat

This group will validate each stage or document requiring approval, within five working days at the most.

Role of the service provider

The service provider will provide the services expected by the Agency.

The service provider will appoint a single contact person who guarantees its commitments to the Agency, for all of the services, including in the event of use of sub- or co-contractors.

This contact person, the service provider's project leader, will:

- Coordinate the service provider's teams,
- Monitor and update the schedule,
- Prepare and lead the project committee meetings,
- Lead the design and validation workshops,
- Draft the minutes of meetings.

He/she shall attend all meetings organised with the Agency.

5.4 Acceptance

Each functional space will undergo acceptance testing.

The unit integration and operational tests (operation and performances) of the system are to be done by the prime contractor (the service provider) which shall furnish evidence to the project manager of their implementation together with the results.

Based on these results, the Agency will particularly check that fulfilment of the service provider's undertakings has at least been formally checked prior to delivery by the latter (this first check will naturally not carry acceptance by the project manager).

The project manager will carry out the functional acceptance of the system, *i.e.*:

- The Agency acts as the project manager for the MAIA and PANACHE functional spaces.

- OSPAR '*through its relevant subsidiary body*', is the project manager for the OSPAR functional space.

The functional acceptance will comprises two steps: OAT and OHC

Operational Acceptance Testing (OAT)

Prior to operational launch, the project manager will check that the system functions correctly, over a length of time to be defined.

The start date of the OAT (T0) will be notified to the service provider by a letter sent by the contract manager.

OAT will be carried out on the system ready for operational launch.

The supplies and services expected of the service provider during this acceptance step relate to:

- The supply, in working order, of a provisional acceptance environment similar to the production environment as it will be when the system is effectively launched,
- Running of the provisional acceptance environment during the acceptance phase; such running will at least include data loading into the environment,
- The opening of applications,
- Environment restorations in the event of any application or technical incidents, etc.
- The handling of any defects and non-conformities reported by the project manager and the ensuing correction tasks.

Operational Health Check (OHC)

At the end of the OAT (T1=T0+ 2 months), a trial period, of a length to be defined, will begin. During this period, the project manager will carry out the operational health check of the system. Save in the event of persistent problems, the Agency will then declare the final acceptance of the system.

During the trial period in which the project manager will carry out the operational health check of the system, the service provider will provide a corrective maintenance service to address and eliminate any incidents reported by the project manager.

Following the trial period (T2= T0 + 8 months), and save any persistent defects or non-conformities reported and not fixed, the final acceptance of the system will be

declared and the warranty period will commence. Note that the tenderer's warranty obligations shall apply to all changes made to the system during the trial period, provided that they have been made by the service provider or on its responsibility (by an approved contractor).

The acceptance shall be done by the project manager on the basis of test scenarios and test sets prepared for this purpose.

5.5 Quality Assurance Plan (QAP)

The supply and implementation of a Quality Assurance Plan (QAP) is requested. This reference methodology document shall be adapted to the project volume and to the structure of the project management.

The QAP initiated by the service provider will:

- Describe the integration and implementation procedure (initialisation, design, development, deployment, launch)
- Describe the deliverables
- Integrate the final version of the approved schedule
- Describe the document management process (reports and minutes in the course of the project)
- Describe the standards or methods used, in particular for monitoring incidents occurring during the project
- Include the elements of project organisation.

5.6 Criticality of anomalies

Any anomalies noted by the Agency or OSPAR will be classed according to 3 degrees:

- inhibiting,
- major,
- minor.

Inhibiting anomaly

Anomaly affecting the availability, compliance or the integrity of the website and the data managed. Such an anomaly particularly:

_____

- causes the complete stoppage of the website or one of its technical components, or renders it unavailable to users or renders certain sections/pages unavailable,

or

- renders one of the system's important functions unavailable,

or

- produces incorrect management of the customized access to administration functions for users,

or

- produces an incorrect result for at least one of the system's important functions.

Major anomaly

Anomaly that is not inhibiting but which affects the compliance, integrity or the confidentiality of the website or the data it manages. Such an anomaly particularly:

- retrieves incorrect data,

or

- affects the use of website functions, as seen by the user, on components other than ergonomic, graphic or editorial,

or

- produces an incorrect functional result,

or

- renders an administration or contribution function unavailable for the user.

Minor anomaly

Anomaly which does not come within one of the two categories defined above and which affects the website compliance in terms of its minor components. Such an anomaly particularly:

- produces degraded functioning on purely ergonomic, graphic or editorial aspects, referred to as "user comfort" aspects;
- does not significantly hinder the working of a function.

5.7 Ownership

All OSPAR data is to be used in accordance with the OSPAR Data Conditions of Use as published on the OSPAR website:

http://www.ospar.org/html_documents/ospar/html/ospar_data_conditions_of_use.pdf

All of the content (images, icons, graphics, texts, animations, videos and sound) created for the websites under this contract will belong to the Agence des aires marines protégées for the MAIA and PANACHE sites and to the OSPAR Commission for the OSPAR space.

Regarding content (images, icons, graphics, texts, animations, videos and sound) not supplied by the Agence des aires marines protégées (The Agency) or OSPAR Commission, the service provider shall ensure that it has full ownership of all content used and shall assign the property rights to the Agency or to OSPAR Commission. Otherwise, it shall ensure that the content used is free of all and any rights, without any limitation in terms of time or medium.

The Agency shall own the source codes of the developments put in place in the MAIA and PANACHE site and it may complete or alter them, at its discretion.

The OSPAR Commission and the Agency shall own the source codes of the developments put in place for the OSPAR functional space and they may complete or alter them, at their discretion.

In the contract signed between the Agency and the selected service provider, a specific clause shall be included providing for the full assignment of rights to the Agency or to OSPAR. The Agency wishes to retain the right to subsequently modify the MAIA and PANACHE sites. The OSPAR Commission retains the right to modify its OSPAR space.

6.1 OSPAR Database (MS ACCESS 2003)

6.2 OSPAR Style Guide

6.3 Special Technical Clauses (CCTP) of the 2010-AAMP-050 contract: 'Creation of the MAIA website with geo-portal and collaborative space'

6.4 Stage 1 and 2 Report - MAIA and OSPAR database comparison and pooling scenarios