
MMO

IS Systems Gap Analysis

Version 2.0

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1 Introduction

1.1 Objectives

There is a business requirement to determine how future IS systems will be delivered within the Marine Management Organisation (MMO). There are two fundamental sources of information that are needed to establish this requirement, namely:

- Defining what are the IS requirements of future IS applications that will be needed by the MMO, and
- What are the capabilities of existing IS applications in use today within the Marine and Fisheries Agency (MFA).

Following the completion of an exercise to define high level requirements for all IS systems required supporting the MMO; this Gap Analysis report has been produced to clarify:

- Which MMO requirements can be fully served with existing IS applications being used within the MFA,
- Identify where IS application gaps exist (and associated risks) to meet MMO business requirements,
- If and/or how those gaps are currently addressed,
- Provide a summary of the impact to the MMO should those gaps not be progressed, and
- Provide options and recommendations to address those gaps / mitigate risks (such as 'do-nothing', amend existing systems, procure new systems), for Project Board consideration (including anticipated timescales and costs).

1.2 Scope

This gap analysis report is limited to identifying:

- Where IS applications gaps exist to meet MMO requirements, and
- Integration with MMO GIS requirements.

1.3 Gap Analysis

Gap analysis is a tool that helps a company to compare its actual performance with its potential performance. At its core are two questions: "Where are we?" and "Where do we want to be?" The gap analysis process involves determining, documenting and approving the variance between business requirements and current capabilities. Gap analysis provides a foundation for measuring investment of time, money and human resources required to achieve a particular outcome.

1.4 Executive Summary

With the exception of BSS and MFA-BS, there is a requirement for MMO to initially retain all existing IS applications and data being used within the MFA.

The requirements-capture exercise revealed a strong case for the following capabilities to be supported by new Planning and Licensing IS solutions within the MMO –

- Geographic Information System (GIS),
- Case Management,
- Customer Relationship Management (CRM),
- Document / Knowledge Management,
- Collaborative Tools.

The present licensing function within the MFA utilises the Marine Consents Management System (MCMS) developed by CEFAS. There will be an ongoing need to develop and maintain MCMS prior to the provision of a completely new IS system. There is a requirement to amend/update limited areas of functionality within the existing MCSS systems, in readiness for MMO vesting, to support new MMO responsibilities for the Marine Environment and Marine Nature Conservation Teams. Enhancements to MCMS and MCSS can be delivered through the existing High Level Agreement between DEFRA and CEFAS in which a development and maintenance budget is identified.

Post MMO vesting, there is a requirement to provide application specific Help Desk support.

Existing and expected fisheries responsibilities can be supported by current on-going IS programmes to enhance existing MFA applications (noting additional analysis is required to ensure compliance with 2010 IUU regulations). The ability to more easily access data from disparate 'stand-alone' IS systems (particularly in Coastal Offices) is seen as key to improving operational performance. Longer term, there are requirements to upgrade / allow greater access to existing systems (e.g., for IFCA's), and to migrate to supportable IS platforms (requirements currently being defined).

1.5 Delivery Timescales

In summary, the key gap requirements are to provide:

- For delivery in April 2010,
 - New (early build release) MMO IS GIS capability
 - New (early build release) MMO IS Planning and Licensing capability (Case Management, Customer Relationship Management (CRM), Document/Knowledge Management, Collaborative Tools)
 - Amendments to existing MFA systems (Stakeholder access to MCMS, re-branding of MMO website, outputs and the Time Logging system, enhancements to MCSS to support new MMO Marine Environment and Conservation and Licensing responsibilities)
- For delivery throughout 2010,
 - Procure MMO application specific Help Desk software,
 - Adopt a one-stop' MMO specific website to provide advice and guidance on pollution emergencies,
 - On-going FISS programme requirements.
 - Provide e-payment capacity via the MMO website.
- For delivery in the first quarter of 2011 (to meet MMO legislative requirements),
 - Enhanced new MMO IS GIS capability,

- Enhanced new MMO IS Planning and Licensing capability (replacing the existing MCMS system).
- For delivery throughout 2011,
 - On-going FISS programme requirements,
 - Provide greater stakeholder access to existing applications (including IFCA's),
 - Possible migration of existing systems to new IS supportable platforms (to be defined),
 - Possible upgrade of existing systems to new IS supportable software (to be defined).

1.6 Gaps Identified – Summary

'Gaps' that have been identified are listed below. A more detailed analysis of gaps identified is shown in Appendix 2 (summary of gaps per MMO function and component sub-functions) and Appendix 3 (priority / proximity / impact / low level requirements definition status).

For delivery by 1st April 2010, there are requirements to provide:

- Gap 2. New (early build release) MMO IS GIS capability (encompassing the 'SPIRIT' web-based component of the MMO GIS solution, a configurable toolbar which provides the capability to define bespoke modelling and analysis functions, clarifying the data needed for the MMO to conduct its business and developing a Data Management Strategy to manage data assets within the MMO). These requirements are being progressed via their respective work-streams.
- Gap 28. GIS Business System Integration Strategy. In delivering a fit-for-purpose GIS solution, it is important that it is not just a stand-alone capability, but integrates with other business applications. For April 2010, the strategy needs to be developed which sets out how business applications should evolve and converge to support a fully integrated GIS solution. This requirement is being progressed via the respective work-streams.
- Gaps 23, 16, 17. New (early build release) MMO IS Planning and Licensing capability (to include Case Management, CRM, Document/Knowledge Management, Collaborative Tools). These broad function categories are being examined as part of present IS solution offerings within the e-Nabling umbrella.
- Gap 7. To provide MCMS access to the Stakeholder (to grant Stakeholder FEPA licences from April 2010). Direct discussions are progressing between the Stakeholder, MFA and CEFAS to define requirements.

- Gap 3. A new MMO website / updated intranet. It is assumed that this will initially be a re-brand of current MFA website (an internal MFA task to be planned, agreed and progressed from January 2010). Further enhancements will be required during 2010 to meet MMO longer term requirements to provide an integrated Content Management IS solution.
- Gap 1. MMO re-branding of all templates and outputs associated with current MFA systems. This is an internal MFA administrative task (to be planned) to re-brand and update associated word templates.
- Gap 4. Update the MFA TR application (Time Logging) for new MMO functionality in readiness for MMO vesting. This is an internal administrative MFA task, currently being planned and progressed within the Fisheries function.
- Gap 10. The new MMO marine conservation enforcement role (MCSS). This requirement needs to be incorporated (as additional screens) into the current MCSS system. Low level requirements specifications are being submitted to CEFAS for review.
- Gap 11. Administration of penalties for nature conservation legislation. This requirement needs to be incorporated (as additional screens) into the current MCSS system. Low level requirements specifications are being submitted to CEFAS for review.
- Gap 14. Environmental Liability Directive authority role (as per current MFA responsibilities). This requirement needs to be incorporated (as additional screens) into the current MCSS system. Low level requirements specifications are being submitted to CEFAS for review.

For delivery throughout 2010, there are requirements to provide:

- Gap 18. Procure Help Desk software to support existing MFA/MMO personnel in providing IS specific application support. Potential options are being analysed.
- Gap 15. A 'one-stop' MMO specific website to provide advice and guidance on pollution emergencies. This website is currently owned by JNCC.

For delivery throughout 2010, there are requirements to integrate the following functionality currently supported by spreadsheets into the new MMO Planning and Licensing Functions:

- Gap 5. Issuing of licences under the Electricity Act. This functionality is currently delivered by DECC and is to be transferred to MMO from April 2010.
- Gap 6. Harbours Act functions (currently delivered by Department for Transport and to be transferred to MMO from April 2010).

- Gap 8. Providing advice to Department for Transport in respect of proposed works under the Transport Act.
- Gap 9. Issuing of licences under the Conservation of Seals Act, Wildlife and Countryside Act (currently delivered by Natural England and to be transferred to MMO from April 2010). Issuing of licences under Offshore Marine Regulations (currently delivered by MFA but with potential to align with the Marine Act licensing). IS support will be provided by Excel spreadsheets.
- Gap 12. As a new function under the Marine Act, management of conservation by-laws in relation to Marine Conservation zones. There is currently no IS support for this functionality (applications are being recorded in Word documents and Excel spreadsheets).
- Gap 13. To provide advice to stakeholders (such as JNCC and Natural England) to inform site selection processes for Marine Conservation Zones and Natura 2000 sites. There is currently no IS support for this functionality (applications are being recorded in Word documents and Excel spreadsheets).

As part of business as usual, for on-going delivery throughout Financial Years 10/11 and 11/12 (and currently being progressed), there are requirements to amend existing Fisheries applications to support:

- Gap 19. Updating the FAD and ERS systems to incorporate e-sales notes and e-logbooks (currently being progressed as the top priority of the FISS programme).
- Gap 21. Develop obligatory reports and analyses to a wide variety of overarching organisations, including FOI requests and support to Policy division (FISS programme advice to be sought).
- Gap 22. Further analysis to determine the extent of required future IS application enhancements to meet the new IUU regulations (to be planned).
- Gap 24. Allow IFCA access to MMO systems (based on allowing access to MCMS, and greater access to MCSS and RNSS).
- Gap 25. Possible amendments will be required to MMO systems to enable IFCA's to enforce administrative penalties, marine conservation enforcement and handling pollution incidents. A Working Group is being formulated to define requirements.
- Gap 20. Migrate existing Fisheries systems to supportable IS platforms (i.e., redeveloping the out-dated / unsupported base for all applications into the .net software framework). This activity has yet to be planned.

Beyond 2011, there are possible requirements (yet to be planned) to:

- Gap 26. A full review of all existing MFA systems, as the complexity of some of the current systems might need a full revision or a rebuild.
- Gap 27. Review vessel registry functions, should they be transferred to the MMO from the RSS in Cardiff (decision awaited).

1.7 Assumptions

The overall vision for the MMO IS Architecture, and associated functionality gaps, is described in Appendix A.

Further IS application requirements will be identified post MMO launch, as part of 'bedding-in'.

It is assumed that all Information Communications and Technology (ICT) infrastructure and services for the MMO Tyneside HQ (such as desktops, standard office applications, and infrastructure, printer and file services) will be provided by IBM under the Defra e-Nabling contract.

MMO functions are defined in the organisational structure Blueprint.

Where appropriate, amendments to existing MFA systems can be progressed under current contracts between MFA and existing suppliers.

Where appropriate, there is sufficient application capacity / capability to enable continued long-term supplier support for existing MFA systems provided by CEFAS and Blue finger.

All Intellectual Property Rights (IPR) of existing MFA systems, supplied by CEFAS and Blue finger, are owned by the suppliers.

Where appropriate, any requirements to provide new MMO applications can be progressed by:

- OJEU restricted processes,
- Catalist Frameworks,
- Internal sourcing (e.g. via CEFAS)

- Government Frameworks (for example GIS ESRI), and / or
- The existing Defra IBM e-Nabling contract or its successor ISDR.

If appropriate, GIS licences and development resources can be purchased via ESRI as part of current Government Framework Agreements, though the MMO's part in such an agreement will need to be reviewed as an NDPB.

If appropriate, Help Desk capability can be progressed via existing MFA/Defra contracts.

MMO requirements for Document Management will not initially require specific application support and will be delivered by the design and implementation of appropriate file structures / taxonomies.

1.8 Risks

Number	Risk	Probability	Impact	Mitigation
1	MMO functions, as described in the Blueprint, are subject to change and will be determined upon vesting.	Low	High	Close liaison with MMO Implementation Team.
2	There may be a change of IS strategy by the MMO Board.	Low (in the short term)	Medium	IS Strategy submitted to and approved by MFA Executive.
3	The MMO IS requirements gathering exercise may not have identified all MMO IS needs / gaps within existing MFA system capabilities.	Medium	High	Distribution of findings to all MMO Directors for review and comment.
4	Recommendations to address gaps beyond April 2010 may not receive the necessary budgetary approval.	Medium	High	Future funding requirements submitted for review and approval.
5	Additional MMO license requirements may develop from the Marine and Coastal Access Bill as a result of secondary legislation	High	Medium	Close liaison with Planning and License Requirements Team.
6	There may be insufficient on-going MFA/MMO Project Management expertise to deliver IS solutions.	Medium	High	To be managed as part of MMO Resource recruitment programmes.
7	MMO relationships with existing suppliers (CEFAS, Blue finger/ AST) may be different from existing MFA arrangements.	High	Medium	Impact of NDBP status being assessed.
8	As Microsoft no longer support Visual Basic operating systems, there are increased risks to the underlying security of CEFAS systems (although the risk is low, the	Low	High	Requirements being prioritised within existing development programmes.

	impacts on MFA applications would be high).			
9	As part of the current schedules of amendments to existing MFA systems, the FISS Programme Board has prioritised the delivery of e-sales and e-logbooks. Consequently, this will impact the ability of suppliers to deliver any further enhancements prior to MMO vesting.	High	High	MFA/MMO Directors advice will be sought where conflicts exist.
10	IS requirements for Coastal Offices may not be fully captured, as responses received were mainly from HQ personnel.	Medium	High	Comments received from a limited number of Coastal personnel. Distribution of findings to all MMO Directors for review and comment.
11	Proposed amendments to existing applications may exceed cost thresholds.	Low	High	Future funding requirements submitted for review and approval.
12	Detailed IS requirements to support planning function may be late in definition, with a knock-on impact to timescale for delivery of a supporting IS system.	Medium	High	Working Groups established. Weekly progress reviews / issue escalation to relevant Directors.

2 Key Requirements to support MMO functions

2.1 Summary of Findings

2.1.1 Corporate Services

For the MMO, the Corporate Services function includes Corporate Communication and Affairs, HR, Finance, Legal and Estates and Information Technology (IT).

MMO Requirements fully served by existing MFA systems:

In summary, the majority of MMO Corporate Services requirements can be served with existing IS applications being used within the MFA. At this stage, it is not expected that specific IS applications (other than Word, Excel etc.) will be required to support the Corporate Affairs and Legal and Estates functions (including the new MMO role as an NDPB, support for the MMO Board, FoI requests, recording of MoU's, Health and Safety, MMO legal advice for licensing, enforcement and nature conservation, and the Estates functions currently with Defra).

The Shared Service Division (SSD) will continue to provide transactional services to the MMO for HR, Payroll, Finance and Procurement via an Oracle Business Suite. MFA have a Service Level Agreement in Place for these services. It is expected that the MMO will be required to continue to use SSD for its transactional services and will therefore need to put in place a revised SLA. Finance has 'read only' access to marine licence recording system, MCMS (and other fee generating systems, if introduced).

The management of existing MFA IS contracts with service providers will continue within the MMO.

Gaps:

There is a requirement to provide:

- Gap 3. A new MMO website / updated intranet. It is assumed that this will initially be a re-brand of current MFA website (an internal MFA task to be planned, agreed and progressed from January 2010). Further enhancements will be required during 2010 to meet MMO longer term requirements to provide an integrated Content Management IS solution.
- Gaps 16, 17. New Customer Relationship Management, Document/Knowledge Management.

- Gap 18. Procure Help Desk software to support existing MFA/MMO personnel in providing IS specific application support.

How the gaps are currently addressed:

Gap 3 - Website and Intranet

As per current MFA website arrangements, the webmaster will continue be responsible for the design, maintenance and ongoing updating of the new MMO website. Funding has been secured to acquire additional webmaster resource to produce a new MMO website/intranet (as a re-branding of the existing MFA website / intranet). Development is expected to commence in November/December '09, in readiness for MMO launch on 1st April 2010.

Gaps 16 and 17 - Customer Relationship Management, Collaborative Tools

The MFA is currently using an Access database, which is overly simple for future MMO needs. There are currently no planned arrangements to replace Access databases with a fully integrated Customer Relationship Management IS solution. These functions are being investigated as part of investigating present IT solution offerings within the e-Nabling umbrella.

Gap 18 - Help Desk software to support existing MFA/MMO personnel in providing IS specific application support.

There is no current IS software, or planned arrangements, to support IS application specific Help Desk queries. Consequently, there is no ability to monitor performance or provide Service Level Agreements. Potential solutions are being investigated.

Summary of Options to address Gaps:

Option	Recommendation
1. Do nothing	
2. For April 2010	Gap 3: Re-brand existing MFA website/intranet Gap 16: Procure initial new CRM capability (which will be included in the early build of the Case Management functionality) Gap 17: Procure initial new Collaborative Tools which will be included in the early build of the Case Management functionality)
3. For April 2011	Gap 18 Procure Help Desk capability Gap 16: Enhance new CRM capability Gap 17: Enhance new Collaborative Tools

Commissioning Impacts on MMO of 'do-nothing' option:

Not meeting MMO Obligations / Legislation Requirements / Corporate Reputation?

The reputation of the MMO would be seriously compromised should a MMO branded website not be available for the organisation launch. As a minimum, there is a requirement to re-branding of the existing MFA website and intranet (being planned). For Customer Relationship Management, corporate reputation will be also impacted should the MMO not have the capability to develop greater communication with stakeholders (via Extranet User Groups). Retaining distributed poorly maintained Access databases, as now, to support Customer Relationship Management is overly simple for future MMO needs. The lack of IS application specific Help Desk support will result in an inability to monitor performance or provide Service Level Agreements.

Missing Functions / Impact on Resources / Efficiencies?

Longer term, the MMO website will need the ability to handle financial transactions, a series of closed user groups for consultation groups of external stakeholders (Extranet) and differing teams, manage and maintain a huge library of information – some within a firewall for transactional data – as well as source material. Further analysis and development will be required to ensure website capability as part of an integrated Content Management System solution (e.g., for applicants to track licence applications). With an HQ in Tyneside, IS may be necessary to provide some form of intranet face-to-face contact provision for each coastal office either videoconferencing or, if network permits, computer to computer video conferencing.

Missed Opportunities?

A MMO website / intranet (based on re-branding of existing MFA functionality) and the lack of Extranet capability will be seen as major missed opportunities, and potentially damaging, to the Corporate reputation and successful deployment of the MMO communication strategy.

2.1.2 Science, Evidence & Technical Support.

MMO Requirements fully served by existing MFA systems:

In summary, the following MMO functionality can be served within existing IS applications being used within the MFA and / or Microsoft products such as Word and Excel:

- Gathering and collating evidence and information about marine planning to inform planning (via relevant project management standards).
- Provide advice to IPC on the impact of nationally significant developments in the marine area (via Word documents).
- Providing information / potential competent authority role ref framework of indicators for good environmental status under Marine Strategy Framework Directive (Any role the MMO might play is likely to require only standard IS packages (e.g., Word) as the initial assessment of marine waters (by 2012) and establishment of a monitoring programme (by 2014) is likely to be carried out through existing UKMMAS processes; while determination of GES, targets and indicators (by 2012) is likely to be coordinated by Defra).
- Commissioning research & development / monitoring (This function is supported by specific data requests to CEFAS, as well as DEFRA IS applications, such as SIS (using DEFRA common practice; final and annual reports etc. are stored in Word documents and uploaded to the DEFRA website). There are no current requirements to use either MFA applications or uploading of reports to a future MMO website).
- Participation in UKMMAS and UKMSCC (There are no current requirements to use either MFA applications or uploading of reports to a future MMO website).

Gaps:

There is a requirement to provide:

- Gap 2. New MMO IS GIS capability (encompassing the 'SPIRIT' web-based component of the MMO GIS solution, a configurable toolbar which provides the capability to define bespoke modelling and analysis functions, clarifying the data needed for the MMO to conduct its business and developing a Data Management Strategy to manage data assets within the MMO). These requirements are being progressed via their respective work-streams.

- Gaps 23, 16, 17. New MMO IS Planning and Licensing capability (to include Case Management, CRM, Document/Knowledge Management, and Collaborative Tools). These broad function categories will be of interest when examining present IT solution offerings within the e-Nabling umbrella.
- Gap 1. MMO re-branding of all templates and outputs associated with current MFA systems. This is an internal MFA administrative task (to be planned) to re-brand and update associated word templates.
- Gap 8. Providing advice to Department for Transport in respect of proposed works under the Transport Act. IS support within.
- Gap 13. To provide advice to stakeholders (such as JNCC and Natural England) to inform site selection processes for Marine Conservation Zones and Natura 2000 sites. There is currently no IS support for this functionality (applications are being recorded in Word documents and Excel spreadsheets).

How the gaps are currently addressed:

Gap 2 – New MMO IS GIS capability

Currently, there is limited GIS capability within the MFA (primarily via 'Google Earth' and 'MAGIC'). Marine Planning is a new function within MMO. It is essential to provide new MMO GIS capability to support new MMO Planning function and associated integration to existing business systems (Gap 28). Work is progressing to identify initial IS GIS capability (encompassing the 'SPIRIT' web-based component of the MMO GIS solution, a configurable toolbar which provides the capability to define bespoke modelling and analysis functions, clarifying the data needed for the MMO to conduct its business and developing a Data Management Strategy to manage data assets within the MMO).

Gaps 23, 16, 17 – New MMO IS Planning and Licensing capability

The present licensing function within the MFA utilises the Marine Consents Management System (MCMS) developed by CEFAS. New licensing capability is required from April 2011 to support MMO licensing and evidence based decision process requirements as defined in the Marine and Coastal Access Bill. These functions are being investigated as part of investigating present IS solution offerings within the e-Nabling umbrella.

Gap 1 – MMO re-branding of all templates and outputs

There is a MMO requirement to re-brand all templates and outputs associated with current MFA systems. This is an internal MFA administrative task (to be planned).

Gap 8 – Providing advice to Department for Transport

IS support within the Department for Transport is currently provided by Excel spreadsheets. For April 2010, ownership of these spreadsheets will transfer to the MMO. For April 2011, there is a requirement to incorporate this functionality into the new enhanced MMO Licensing Case Management capability (Gap 23).

Gap 13 – To provide advice to stakeholders (such as JNCC and Natural England) to inform site selection processes for Marine Conservation Zones and Natura 2000 sites.

There is no current IS support providing advice for Marine Nature Conservation Zones and Natura 2000 sites. For April 2010, there is a requirement to develop spreadsheets to support MMO requirements. For April 2011, there is a requirement to incorporate this functionality into the new enhanced MMO Licensing Case Management capability (Gap 23).

Summary of Options to address Gaps:

Option	Recommendation
1. Do nothing	
2. For April 2010	Gap 2: Procure New GIS capability Gap 23: Procure New Case Management Gap 16: Procure initial new CRM capability Gap 17: Procure initial new Collaborative Tools Gap 1: Re-brand MMO templates Gap 8: Retain existing DfT spreadsheets Gap 13: Develop new Conservation spreadsheets
3. For April 2011	Gap 2: Enhanced new GIS capability Gap 16: Enhance initial new CRM capability Gap 17: Enhance initial new Collaborative Tools Gap 8: Integrate spreadsheet to new Case Management Gap 13: Integrate spreadsheet to new Case Management

Commissioning Impacts on MMO of ‘do-nothing’ option:

Not meeting MMO Obligations / Legislation Requirements / Corporate Reputation?

The corporate credibility of the MMO would be seriously compromised should MMO not have the capability to support the legislation driven / MMO gaps as described above.

Missing Functions / Impact on Resources / Efficiencies?

The inability to provide IS support for the above missing functionality will result in additional resources (both Head Quarters and Coastal offices) being required to maintain a number of disparate spreadsheets. This is seen as an onerous and inefficient solution, as business processes / data quality will be compromised due to the need (and inability) to access data in various databases

Missed Opportunities?

The lack of IS capability will be seen as major missed opportunities, and potentially damaging, to the successful deployment of the MMO communication / stakeholder management strategy.

2.1.3 Marine Planning

Marine Planning is a new function that will be charged with the development and thereafter the responsibility for maintaining Marine Plans. Marine Planning will encompass a set of marine spatial plans that will set out how the Marine Policy Statement will apply to specific parts of waters across England and Wales. A key component for the production of the Marine Plans is the development and ongoing maintenance of a single evidence base shared with the Marine Policy Statement.

MMO Requirements fully served by existing MFA systems:

Marine Planning is a new function to the MMO.

Gaps:

There is a requirement to provide:

- Gap 2. New MMO IS GIS capability (encompassing the 'SPIRIT' web-based component of the MMO GIS solution, a configurable toolbar which provides the capability to define bespoke modelling and analysis functions, clarifying the data needed for the MMO to conduct its business and developing a Data Management Strategy to manage data assets within the MMO). These requirements are being progressed via their respective work-streams.
- Gaps 23, 16, 17. New MMO IS Planning and Licensing capability (to include Case Management, CRM, Document/Knowledge Management, and Collaborative Tools). These broad function categories will be of interest when examining present IT solution offerings within the e-Nabling umbrella.

How the gaps are currently addressed:

Marine Planning is a new function within MMO.

Summary of Options to address Gaps:

Option	Recommendation
1. Do nothing	
2. For April 2010	Gap 2: Procure new GIS capability Gap 23: Procure new Case Management Gap 16: Procure initial new CRM capability Gap 17: Procure initial new Collaborative Tools
3. For April 2011	Gap 2: Enhance new GIS capability Gap 23: Enhance new Case Management Gap 16: Enhance initial new CRM capability Gap 17: Enhance initial new Collaborative Tools

Commissioning Impacts on MMO of 'do-nothing' option:

Not meeting MMO Obligations / Legislation Requirements / Corporate Reputation/ Missing Functions / Impact on Resources/ Efficiencies
 Missed Opportunities?

The corporate credibility of the MMO would be seriously compromised should MMO not have the capability to support marine planning.
 The provision of GIS capability is essential to this process.

2.1.4 Marine Environmental Licensing

Under the Marine and Coastal Access Bill, the MMO will be responsible for issuing a reformed marine licensing regime (including the issue of licenses for offshore wind farms, tidal and wave power, jetties, moorings, dredging, aggregates extractions and laying of cables and pipes). The licenses will enable the MMO to regulate the environmental and navigational impacts of constructions, deposits and removals in the marine area.

MMO Requirements fully served by existing MFA systems:

All returns and associated correspondence for licensing of oil spill treatment products (as now within the MFA but under new secondary legislation under the Marine Act) is stored in Microsoft products (such as Word and Excel). MMO will need IS capacity to store and manage the enforcement of IPC deemed Marine Act licences. The intention is that the IPC will give licences to the MMO once they have been issued. Details of how this will work has yet to be determined, at this stage, it is envisaged that evidence can be stored as either Word documents or e-mail exchanges.

Gaps:

There is a requirement to provide:

- Gaps 23, 16, 17. New MMO IS Planning and Licensing capability (to include Case Management, CRM, Document/Knowledge Management, and Collaborative Tools). These broad function categories will be of interest when examining present IT solution offerings within the e-Nabling umbrella.
- Gap 28. GIS Business System Integration Strategy. In delivering a fit-for-purpose GIS solution, it is important that it is not just a stand-alone capability, but integrates with other business applications. For April 2010, the strategy needs to be developed which sets out how business applications should evolve and converge to support a fully integrated GIS solution.
- Gap 7. To provide MCMS access to the Stakeholder (to grant Stakeholder FEPA licences from April 2010). Direct discussions are progressing between the Stakeholder, MFA and CEFAS to define requirements.
- Gap 1. MMO re-branding of all templates and outputs associated with current MFA systems. This is an internal MFA administrative task (to be planned) to re-brand and update associated word templates.

- Gap 5. Issuing of licences under the Electricity Act. This functionality is currently delivered by DECC and is to be transferred to MMO from April 2010.
- Gap 6. Harbours Act functions (currently delivered by Department for Transport and to be transferred to MMO from April 2010).
- Gap 8. Providing advice to Department for Transport currently delivered by Department for Transport and to be transferred to MMO from April 2010).
- Gap 9. Issuing of licences under the Conservation of Seals Act, Wildlife and Countryside Act (currently delivered by Natural England and to be transferred to MMO from April 2010). Issuing of licences under Offshore Marine Regulations (currently delivered by MFA but with potential to align with the Marine Act licensing). There is currently no IS support for this functionality (applications are being recorded in spreadsheets).
- Gap 12. As a new function under the Marine Act, management of conservation by-laws in relation to Marine Conservation zones. There is currently no IS support for this functionality (applications are being recorded in Word documents and Excel spreadsheets).
- Gap 13. To provide advice to stakeholders (such as JNCC and Natural England) to inform site selection processes for Marine Conservation Zones and Natura 2000 sites. There is currently no IS support for this functionality (applications are being recorded in Word documents and Excel spreadsheets).

How the gaps are currently addressed:

Gaps 23, 16, 17 – New MMO IS Planning and Licensing capability

The present licensing function within the MFA utilises the Marine Consents Management System (MCMS) developed by CEFAS. New licensing capability is required from April 2011 to support MMO licensing and evidence based decision process requirements as defined in the Marine and Coastal Access Bill. These functions are being investigated as part of investigating present IT solution offerings within the e-Nabling umbrella.

Gap 28 – GIS Business System Integration Strategy

In delivering a fit-for-purpose GIS solution, it is important that it is not just a stand-alone capability, but integrates with other business applications. For April 2010, the strategy needs to be developed which sets out how business applications should evolve and converge to support a fully integrated GIS solution.

Gap 7 - Stakeholder access to MCMS

Stakeholder FEPA licences are currently managed by the Marine Environment Team. As part of devolved powers, the Stakeholder will be responsible for granting Stakeholder FEPA licences from April 2010. Consequently, they will require direct access to the MCMS system. Work is progressing to technically enable system access. However, it has yet to be decided whether access will be limited to Stakeholder only licences. Direct discussions are progressing between the Stakeholder, MFA and CEFAS to define requirements.

Gap 1 – MMO re-branding of all templates and outputs

There is a MMO requirement to re-brand all templates and outputs associated with current MFA systems. This is an internal MFA administrative task (to be planned).

Gap 5 – Issuing of licences under the Electricity Act

For April 2011, there is a requirement to incorporate this functionality into the new enhanced MMO Licensing Case Management capability (Gap 23).

Gap 6 – Harbours Act functions

IS support within the Department for Transport is currently provided by Excel spreadsheets. For April 2010, ownership of these spreadsheets will transfer to the MMO. For April 2011, there is a requirement to incorporate this functionality into the new enhanced MMO Licensing Case Management capability (Gap 23).

Gap 8 – Providing advice to Department for Transport

IS support within the Department for Transport is currently provided by Excel spreadsheets. For April 2010, ownership of these spreadsheets will transfer to the MMO. For April 2011, there is a requirement to incorporate this functionality into the new enhanced MMO Licensing Case Management capability (Gap 23).

Gap 9 – Issuing of licences under the Conservation of Seals Act, Wildlife and Countryside Act

IS support within Natural England is currently provided by Excel spreadsheets. For April 2010, ownership of these spreadsheets will transfer to the MMO. For April 2011, there is a requirement to incorporate this functionality into the new enhanced MMO Licensing Case Management capability (Gap 23).

Gap 13 – To provide advice to stakeholders (such as JNCC and Natural England) to inform site selection processes for Marine Conservation Zones and Natura 2000 sites.

There is no current IS support for this functionality. For April 2010, there is a requirement to develop spreadsheets to support MMO requirements. For April 2011, there is a requirement to incorporate this functionality into the new enhanced MMO Licensing Case Management capability (Gap 23)

Summary of Options to address Gaps:

Option	Recommendation
1. Do nothing	
2. For April 2010	Gap 23: Procure New Case Management Gap 16: Procure initial new CRM capability Gap 17: Procure initial new Collaborative Tools Gap 28: Develop Business Systems strategy Gap 1: Re-brand MMO templates Gap 7: Allow Stakeholder access to MCMS Gaps 5,6, 8, 9,12,13: Retain existing spreadsheets
3. For April 2011	Gap 16: Enhance new CRM capability Gap 17: Enhance new Collaborative Tools Gap 28: Business applications to evolve and converge to support a fully integrated GIS solution. Gaps 5,6, 8, 9,12,13: Integrate existing spreadsheets to MMO Case Management capability

Commissioning Impacts on MMO of 'do-nothing' option:

Not meeting MMO Obligations / Legislation Requirements / Corporate Reputation?

The corporate credibility of the MMO would be seriously compromised should MMO not have the capability to support the Marine Bill legislation driven / MMO gaps as described above.

Missing Functions / Impact on Resources/ Efficiencies ?

The inability to provide IS support for the above new functionality will result in existing resources (both Head Quarters and Coastal offices) being required to maintain a number of disparate existing and to be developed spreadsheets. This is seen as an onerous and inefficient solution, as business processes / data quality will be compromised due to the need (and inability) to access data in various databases.

Missed Opportunities?

The lack of IS capability will be seen as a major missed opportunity, and potentially damaging, to the successful operation of the MMO. The ability to liaise with / provide information to Stakeholders will be seriously compromised.

2.1.5 Fisheries Management

Fisheries and Management have wide ranging responsibilities, including issuing licences for vessels. Further responsibilities are to monitor fleet entries and exits for which Fisheries Management will produce an annual report for the European Commission. In addition they implement appeal tribunal decisions for restrictions on time spent at sea. Through the Statistical Unit reporting is extended to cover both statutory and non-statutory reporting for the whole of the MMO. They also provide support for negotiations on EU proposals; ensure compliance with economic links so fishing vessels contribute to economies of UK fishing communities

MMO Requirements fully served by existing MFA systems:

For the MMO, there is a requirement to maintain all existing MFA Fisheries Management systems and associated reporting, (i.e., FVR, VLS, FAD, I-FISH,MCSS,MFA TR, Cross Checker, RBS, ERS and VMS).

All current MFA reports for all existing fisheries management functions will be required for the MMO (including MMO reporting of quotas to Defra, the collecting, co-ordinating and reporting fisheries statistics). As a generic description, reports are usually in the form of us compiling data or extracting data direct either from UK systems or combining similar extracted data from the separate UK systems that exist i.e. the FIN and FAD systems. In many cases, MFA supplement these data extractions with additional data from the other administrations to produce the required composite UK set of data. This is often needed to be recast into the required format before submission to the organisation involved, using whatever submission route they state (e.g. for data submissions to the EU we are required to use the FIDES system for most data reports).

Gaps:

There is a requirement to provide:

- Gap 1. MMO re-branding of all templates and outputs associated with current MFA systems. This is an internal MFA administrative task (to be planned) to re-brand and update associated word templates.
- Gaps 23, 16, 17. New MMO IS Planning and Licensing capability (to include Case Management, CRM, Document/Knowledge Management, and Collaborative Tools). These broad function categories will be of interest when examining present IT solution offerings within the e-Nabling umbrella.

- Gap 4. Update the MFA TR application (Time Logging) for new MMO functionality in readiness for MMO vesting. This is an internal administrative MFA task, currently being planned and progressed within the Fisheries function.
- Gap 19. Updating the FAD and ERS systems to incorporate e-sales notes and e-logbooks (currently being progressed as the top priority of the FISS programme).
- Gap 21. Develop obligatory reports and analyses to a wide variety of overarching organisations, including FOI requests and support to Policy division (FISS programme advice to be sought).
- Gap 22. Further analysis to determine the extent of required future IS application enhancements to meet the new IUU regulations.
- Gap 20. Migrate existing Fisheries systems to supportable IS platforms (i.e., redeveloping the out-dated / unsupported base for all applications into the .net software framework).
- Gap 24. Allow IFCA access to MMO systems (based on allowing access to MCMS, and greater access to MCSS and RNSS).
- Gap 25. Possible amendments will be required to MMO systems to enable IFCA's to enforce administrative penalties, marine conservation enforcement and handling pollution incidents.
- Gap 26. A full review of all existing MFA systems, as the complexity of some of the current systems might need a full revision or a rebuild.
- Gap 27. Review vessel registry functions, should they be transferred to the MMO from the RSS in Cardiff (decision awaited).

How the gaps are currently addressed:

Gaps 23, 16, 17 – New MMO IS Planning and Licensing capability

The present licensing function within the MFA utilises the Marine Consents Management System (MCMS) developed by CEFAS. New licensing capability is required from April 2011 to support MMO licensing and evidence based decision process requirements as defined in the Marine and Coastal Access Bill. These functions are being investigated as part of investigating present IT solution offerings within the e-Nabbling umbrella.

Gap 1 – MMO re-branding of all templates and outputs

There is a MMO requirement to re-brand all templates and outputs associated with current MFA systems. This is an internal MFA administrative task (to be planned).

Gaps 19 to 27

The majority of current and planned arrangements are incorporated within the FISS Programme and IFCA initiatives discussed above. The Implementation of existing Catch Documentation Schemes (CDS) and more recently Council Regulation 1005/2008 which creates a global EU CDS and Port State Control system to prevent the import into the EU of IUU fishery products caught by 3rd countries. New internal systems are required for recording the processes and outcomes of the IUU catch certificate verification purposes. This will need to include systems that support the MFA role as the Single Point of contact for all international IUU procedures. Including Mutual Assistance single liaison office functions. The UK Fisheries call Centre may also need to modify their systems to cater for the IUU regulation. There is a need for access to external databases.

Summary of Options to address Gaps:

Option	Recommendation
1. Do nothing	
2. For April 2010	Gap 1: Re-brand MMO templates Gap 23: Procure New Case Management Gap 16: Procure initial new CRM capability Gap 17: Procure initial new Collaborative Tools Gap 4: Update MMO Time Logging requirements

3. For April 2011	Gap 23: Enhance new Case Management Gap 16: Enhance new CRM capability Gap 17: Enhance new Collaborative Tools Gaps 19, 21, 22, 20, 24, 25, 26, 27: Progress as part of FISS Programme / Business as Usual
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Commissioning Impacts on MMO of 'do-nothing' option:

Not meeting MMO Obligations / Legislation Requirements / Corporate Reputation / Missing Functions / Impact on Resources/ Efficiencies

IS support exists for the majority of Fisheries Management activities. The FISS programme and IFCA initiatives will address the majority of MMO IS gaps identified above.

There is a risk to the MMO of serious 'Infraction' penalties from the European Union, should e-sales notes and e-logbook software not be installed to meet the required legislation. Consequently, delivery of this software (to April 2010) has been identified by the FISS Programme as its top priority, and is being progressed as a matter of urgency.

In addition, there is a risk that existing IS infrastructures and Fisheries application software is increasingly out-dated and not supported by IS vendors. This will seriously undermine the ability to maintain existing IS should they not be migrated to new supportable platforms.

Missed Opportunities?

IS support exists for the majority of Fisheries Management activities. The ability to access data more readily from disparate systems is seen as a major improvement to operational efficiency.

Recommendations to address gaps:

The majority of current and planned arrangements are incorporated within the FISS Programme and IFCA initiatives discussed above.

2.1.6 Operations

A key responsibility of the Operations function is to respond to marine pollution emergencies. The Operations function is also tasked with monitoring and enforcing consented and unlicensed marine works and aggregate extraction. The Marine Conservation team within the Operations Function are being charged with issuing wildlife licences. Under the Marine and Coastal Access Bill, the MMO will take responsibility for the new Marine Nature Conservation Zones (MCZ) to protect marine biodiversity. Initially the work is being led by Natural England and the JNCC and from April 2010 will be transferred to the MMO. At this stage the Marine Conservation team supports this work by providing information on socio-economic and enforcement issues acquired through its planning, licensing, enforcement and fisheries management roles, which will contribute to the site selection process.

MMO Requirements fully served by existing MFA systems:

There is no requirement for specific IS application development to support management of the European Grants scheme and provision of training for Marine Enforcement Officers (both MMO staff and EA/IFCA's). For managing European Grant schemes, applications are stored and managed in a discrete, standalone 'Access' database (noting there are interfaces to other MFA databases, such as FAD). This Access database will be required, as is, for the launch of the MMO. Training courses can be amended as and when appropriate.

The current MFA systems (such as FAD, MCSS and VMS) are sufficient to meet current IUU regulations on the enforcement of UK and EU fisheries obligations in waters outside Community waters, including those created by Regional Fishery Management Organisations where the EU or the UK are contracting parties (mutually supported by Operation and MFA coastal offices).

Gaps:

There is a requirement to provide:

- Gap 1. MMO re-branding of all templates and outputs associated with current MFA systems. This is an internal MFA administrative task (to be planned) to re-brand and update associated word templates.
- Gaps 23, 16, 17. New MMO IS Planning and Licensing capability (to include Case Management, CRM, Document/Knowledge Management, and Collaborative Tools). These broad function categories will be of interest when examining present IS solution offerings within the e-Nabling umbrella.

- Gap 10. The new MMO marine conservation enforcement role (MCSS). This requirement needs to be incorporated (as additional screens) into the current MCSS system.
- Gap 11. Administration of penalties for nature conservation legislation. This requirement needs to be incorporated (as additional screens) into the current MCSS system.
- Gap 14. Environmental Liability Directive authority role (as per current MFA responsibilities). This requirement needs to be incorporated (as additional screens) into the current MCSS system.
- Gap 15. A 'one-stop' MMO specific website to provide advice and guidance on pollution emergencies.

How the gaps are currently addressed:

Gaps 23, 16, 17 – New MMO IS Planning and Licensing capability

The present licensing function within the MFA utilises the Marine Consents Management System (MCMS) developed by CEFAS. New licensing capability is required from April 2011 to support MMO licensing and evidence based decision process requirements as defined in the Marine and Coastal Access Bill. These functions are being investigated as part of investigating present IT solution offerings within the e-Nabling umbrella.

Gap 1 – MMO re-branding of all templates and outputs

There is a MMO requirement to re-brand all templates and outputs associated with current MFA systems. This is an internal MFA administrative task (to be planned).

Gap 10 – The new MMO marine conservation enforcement role.

Gap 11 – Administration of penalties for nature conservation legislation

Gap 14 – Environmental Liability Directive authority role (as per current MFA responsibilities).

There is currently no IS support for this functionality (where applicable, applications are being recorded in spreadsheets).

Gap 15 – A 'one-stop' MMO specific website to provide advice and guidance on pollution emergencies

There is currently no IS support for this functionality. Currently, there are a number of websites from a variety of interested parties (such as JNCC, Natural England, DECC and MFA). This can lead to confusion. JNCC have developed a new ‘one-stop’ website that should be owned and managed by MMO (as custodians of the Marine Environment). Although completed, work has stalled to transfer this website to the MMO. This website will be required within 6 months of the operational start of the MMO.

Summary of Options to address Gaps:

Option	Recommendation
1. Do nothing	
2. For April 2010	Gap 1: Re-brand MMO templates Gap 23: Procure new Case Management Gap 16: Procure initial new CRM capability Gap 17: Procure initial new Collaborative Tools Gap 10: Enhance MCSS – Marine Nature Enforcement Gap 11: Enhance MCSS – Marine Conservation Penalties Gap 14: Enhance MCSS - Environmental Liability Directive Gap 15: Adopt Pollution Website (October 2010)
3. For April 2011	Gap 23: Enhance new Case Management Gap 16: Enhance new CRM capability Gap 17: Enhance new Collaborative Tools

Commissioning Impacts on MMO of ‘do-nothing’ option:

Not meeting MMO Obligations / Legislation Requirements / Corporate Reputation?

The corporate credibility of the MMO would be seriously compromised should MMO not have the capability to support the Marine Bill legislation driven / MMO gaps as described above.

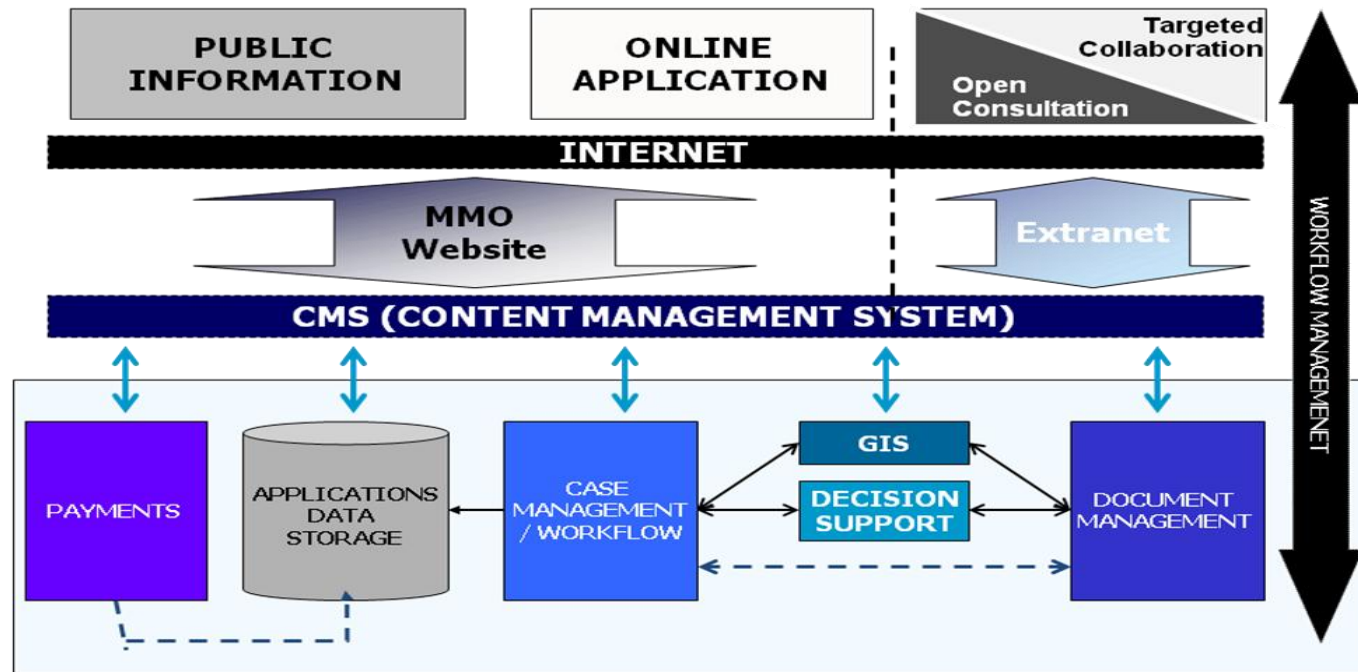
Missing Functions / Impact on Resources/ Efficiencies ?

The inability to provide IS support for the above new functionality will result in existing resources (both Head Quarters and Coastal offices) being required to maintain a number of disparate existing and to be developed spreadsheets. This is seen as an onerous and

inefficient solution, as business processes / data quality will be compromised due to the need (and inability) to access data in various databases.

3 Appendix 1 - MMO Applications Architecture Vision

Marine Licensing – Logical Applications Architecture



WEBSITE AND ON-LINE FUNCTIONS / INTERNET:

The website is an information tool for the public to access which provides current guidance and reference material, it also acts as a portal to web-based transactional systems – specifically, online application submission and an online payments facility. It supports public engagement on applications and existing licences. Web content is supported by CMS which will filter information content and make it available in the form of web pages, downloadable e-documents, e-forms and links to useful pages. The internet provides access to a dedicated MMO website and extranet facilities which supports the applications process, licensing function and stakeholder engagement. It supports all web-based applications.

EXTRANET

The extranet function is a collaborative space for targeted stakeholder engagement. Via an online account, stakeholders and key consultation bodies are invited to view applications, submit their comments and engage in pre-application activity. It is supported by CMS which will filter information content to users as appropriate.

ONLINE PAYMENTS

This online facility allows applicants to create an account and submit their application, view its progress, receive notification of the licensing decision and store e-documents.

PUBLIC ENGAGEMENT

This facility supports the public engagement process by providing access to licence application details and by enabling comments to be submitted or questions to be asked.

DOCUMENT MANAGEMENT

This function enables document tracking, storage, management and retrieval for electronic and paper documents relating to an application or record. It relies on metadata to support the efficient search functions and interfaces with the case management, GIS and decision support tools.

CASE MANAGEMENT & WORKFLOW

This is an operational system which supports the licensing function. its key features are:

- Workflow Management
This is responsible for controlling process sequences and the automation of key activities to support overall licensing process, online engagement activity, reporting and case management needs.
- Applications Data Storage
This is the storage function for data and information records of the licensing function.
- Case Allocation and Performance Management
This feature supports casework allocation and management. It enables managers to view current workloads, outstanding cases, process targets and monitor individual / team performance.

- Consultation Management
This feature is supported by workflow management to manage the sequential stages and activities, and collate the findings of the consultation process.
- Automated Document Production
This feature generates e-documents as part of workflow management. Types of e-documents include advertising notices, decisions and licences.

DECISION SUPPORT

This feature supports the decision-making process by ensuring that the right issues are addressed at each stage, and that Licensing Officers have access to clear and comprehensive guidance in reaching their decisions.

GIS

This application enables officers to check the location of application co-ordinates and engage in comparative analysis of activity in licensing areas using data layers. Its functions include its availability to stakeholders via the extranet and to the public via the website for information and research purposes. It is supported via CMS and is integrated with the case management and document management functions.

CUSTOMER RELATIONSHIP MANAGEMENT (CRM)

This software is to manage and maintain the stakeholder database which should reside in one place rather than multiple activities, poorly maintained as now.

DATA

To identify data sources required for MMO functions, with particular reference to geospatial data layers (including data source, freely available, ready for use, reference data)

4 Appendix 2 - Summary of Gaps per MMO sub-Function

MMO function	MMO sub function	Gaps
Corporate affairs & Communications	1. Communications – enhanced role to reflect NDPB status	<p>Gap 1. MMO re-branding of all existing templates and outputs associated with current MFA systems.</p> <p>Gap 3. A new MMO website / updated intranet.</p> <p>Gap16. Procure a new Customer Relationship Management (CRM) application to manage stakeholder communication.</p> <p>Gap 17. Procure new extranet functionality.</p>
	2. Corporate planning – enhanced role to reflect NDPB status	No.
	3. Support for MMO Board – new role	No.
	4. Freedom of information / Environmental Information Regulations - Ability to publish as much info as possible proactively??	No.
	5. Management of MoUs with other bodies?	No.
	6. Health & Safety	No.
Legal & estates	7. MMO will need own legal advice – in particular for licensing, enforcement, nature conservation (including bylaws) functions.	No.
	8. Estates functions (currently from Defra – future situation?)	<p>No, for Defra estates.</p> <p>No immediate requirement for Inter serve Facilities Management. Possible future MI requirement.</p>

HR	9. Similar to MFA functions plus changes to reflect NDPB status. Including staff resource allocation and development.	No (covered by SSD). If MMO is to become free-standing and accountable for its own performance , then the incoming CEO and Board will need to be consulted.
Finance	10. Similar to MFA functions but amended for NDPB status. Including procurement (currently provided by Defra) and service contract management.	No. Accounting system – currently using Defra SSD Oracle Financials, including Oracle ADI reporting tools. Read only access to marine licence recording system , MCMS (and other fee generating systems, if introduced).
IT	11. Management of contract with service providers (IBM and CEFAS) plus internal support and development	Gap 18. Help Desk software to support existing MFA/MMO personnel in providing IS specific application support.
Science, Evidence & technical support (including GIS specialists, stats, economist, heritage and conservation, social scientist, monitoring & assessment scientist, R&D)	12. Gathering and collating evidence and information about marine areas to inform marine planning	Gap 1. MMO re-branding of all existing templates and outputs associated with current MFA systems. Gap 2. New (enhanced) GIS capability, including an agreed Data Management Strategy (to all SETS sub-functions).
	13. Storing, accessing and making available to other functions information received through the (current & new) licensing process	Gap 23. A new MMO marine licensing system (based on MCMS/ MCSS).
	14. Providing advice and information re. marine nature conservation data, including to Natural England JNCC, EA and 4 x regional MCZ projects to inform the site selection process for Marine Conservation Zones,	Gap 12. As a new function under the Marine Act, management of conservation by-laws in relation to Marine Conservation zones.

	Natura 2000 sites	Gap 13. To provide advice to stakeholders (such as JNCC and Natural England) to inform site selection processes for Marine Conservation Zones and Natura 2000 sites.
	15. Providing advice to IPC on the impact of nationally significant developments in the marine area - in relation to Planning Act license applications.	No.
	16. Providing advice to DfT in respect of impact of proposed works under the Transport and Works Act	Gap 8. Providing advice to Department for Transport in respect of proposed works under the Transport Act.
	17. Maintaining register of licensing activities	No.
	18. Collecting, co-ordinating and reporting fisheries statistics and information (as current function)	See sub-function 40
	18 (a) Exploitation of administrative data sources	See sub-function 40
	19. Providing information / potential competent authority role ref framework of indicators for good environmental status under Marine Strategy Framework Directive	No.
	20. Enforcement information gathering and sharing (as current)	Gap 9(a). Issuing of licences under the Conservation of Seals Act, Wildlife and Countryside Act (currently delivered by Natural England and to be transferred to MMO from April 2010). Gap 9(b). Issuing of licences under Offshore Marine Regulations (currently delivered by MFA but with potential to align with the Marine Act licensing).
	21. Chief scientific advisor role	No.

	22. Provision of information to fulfil requirements of OSPAR / London Convention & protocol etc (taken from MMO brochure)	No.
	23. Ability to provide information, data, advice, assistance to SoS, public etc	No
	24. Commissioning research & development / monitoring	No.
	25. Participation in UKMMAS and UKMSCC	No.
	Marine Planning	26. Selecting order in which to plan, preparing plan options.
27. Publishing order that plans will be drawn up, statement of public participation and consulting on plan options		
28. Preparing plan options and sustainability appraisal		
29. Engaging with stakeholders and interested parties		
30. Reviewing marine plans every 3 years		
31. Potential competent authority role under Marine Strategy Framework Directive		
Marine Environmental Licensing	32, Marine Act licensing - replacing existing FEPA/CPA licensing from Q1 2011	<p>Gap 1. MMO re-branding of all existing templates and outputs associated with current MFA systems.</p> <p>Gap 23. A new MMO marine licensing system (based on MCMS/ MCSS).</p> <p>Gap 2. New (enhanced) GIS capability, including an agreed Data Management Strategy.</p> <p>Gap 7. To provide limited MCMS access to the Stakeholder (to grant Stakeholder FEPA licences from April 2010).</p>

	33. Wildlife licensing - Issuing licences under Conservation of Seals Act and Wildlife & Countryside Act (currently done by Natural England) from April 2010	Gap 9(a). Issuing of licences under the Conservation of Seals Act, Wildlife and Countryside Act (currently delivered by Natural England and to be transferred to MMO from April 2010).
	34. Wildlife licensing - Issuing licenses under Offshore Marine Regulations (existing function but relatively new and potential to align with Marine Act licensing)	Gap 9(b). Issuing of licences under Offshore Marine Regulations (currently delivered by MFA but with potential to align with the Marine Act licensing).
	35. Electricity Act licensing - Issuing licenses under Electricity Act (currently done by DECC) from April 2010 (intention is to align with Marine Act licensing process)	Gap 5. Issuing of licences under the Electricity Act – adopt DECC spreadsheet or amend MCMS.
	36. Providing advice and proposing conditions etc to Infrastructure Planning Commission for deemed Marine Act licenses	No.
	37. Harbours Act functions currently delivered by DfT from April 2010	Gap 6. Harbours Act functions - adopt DECC spreadsheet or amend MCMS.
	38. Nature conservation by-laws - new function under Marine Act from April 2010 – in relation to Marine Conservation Zones 0-12nm. Likely to follow similar process to that used by SFCs/IFCAs	Gap 12 As a new function under the Marine Act, management of conservation by-laws in relation to Marine Conservation zones.
	39. Licensing of oil spill treatment products (as MFA but under new secondary legislation under Marine Act)	No.
Fisheries management	40. All existing fisheries management functions – licensing, managing fleet capacity, quota management, reporting & stats.	Gap 1. MMO re-branding of all existing templates and outputs associated with current MFA

	<p>BUT the process followed / reporting arrangements etc for some may change in consultation with Defra to take account of new status – in particular Quota Management.</p>	<p>systems.</p> <p>Gap 2. New (enhanced) GIS capability, including an agreed Data Management Strategy.</p> <p>Gap 4. Update the existing MFA TR application (Time Logging) in readiness for MMO vesting.</p> <p>Gap 19. Updating the FAD and ERS systems to incorporate e-sales notes and e-logbooks</p> <p>Gap 20. Migrate existing Fisheries systems to supportable IS platforms</p> <p>Gap 21. Develop obligatory reports and analyses to a wide variety of overarching organisations, including FOI requests and support to Policy division</p> <p>Gap 26. A full review of all existing MFA systems, as the complexity of some of the current systems might need a full revision or a rebuild.</p> <p>Gap 27. Review vessel registry functions, should they be transferred to the MMO from the RSS in Cardiff (decision awaited).</p>
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	41. Appointments to Inshore Fisheries Conservation Authorities – new role (existing similar role in relation to SFCs carried out by Defra)	Gap 24. Allow IFCA access to MMO systems (based on allowing access to MCMS, and greater access to MCSS and RNSS).
Operations (Including enforcement, transactional services and field support)	42. Updated enforcement powers from Marine Act (such as administration penalties for UK Fisheries regulators) Marine Enforcement Officers, including IFCAs	Gap 1. MMO re-branding of all existing templates and outputs associated with current MFA systems. Gap 2. New (enhanced) GIS capability, including an agreed Data Management Strategy. Gap 25. Possible amendments will be required to MMO systems to enable IFCA's to enforce administrative penalties, marine conservation enforcement and handling pollution incidents.
	43. New enforcement role in relation to licensing systems (as above) and nature conservation bylaws	Gap 10. Marine Nature Conservation enforcement role.
	44. Admin penalties systems for nature conservation legislation and licensing regimes	Gap 11. Administration of penalties for nature conservation legislation. (amendments to MCMS)
	45. Enhancing Existing enforcement functions – inspections, stop and emergency safety notices, compliance & remediation notices.	Gap 10. Marine Nature Conservation enforcement role.
	46. Managing European grants schemes	No.
	47. Provision of training for Marine Enforcement Officers – MMO staff and for EA/IFCAs etc	No.
	48. Marine pollution emergencies response function	Gap 15.

	(as MFA)	A 'one-stop' MMO specific website to provide advice and guidance on pollution emergencies
	49. Environmental Liability Directive competent authority role (as MFA)	Gap 14. Environmental Liability Directive authority role (as per current MFA responsibilities).
	50. New enforcement role in relation to illegal, unreported and unregulated fishing	Gap 22. Further analysis to determine the extent of required future IS application enhancements to meet the new IUU regulations.
Local Office Network	51. As now – FAD etc BUT will likely change to encompass marine planning etc roles – also useful to consider what access local offices will need to planning, licensing and marine nature conservation IT systems.	Gap 1. MMO re-branding of all existing templates and outputs associated with current MFA systems. Gap 2. New (enhanced) GIS capability, including an agreed Data Management Strategy.

5 Appendix 3 - Gap Analysis, MMO Priority, Impact and Low Level Requirements Definition Status

Date	Priority	Impact	Req. Defined	Gap Requirement	Status
Early Build April 2010	High	High	To be defined	Gap 23. A new MMO marine licensing system (based on MCMS).	Low level requirements have yet to be defined as part of an integrated Content Management IS solution. Agreement to proceed to procurement has yet to be granted.
Early Build April 2010	High	High	To be defined	Gap 2. New (enhanced) GIS capability, including an agreed Data Management Strategy.	Low level requirements gathering / solution options are being defined. This is being progressed within the GIS Requirements and Data management work-streams.
Early Build April 2010	High	High	To be defined	Gap 16. Procure a new Customer Relationship Management (CRM) application to manage stakeholder communication, including Knowledge Management capability to enable good decision support in preparing plan options and sustainability appraisals.	Low level requirements are being defined as part of an integrated Content Management IS solution. Agreement to proceed to procurement has yet to be granted.
Early Build April 2010	High	High	To be defined	Gap 17. Procure new extranet functionality.	Low level requirements are being to be defined as part of an integrated Content Management IS solution. Agreement to proceed to procurement has yet to be granted.
April 2010	High	High	In Progress	Gap 7. To provide limited MCMS access to the Stakeholder (to grant Stakeholder	Low level requirements are being defined via direct discussions are progressing between the Stakeholder and CEFAS.

				FEPA licences from April 2010).	It is unclear whether this functionality will be available for April 2010.
April 2010	High	High	In Progress	Gap 3. A new MMO website / updated intranet. It is assumed that this will initially be a re-brand of current MFA website.	<p>Low level requirements are being defined for the re-branding of the existing MFA website / intranet.</p> <p>This is an internal MFA task (currently being scheduled for delivery by April 2010).</p> <p>Low level requirements are not fully defined for the provision of an integrated Content Management website solution.</p>
April 2010	High	High	In Progress	Gap 1. MMO re-branding of all existing templates and outputs associated with current MFA systems.	<p>Low level requirements are being defined.</p> <p>This is an internal MFA administration task (currently being scheduled for delivery by April 2010).</p>
April 2010	High	Medium	Yes	Gap 4. Update the existing MFA TR application (Time Logging) in readiness for MMO vesting.	<p>Low level requirements are defined.</p> <p>This is an internal MFA administration task (currently being scheduled for delivery by April 2010).</p>
Within 2010	High	High	Yes	Gap 19. Updating the FAD and ERS systems to incorporate e-sales notes and e-logbooks.	Low level requirements are defined and being progressed as part of the FISS programme (for deployment in 2009 and 2010).
Within 2010	High	Medium	To be defined	Gap 20. Migrate existing Fisheries systems to supportable IS platforms.	<p>High level requirements need to be defined.</p> <p>Agreement to proceed has yet to be granted.</p>
Within 2010	High	Medium	To be defined	Gap 21. Develop obligatory reports and analyses to a wide variety of overarching organisations, including FOI requests and support to Policy division.	High level requirements need to be defined.

Within 2010	High	Medium	To be defined	Gap 22. Further analysis to determine the extent of required future IS application enhancements to meet the new IUU regulations.	High level requirements need to be defined.
Within 2010	Medium	Medium	In Progress	Gap 10. Marine Nature Conservation enforcement role.	Low level requirements are being defined by the Marine Nature Conservation Team (in readiness for delivery within 2010). Regardless of any future system solutions, these requirements need to be incorporated into the current MCSS system within 2010.
Within 2010	Medium	Medium	In Progress	Gap 11. Administration of penalties for nature conservation legislation.	Low level requirements are being defined by the Marine Nature Conservation Team (in readiness for delivery within 2010). Regardless of any future system solutions, these requirements need to be incorporated into the current MCMS system within 2010.
Within 2010	Medium	Medium	In Progress	Gap 12. As a new function under the Marine Act, management of conservation by-laws in relation to Marine Conservation zones.	Low level requirements are being defined by the Marine Nature Conservation Team (in readiness for delivery within 2010). Regardless of any future system solutions, these requirements need to be incorporated into the current MCMS system within 2010.
Within 2010	Medium	Medium	In Progress	Gap 14. Environmental Liability Directive authority role (as per current MFA responsibilities).	Low level requirements are being defined by the Marine Nature Conservation Team (in readiness for delivery within 2010). Regardless of any future system solutions, these requirements need to be incorporated into the current MCSS system within 2010.
Within 2010	Medium	Medium	Yes	Gap 15. A 'one-stop' MMO specific website to provide advice and guidance on pollution emergencies.	Requirements are defined. Software is developed and hosted/operational in JNCC.

					An agreement required from MMO to accept / maintain this website software.
Within 2010	Medium	Medium	Yes for s/sheet. No for MCMS	Gap 5. Issuing of licences under the Electricity Act.	Low level requirements are defined for transfer of Excel spreadsheets from DECC to the MMO. If wanted, low level requirements are not defined to incorporate this functionality into the current MCMS system.
Within 2010	Medium	Medium	Yes for s/sheet. No for MCMS	Gap 6. Harbours Act functions	Low level requirements are defined for transfer of Excel spreadsheets from DfT to the MMO. If wanted, low level requirements are not defined to incorporate this functionality into the current MCMS system.
Within 2010	Medium	Medium	Yes for s/sheet. No for MCMS	Gap 8. Providing advice to Department for Transport in respect of proposed works under the Transport Act.	Low level requirements are defined for transfer of Excel spreadsheets from DfT to the MMO. If wanted, low level requirements are not defined to incorporate this functionality into the current MCMS system.
Within 2010	Medium	Medium	In Progress	Gap 9(a). Issuing of licences under the Conservation of Seals Act, Wildlife and Countryside Act (currently delivered by Natural England and to be transferred to MMO from April 2010). Gap 9(b). Issuing of licences under Offshore Marine Regulations (currently delivered by MFA but with potential to align with the Marine Act licensing).	Low level requirements are being defined by the Marine Nature Conservation Team (in readiness for delivery within 2010). Regardless of any future system solutions, these requirements need to be incorporated into the current MCMS system within 2010.
Within 2010	Low	Medium	To be defined	Gap 18. Help Desk software to support existing MFA/MMO personnel in providing IS specific application support.	Low level requirements need to be defined. Agreement to proceed to procurement has yet to be granted.
Within	Low	Medium	In	Gap 13. To provide advice to	Low level requirements are being defined by the

2010			Progress	stakeholders (such as JNCC and Natural England) to inform site selection processes for Marine Conservation Zones and Natura 2000 sites.	Marine Nature Conservation Team (in readiness for delivery within 2010). Regardless of any future system solutions, these requirements need to be incorporated into the current MCMS system within 2010.
Early 2011	High	Medium	To be defined	Gap 24. Allow IFCA access to MMO systems (based on allowing access to MCMS, and greater access to MCSS and RNSS).	Low level requirements gathering is being planned.
Early 2011	Medium	Medium	To be defined	Gap 25. Possible amendments will be required to MMO systems to enable IFCA's to enforce administrative penalties, marine conservation enforcement and handling pollution incidents.	Low level requirements gathering is being planned.
2011	Medium	Medium	To be defined	Gap 26. A full review of all existing MFA systems, as the complexity of some of the current systems might need a full revision or a rebuild.	High level requirements need to be defined (as part of an integrated Content Management IS solution). Agreement to proceed had yet to be granted.
2011	Medium	Medium	To be defined	Gap 28. GIS Business System Integration Strategy	High level requirements need to be defined (as part of an integrated Content Management IS solution).
2011	Low	Low	N/A	Gap 27. Review vessel registry functions, should they be transferred to the MMO from the RSS in Cardiff (decision awaited).	Status is green this is currently not a MMO responsibility.