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REVIEW OF THE MARINE SPATIAL PLAN FOR THE SHETLAND ISLANDS

*Monitoring and evaluating progress in Marine Spatial
Planning in Shetland 2012*

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1. Introduction to 'The Review'

This review of Shetland Marine Spatial Plan (SMSP) is a brief report summarising the findings of an internal appraisal of the third edition of the SMSP. The report aims to provide an overview of the SMSP achievements to date, including its successful endorsement internationally as an exemplar case study for marine spatial planning. Areas for improvement and refinement in policies and data that have been identified as part of this Review will be considered when moving forward in the fourth edition of the SMSP. This monitoring and evaluating exercise is a key step in the ecosystem based approach to marine spatial planning (Ehler and Douvère, 2009). The report also presents an opportunity to evaluate outputs and outcomes at the national level, and identify lessons learned with a view to influencing the development of the marine planning system for Scotland (Marine Scotland, 2010a and 2010b).

2. Context of the Shetland Marine Spatial Plan

Marine spatial planning is currently being implemented under the Marine (Scotland) Act, 2010 and UK Marine and Coastal Access Act, 2009. The SMSP was first developed in 2006 under the auspices of the Scottish Sustainable Marine Environment Initiative (SSMEI), which was funded by the Scottish Government via Marine Scotland and guided by a national and local steering group. Since the launch of the third edition and the end of the pilot in 2010, the SMSP has been championed by the Marine Spatial Planning Section at the NAFC Marine Centre who continue to engage regularly with key stakeholders, supported by a SMSP Local Advisory Group. The SMSP represents an innovative approach to marine planning, based on Scottish Ministers' commitment to making marine management more efficient, inclusive and accessible now and for future generations.

A Strategic Environmental Assessment (SEA) informed the development of the third edition of the SMSP which considered the environmental effects of the policies implemented as part of the SMSP and afforded an opportunity to mitigate any adverse effects identified. As with any strategic spatial plan that provides an overarching policy framework for marine development, a key stage of the process is the continued monitoring and assessment of policies and indicators. It is envisaged that 'The Review' will provide an insight into how the current marine policies and management strategies are progressing to date.

Notwithstanding its statutory ordnance through the Marine (Scotland) Act, 2010, the fourth edition of the SMSP will become formally adopted through Shetland Islands Council's Local Development Plan (LDP) as Supplementary Guidance in 2013.

3. Methodology

The Review encompasses a qualitative and quantitative assessment involving an analysis of responses from the previous SMSP consultation in 2010, questionnaires carried out with key stakeholders and an appraisal of survey responses to on-going national marine planning-related studies. A sample review of marine planning applications and works licences was also undertaken as was an analysis of SMSP data requests. A summary of the findings is provided in the subsequent sections.

4. Progress since the 2010 Consultation on the Shetland Marine Spatial Plan

As part of the SMSP preparatory process in 2010 (third edition), a consultation exercise engaging responses from statutory and non-statutory stakeholders was carried out. A detailed summary of the comments received, the SMSP Team responses and actions required are included in Appendix I. Responses on the SEA were considered previously and included in the [Post Adoption Statement](#).

It is widely acknowledged that a significant body of work had already been undertaken in the preparation of the first two editions of the SMSP prior to the third edition in 2010 (Marine Scotland, 2010). In particular, one stakeholder highlighted the following:

The achievements on data gathering/compilation and on local consultation are particularly notable.... (Scottish Natural Heritage, 2010)

Responses from the 2010 consultation have helped to prioritise marine spatial planning work since, including the development of regional locational guidance and cumulative effect assessment.

It is encouraging to report that all consulted agreed on the necessity for continued support for the SMSP and its progress. In 2012, the legislative context of the SMSP was updated to align with the imminent National Marine Plan and the Shetland Islands Council Local Development Plan 2013 (LDP), the latter adopting the SMSP as Supplementary Guidance. This 'joined-up' approach between marine and terrestrial development plans is endorsed by stakeholders. More guidance on the necessary planning requirements for land and sea-based developments will be included in the SMSP, which will be adopted as SG in 2012. This will ensure a properly co-ordinated approach to integrated coastal zone management and marine spatial planning in Shetland. This mechanism is in line with the EC's guiding principle of marine spatial planning (CEC, 2008).

The 'Swarbacks Minn sub-area plan' was a study which focused primarily on the extensive aquaculture development in this subject area. At the time there was a need for a detailed review of aquaculture usage and capacity to ensure the effective and safe management of this particular marine resource. The detailed study informed the development of the aquaculture policies included in the SMSP. Following more recent consultation with the aquaculture industry and marine planning officials, it is clear that there is currently no scope for new aquaculture developments in the Swarbacks Minn area and existing developments are unlikely to change. Although the SMSP policy on aquaculture development within this area will be removed in the next edition as a consequence, other aquaculture policies will remain. The trialling of spatial sub-plans for particularly busy areas was a good exercise in providing greater spatial guidance to individual sectors and guiding policy development.

A number of responses received as part of The Review identified opportunities for development in the fourth edition of the SMSP. The recently published '*Regional Locational Guidance for Wave and Tidal Devices in the Shetland Islands*' (RLG) which identifies suitable locations/ spatial opportunities for the development of tidal and wave devices is a measured approach to this issue (Tweddle *et al.*, 2012). This is one of the first steps in guiding future development in the SMSP. As the SMSP develops and is monitored over time, other opportunities will be explored if and when the need arises i.e. off-shore wind devices (within 12 nautical miles); seaweed cultivation etc.

Scottish Natural Heritage (SNH) recently compiled a list of Priority Marine Features (PMFs), which comprise marine habitats and species considered to be of conservation importance in Scottish territorial waters. The finalisation of the PMF list is pending. The draft recommended list of PMFs which has been peer-reviewed contains 56 habitats and species, 44 of which are present in waters around Shetland. Once endorsed by Scottish Ministers, it will be used to help prioritise marine conservation work, guide future research and support the advice SNH gives on marine biodiversity (Marshall *et al.* in prep.). This process will be monitored and implemented within the SMSP when required.

The imminent designation of Marine Protection Areas (MPAs) under the Marine Scotland Act, 2010 will also be closely monitored by the SMSP team. In particular, Fair Isle is being considered as a search location for designation as both a Demonstration and Research MPA and Nature Conservation MPA. Additionally, Fetlar is also being considered as a Nature Conservation MPA. Any progress will be included and updated in the SMSP including any other designations outwith the existing plan.

A synopsis of the remaining matters highlighted as part of this Review is discussed in the following section.

5. Key Themes

As part of the Review, a number of recurring topics were discussed and are summarised under key themes. The current work being undertaken to address these themes and the more pertinent issues are outlined in the subsequent sections.

5.1 Provision of comprehensive data and information

One of the key inputs to the marine spatial planning process is spatial data. The development of any plan should be based on the best available information otherwise poor or limited data may limit the scope of the planning exercise (Gilliland and Laffoley, 2008). A comprehensive range of spatial data has been collated on the marine environment around Shetland and is included in the Marine Atlas.

All responses received from the questionnaires highlighted how useful the Marine Atlas has been in providing important guidance and spatial context at a local level. For example, as aquaculture is quite a mature industry in Shetland, one of its representatives felt that the Marine Atlas would be of highest value for companies new to Shetland. This was echoed in a response from the marine renewables industry where it was felt that both the Policy Framework and Atlas were easy to use and had assisted at feasibility, scoping and pre-consultation stages. In particular, it was noted that the baseline information contained within the SMSP had been used to consider environmental restrictions/ key sensitivities; cultural and heritage interests; and industry/ built infrastructure parameters and exclusion areas. Responses from industry also confirmed that the SMSP would be referenced in supporting documentation going forward for planning permission/ work licenses.

It was also confirmed that the SMSP had provided new information that developers were directly unaware of and would have led them to expend considerably more resources in accessing the information from elsewhere.

One survey response from the dredging industry agreed that the SMSP was very helpful at an initial planning stage and where more data becomes available it will continue to be of use. It was also confirmed that the SMSP was used to help assess the potential conflicts with other marine activities.

At a renewable energy conference held in Shetland in November 2011, the director of a renewable energy company stated that the SMSP made Shetland '*a more attractive place to come*'. This is a clear indication of how the SMSP has been of significant help in attracting developers and investment to Shetland. Incorporating renewable energy development and specific policies in the SMSP adds certainty to the sector and facilitates its long-term investment (Ehler, 2008).

From an industry perspective it is evident that the SMSP is proving to be helpful in the consideration and location of marine developments, in particular, with their initial planning stages. There is constant demand for the data to be kept up-to-date and where further data becomes available it will be published within the Marine Atlas and reviewed every 6 months.

Since records of registrations for data requests commenced in August 2010, there has been a total of forty-two requests for data downloads of the SMSP Atlas from the NAFC Marine Centre [website](#). The requests were submitted by a number of organisations, with the majority being industry-related. A snapshot of the requests for data is included in Table 1, Appendix II and is a good indication of who is using the SMSP Atlas data.

In terms of marine planning and licensing, Shetland's Coastal Zone Manager confirmed that both the SMSP Policy Framework and Marine Atlas are consulted for all marine development proposals, with the latter also being useful in terms of providing spatial context and information on other marine users. A brief review of a sample of permitted marine-related planning applications and works licences from 2006 noted that the SMSP had been referenced in 46% of the sample documents reviewed for 2009. While this figure has decreased steadily in the subsequent years it was conceded that this should not be interpreted as a decline in its use; it may be an indication that planners and developers are more familiar with the SMSP and as such have no need to make reference to it continuously. Quantitative figures on the use of the SMSP are also not entirely representative because some users may only use it in cases where there was a direct need to reference it (i.e. to give weight to an objection as per SNH comments in the PMF pilot study). A summary of the findings from the sample applications/ licences review is included in Table 2, Appendix II.

Scottish Natural Heritage's (SNH) local officer also confirmed that they quote SMSP policies or refer to the Marine Atlas at scoping/pre-application stage which may not be recorded in the applications. More specifically however, SNH confirmed that they generally only refer to the SMSP in application responses if the proposal is outwith the SMSP policies (Marshall *et al.*, in prep.).

It is reassuring to learn that government agencies, the local authority and developers are using the SMSP policies and data in the consideration of planning applications and works licences. This is imperative to ensure legal authority and political support for the successful implementation of marine spatial planning. It is widely regarded that marine spatial planning should be implemented as a statutory, enforceable process, rather than a non-binding one (Schaefer and Barale, 2011).

5.2 Identifying development opportunities

Defining and analysing future conditions for ocean space is an integral step in the marine spatial planning process (Ehler and Douvère, 2009). In the SSMEI National Review it was recognised that there may be some reluctance to defining strict zones for different activities (Marine Scotland, 2010b). However, it was stated that without any clear spatial guidance on which activities might be able to co-exist in which areas, marine spatial planning is unlikely to achieve its stated aim of 'giving direction' or 'streamlining the development application process' for developers and regulators. It was suggested that zones could be used to define areas by their character, existing uses and suitability for different activities, within which more specific policies can apply.

It is acknowledged that some industry representatives are not in favour of zoning of sea uses/ activities. One of the renewable energy developers consulted in the Review considered it best to avoid setting 'hard' zones for the development of energy renewables. Given that the industry is fast evolving developers felt that there are many parameters to be considered including the actual capacity/ size of array development, type of technology, energy climate and extraction performance etc. Some previous efforts at zoning development areas seem to have been based on somewhat arbitrary or directly challengeable assumptions (e.g. cut off set on available energy climate or overall farm capacity). Therefore developers were of the opinion that as their understanding of the technologies improves with maturity/commercialisation then re-assessment of factors such as of potential interactions and optimal siting is expected. A cumulative approach that maintains the ability to re-analyse the localisation of energy renewables with 'fuzzy' zones/ preferred areas without excluding any but the most restricted/ sensitive sites is the favoured option.

Consultation with an aquaculture representative revealed that it is very challenging to predict development zones due to difficulty in assessing what currently is and what will become suitable for evolving industries. They noted that although in the past the Crown Estate and some universities had tried to develop a few different models of marine use for both aquaculture and renewables, they had a number of limitations. It was felt that the aquaculture industry is highly regulated and any new models will not necessarily be well received. It was conceded however that this will be different for different activities and this approach may be useful for emerging industries such as renewables and seaweed growing.

The recently published Regional Locational Guidance for Wave and Tidal Devices in the Shetland Islands (RLG) is a first step in identifying opportunities for future development. This mapping exercise was undertaken by the SMSP team to develop local guidance for wave and tidal devices, and cable landing points around Shetland (Tweddle *et al.*, 2012). Maps showing potential areas of least resistance in the planning regime were created through a process of consultation with local advisors, planners, regulators, communities and developers. They are designed as a support tool to make more informed decisions about where developments are likely to be successful and where they are likely to meet resistance. The findings of the assessment are part of an on-going process which will change as new information is incorporated into the RLG.

In accordance with European guidance, the management of maritime spaces through marine spatial planning should be based on the type of planned or existing activities and their impact on the environment (CEC, 2008). In Europe driving factors such as demands for marine renewable energy

were perhaps the catalyst for identifying opportunities for development (Johnson *et al.* 2012). In the North Sea, for example, the Dutch government in developing their Integrated Management Plan for the North Sea included opportunity maps for the functions expected to show the strongest growth and are bound to a fixed location such as wind farms, minerals extraction and conservation (IDON, 2005). Therefore, incorporating multi-use objectives or zoning and supporting regulations for future development are options worth considering as key management measures in the fourth edition of the SMSP.

5.3 Economic benefits from conservation measures

Different marine areas have different values and sensitivities in both biophysical and human dimensions (Ehler, 2008). Therefore the identification of compatible uses and areas for development is dependent on integrating information on current marine uses and key marine features across different sectors. This will inform users and developers of potential conflicts when selecting sites.

The recent successful outcome of a two-year process to gain Marine Stewardship Council (MSC) accreditation for three shellfish stocks (king scallops, brown and velvet crabs) is an example of how the local Shetland inshore fishing industry have endorsed conservation measures to gain potential market advantage. The management measures include shellfisheries closures to protect important seabed habitats such as maerl, horse mussel beds and eel grass. The closures were voluntary in the first instance but were subsequently made statutory (by Scottish Government) at the behest of industry.

Initially, data relating to the distribution of reef was considered to be poor, dated or contested as no longer true (horse mussel beds in particular are known to collapse and diminish). The stakeholders agreed to adhere to the existing data in the SMSP after the NAFC Marine Centre pledged to map the areas in detail using its side-scan sonar equipment the following year (Marshall *et al.*, in prep.). These areas will be reviewed and updated accordingly in the fourth edition of the SMSP Marine Atlas.

As a result of the MSC accreditation, the seafood industry is assured that the shellfish stocks come from a well-managed and sustainable source. This may have important ecological and economic impacts for the local inshore fishery. It has been reported that the MSC standard to which fisheries are certified 'allows the marine environment to flourish, helps seafood remain a global nutritional resource, and helps ensure that fishing-related livelihoods thrive for generations to come' (MSC, 2012). There is also the potential for higher prices for MSC certified fisheries. It has been stipulated that due to the growing consumer demand and increasing retailer commitments to source only MSC certified fish, at least some products associated with certain MSC certified fish stocks have achieved better market price.

This is a clear indication of how marine spatial planning can play a role in achieving economic and social objectives that respect environmental parameters.

5.4 Addressing Cumulative Impacts

A recurring issue raised during this Review process has been the need to address cumulative impacts. Although a number of pilot studies and the pre-consultation draft National Marine Plan have included a matrix of interactions and/or matrix of sensitivities (Scottish Government, 2011),

this provides only an initial simplified view of the likely level of interactions between a range of marine users. The SSMEI National Review report highlighted that the process of identifying interactions both between different uses/activities and the marine environment has been very effectively carried out by several of the pilot projects. However, it would be more relevant to test whether a more 'spatial' approach to this exercise would identify particular locations where specific policies are required to resolve interactions (Marine Scotland, 2010b). It was also recommended that the key interests in an area could be mapped (e.g. marine biodiversity interests; marine recreation hotspots; or marine renewable energy resource) so that potentially competing or complementary uses could be identified and appropriate policies drafted to address such interactions.

The sensitivity matrix in the current SMSP was a first step in determining potential impacts between human activities and important species and habitats around Shetland. The next logical step was to address cumulative impacts, interactions and capacity of marine resources to accommodate future sustainable development. Current work being carried out as part of the SMSP is using GIS to map cumulative pressure areas around Shetland based on an ecosystem-based risk assessment (ERA). This location specific method is a move away from the generic, single sector analysis approach of the interactions matrix, and is deemed more relevant and sympathetic to local factors.

As consultation on the cumulative impacts exercise is on-going with local experts and stakeholders in Shetland, there are opportunities to adapt and improve on the methodology and data used. It is hoped that this exercise will promote discussion and debate among stakeholders and subsequently help to advise and formulate future policy in the SMSP.

5.5 Shetland Marine Spatial Plan as an Exemplar Case Study

Since the SMSP was first initiated in 2006, a number of reviews in relation to marine spatial planning progress have been carried out nationally and internationally. The SMSP team have responded to a number of surveys and questionnaires and have assisted with third level international research projects on this topic. Given that the SMSP was first developed prior to any European guidance (i.e. the 'Blue Book', 2007 and the Roadmap for Marine Spatial Planning in 2008), it may be regarded as a pioneer in the realm of marine spatial planning.

The SMSP has been constructive in helping the Scottish Government to develop a national planning framework for Scotland (Marine Scotland, 2010a and 2010b). The SMSP has been regarded as a 'marine user/regulator-based development model' in comparison to the other pilot studies (Marine Scotland 2010a).

Similarly, the SMSP team have been influential in providing advice at an international and regional level through collaboration, consultation and presentations at workshops and conferences including the [ICES Annual Science Conference in 2012](#); the [Challenger Conference for Marine Science in 2012](#); [Nordic Oceans Conference](#) in 2011; the [Joint HELCOM/VASAB, OSPAR and ICES Workshop on Multi-Disciplinary Case Studies of Maritime Spatial Planning](#) in 2011; the [Conference of Peripheral Maritime Regions](#) in 2009; and with Local Coastal Partnerships at the [Dorset Coast Forum/ C-Scope conference](#) in 2009.

Consultants advising the UK Government have also reviewed the marine spatial planning model developed in Shetland (ABPmer, 2012). In the United States a specialist taskforce group was

established to assess a representative set of 17 marine spatial plan examples from around the world. This was to provide strategic advice on the design and implementation of coastal and marine spatial plans around the US (ESMWG, 2011). The SMSP was included in this study, the outcomes of which helped inform a set of recommendations for progressing coastal and marine spatial planning.

At national level a project investigating a hypothetical case study to explore the range of issues in selecting sites for marine energy device arrays, in particular tidal energy devices in the Shetland Islands, was conducted by the UK Energy Research Centre (UKERC, 2009). The Shetland Islands were selected for the study due to the availability of local environmental and socio-economic data within the SMSP. It was concluded that the detailed local data was 'invaluable' in the assessment and in particular for the onshore connection routes and possible negotiations with fisheries interests. It was also recommended that such exercises could be usefully replicated elsewhere (UKERC, 2009).

It is important to share knowledge and practical experiences of marine spatial planning with other regions as it is still regarded as an evolving discipline. Ensuring that marine spatial planning is adaptive will allow uncertainty to be addressed and progress made over time. This will be necessary for successful implementation given the inherent and dynamic nature of marine and human ecosystems. It is also imperative to understand that early 'pioneers' in marine spatial planning may not 'get it quite right' on the first attempt but by developing initial precedents and processes, these can and should be built upon in the future (Ehler, 2008). The sharing of experience and best practice is imperative to this learning process.

5.6 Future Challenges and Opportunities

Spatial Data

One major challenge is the use of spatial data and in the SMSP experience specifically, the use of local datasets versus national datasets. Collecting and collating spatial datasets has proved to be labour intensive. Data sources include government agencies, the local authority, industry, the local community and regular sea users. This data has been checked with local stakeholders for quality assurance and is deemed to be as accurate as is realistically possible. The data continues to be updated on a regular basis as new or improved information becomes available.

The challenge lies with the preferential use of this locally collated data over the use of national datasets however. On a number of occasions developers, consultants and even government agencies have chosen to use national data instead of the quality assured and locally consulted data in the Marine Atlas. Projects using the national dataset as opposed to local data have been data deficient, and resulted in inaccurate models and mapping outputs. For example, in a recent natural heritage study using data on important natural heritage features in Shetland, the consultants used the data from GEMS¹ as opposed to the SMSP Atlas (Marshall *et al.*, in prep.). The resultant preliminary maps were inaccurate as not all SACs, SPAs and SSSIs for Shetland were included. As part of the SMSP process a local biodiversity working group separated out the designated areas with a marine element, which also underwent public consultation. Therefore, the use of local datasets should be acceptable over the use of national datasets when they have already undergone scrutiny at consultation stage. This has the potential to cause future problems where licencing is controlled at the national level.

¹ Geodatabase for Marine Habitats and Species in Scotland (GeMS)

Another example of data inconsistency is the recently published pre-consultation Regional Locational Guidance for Offshore Wind, Wave and Tidal Energy in Scottish Waters by Marine Scotland. The modelling outputs do not accurately represent current marine uses in Shetland waters as they do not include local data on fisheries, marine recreation and shipping. This data is comprehensively mapped and available in the SMSP Marine Atlas. As a result, the national mapping output may be misleading to potential developers and is contradictory to the SMSP intentions, which are to ensure and promote 'buy-in' of local data use. This issue of preferring national datasets over locally consulted datasets is a challenge which should be addressed. From the SMSP experience, stakeholder involvement and confidence in the planning process is dependent on locally consulted sourced and validated data.

There are numerous sources of available national datasets including GEMS, National Biodiversity Network (NBN gateway), the Crown Estate's Marine Spatial Planning system (MaRS) to name just a few. Ideally local data should be compared to existing national sets and a gap analysis conducted. As a large number of national and regional marine and coastal data are being collected through dedicated marine research programmes at Scottish universities and research institutions, it may be difficult to decipher the range and scale of information that is available. This may be confusing for developers and marine users, and in a recent Shetland example, renewable energy developers were collating data in a scoping report from a range of sources with some national datasets taking precedence over SMSP local datasets. It is imperative that all data collated is current and at the same time fit for purpose. It was also suggested by one respondent in the Review that links could be provided within the SMSP to existing geospatial portals/ infrastructure, such as the NBN directly in the Marine Atlas or in the metadata spreadsheet. These possibilities will be explored for the fourth edition.

To allow for a more holistic marine knowledge base it is important to record historical, anecdotal and predictive data. The ability to predict ecosystem behaviour is currently limited and knowledge on states, processes and outcomes relating to ecosystem impacts is, and will continue to be, very uncertain (Ehler, 2008). Therefore it is imperative that relevant and appropriate data, both historical and current, are collected and collated; this is a lengthy and continuous process. All spatial data in the SMSP is held in both MapInfo and Esri Arc Geographic Information System (GIS) formats. It should be noted that a confidence rating has been assigned to all data used in the RLG and the cumulative impacts assessment mapping. Any data given a low confidence rating has been treated with due caution in any analysis or decision making (C-Scope, 2012).

Another challenge for data collation and management is commercial sensitivity and ownership of personal data. An example of this is the recent inclusion of VMS² data for local whitefish boats around Shetland in the SMSP. Whitefish fishing grounds were historically mapped in the Marine Atlas based on anecdotal evidence (i.e. hand drawn polygons in consultation with only a cross section of local fisherman). More recently these maps were not considered to be accurate enough or a true reflection of important whitefish fishing grounds however, access to local fishermen's VMS data was provided by the Shetland Fishermen's Association (SFA) and individual vessel owners as a result. The need or catalyst for more up-to-date data resulted partly from plans for renewable energy exploration in the waters surrounding Shetland. Based on the local permissions granted

² Vessel Monitoring System (VMS)

Marine Scotland provided the raw VMS to the SMSP team, which was then aggregated in GIS to provide an overview of fishing intensity. These updated maps are included in the SMSP Marine Atlas. This aggregation of data ensures anonymity of individual fishermen and their fishing grounds. Although at a more project-specific level the need for more detailed and individual data on density/intensity of fishing grounds may be required, this becomes a commercially sensitive request beyond the remits of the SMSP. VMS data is considered as personal, proprietary data so access is strictly controlled at national level (Marine Scotland, 2012) and by the data agreements between the NAFC Marine Centre and individual fishermen. Data sensitivities and ownership are future challenges which should be addressed if the SMSP is to provide a holistic spatial overview of marine usage and sensitivities around the waters of Shetland.

Addressing the needs of individual sectors and their own data requirements is a further challenge. From the Review a number of respondents requested the inclusion of data specific to their own industry needs. For example, the aquaculture industry wished to see the location of wild salmonoid rivers included in the SMSP Marine Atlas. Others wished to see the inclusion of bird telemetry data for offshore renewables and AIS³ data. As the SMSP is an adaptive process, it allows for the regular inclusion and updating of datasets as they become available. The collection and collation of data is on-going and an important stage of the planning process to identify the priorities of different sectors or activities to be integrated into the plan. These priorities should be in line with the overall vision and objectives of the SMSP. If this is done too late in the process and therefore not integrated effectively then there is a risk that the plan will read like a series of discrete sectoral strategies rather than a coherent plan seeking to achieve clear objectives (Marine Scotland 2010b).

The SSMEI National Review noted that a number of the pilot studies reported problems of survey and data gaps when preparing their plans. It was recommended that information on data gaps be collated so that future requirements are prioritised and work to address gaps commenced in advance of statutory marine planning.

Leadership

Several pilots in the SSMEI National Review commented on a difficulty in steering groups reaching consensus; pending selection of Scottish Marine Regions this may continue to be a challenge. It was felt that without a lead body to make a final judgement, there is a risk that policies become very high-level and general as detail and direction is sacrificed in order to ensure everyone is accommodated. It is important that consensus is reached and the plan is acceptable to everyone but individual policies need to be precise, targeted and enforceable. With this in mind, the fourth edition of the SMSP will address any concerns regarding generality or simplification of policies. The RLG and cumulative impacts mapping in addition to other current work, such as mapping of invasive non-native species, all culminate in providing more specific policies and direction in the SMSP.

Status of Plan

Another challenge for marine spatial planning has been the non-statutory status of the pilot plans to date in Scotland. This problem was highlighted in the Clyde where existing agencies do not have the authority to hold other government departments or agencies to account, or to compel them to comply with the plan (Flannery and Ó Cinnéide, 2012). This is an important consideration which will

³ Automatic Identification System - an automatic tracking system used on ships and by vessel traffic services (VTS)

be addressed in Shetland when the SMSP is adopted by Shetland Islands Council as Supplementary Guidance to the LDP in 2013.

6. Summary

The review of the SMSP has provided a valuable synopsis of how the plan has progressed. Individual and collective comments, feedback and available statistics have provided an important foundation for the fourth edition.

Many of the responses welcomed the continuing development of the SMSP and commended its achievements to date. Many submissions praised the continuing development of the Marine Atlas in particular, finding it to be a very useful resource. Many of the industry representatives, marine planning officials and statutory bodies all confirmed they have been consulting both the Policy Framework and Marine Atlas at initial pre-application and planning stages. One aquaculture industry representative provided an example of planning for a development on the West coast of Scotland and finding it very difficult to obtain the same level of information as included in the SMSP Atlas. This was echoed by the UKERC case study of marine renewables in Shetland that found the data available to be 'invaluable'.

The SSMEI National Review suggested that some of the pilots could trial further work on spatial sub-plans for particularly busy areas, to determine whether sectors would find greater resolution spatial guidance helpful. The trialling of spatial sub-plans for particularly busy areas was considered a good exercise where conducted but should be mindful that any potential sub-area plan needs to ensure that it is not a duplication of another plan and policies, being necessary and distinct.

Another recurring point mentioned throughout the Review has been the need to identify opportunities for development with some reference to zoning. Initial consultations at the start of the Shetland SSMEI pilot study highlighted that, where there is an already reasonable level of marine development, zoning perhaps, is not the best approach. Conventional zoning was perceived as incapable of representing the three dimensional aspect of the marine environment in comparison to terrestrial spatial planning. This is a common misunderstanding however; it is possible to have different activities happening at the same time at different depths in the same zone (Plasman, 2008). In the Great Barrier Reef Management Plan (GBRMP), zoning provides a spatial planning basis for determining where many activities can or cannot occur. Zoning is only one of many spatial and non-spatial management tools used in the GBR by the Authority however (Kenchington and Day, 2011). Important non-spatial management tools used in the GBRMP include *inter alia* community engagement, public education, permitting, and economic instruments.

In the SMSP it was agreed that based on spatial environmental, social and economic constraints a sensitivity-led approach would be more applicable. The recently published '*Regional Locational Guidance for Wave and Tidal Devices in the Shetland Islands*' (RLG) which identifies suitable locations/ spatial opportunities for the development of tidal and wave devices is one of the first steps in guiding future development in Shetland. As the SMSP develops and is monitored over time, other spatial opportunities will be explored when necessary i.e. off-shore wind (within 12 nautical miles); seaweed harvesting/ cultivation etc.

The use of GIS to map cumulative pressure areas around the Shetland Islands based on an ecosystem-based risk assessment (ERA) is addressing the issue of cumulative impacts. It is anticipated that this will assist in the further development of marine policy. Other possibilities to further develop the ERA exist. For example, all of the cumulative physical impacts on the seabed could be spatially overlain with vulnerable seabed habitats or priority marine features such as maerl beds. This could trigger a need for further habitat management or policy development. These options will be considered in more detail in the fourth edition of the SMSP.

Another acknowledged recommendation was to make the policies more focused spatially and create better links between the policy framework and the atlas and in particular, the sensitivity matrix within the SMSP. It is envisaged that the on-going SMSP work on mapping cumulative impacts will be a step further in addressing this shortfall. An example of current success in linking policies is the recent work carried out in conjunction with the Shetland Shellfish Management Organisation (SSMO). This resulted in the statutory closure of areas to scallop dredging where sensitive habitats have been confirmed and validated and/or where sensitive species may be physically impacted. New policies and maps reflecting this development will be included in the fourth edition of the SMSP and updated on a regular basis. This is an indication of how the SMSP natural heritage policies and mapping informed the local fishing industry of spatially conflicting activities. It is imperative to maintain and progress this correlation between policy and mapping.

It is important to reflect on the SMSP's imminent adoption as Supplementary Guidance (SG) to the Local Development Plan. The Review highlighted that some developers felt that because until now the SMSP was being adopted on a voluntary basis, the policies were not being implemented. As a result there was no incentive for them to adhere to policies included in the SMSP or conversely, to highlight developments that may have been non-compliant with certain policies. The forthcoming adoption of the SMSP as SG will ensure that the SMSP policies and maps will be a material consideration in the determination of new applications for development by the planning and regulatory authorities. This marks a unique and significant move to standardise the approaches and responsibilities between terrestrial and marine planning jurisdictions, and reflects a more integrated approach to coastal zone management and marine spatial planning.

Registrations for SMSP data requests evidences that the SMSP Atlas is proving to be beneficial to a range of industry-related organisations, public sector and educational bodies. This is an important development and is in keeping with the overall objectives of the SMSP, which is to better inform the decision-making process by providing as much current and where possible accurate spatial information on marine resources and activities. The continued updating and improvement of data collection and collation will always be a challenge but is a key step in delivering a realistic spatial overview of marine uses, activities, sensitivities and opportunities in the waters around Shetland.

7. Conclusions

A substantial amount of work has been achieved in progressing the SMSP to the fourth edition and will only be enhanced by on-going and future work. The feedback received as part of this Review will continue to inform the marine planning process in Shetland which is largely supported by local stakeholders.

As more detailed guidance becomes available from the Scottish Government in terms of secondary marine legislation, it is believed that the SMSP is in a good position to adapt to any future legislative developments that may be required to become a Scottish Marine Region. Continuous monitoring and evaluation of the marine spatial planning process nationally and internationally will help to develop the SMSP into a stronger and more quality assured instrument. Adaptive management is learning by doing, and while the SMSP may not have addressed everything just yet, it is an evolving process in collaboration with the local community.

References

- ABPmer. 2012. Marine Planning Case Studies. Available at: http://www.abpmer.net/marine-planning/case_studies.aspx. Accessed 2 October 2012.
- Combining Sea and Coastal Planning in Europe (C-SCOPE). 2012. Why one size won't fit all. Marine spatial planning in Belgium & Dorset. Key Messages from the C-SCOPE Project.
- Commission of the European Communities. 2007. Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. An Integrated Maritime Policy for the European Union (the 'Blue Book'). COM(2007) 575 Final.
- Commission of the European Communities. 2008. Communication from the Commission. Roadmap for Maritime Spatial Planning: Achieving Common Principles in the EU. COM(2008) 791 Final.
- Ecosystem Science and Management Working Group (ESMWG). 2011. Strategic Advice on Designing and Implementing Coastal and Marine Spatial Plans. Report to the NOAA Science Advisory Board from the Ecosystem Science and Management Working Group.
- Ehler, C. 2008. Conclusions: Benefits, lessons learned, and future challenges of marine spatial planning. *Marine Policy* 32 (2008) 840-843.
- Ehler, C. and Douvère, F. 2009. Marine spatial planning: a step-by-step approach towards ecosystem-based management. Intergovernmental Oceanographic Commission and Man and the Biosphere Programme. IOC Manual and Guides No.53, ICAM Dossier No. 6. UNSECO, Paris.
- Food Certification International (FCI) Ltd. 2012. MSC Sustainable Fisheries Certification. The SSMO Shetland inshore brown & velvet crab, lobster and scallop fishery. Public Certification Report. January 2012.
- Gilliland, P. M. and Laffoley, D. 2008. Key elements and steps in the process of developing ecosystem-based marine spatial planning. *Marine Policy* 32 (2008) 787– 796.
- Tweddle, J., Gray, L. and Kelly, C. 2012. Regional Locational Guidance for Wave and Tidal Devices in the Shetland Islands. NAFC Marine Centre Report.
- Interdepartmental Directors' Consultative Committee North Sea (*Interdepartementaal Directeurenoverleg Noordzee - IDON*). 2005. Integrated Management Plan for the North Sea 2015.
- Ironside Farrar. 2010. A Marine Spatial Plan for the Shetland Islands. Strategic Environmental Assessment (SEA) Post Adoption Statement.
- Johnson, K., Kerr, S. and Side, J. 2012. Accommodating wave and tidal energy - Control and decision in Scotland. *Journal for Ocean & Coastal Management* 65 (2012) 26e33.
- Kenchington, R. A. and Day, J. C. 2011. Zoning, a fundamental cornerstone of effective Marine Spatial Planning: lessons learnt from the Great Barrier Reef, Australia. *Journal of Coastal Conservation* (2011) 15:271-278. Doi. 10.1007/s11852-011-0147-2.

Levin, P. S., Fogarty, M. J., Murawski, S. A. and Fluharty, D. 2009. Integrated ecosystem assessments: Developing the scientific basis for ecosystem-based management of the ocean. *PLoS Biol* 7(1): e1000014. doi:10.1371/journal.pbio.1000014

Marine Scotland. 2010a. Report on Social and Economic Objectives for a Scottish Marine Plan. ISBN: 978-0-7559-9266-9 (web only).

Marine Scotland. 2010b. Scottish Sustainable Marine Environment Initiative. Project Evaluation.

Marine Scotland. 2012. Satellite Monitoring. Available online at: <http://www.scotland.gov.uk/Topics/marine/Compliance/satellite>. Accessed 4 September 2012.

Marine Stewardship Council (MSC). 2012. Benefits of MSC certification. Available online at: <http://www.msc.org/get-certified/fisheries/benefits-of-msc-certification>. Accessed 28 September 2012.

Marshall, C., Griffiths, C. and Tyler-Walters, H. (in prep). Safeguarding Priority Marine Features – regional pilot study. Report to Scottish Natural Heritage from the Marine Biological Association of the UK. Scottish Natural Heritage Commissioned Report.

Plasman, C. 2008. Implementing marine spatial planning: A policy perspective. *Marine Policy* 32(2008) 811-815

Schaefer, N. and Barale V. 2011. Maritime spatial planning: opportunities & challenges in the framework of the EU integrated maritime policy. *Journal for Coastal Conservation* (2011) 15:237–245 DOI 10.1007/s11852-011-0154-3

Scottish Government. 2011. Scotland's Pre-Consultation Draft National Marine Plan. ISBN: 978-1-78045-084-1

UK Energy Research Centre (UKERC). 2009. Spatial Planning for Marine Arrays: Shetland Islands Case Study. Working Paper. 27 July 2009: REF UKERC/WP/ES/2009/015

Appendix I

Summary of responses from 2010 consultation

1). Scottish Environment Protection Agency (SEPA) - Submission Comments (28/05/2010)	SMSP Team Response/ Comments	Actions required
General Comments - SMSP will help to consider cumulative impacts. Found quick guidance on P.8 very helpful. Support any proposals to monitor and update the Plan.	A review was carried out as part of the preparation of the fourth edition of the SMSP. This will form part of a continuing monitoring process. Also SMSP team currently exploring the use of GIS to map cumulative pressure areas around the Shetland Islands based on an ecosystem-based risk assessment and how this will assist in implementation of marine policy.	Pending publication.
Need to update related references to new legislative changes i.e. Marine Scotland Act, 2010. SEPA policy and guidance also changed and should be referred to generally to avoid Plan becoming out of date. Make general reference to the SEPA website.	Agreed. A number of legislative changes have been implemented since the last edition of SMSP and will be updated accordingly in the fourth edition of the SMSP. Will review all other organisations' policy and guidance.	Action carried out.
Context and Use of the Plan - Welcome joined up approach of SMSP being adopted as supplementary guidance to the Shetland Local Development Plan. Text in sub-section of the Development Plans should be reworded to incorporate adoption as supplementary planning guidance.	Agreed. At the time of SMSP Review, the Shetland Local Development Plan is still in the draft preparatory phase.	Confirmed from SIC Development Plan team that SMSP will be adopted as supplementary guidance to the 2013 Local Development Plan.
Plan to outline spatial opportunities as well as constraints.	The recently published Regional Locational Guidance for Wave and Tidal Devices in the Shetland Islands (RLG) identifies suitable locations/ spatial opportunities for the development of tidal and wave devices. As the SMSP develops and is monitored over time, other spatial opportunities will be explored if and when the need arises i.e. off- shore wind (within 12 nautical miles); seaweed harvesting/ cultivation etc.	Areas for further development and further protection will be reviewed and monitored on an on-going basis as part of the SMSP progress. New policies to reflect RLG will be included in fourth edition of SMSP.
Fair Isle Action Plan to include an action in relation to the RBMP i.e. an additional target under 'Biodiversity Conservation'.	Fair Isle Action Plan has been submitted to Scottish Government for consideration as a MPA.	Await outcomes of MPA designation process.

1). Scottish Environment Protection Agency (SEPA) - Submission Comments (28/05/2010)	SMSP Team Response/ Comments	Actions required
Swarbacks Minn sub-area plan - clearly outline individual sites which are targeted for relocation.	As part of this SMSP review, representatives from the aquaculture industry and SIC planning department were asked to comment on the Swarbacks Minn sub-area plan. It was noted that as there is currently no room for new developments and existing developments are unlikely to alter, there is no further requirement to outline individual sites targeted for relocation.	'Policy MSP AQ4: Aquaculture in the Swarbacks Minn Area' has been removed from SMSP.
Swarbacks Minn sub-area plan - constraints map to be included at greater resolution as those in the Atlas and enhanced by indicating separation distances/ including a layer to show habitats/ other water users.	A review of 'Policy MSP AQ4: Aquaculture in the Swarbacks Minn Area' has been carried out.	'Policy MSP AQ4: Aquaculture in the Swarbacks Minn Area' has been removed from SMSP.
Update links to maps in RBMP section.	Agreed action. Links to be updated in the SMSP Report.	Links updated.
Environmental Objectives - only refer to habitats and species. Should be more encompassing and include water quality and coastal morphology.	Agreed. Environmental objective should be more encompassing and consider other physical, chemical and biological features within the environment.	Revise general environmental objectives.
Policies - EIA Amend text and refer to cumulative impacts. Make reference to pre-application discussions with other relevant agencies.	Agreed. Cumulative impacts must be a consideration in any EIA. Text will be revised to include this requirement as well as pre-application consultation with other relevant agencies.	Action carried out.
General Policies: Support for inclusion of general policies within the Plan.	Noted.	No further action necessary.
MSP GEN 1(iii) Amend text to include reference to the consideration of flood risk in proposals below the high water mark. Revise the numbering in policies.	Agreed. Amend MSP GEN1 to include reference to flood risk considerations.	Action carried out.
General policies to make it clear that developments/ activities should be looked on favourably where habitat enhancement opportunities have been considered (meet the WFD and Marine Act objectives)	MSP GEN2 (ii) already makes reference to species and habitats outwith designated sites however; see no reason why this additional consideration should not be included.	Amend MSP GEN 1 accordingly.
MSP GEN 1(vi) include reference to cumulative impacts	Agreed. Amend MSP GEN1 (vi) to include reference to cumulative impacts.	Amend MSP GEN1 (vi) accordingly.

1). Scottish Environment Protection Agency (SEPA) - Submission Comments (28/05/2010)	SMSP Team Response/ Comments	Actions required
It is suggested that the current format where some policies state that there is a requirement to comply with general policies and others do not, may be confusing to developers.	Review where it is stated throughout the Plan that all proposals comply with general policies. Make this clearer.	Ensure it is clear at the forefront that all proposals comply with general policies.
Wider considerations - Welcome policy on climate change.	Noted.	No further action necessary.
Include clarification of difference between mitigation and adaptation.	Agreed.	Include explanation of mitigation and adaptation.
Consider reference to UKCIP09 (Climate change projections)	Agreed.	Include reference to UKCIP09 (Climate change projections)
Water resource - Non-native species policy supported. Additional policies to be added which encourage the eradication of such organisms and a scheme to prevent reintroduction.	SMSP team are currently undertaking a study of non-native species around Shetland. The locations surveyed will be mapped and this will assist in the formulation and implementation of relevant marine policy.	To include specific policies on non-native species arising from the research currently being undertaken around Shetland.
Water resource - Water quality. Welcome policy MSP CON4. Have concerns about prioritisation of recreation water designations - these are non-statutory and not part of WFD protected area register. Recommend strategy which concentrates on Shellfish Waters and coastal water bodies - less GES status in RBMP.	Review Orkney & Shetland RBMP for co-ordinated strategy and policies. Look at recommending a strategy which concentrates on Shellfish Waters and coastal water bodies - less than good GES status in RBMP.	Focus water quality on GES not as recreation or tourism.
Scalloway, Bressay and Clift Sound classified as 'moderate' GES. Can SMSP help to improve this status?		Will investigate how SMSP can impact on water quality status.
Designated shellfish waters - SMSP to improve the conditions to achieve guideline standards.		See comments above.
SEPA Policy 28 is now withdrawn	Noted.	Reference removed.
SEPA is also responsible for authorisations to coastal waters, rather than to tidal waters.	Update SEPA responsibilities.	Action carried out.
Advise that marine planning department and terrestrial planning dept. have been consulted on the content of the SMSP	Confirm that both departments have been consulted. Also note that SMSP will be adopted as SG to Local Development Plan in 2013.	Action carried out.

1). Scottish Environment Protection Agency (SEPA) - Submission Comments (28/05/2010)	SMSP Team Response/ Comments	Actions required
Business and Industry - Aquaculture - Para 105 of Scottish Planning Policy - SMSP should include spatial guidance on suitable and unsuitable sites for aqua development. PA to ensure it can deliver relevant aspects of SPP.	SIC in adopting the SMSP as SG is ensuring that spatial guidance for aquaculture development is addressed. In terms of providing guidance on suitable and unsuitable sites for this type of development, Map 14 currently displays areas of constraints. Furthermore, from the SMSP Review it was acknowledged that due to current limitations on capacity, industry was already aware of the spatial and environmental constraints.	Ensure the Atlas includes the most recent 'Locational Guidelines for the Authorisation of Marine Fish Farms in Scottish Waters' March 2012.
Include reference to Aquaculture and Fisheries Scotland Act 2007 and the Marine Scotland Act 2010 in the introduction section.	Agreed.	Action carried out.
Consider including guidance as to what Aquaculture Development Management Plans should address.	Policy MSP AQ2 already encourages the use of Aquaculture Development Management Plans and what they should address.	No further action necessary.
SEPA Policy 3 has been withdrawn.	Noted.	Action carried out.
Mineral and aggregate extraction - revise MSP EX1 (bii) - refer to alternatives of using recycle or secondary aggregate.	Have no issue with including reference to recycled or secondary aggregate.	Revise MSP EX1 (Bii) to include reference to recycled/ secondary material.
Infrastructure and services - Link to SEPA webpage is broken and should be replaced.	Noted.	Action carried out.
Shore Access - Revise MSP SA1 (b) to include reference to mitigation measures	Agreed. Revise MSP SA1 (b) to include reference to mitigation measures.	Revise MSP SA1 accordingly.
Coastal defences and flood protection - Recommend adding that proposals for new flood risk management measures should only be promoted through the development plan??	Noted. This could be a recommendation that is included in both the SMSP and SIC local Development Plan.	To revise accordingly.
Typos on P. 51	Noted.	Action carried out.
SEPA is not responsible for carrying out flood risk assessments - they are the flood warning authority for Scotland and provide advice to planning authorities. SIC is the flood prevention authority.	Noted.	Action carried out.
Cables and pipelines - strong support for revised MSP CBP1 and MSP CBP3	Noted.	No further action necessary.

1). Scottish Environment Protection Agency (SEPA) - Submission Comments (28/05/2010)	SMSP Team Response/ Comments	Actions required
MSP CBP3 to include a requirement for old outfalls to be removed and disposed of appropriately.	Agreed. This can be added to policy MSP CBP3 to comply with SEPA's Policy 55.	Review and revise MSP CBP3 accordingly.
Part II of the Control of Pollution Act to be removed from paragraph on P. 53	Noted.	Action carried out.
Transport - same comments to be made to MSP TRANS3 as MSP SA1 (b) to include reference to mitigation measures	Noted.	Revise MSP TRANS3 accordingly.
Dredging and disposal - Note that some forms of dredging will fall under regulatory control when new licensing regime is in place under Marine Act.	Noted.	Action carried out.
MSP DD1 - reword to identify beneficial uses of dredge disposal. Also include use of 'clean' materials. Also look at waste management implications. Review the Justification section - FEPA Best Practicable Environmental Option.	Look at identifying beneficial uses of dredging disposal i.e. beach nourishment etc. Highlight waste management implications for disposal.	Review this section in terms of Waste Management regime. Look at promoting a more beneficial re-use of dredged material than disposal where possible.
Delivery Plan - SEPA happy to support Plan implementation.	Noted.	No further action necessary.
Action 5 - SEPA no responsible for planning app changes.	Noted.	Action carried out.
Action 6 - SEPA willing to assist - where related to CAR applications.	Noted.	No further action necessary.
Actions 19 & 21 - SEPA willing to help with these and provide financial support for Action 21	Noted.	No further action necessary.
Glossary - Revise explanation for CAR.	Noted.	Revise accordingly.
Consider revising definition of the Electricity Act 1989 - consenting process for large scale renewable electricity generation schemes.	Noted.	Action carried out.
Local Development Plan to be included - note that local plan, structure plan and development will be replaced by LDP.	Noted.	Action carried out.
Water Framework Directive - Re-word -covers all of the water environment.	Noted.	Action carried out.
Appendix 1 - SEPA - Environment not Environmental	Noted.	Action carried out.

1). Scottish Environment Protection Agency (SEPA) - Submission Comments (28/05/2010)	SMSP Team Response/ Comments	Actions required
Appendix 3 - Construction activity does not include land reclamation and should be considered. Potential impacts would include physical damage or removal of intertidal habitats. Loss of intertidal area in Bressay Sound and Scalloway	Agreed. Need to include information on land reclamation as it reflects local impacts.	Include land reclamation in matrix of sensitivities.
Appendix 4 - Typo in sub-heading	Noted.	Action carried out.
Swap SEPA contacts around - Planning <i>Service</i> not Unit	Noted.	Action carried out.
Marine Atlas - Is map 3 & 4 based on works licenses? - they don't match directly with CAR authorisation for fish farms in Whalefirth, West coast of Yell	These have been based on consents provided by SIC Marine Planning department.	Map renamed.
Maps 9-15 do not all outline statutory constraints and should be changed to "development constraints (statutory and other)" or similar	Will consider this recommendation.	Action carried out.
Map 28 'Water Quality' should be updated and Map 37 to be removed - superseded by Map 28.	To review map and amend accordingly in consultation with Eilidh Johnston (RBMP co-ordinator).	Maps 28 and 37 removed as all of Shetland designated as having 'Good Ecological Status'.
Plan suggests that sand & gravel extraction may be a significant issue along the coastline. Can this be mapped?	To check with SIC marine planning department for information on extraction around Shetland (works licence)	To see if this information can be obtained from SIC and mapped in Atlas.
Details regulatory requirements for applicant can be found http://www.sepa.org.uk/planning.aspx	Noted.	Links to be updated in the SMSP.

2). Royal Commission on the Ancient Historical Monuments of Scotland (RCAHMS) - Submission Comments 06/11/2010	SMSP Team Response/ Comments	Actions required
RCAHMS - tasked with responsibility of maintaining and promoting records of the historic environment. RCAHMS database accessible on-line containing data on maritime hinterland, coastal edge, intertidal and marine and maritime sites for Scotland and Shetland.	Noted.	No further action necessary.

3). Isaac Forster , Sound of Mull SSMEI, Submission Comments 06/11/2010	SMSP Team Response/ Comments	Actions required
General Comments - Formatting: - indented rather than justified - more difficult to read.	Noted. All publications are unjustified as people with dyslexia find that justification interferes with cognitive understanding	No further action required.
Policy MSP GEN1(i) - question - are they inadequate? Is this deliberate?	Yes, question is deliberate. Perhaps consider a more positive slant - i.e. adequate?	Review text.
Policy MSP GEN2(ii) - is question deliberate?	Yes, question is deliberate.	No further action necessary.
Policy MSP GEN2(iii) - NSAs should be first as the most important areas in terms of landscape.	Agreed. Order of importance can be revised.	Revise order.
Landscape/ seascape carrying capacity - question if this should be included - very specific to type of sector that it relates to and what equipment and structures are being assessed - there are so many variables so don't see the justification in having this in policy as could be easily argued against.	This was included following comments received from SNH.	No further action necessary.
Policy MSP GEN2 - rather than listing all of the points for these sectors, may be simpler to refer to existing activities and infrastructure - would take these into account with much simpler wording.	Accept comments however, it is felt that as part of the introduction to general policies it is pertinent to state existing activities for the benefit of new interests in Shetland.	No further action necessary.
Policy MSP CON2 - marine users (a) - wording clumsy. Suggest - ensuring boat hulls are clear of fouling organisms when moving to and from new areas.	Accept comments. It is noted that SMSP team are currently undertaking a study of invasive non-native species around Shetland. The locations surveyed will be mapped and this will assist in the formulation and implementation of relevant marine policy.	Review policies on invasive non-native species.
Policy MSP CON3 - note typo.	Noted.	Action carried out.
Policy MSP CON5 - sentences are too long.	Noted. Will edit text if too convoluted.	Edit text.
Policy MSP HER1 - first sentence is too long.	Noted. Will edit text if too convoluted.	Edit text.
Policy MSP HER2 - point b is too long - use of commas. Note in definitions section, an example of over-riding interest is regional economic development which creates in excess of 50FTE jobs. Where has this come from? No recollection of specific thresholds of jobs for Natura 2000 sites.	Noted. Will get reference for example of overriding public interest. Nb - it is stated in e.g.s. 'might' include.....p. 26.	Action carried out.
Policy MSP AQ2 - typo in present tense	Noted.	Action carried out.
Policy MSP NRG2 - justification: use ' <i>withstand</i> ' instead of 'sustain' Para. 1, p. 38	Agreed, will replace word.	Action carried out.

3). Isaac Forster , Sound of Mull SSMEI, Submission Comments 06/11/2010	SMSP Team Response/ Comments	Actions required
Policy MSP EX1 - typos in MWHS, 13,000 and decapitalise 'archaeology'	Noted.	Edit text.
Policy MSP TR2 - sentence is confusing, should be revised.	Noted.	Revise text.
Infrastructure and services - reference to MWHS is inconsistent.	Noted.	Action carried out.
Infrastructure and services - Devt. in or near EU protected site	Format paragraph - spacing not consistent.	Action carried out.
Policy MSP TR2 - typo - ' <i>installation</i> '	Noted.	Edit text.
Policy MSP CBP1 - Move the first couple of sentences to justification section instead.	Noted.	Edit text.
Policy MSP CBP 2 - Crown Estate leases for pipelines recommend a 250m exclusion zone from either side, and from 250-500m any activity should be negotiated with the lease holder.	Agreed. It would be worth referencing these exclusion zones and constraint buffers.	Include reference to these buffers and ensure consistency with the Regional Locational Guidance for Wave and Tidal devices in the Shetland Islands.
Policy MSP TRANS2 - MEHRAs - are these marked on Admiralty Charts as suggested?	Will check this reference.	To check if reference is included on Admiralty charts.
Glossary - Definition of ' <i>productivity</i> ' seems to be very biologically specific but don't recall how it was used in the text.	Action 19 refers to productivity in mussel farming. Elsewhere it is referenced in Policy MSP F1: Safeguarding Fishing Opportunities where it is explained that an important fishing ground is defined by the frequency of use or ' <i>productivity</i> ' of an area, which has been determined by local fishermen.	Review definition.

4.) Scottish Fishermen's Federation (SFF) Submission Comments 13/05/2010	SMSP Team Response/ Comments	Actions required
SFF fully support the Principles of Sustainable Development outlined on p.17 and, in particular, 'using sound science responsibly'. Would expect to this in the development of Biodiversity Conservation objectives of any Marine Action Plan.	Noted.	No further action necessary.

4.) Scottish Fishermen's Federation (SFF) Submission Comments 13/05/2010	SMSP Team Response/ Comments	Actions required
<p>Justifications on p.19 - 'The purpose of these General Policies is to provide a basic <i>framework</i> of guidance in the assessment of all marine activities, including not just planning applications or prior notifications, but unlicensed activities such as shipping and fishing'. SFF believe that the fishing industry is one of the most highly regulated industries in the world and is therefore not regarded as 'unlicensed'. Note also that Shetland Inshore Fisheries operate within constraints of SSMO and is aware of connection between offshore and onshore communities.</p>	<p>Accept comments. Remove the use of 'unlicensed' activities and revise text. Also review the use of 'framework'.</p>	<p>Review the text in this section.</p>
<p>Communities: p.31 - competent authorities seek to involve communities in the planning process in order to make informed decisions. Should consider seeking decision about the use of the sea to be inclusive of those who depend on sea for a living.</p>	<p>Accept comments. Revise text to state: '<i>Competent Authorities should seek to see decisions about the use of the sea, being wholly inclusive of those who strive to make a living from the sea</i>'.</p>	<p>Revise text accordingly.</p>

5.) Scottish Natural Heritage (SNH) Coastal & Marine Ecosystems Unit - Submission Comments 11/06/2010	SMSP Team Response/ Comments	Actions required
<p>General comment: commend the project officers and local steering group for impressive amount of work achieved in reaching this stage of the process particularly as Shetland led the way for the other SSMEI pilot projects. Notable are achievements in data gathering/ compilation and on local consultation. Glad that Plan continues to be refined and improved and welcome the opportunity to learn lessons from evolving Shetland marine plan to help design the statutory marine planning system for Scotland.</p>	<p>Comments welcomed.</p>	<p>No further action necessary.</p>

5.) Scottish Natural Heritage (SNH) Coastal & Marine Ecosystems Unit - Submission Comments 11/06/2010	SMSP Team Response/ Comments	Actions required
<p>Further work could be done to make the policies more spatially focused and create better links between policy framework and the atlas.</p>	<p>Accept comments. The recently published RLG identifies suitable locations/ spatial opportunities for the development of tidal and wave devices. As the SMSP develops and is monitored over time, other spatial opportunities will be explored if and when the need arises i.e. off- shore wind (within 12 nautical miles); seaweed harvesting/ cultivation etc. Policy within the Framework will evolve to reflect these changes in developments and opportunities. It is also noted that recent work carried out in conjunction with the Shetland Shellfish Management Organisation (SSMO) resulting in the closure of areas to scallop dredging in areas where sensitive habitats have been confirmed and validated and/or where sensitive species may be physically impacted is an example of how the marine atlas is informing industry of spatially conflicting activities. These closure areas will be included in the 4th edition of the SMSP and updated as more information becomes available.</p>	<p>All policies will be re-appraised as part of a Review of the SMSP process and will be revised and focused where there is further science available and adequate support from the Local Advisory Group. Update mapping to include the SSMP closure areas.</p>
<p>Zoning may be a challenge for the future. Logical step is to overlay sectoral maps in the Atlas with interactions/ sensitivity matrices to identify where risk of conflict is highest and policy attention may be required.</p>	<p>Previous consultations arising from the Shetland SSMEI highlighted that, where there is an already reasonable level of marine development, zoning is not the best approach. Conventional zoning was regarded as being unable to represent the three dimensional aspect of the marine environment in comparison to spatial planning on land. As a result, it was agreed that a sensitivity led approach would be more applicable based on spatial environmental, social and economic constraints. In this context, the work currently undertaken by the SMSP team (RLG & mapping of cumulative pressure areas) feed into this alternative zoning/policy direction.</p>	<p>Ongoing work being carried out on spatial analysis of activities with interactions/ sensitivities of existing and new developments. SMSP team await further advice from ongoing studies such as the Priority Marine Features pilot project which will also provide guidance in terms of incorporating spatial management measures.</p>

5.) Scottish Natural Heritage (SNH) Coastal & Marine Ecosystems Unit - Submission Comments 11/06/2010	SMSP Team Response/ Comments	Actions required
Try to develop maps of future development potential and priority as current maps represent status quo.	Recently published RLG identifies suitable locations/ spatial opportunities for the development of tidal and wave devices. This is an area of spatial planning that we hope to develop further in terms of other emerging industries.	Continuous research into identifying opportunity sites for future development based on socio-economic and environmental appraisals.
Provide cross-reference (or for on-line users give a live link) to the appropriate map in the atlas, e.g. for location of NSAs (p.28)	Accept comments. Considering incorporating maps into the Policy Document within the relevant sections.	Integrate maps within the policy framework.
Sensitivity matrix is a welcome addition to the Plan although it would be helpful to see this more closely linked to certain policies. Still seems to be little mention of cumulative impacts and capacity issues.	Current work on mapping cumulative impacts aims to provide a valuable link between sensitivities and policy.	Pending publication of cumulative impacts assessment.
Reference to recent study carried out as part of the Clyde SSMEI project on ecosystem-based marine spatial planning i.e. policy development should be directed by reference to integrated ecosystem limits, rather than sector specific limits. SNH recognise this is currently difficult to implement, given gaps in data and understanding of ecosystem limits but it would be useful if the plan could state an intention to develop an approach to recognising capacity issues. Guidance on this process should become available as work progresses on the interpretation of Good Environmental Status under the Marine Strategy Framework Directive.	Current work on mapping cumulative impacts uses an ecosystem-based risk assessment which identifies potential pressures and impacts as outlined in the MSFD. The aim of this work is to locate areas of high pressure and avoid capacity issues in terms of ecosystem limits. The outcome should result in the attainment of GES in our marine waters.	Pending publication of cumulative impacts assessment.
Swarbacks Minn Sub-area plan: Do not agree that the sub-area report constitutes a 'plan'. The report itself proposes that aquaculture policies 'that apply to all of Shetland as well as some which specifically relate to Swarbacks Minn could be included in the main SMSP rather than create a sub-area plan'. It is important to use an accurate term, as referring to this report as a 'sub-area plan' gives a false impression of what a sub-area plan might be expected to deliver, such as a very detailed, spatial zoning plan for a particularly highly used area of water.	Accept comments. Following a review of the aquaculture policies, reference to Swarbacks Minn has been removed as there is no longer any capacity or likelihood of future development.	Action carried out.

5.) Scottish Natural Heritage (SNH) Coastal & Marine Ecosystems Unit - Submission Comments 11/06/2010	SMSP Team Response/ Comments	Actions required
Context: Legislative context is out of date and should include references to the Marine (Scotland) Act, 2010; UK Marine & Coastal Access Act, 2009; Marine Policy Statement.	Accept comments. Text to be updated with developments in legislation.	Action carried out.
Development Plans (P.13): Include more reference to the interactions between marine and terrestrial activities and developments, e.g. the need for coastal infrastructure to support marine recreation or marine renewables; potential landscape & seascape impacts of marine developments; impacts of sea level rise and coastal defences etc. It will be important to ensure close and ongoing integration between the objectives and policies of marine plans and terrestrial development plans.	Accept comments. Will revise text to make sure the integration between terrestrial and marine spatial plans is clear. The adoption of the SMSP as Supplementary Guidance to the forthcoming SIC Local Development Plan in 2013 is a clear indication of commitment to land/ sea integration.	Review text.
General Policies: Definitions (p.19) – include reference to sensitivity matrix in appendix 3 as it is a useful guide to identify compatible/ incompatible uses. Similarly, various uses and activities may be able to co-exist in the same area of sea (e.g. even though a major shipping lane is non-negotiable, there may be other uses which could take place in the same space). A further matrix showing how different uses interact with one another could be useful in clarifying these issues.	Accept comments. Ongoing work with mapping cumulative impacts will assist in developing policy on interactions. Worth noting that interactions between users is still under review regarding emerging industries and technologies such as wave, tidal and offshore wind devices.	Ongoing work on cumulative impacts will help with policy development.
Wider considerations - Climate Change and Flood Protection (p.20 & 50). Make reference to the UKCP09 projections.	Accept comments. Revise text.	Revise text accordingly.
References to 'increased storminess' could be re-worded as the latest work (UKCP09 and others) suggests that the frequency of storms may not change radically, but we may already be seeing a slight increase in the magnitude of the storms that do occur.	Noted.	Revise text accordingly.
Land sea interface (p.23): further highlight potential marine impacts of terrestrial developments as well as effects of marine activities on the coast, e.g. the potential effects of developing new coastal infrastructure for marine recreation on marine wildlife.	Accept comments. Some difficulty is noted with applications crossing both marine planning and development planning departments. However, land-sea policies will be reviewed in light of similar comments from SEPA and further consultation with SIC LDP will be prioritised. The current cumulative impacts research being carried out is based on an ecosystem approach which reviews the impacts of all marine related activities in Shetland, including coastal infrastructure.	Review current text and revise accordingly.

5.) Scottish Natural Heritage (SNH) Coastal & Marine Ecosystems Unit - Submission Comments 11/06/2010	SMSP Team Response/ Comments	Actions required
Policy MSP HER1: recommend that this policy is altered to more accurately reflect the wording and/or meaning of Habitats Regulation 48 and 49.	Noted. Text to be revised. Also note caveats for compensatory measures - Regulation 53.	Action carried out.
Definitions p.26: 'over-riding interest' should be based on Circular 6/95 (as revised). Note inconsistencies between 'national' and 'regional' over-riding interests.	Noted.	Action carried out.
Important species & habitats p.26: Support this policy. Make reference to Scottish Government's draft Marine Nature Conservation Strategy - states need for wider seas policies and measures, including use of the marine planning system to help deliver marine nature conservation objectives. Link this policy to appendix 3, which will help applicants determine whether an adverse impact is likely.	Accept comments. Will include reference and provide links to sensitivities matrix.	Revise text accordingly.
Landscape / seascape (p. 28): Accompanying text focuses almost entirely on designated landscapes, such as NSAs. More helpful if text could expand on issues of landscape character and capacity. Also highlight the importance of safeguarding the quality of views of land <u>from the sea</u> , as this is often ignored in terrestrial planning, but can be important for ferry or recreational boat users	Accept comments. Will review text and incorporate more detail on the importance of landscape character and capacity. Also include importance of views of the land from the sea.	Revise text accordingly.
Business & Industry (Aquaculture) (p. 34): Anti-predator measures - include reference to new seal licence system introduced through the Scottish Marine Act.	Noted.	Revise text accordingly.
Oil extraction & decommissioning (p. 37). Note that this is a reserved issue. Reference could be made to statements in the UK Marine Policy Statement.	Noted.	Action carried out.
Policy MSP F1: States that 'Development proposals will not normally be permitted if it obstructs an important fishing ground*. Referring to maps 1 and 2 in the atlas, this constraint appears to cover almost all the inshore waters around Shetland. It would be useful if this policy could be spatially refined, or some guidance given on how such a policy objective might be judged against, for example, a proposal for a new MPA or an offshore renewable device which might have limited locational options.	SMSP team are currently looking at the socio-economic value of finfish and shellfish grounds around Shetland based on interviews and use of VMS data and logbook data. This will help to spatially map and hone in on the most important/ valuable grounds for local communities in terms of income and employment. In terms of the judgement of proposals, will revise text to ensure all material concerns are considered.	Update mapping on fishing grounds and review text.

5.) Scottish Natural Heritage (SNH) Coastal & Marine Ecosystems Unit - Submission Comments 11/06/2010	SMSP Team Response/ Comments	Actions required
<p>Tourism & recreation (p. 44). Support policy aspirations here. TR1 - worthwhile highlighting the potential interactions between different marine recreational users, such as 'noisy sports' such as power boats /jet skis versus quieter kayakers and wildlife watchers. Policies may be required to resolve any potential conflicts between different types of users in particular hot spot areas.</p>	<p>Currently carrying out a review of tourism and recreation policies and will take this point into consideration in the fourth edition.</p>	<p>Review text.</p>
<p>Infrastructure & Services: This section would benefit from updating with the latest information on new marine licensing provisions under the Marine (Scotland) Act 2010.</p>	<p>Noted.</p>	<p>Action carried out.</p>
<p>Coastal defence (p.50): Policy CD2 demolishing coastal defences. Useful to mention significant benefits that might arise from removal of defences i.e. creation of intertidal habitats through 'managed realignment' or the reinstatement of natural coastal processes and sediment transport.</p>	<p>Agreed. It is worthwhile recommending 'passive' adaptation methods to flooding as well 'hard' engineering techniques.</p>	<p>Revise text accordingly.</p>
<p>Cables & Pipeline (p.53) Policy CBP3 includes a requirement for new pipelines to be 'at least 100m from any wrecks, or archaeological remains'. Inconsistent to include archaeological interests here but not to include pollution- sensitive nature conservation interests (both are covered by the general development policy anyway).</p>	<p>Noted.</p>	<p>Text revised.</p>
<p>Action Plan: Introductory statement on marine spatial planning objectives here is slightly confusing - it doesn't refer back to the different objectives of the policy framework. It would be helpful to clarify here (as on p.16) that these are longer-term aspirational objectives that supplement those listed in the policy framework.</p>	<p>Agreed. Will revise text to clarify.</p>	<p>Revise text accordingly.</p>

5.) Scottish Natural Heritage (SNH) Coastal & Marine Ecosystems Unit - Submission Comments 11/06/2010	SMSP Team Response/ Comments	Actions required
<p>Actions 15 & 16: identifying suitable locations for MPA. Process is proceeding at national level, and may or may not identify appropriate new MPA locations within the Shetland plan area. However, it will be important to identify further areas of important or sensitive habitats which require protection through policies in the marine plan (see comments in relation to page 26 above).</p>	<p>Noted. Fair Isle community has made a formal submission to Marine Scotland requesting designation as either a Nature Conservation MPA or Demonstration & Research MPA. Awaiting the outcome of this consultation and any specific guidelines assigned by MS. In terms of additional policies for the protection of important/ sensitive species and habitats, we await definitive PMF designations. Any formal designations will be implemented at a regional level and incorporated into the Shetland MSP. In the meantime, we will endeavour to develop our own heritage policies for continued protection at a local level in the SMSP.</p>	<p>Ongoing consultation with SNH, Marine Scotland, RSPB and local natural heritage groups will be maintained to ensure that policies are adequate for continued conservation of important marine species and habitats.</p>

6.) RSPB Submission comments - 14/06/2010	SMSP Team Response/ Comments	Actions required
<p>General Comments: RSPB Scotland fully supports the introduction of a system of statutory marine spatial planning and welcomes the publication of the Shetland Draft MSP. Supports sustainable development principles to the front of the SMSP.</p>	<p>Noted.</p>	<p>No further action necessary.</p>
<p>Reference to context of the Marine (Scotland) Act and Marine and Coastal Access Act. Specific reference should be made to the Marine Policy Statement (UK context), National Marine Plan and the duty to deliver a network of marine protected areas. Given that all plans must be in conformity with the MPS, this is a fundamental omission.</p>	<p>Noted. Legislative context to be revised accordingly.</p>	<p>Action carried out.</p>
<p>SMSP should recognise, more explicitly, the importance of marine conservation as a cross-cutting theme, rather than purely as an individual sector. Although environmental impacts are recognised in some of the sectoral policies, they are not addressed for all sectors. RSPB Scotland believe this would provide a greater drive for achieving the core aim of this plan, to "Ensure that the use of the marine and coastal environment of Shetland is sustainable".</p>	<p>Noted. However, it is contended that throughout the SMSP and for all sectors and activities, it is a requirement that all new developments must comply with Policy MSP GEN1 and GEN2. Additionally, all new developments are recommended to consult with the sensitivity matrix in Appendix 3 as it is a useful guide to identify compatible/ incompatible uses. The cumulative impact assessment will also provide additional information to ensure that all impacts on the marine environment are recognised.</p>	<p>Revise text where necessary.</p>

6.) RSPB Submission comments - 14/06/2010	SMSP Team Response/ Comments	Actions required
MSP should better incorporate cumulative impacts identified by the SEA, considering what level of development by all sectors will be environmentally sustainable (including beyond the boundaries of protected areas).	It is expected that current work on mapping cumulative impacts will help to address this issue.	Ongoing work.
Part 3: Heritage: MSP needs to be forward looking – it is important that there is reference to MPAs, especially given that the government is obliged to have a well-managed ecologically-coherent network of MPAs in place by 2012. A policy, akin to HER1 and HER 2, relating to MPAs would do this adequately. MPAs & PMFs should be included in the plan. Proposal 15 of the delivery plan makes welcome reference to the SSMEI steering group bringing forward MPA proposals, making it all the more important that MPAs are acknowledged up-front in the plan.	Noted. Will include more references to the MPA network and give it equal prominence with other natural heritage objectives. Awaiting outcome of the MPA process from SG but in the meantime provide continuing support for the Fair Isle proposal. Also await final list of PMFs however will include a map of draft PMFs for Shetland.	Ongoing consultation will SNH, RSPB, Marine Scotland and local natural heritage groups will be maintained to ensure that policies are adequate for continued conservation of important marine species and habitats.
MPAs - proposals in the delivery plan focused on improving data. RSPB support improving data collection, and believe inclusion of a proposal to improve data collection for <u>all</u> marine birds, not just wading birds, as outlined in proposal 18, is important. In particular, there is a dearth of knowledge on seabird foraging areas.	Comments accepted. The SMSP team continually strive to improve the existing database of information held in relation to all marine uses, activities and features incl. species and habitats. As more information is made available, the Atlas and associated maps will be updated on a regular basis and made available to the public every 6 months. It is accepted that the more information that is provided, the better the SMSP will become in terms of making informed decisions.	Data collection and collation is an ongoing process and updated mapping will be made available on a regular basis.
Policy MSP HER3: RSPB welcome the recognition of important species and habitats outwith MPAs – a clear component of the 3-pillar approach to Marine Nature Conservation.	Noted.	No further action necessary.

7.) Scottish Water (SW) Submission Comments 14/06/2010	SMSP Team Response/ Comments	Actions Required
<p>Policy MSP CBP3: Placement of New Wastewater Pipelines. 'general presumption against the laying of new wastewater pipelines.' - have a number of concerns with this given that wastewater treatment and the discharge of treated effluents in accordance with all environmental regulations is a key part of SW national infrastructure. Such an approach may not adequately take into consideration the varying requirements associated with the provision and maintenance of our assets in this area. It is imperative that such a policy statement includes a degree of cost-benefit assessment in any decisions – safe, cost effective sanitation underpins a sustainable society.</p>	<p>Accept comments. Will review text and amend in accordance with proper and sustainable environmental guidelines and standards.</p>	<p>Revise text accordingly.</p>
<p>Reference should be made in this section to FEPA and CPA licences.</p>	<p>Noted. Part II of FEPA (except reserved matters) and Part II of CPA are now covered under Marine Scotland Act, 2010</p>	<p>Revise text accordingly.</p>

8.) Scottish Power Renewables Submission Comments 14/06/2010	SMSP Team Response/ Comments	Actions Required
<p>P13 – We welcome the fact that the plan recognises the interaction between terrestrial and marine planning systems</p>	<p>Noted.</p>	<p>No further action necessary.</p>
<p>P13 – Reference to sub-area MSPs. This could get complicated and confusing dependant on the approach. Could they be industry specific (aquaculture, oil & gas, Renewables, etc.) or possibly geographically driven?</p>	<p>Comments noted. 'Swarbacks Minn Sub-area plan' is no longer relevant. A sub-area plan would only be considered necessary in a particular geographical location where a certain level of spatial detail or analysis (above and beyond what is included in the Marine Spatial Plan) would be required to ensure the sustainable development of the marine and coastal environment.</p>	<p>No sub-area plans necessary at this stage.</p>
<p>P15 – We look forward to following progress on the integration with the new IFGs.</p>	<p>Noted.</p>	<p>No further action necessary.</p>
<p>P16 – We are confused that under 'Objectives' and PLAN, oil is considered as a sustainable use?</p>	<p>Accept comments. Will change to 'Natural Resources'</p>	<p>Revise text accordingly.</p>

8.) Scottish Power Renewables Submission Comments 14/06/2010	SMSP Team Response/ Comments	Actions Required
P19 – We were particularly interested in the definition of ‘non-negotiable’ constraints. We believe this need not be the case with certain constraints.	Accept comments. Will review definition and clarify the explanation. This section of the Marine Atlas has been reworded to ‘Development Constraints’.	Revise text accordingly.
P19 – There seems to be a contradiction between the third bullet point, which implies that development can never happen inside a designated area, and GEN2, which states that the development only needs to show no effect.	Comments noted. Don’t agree that ‘advisory constraints’ implies as much. The Atlas should only be used for information purposes i.e. to locate existing activities, potential constraints and potential opportunities for development. It is not a zoning plan and therefore should not be construed as such. Any application for development will be assessed in accordance with the relevant statutory and non-statutory planning policies and environmental legislation.	No further action necessary.
P19 – States that “any device in the water is a threat to fishermen” – is this the case even when in a non-fishing area?	Accept comments. Review and revise text.	Revise text accordingly.
P19 – The document introduces the concept of a site restoration plan – is this in addition to a decommissioning plan?	Only certain activities will require a decommissioning plan i.e. disused installations and/or pipelines, or when the lifespan of a development is known and closure/ end of life is planned. Therefore other activities may require a site restoration plan after the construction phase of a development has been carried out e.g. any damage caused by construction traffic demolition/ excavation works for coastal infrastructure.	No further action necessary.
P20 – Under ‘Climate Change’, the document suggests avoiding new developments in areas vulnerable to climate change. This needs clarification as climate change is global and can obviously affect any area. Perhaps the document means coastal zones vulnerable to flooding perhaps? A definition would therefore be useful.	Accept comments. Revise sentence to ‘ <i>new developments in areas vulnerable to sea level rise, inundation or flooding</i> ’.....	Action carried out.
P23 – Maritime and Coastguard Agency misspelt.	Noted.	Action carried out.
P23 – Under ‘Justification’, it would be good to have examples of the marine developments that Shetland Council can/has consented. This section is also confusing regarding what is required when your development has sea and land based elements?	Accept comments. Will include examples to ensure the justification is clear. Will review and revise text in terms of requirements for development at sea.	Revise text accordingly.

8.) Scottish Power Renewables Submission Comments 14/06/2010	SMSP Team Response/ Comments	Actions Required
P38 – In the box item (c) suggests a monitoring programme and restoration plan. At what point in time would these required? It's also mentioned on P39 in the box, under (d). Would other industries (e.g. aquaculture) be subject to these requirements too?	Given that these devices have not been developed at a commercial scale, it is expected that a preliminary monitoring programme & restoration plan would need to be considered at pre-application stage and/ or scoping stage of EIA. In terms of other developments, each application will be considered on its own merits in line with relevant planning policy and environmental legislation. It is noted that certain aquaculture developments (finfish farms) are also subject to EIA regulations and generally require monitoring programmes i.e. benthic impacts etc.	No further action required.
P38 – It may be worthwhile mentioning The Crown Estate leasing around Orkney & the Pentland Firth?	Noted. Will make reference to current leasing and recent exploration re: Pelamis and Nova sites.	Update Shetland context for renewable developments.
P40 – The document implies here that there is a need to consult at the European level if a development is outside 6nm? Is it also appropriate for important fishing grounds to be determined solely by local users?	This is incorrect. The document does not state anywhere the need to consult at a European level. Important fishing grounds are based on a range of criteria including ecological value as well as socio-economic value and are not solely determined by local fishermen.	The section on commercial fishing will be reviewed and revised. Maps of important fishing grounds are being updated based on socio-economic criteria and intensity of use.

9.) SSE Renewables - Submission Comments 17/06/2010	SMSP Team Response/ Comments	Actions Required
MSP GEN 1: Opening sentence appears to send mixed signals with regard to development in general. Suggested alternative wording is: 'Developments and activities are more likely to be looked on favourably where they can demonstrate...'	Accept comments however, it is felt that we do not want to deter development and it should be encouraged, in a sustainable manner. Do not think it necessary to re-word in this context.	No further action necessary.
MSP GEN2: As above. It is suggested that the opening sentence is reworded along the lines suggested for policy MSP GEN1.	Accept comments however feel it is fairly comprehensible as it is.	No further action necessary.
MSP GEN2: It is unclear what the policy is guiding prospective developers to undertake with regard to this statement, but it is assumed that in this context 'consider' relates to an assessment of potential impact effect. Suggested wording 'Developments and activities that assess the potential effects of their proposal on particularly sensitive species and habitats, as detailed in the matrix of Sensitivities in Appendix 3, are likely to be considered more favourably.'	Noted. Will revise sentence to include the suggested rewording.	Revise text accordingly.

9.) SSE Renewables - Submission Comments 17/06/2010	SMSP Team Response/ Comments	Actions Required
<p>MSP CON1: SSE Renewables welcomes and strongly supports the protection this policy provides against sterilising renewable energy resources.</p>	<p>Noted.</p>	<p>No further action necessary.</p>
<p>MSP CON5: Support policy, particularly strong linkages that will exist between a number of offshore and onshore developments e.g. Aquamarine technology 'Oyster' is a near shore wave energy converter with onshore generation of electrical power. Important to ensure that in assessing proposals for development, clear on and offshore planning guidance and policy exists, against which developers, consultees and statutory authorities can reference the proposal.</p>	<p>Accept comments. Acknowledge that further policy guidance is required for land-sea developments.</p>	<p>Review guidance for land sea developments.</p>
<p>MSP HER2: The policy appears contradictory as it initially implies developments can proceed even if they are predicted to have a significant effect on the SSSI but clause (a) then appears to preclude this. Clarity is requested on how it is envisaged this policy would work in practice.</p>	<p>Comments noted. Don't agree that policy precludes development; as criteria is included in policy. In practice, the presence of a national natural heritage designation is an important material planning consideration. Proposals require to be assessed for their effects on the interests which the designation is designed to protect. If necessary, certain applications will have to undergo EIA and an Appropriate Assessment.</p>	<p>Perhaps re-word as per SPP - <i>Development that affects a NSA, SSSI or NNR should only be permitted where: (a) it will not adversely affect the integrity of the area or the qualities for which it has been designated, or</i></p> <ul style="list-style-type: none"> • any such adverse effects are clearly outweighed by social, environmental or economic benefits of national importance.
<p>MSP HER2: Clause (b) states a test of 'national importance' must be applied with regard to proposals likely to have a significant effect on a SSSI. It is later suggested with respect to policy MSP HER1 that a proposal of overriding public interest would potentially be one that generates 50 full time jobs within a regional context. SSE Renewables considers the test for MSP HER2 to be disproportionate to that applied to MSP HER1 and clarity is requested on what would constitute a development of 'national importance' with regard to MSP HER2.</p>	<p>Accept comments. Will include reference to overriding public interest. Nb - it is stated in eg.s. 'might' include.....p. 26.</p>	<p>Action carried out.</p>

9.) SSE Renewables - Submission Comments 17/06/2010	SMSP Team Response/ Comments	Actions Required
<p>MSP HER3: Policy described in clause (b) with regard to 'Undiscovered Features' is very broad, could potentially add significant and ultimately unnecessary expense to a development proposal assessment. SSE Renewables suggests that the words 'reasonable scientific' should be inserted into this policy before the word 'evidence' in line 1 of (b).</p>	<p>Accept comments. Will revise text to include specification of scientific evidence.</p>	<p>Revise text accordingly.</p>
<p>MSP NRG1: Welcome the inclusion of policies specifically aimed at marine renewable energy proposals. Suggest that the reference to FREDS in the justification section is not required as the role of FREDS is not related to development of specific project proposals.</p>	<p>Accept comments. Will remove reference to FREDS.</p>	<p>Revise text accordingly.</p>
<p>MSP NRG2: The present offshore grid development process requires that connections to shore of 132kV and above are tendered via the Offshore Transmission Owner (OFTO) process and the successful OFTO bidder is then responsible for the development, construction and operation of the grid connection asset. This system arguably dis-incentivises project developers from assessing grid connection options in parallel with their wider project as there is no certainty that the successful OFTO bidder will wish to build the grid connection which the project developer has proposed. Whilst this situation may change it is worth bearing in mind given the policy wording of MSP NRG2 which states both the project and grid connection proposal need to be included in a single assessment – for proposals requiring transmission level grid connections this is unlikely to be the case within the present offshore grid regime.</p>	<p>Accept comments. Will review policy with regards to national grid connections and developers responsibility.</p>	<p>Revise text accordingly.</p>
<p>Appendix 3: An explanation and quantitative description is requested with regard to low, medium and high impacts.</p>	<p>Accept comments. Will review this section.</p>	<p>Review and revise this section.</p>
<p>Appendix 3: No category is provided for consideration of wave energy projects.</p>	<p>Accept comments. Collision risks for wave devices should also be considered.</p>	<p>Revise matrix to take into consideration wave energy devices.</p>

Appendix II

Table 1: Summary of registrations for SMSP Information and Data from 2010

<i>Type of Organisation</i>	<i>No. of downloads</i>
Consultancy (environment & engineering)	2
Consultancy (environmental)	2
Consultancy (marine & environmental)	3
Oil & gas company	6
Public Sector	8
Renewables company	1
Renewables company (wave)	1
Renewables company (wave, tidal, wind)	1
Renewables company/ Infrastructure	1
Shipping company	1
Software and internet services	2
University	11
Unknown (no details provided)	3
Total	42

Table 2: Sample of marine planning applications/ works licences reviewed for SMSP references (2006-2011)

Marine Planning Applications & Works Licences with planning consent	2006	2007	2008	2009	2010	2011	Totals
No. of applications	26	35	30	26	52	5	174
Internet available files*			1		1	7	9
Additional files**						19	
Total no. of files reviewed	26	35	31	26	53	31	183
No. of apps with reference to the SMSP	0	0	0	12	11	3	26
% of referenced applications	0%	0%	0%	46%	21%	10%	14%

* Some files at the time were only available electronically

** During the review of the planning files (Jan 2012), the SIC was in the process of uploading electronic copies of all planning application/works licences to the SIC website so unavailable statistics on additional files were provided by SIC Planning Officer