Integrated ocean management and the collaborative planning process: 
the Eastern Scotian Shelf Integrated Management (ESSIM) 
Initiative∗

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Abstract

In its capacity to lead and facilitate the development and implementation of integrated management plans under the 1997 Oceans Act, Fisheries and Oceans Canada is working with a range of stakeholders through a collaborative process—the Eastern Scotian Shelf Integrated Management (ESSIM) Initiative—to develop and implement an integrated ocean management plan for the eastern Scotian Shelf off Nova Scotia. Stakeholders include federal and provincial departments, aboriginal communities, municipal and local planning authorities, ocean industry and resource use sectors, coastal communities, environmental interest groups, and university researchers. This large ocean management area possesses important living and non-living marine resources, high biological productivity and diversity, and increasing levels of multiple use and competition for ocean space and resources. The ESSIM vision is to achieve environmental, economic, social/community, and institutional sustainability in the eastern Scotian Shelf.

The ESSIM Initiative is building a collaborative planning process that involves all interested and affected parties. Ongoing information sharing and dialogue with stakeholder groups is providing capacity building and important input to current proposals for a collaborative planning structure and the ocean management plan. A joint federal-provincial working group has been established to move the Initiative forward within government and to address policy and regulatory coordination for ocean management. The future ocean management plan will include a balanced set of environmental, social, economic and institutional objectives, indicators and management strategies, as well as spatial and temporal planning approaches to address multiple ocean use.

This article provides an overview of the ESSIM Initiative, including an assessment of ocean use, ecosystem understanding, and ocean management and planning requirements. The design of a collaborative management and planning structure and process will be discussed, as well as the key elements of the future integrated ocean management plan.

Keywords: Integrated ocean management; Sustainability objectives; Collaborative planning processes; Capacity building and stakeholder participation; Eastern Scotian Shelf; Large ocean management area; Oceans Act

1. The ESSIM Initiative

The Eastern Scotian Shelf Integrated Management (ESSIM) Initiative is a collaborative management and planning process led by the Oceans and Coastal Management Division (OCMD), Fisheries and Oceans Canada (DFO), Maritimes Region. Announced by the Minister of Fisheries and Oceans in December 1998, the ESSIM Initiative followed the Sable Gully Conservation Strategy’s recommendation that integrated management approaches be applied to the offshore area around the Sable Gully Area of Interest (AOI) under DFO’s Marine
Protected Areas Program [1]. Initially announced as Canada’s first integrated ocean management pilot with an offshore focus, the Initiative has since evolved to include coastal areas as a result of the establishment of the Large Ocean Management Area\(^2\) (LOMA) concept in DFO’s Integrated Management Policy and Operational Framework [2]. The 1997 Oceans Act [3] and its supporting policy, Canada’s Oceans Strategy [4], affirm DFO’s mandate as the lead federal authority for oceans and provide the national context for the Initiative. The principles and approaches of the Initiative are rooted in developing international ocean governance processes (e.g., UNCED, Agenda 21, and UNICPOLOS) and Canada’s ocean-related international legal commitments. The Initiative is designing an intergovernmental and multi-stakeholder management and planning process to develop and implement an integrated ocean management plan for this large marine biogeographic area.\(^3\)

The eastern Scotian Shelf area (Fig. 1) has been selected for the application of integrated ocean management because it possesses important living and non-living marine resources, high biological diversity and productivity, and increasing levels of multiple use and competition for ocean space and resources. Key ocean use interests and activities include fisheries, offshore oil and gas, shipping, maritime defence operations, submarine cables, science, research and development, recreation and tourism, potential offshore minerals development, and marine conservation. The boundaries of the Management Area comprise a mix of existing administrative and ecological considerations, combined with an offshore community of interest and the LOMA concept.

The vision for the Initiative is to have an effective, collaborative process that provides integrated and adaptive management plans, strategies and actions for social, economic, environmental, and institutional sustainability. A collaborative process is an open, inclusive and transparent planning, advisory and decision-making process involving all interested and affected parties. Ocean management plans and decisions are based on shared information where those with the decision-making authority and those affected by the decision jointly seek outcomes that meet the needs and interests of all parties to the greatest possible degree. Under this approach, those with the authority, power and responsibility to implement agreed management plans and measures will be expected to do so as part of their commitment to the planning process.

The supporting objectives are aimed at a balanced approach to achieving social, economic, environmental, and institutional sustainability. As determined by the mandate of the Oceans Act, the four overarching objectives of the Initiative are:

- to integrate the management of all measures and activities in or affecting the Eastern Scotian Shelf Large Ocean Management Area;
- to manage for conservation, sustainability and responsible use of ocean space and marine resources;
- to restore and maintain natural biological diversity and productivity; and
- to provide opportunities for economic diversification and sustainable wealth generation to foster social well-being for coastal communities and stakeholders.

1.1. Research studies

One of the first activities undertaken for the ESSIM Initiative was an unpublished Overview and Use Audit of ocean activities, management and issues in the eastern Scotian Shelf. This exercise was largely an internal exercise for DFO Oceans and Environment Branch staff to identify existing and potential issues and challenges facing ocean management on the eastern Scotian Shelf.

\(^2\)Large Ocean Management Areas (LOMAs) extend from the coastline to the limits of the exclusive economic zone (EEZ), with boundaries based on a mix of ecological considerations and administrative units. LOMAs will address large-scale ecosystem and economic development issues through the development and implementation of integrated management plans. This paper focuses mainly on the offshore part of the ESSIM LOMA.

\(^3\)For additional background on the ESSIM Initiative, including published documents, see online: [http://www.mar.dfo-mpo.gc.ca/oceans/](http://www.mar.dfo-mpo.gc/ca/oceans/).
A November 2001 discussion paper titled *Issues, Challenges and Opportunities* (see footnote 3) expanded upon the issues identified in the *Overview and Use Audit* and incorporated information gained from information sessions and dialogue with a variety of groups and individuals involved in the Initiative, including other government departments, aboriginal First Nations, marine industry and user groups, conservation interests, and academia. The discussion paper provides a descriptive overview of the range of issues and challenges for integrated ocean management in the ESSIM area. The issues given emphasis by stakeholders relate to the following thematic categories: multiple ocean use; marine safety; marine conservation and environmental protection; compliance and enforcement; jurisdiction and institutional arrangements; science, research and development; and cultural resource protection.

To date, there have been considerable research studies to understand and assess the human use of the Management Area, including mapping key ocean use activities, such as submarine cables, oil and gas, fisheries and shipping. Other ocean use sectors being tracked include maritime defence operations, recreation and tourism, marine science and technology, marine conservation/protection, and potential ocean mining. Work is ongoing to further ecosystem understanding through collaborative science and research initiatives, funding ongoing and new research on ecosystem-based management, and compiling an overview of the current state of ecosystem knowledge and identifying key ecosystem knowledge gaps. In terms of ESSIM links with the Sable Gully MPA initiative, it is recognized that the communities of interest and players are basically the same. DFO is continuing to work with partners and stakeholders to share information, identify issues, build capacity, and support network development.

2. **The ESSIM forum governance model**

In November 2001, DFO proposed a collaborative governance structure—the ESSIM Forum—in a discussion paper titled *Development of a Collaborative Management and Planning Process*, and discussed at the multi-stakeholder 1st ESSIM Forum Workshop in February 2002 [5]. The ESSIM Forum is proposed as a collaborative process and networked structure to link all communities of interest for integrated management and planning. Through the mandate of DFO to lead and facilitate integrated management under the *Oceans Act*, the OCMD is functioning as the Secretariat for the future collaborative management and planning process. The ESSIM Forum will function as a networked structure for engaging and linking federal and provincial departments, boards and agencies, aboriginal communities (First Nations), municipal and local authorities, ocean industry and resource user groups, community interests, non-governmental organizations (NGOs), the science and research community, and the general public. Based on dialogue and input gained through the Initiative to date, the proposed structure and functions of the ESSIM Forum involve three key elements (see Fig. 2).

2.1. **Multi-stakeholder engagement**

The multi-stakeholder Ocean Management and Planning Group (OMPG) would function as the core of the ESSIM Forum to provide objective and inclusive opportunities for ongoing communications, information sharing and advice for integrated management and planning. This group could also be used to establish multi-stakeholder/expert working groups to address specific management issues and requirements for the Initiative.

2.2. **Government-level engagement**

It is proposed that federal and provincial government partners would be networked into the process at two key levels. Executive-level decision making would be facilitated through the Regional Committee on Ocean Management (RCOM)—a neutral table for information exchange to influence mandated decision-making processes and to avoid conflicts—that would respond to input and recommendations from the Ocean Management and Planning Group. Government engagement also occurs at the operational level through the intergovernmental Federal-Provincial ESSIM Working Group (described below), which would function as a sub-committee of the multi-stakeholder OMPG. These two levels of government involvement would work to improve policy and regulatory coordination, and to incorporate the objectives and measures of the ocean management plan into existing planning and decision-making processes for all ocean sectors.
2.3. Administration and operation

The OCMD is serving as the Forum Secretariat to facilitate and coordinate ocean management and planning for the ESSIM Initiative. One of the main functions for the Secretariat would be to support the activities of the multi-stakeholder OMPG, including its ongoing functions for communications, information sharing and the provision of advice for integrated ocean management. The Secretariat would also facilitate the design, development and implementation of the ocean management plan in collaboration with the multi-stakeholder and government interests involved in the ESSIM Forum.

2.4. Federal–Provincial ESSIM Working Group

At the governmental level, DFO is working with federal and provincial (Nova Scotia) partners to focus on policy, management and regulatory coordination in support of integrated ocean management. The Federal–Provincial ESSIM Working Group was established in January 2001 to build the government support and cohesion for ocean management necessary to move the Initiative forward at the governmental level. Comprised of representatives of over 20 ocean-related federal and provincial departments, agencies and boards, the Working Group provides an important forum for addressing intergovernmental policy and operations coordination in support of integrated ocean management. The Working Group also includes the DFO Maritimes Region representatives from other Departmental sectors, including Oceans & Environment, Policy & Economics, Science, Coast Guard and Fisheries Management. In its capacity as ESSIM Forum Secretariat, the OCMD is providing planning and organizational support for this joint Working Group. The Federal–Provincial ESSIM Working Group is involved in a number of important activities in support of the ESSIM Initiative and related integrated ocean management efforts around Nova Scotia:

- review of ESSIM discussion papers and reports [6];
- identification, definition and prioritization of ocean management issues and requirements;
- completion of a federal-provincial regulatory overview for the Management Area;
- advice on the design of a collaborative management and planning process (the future ESSIM Forum);
- support for the development of a draft integrated ocean management plan; and
- implementation of a communications and engagement strategy for the Initiative, including planning for the annual ESSIM Forum Workshop.

The Working Group has recently been tasked to determine and discuss with federal and provincial government departments the regulatory, political, economic, and geological parameters for the planning and implementation of seabed utility corridors for pipelines and power and telecommunications cables to offshore Nova Scotia. These conceptual discussions are intended to help formulate a “position statement” and/or “research needs” should the Working Group decide to further investigate the utility corridor concept.

2.5. Sectoral interest groups

Multiple affected interests are engaged in the design of a collaborative planning process. An informal ESSIM Fishing Industry Working Group has formed to represent diverse fishing interests with operations in the Management Area and to present a unified voice in discussions with government and other ocean-use sectors on matters of importance to the broader fishing community. The North American Submarine Cable Association (NASCA) is a useful conduit to the telecom sector, and NASCA members with infrastructure in the Management Area have participated in ESSIM-related discussions. The Canadian Association of Petroleum Producers’ (CAPP) Environmental Committee is involved in wide-ranging discussions with DFO on oil and gas exploration and development in the context of integrated ocean management and marine protected areas. Although the shipping sector has been slow to engage in the ESSIM process, the sector has recently been engaged through the Canadian Marine Advisory Council, a joint government-industry forum co-chaired by Transport Canada and Canadian Coast Guard for discussion on shipping issues.

Various environmental non-governmental organizations (ENGOs) (e.g., Canadian Parks and Wilderness Society, World Wildlife Fund, Ecology Action Centre, and Sable Island Preservation Trust) have formed a community of interest to represent marine conservation interests. At the municipal government level, the Guysborough County Regional Development Authority and the Halifax Regional Municipality have had representation in ESSIM-related discussions. Members of the local academic community have been actively involved in policy discussions regarding the development of a collaborative planning and management process and in ongoing environmental protection and marine conservation initiatives. These groups are provided with an opportunity to come together in large multi-stakeholder gatherings during the annual ESSIM Forum Workshop.

2.6. First Nations

The development and implementation of the ocean management plan will be in collaboration with affected aboriginal organizations, including those bodies that are
established under land claims agreements. Aboriginal First Nations involvement has been limited to discussions with the Atlantic Policy Congress, a strategic voice for First Nation communities in the region, and the Unama’ki Institute of Natural Resources, representing five First Nation communities on Cape Breton Island, Nova Scotia. There is a need to integrate First Nations into the ocean management processes and several initiatives are underway to address this issue in the near future.

3. Challenges to stakeholder participation in integrated ocean management

There are many challenges to stakeholder participation in a collaborative planning process, which may be categorized according to time and resources, trust and sectoral protectionism, and capacity to participate.

3.1. Time and resources

A substantial time commitment is required for participating and building capacity among all stakeholders, as the organizational capacity varies among ocean sectors. For example, the fishing sector is very diverse and comprised of dozens of disparate industry associations representing various fleet, gear, and processing sectors. Given that there is a requirement for functional and balanced representation in the ESSIM Forum to ensure its accountability, industry diversity may result in unmanageable participation levels in a collaborative process. Engagement of the offshore fishing industry, for example, could entail 20–30 people sitting at the table. Although the initial offshore focus of the ESSIM Initiative was a challenge for general public involvement, the inclusion of coastal interests through the LOMA concept adds a level of complexity with a range of sectors and communities of interest.

Many environmental non-governmental organizations have different focus issues and varied strategies to achieve their aims, and may not necessarily reach consensus on views and approaches. Conversely, the Canadian oil and gas sector and North American submarine cable sector are unified with membership organizations that represent their respective sectoral interests more effectively.

Time is also a factor in bringing all affected interests to the planning table. Affected interests range from local, regional, and national to the international, given the global nature of the shipping and telecommunications cable industries. For some affected extra-regional interests, attending ESSIM-related public consultations in Nova Scotia could require representatives to travel from places such as Texas, New Jersey, Virginia, Vancouver, Ottawa, Montreal, Newfoundland, and St-Pierre and Miquelon (France).

3.2. Trust and sectoral protectionism

The scope and diversity of ocean sectors represented in the Management Area is broad and often trust and co-operation among sectors is problematic. For example, effective and satisfactory consultation between telecommunications cable companies and the fishing industry is limited due to the weak local presence of multinational telecommunications companies. There is a tendency for various communities of interest to employ “sectoral protectionism” when dealing with other interests, etc. The fishing industry occasionally seeks the support of its regulator, DFO, in intersectoral conflicts when dealing with oil and gas and linear developments. Discussions regarding priority of use with components of the offshore fisheries sector highlight a perception that the fishing industry should have a higher priority in the integrated management and planning process based on its traditional and historical rights, industry value, and the renewable nature of the resource exploited. There are concerns regarding the degree of influence of the multi-lateral process over existing management structures and sectoral mechanisms. In nearly all sectors, there is a desire to continue discussions with DFO on a bilateral level, as opposed to engaging fully in broader multi-sectoral discussions at this early stage of the ESSIM planning process. Diminished trust and sectoral positions are factors that a future collaborative management and planning process must deal with regularly. DFO and its intergovernmental partners must work to restore trust and re-build public confidence in the ability of government to provide effective ocean management.

3.3. Capacity to participate

There are varying levels of capacity and/or willingness among sectors and groups to engage in a long-term integrated management and planning process. In some cases there is limited capacity in terms of people, knowledge of issues, access to information, suitable organization of information, financial resources, or time to commit to the process. The key challenges for building this capacity include the size and diversity of many ocean sectors and the involvement of extra-regional interests in the Management Area. While the organizational capacity for engagement in an integrated management and planning process varies among sectors, the government capacity to support integrated management and planning initiatives is also limited and needs to be addressed.
4. Building the ESSIM forum

The 1st ESSIM Forum Workshop in February 2002 was successful in beginning multi-stakeholder dialogue on the proposed ESSIM Forum and integrated ocean management and planning. Assessment of workshop outcomes by DFO highlighted the following points:

- There was strong support from workshop participants to proceed in the general direction proposed for the development of the ESSIM Forum and the ocean management plan.
- The workshop succeeded in highlighting to the broader community the ongoing efforts for government engagement and coordination.
- Individual sectors and communities of interest recognized the need to organize themselves in order to participate effectively in the process.

The workshop discussions provided valuable input on the structure and process for the ESSIM Forum. The various considerations and options put forward during the workshop have been reviewed by the Secretariat as part of the process of refining the proposed ESSIM Forum.

The 2nd ESSIM Forum Workshop in February 2003 discussed key elements of the discussion paper, A Strategic Planning Framework for the Eastern Scotian Shelf Ocean Management Plan [7]. Discussion focused on the plan elements, the proposed ESSIM Forum and the requirements for a networked structure to engage and link DFO, other government partners, and ocean communities of interest for integrated ocean management and planning. In most cases, participants expressed positive support for the overall direction being taken by the ESSIM Initiative and as presented in the Strategic Planning Framework. A range of perspectives and views on the various components of the future ocean management plan was captured, including the management objectives, the ecosystem-based management area framework, spatial planning and zoning approaches, and the proposed ESSIM Forum structure. The central questions relate to what it means in practice and the timelines for action [8].

4.1. Communications and information sharing

DFO’s Oceans and OCMD is now functioning as the ESSIM Forum Secretariat for the future collaborative management and planning process. The Secretariat established a web site [9] in April 2002 for communications and information sharing to support the activities of the multi-stakeholder planning process and to promote understanding of the integrated ocean management approach. The Secretariat continues to provide regular E-mail bulletins of relevant developments and information on the ESSIM Initiative. As part of the longer-term communications and information-sharing strategy being developed for the Initiative, the Secretariat supports the future establishment of a non-governmental web site operated by the broader ESSIM Forum. This would enable the ESSIM stakeholders to utilize interactive web-based communications tools, such as bulletin boards and online/timed discussions. In addition to E-mail or web-based communications, the Secretariat continues to initiate and respond to opportunities for face-to-face dialogue through information sessions, focus groups, or topic-based workshops.

During the 2nd ESSIM Forum Workshop, participants registered for the ESSIM Online Discussion Forum at www.thinkwell.ca. Several topics have been considered online through moderated, timed discussions, including ocean zoning, seabed utility corridors, information sharing and management, and conflict avoidance/resolution for integrated ocean management. The ESSIM Online tool will also be used to gather and post feedback on the Strategic Planning Framework. The site features a library page for easy access to ESSIM-related documents and references used for online discussions.

4.2. Institutional design and capacity-building

DFO continues to work with various communities of interest to support their organizational efforts, refine the design of the management and planning process and structure, and discuss the ocean management plan. There was general support from workshop participants for the formation of a multi-sector “coordinating working group” to work directly with the Secretariat on the process and plan design. At the same time, DFO was cautioned about the potential problems involved in establishing a “representative” multi-sector group with selected individuals from various communities of interest. Key considerations here include the broad and diverse nature of the groups and individuals involved in the process, the need for capacity- and institution-building in the majority of sectors, and the differing objectives and priorities among various communities of interest. However, there was overall agreement that the ESSIM Initiative should maintain the longer-term objective of a multi-stakeholder planning group as the core of the future ESSIM Forum. A number of communities of interest (e.g., fishing, oil and gas, ENGOs) are actively working to determine their involvement in a future multi-stakeholder group and to organize themselves for effective participation in the ESSIM process.

In addition to discussions between DFO and various communities of interest to support capacity-building and engagement in the process, the shorter-term establishment of a “coordinating group” remains a possibility. However, given the requirements identified...
above, such a group would be limited to specific functions, such as workshop planning or initial review of planning documents, and would be used to provide advice and perspectives as opposed to “representation” in the planning process. The input provided by a coordinating group would be taken back to the broader Forum for its review and comment to ensure full transparency of the planning process. Based on the limited response to join a coordinating group, the Secretariat continues to focus its efforts on building capacity through broad group discussion (e.g., E-mail bulletins) and dialogue with individual communities of interest.

At the government level, the Secretariat continues to work with the Federal-Provincial ESSIM Working Group for operational support and participation in the process. DFO is working toward establishing a senior intergovernmental committee (i.e., RCOM) to coordinate government input to the ESSIM Initiative. This intergovernmental committee will include senior policy and decision makers from the key ocean-related federal and provincial departments, boards and agencies operating in the region. Within DFO, the Secretariat continues to work with departmental sectors, including Science, Coast Guard, Policy & Economics, Oceans & Environment, and Fisheries Management, to develop capacity and expertise for integrated ocean management. This also includes the provision of regional input to the developing national ocean policy, Canada’s Oceans Strategy, and management frameworks, as well as related DFO programs (e.g., ecosystem objectives, objectives-based fisheries management plans, and MPA planning).

5. Development of the integrated ocean management plan

The Future Eastern Scotian Shelf Ocean Management Plan is envisioned as a 5-year strategic plan for the integrated management of all policies, programs, sector plans, measures and activities in or affecting the Management Area. To facilitate the design, development and implementation of the ocean management plan, the Secretariat worked in collaboration with interested parties to prepare the Strategic Planning Framework for discussion with multi-stakeholder and government interests at the second annual ESSIM Forum Workshop. This drafting process focused on the structure and key elements of the plan, including a vision statement, guiding management principles, high-level management objectives, and indicators and strategies for achieving environmental, social/cultural, economic and institutional sustainability through the management plan.

Foremost among the next steps to develop the ocean management plan was the formation in May 2003 of a Working Group to begin applying the approaches in the Strategic Planning Framework to the LOMA and to sub-areas within this Management Area. The Working Group is undertaking a planning exercise to complete the planning cycle and demonstrate how integrated management will apply layers of knowledge about the ecosystem and human use to advance the planning process, leading to a prototype plan.

On operational matters, the Secretariat continues to provide input to intergovernmental and interdepartmental discussions for regulatory consistency and coordination to clarify government jurisdiction and address multiple ocean use conflict. The Regulatory Overview [10] will assist these processes by providing an assessment of intra- and inter-sectoral capacity for integrated management and planning. As part of the referral process under the Canadian Environmental Assessment Act, the Secretariat continues to monitor and provide ocean management advice to avoid conflicts regarding proposed industrial activities on the Scotian Shelf. The Secretariat is also building an information base to improve ecosystem understanding and knowledge of current and planned ocean activities and management requirements.

5.1. Key elements of the integrated ocean management plan

The process leading to plan development requires a number of background supporting documents, including an ecological overview of the area [11], assessment of ecological health and all threats and impacts to be addressed; a comprehensive inventory and assessment of ocean use and interests (e.g., social/cultural, institutional and economic); a comprehensive inventory and gap analysis of existing legal, jurisdictional and management approaches and frameworks; an assessment of resource potential in the area (both renewable and non-renewable); and the identification and prioritization of ocean management challenges and issues to be addressed.

The Future Eastern Scotian Shelf Ocean Management Plan will include the following key elements:

- clear definition of the Ocean Management Area in geographical, physical and political/jurisdictional terms;
- clear statement of purpose, scope and legislative basis for the Ocean Management Plan;
- management vision and goals;
- management principles and approaches enshrined in the plan;
- high-level management objectives in terms of the four elements of sustainability: (i) environmental, (ii) social and cultural, (iii) economic, and (iv) institutional;
• operational objectives, indicators, reference points, and accompanying management strategies and actions to maintain indicators within acceptable limits;
• area-based management framework of sub-areas within the LOMA;
• ocean use planning measures, such as zoning, to address spatial and temporal management requirements for multiple ocean use;
• institutional planning framework of collaborative processes for the development and implementation of the plan, including mechanisms for stakeholder engagement, planning and decision making, and addressing conflicts; and
• ongoing monitoring, performance measurement and feedback mechanisms to enable plan revisions and adaptive management.

5.2. Management objectives

A key element of the plan is the identification of conceptual management objectives in terms of the four elements of sustainability: (i) environmental; (ii) social and cultural; (iii) economic; and (iv) institutional (governance). These qualitative objectives provide strategic direction for achieving desired outcomes and conditions and respecting agreed values through the ocean management plan and integrated management and planning process. Each element of sustainability will require a subset of high-level objectives for which measurable operational objectives and indicators will be developed. For example, for plan implementation and monitoring purposes, the high-level objectives will be supported by sets of “unpacked” measurable operational objectives, indicators, reference points, triggers for management action, and performance indicators. For each operational objective, responsibilities are to be identified and established for monitoring, reporting and corrective management actions. The operational objectives will be developed, monitored and reviewed through the annual plan implementation process within the ESSIM Forum for the ocean management plan.

5.3. Plan development and implementation

Plan approval would be conducted through the proposed multi-stakeholder Oceans Management and Planning Group and the government-level Regional Committee on Ocean Management. Plan implementation is envisioned through annual action plans that identify and prioritise issues according to criteria set collaboratively by the Oceans Management and Planning Group. The plan will be implemented through the ESSIM process by building on existing management and planning structures within the government and industry sectors. Those sectors with capabilities and responsibilities to implement agreed management measures would be expected to do so as part of their commitment to the planning process. Regulatory authorities with mandates over non-participants in the process will need to ensure that activities of non-participants are conducted according to the management objectives and measures in the plan. Similarly, industry and ocean use sectors are expected to apply the plan’s objectives within their sectoral planning. Cases of disagreement could be resolved via discussion and consensus building through the ESSIM planning process and via current inter-sectoral committees. If unresolved, a government-led dispute resolution process could be established, first through the responsible departments and through to the relevant Ministers or via currently established review processes, such as in the Canadian Environmental Assessment Act (e.g., environmental assessment, public review, mediation). Decision making with respect to conflicts could be provided by the proposed executive-level Regional Committee on Ocean Management or by relevant Ministers according to line management.

Information sharing, communication and capacity building are key to the planning process and to plan development. A communications strategy will be needed to support the developing planning process. Ongoing monitoring and reporting for performance assessment is necessary for review and improvements to the plan.

A collaborative administrative vehicle may be required to provide an oversight function with respect to cumulative ecosystem impacts, with a mandate to implement an action plan to reduce overall impacts to within target levels. Such an institutional body could be mandated to monitor and quantify the cumulative quantities of, for example, noise levels and contaminant load entering the eastern Scotian Shelf annually and to assess use conflicts.

6. Conclusion

The ESSIM Initiative is one of Canada’s flagship integrated ocean management programs under the Oceans Act and is in many respects providing lessons learned for the development of similar initiatives nationally. Substantial learning has occurred through the ESSIM Initiative regarding the development of integrated ocean and coastal management and planning processes. Such processes take a long time to develop and require extensive capacity building, both within government and among ocean stakeholders. Although still in the early phase of a fully functioning integrated planning process, the ESSIM Initiative has influenced sectoral management decision making by encouraging the movement toward integrated and collaborative models of ocean governance. Capacity building and effective engagement of stakeholder participants in a
collaborative planning process are primary challenges for the effective management of a large ocean management area with a complex social-legal-environmental-institutional setting.

References