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Vessel Replacement Rules and Procedures on the Atlantic Coast

A Discussion Paper



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Table of Contents

- 1. INTRODUCTION 1**

- 2. REASONS TO REGULATE 2**
 - 2.1. VESSEL SIZE AND THE CONSERVATION OBJECTIVE 2
 - 2.2. ORDERLY MANAGEMENT OF FISHERIES 4
 - 2.3. POLICY ON CAPACITY MANAGEMENT 5

- 3. CHANGING FISHERIES..... 7**
 - 3.1. COMPETITIVE AND QUOTA MANAGED FISHERIES..... 7
 - 3.2. CHANGES IN FISHING OPPORTUNITIES AND METHODS 8

- 4. THE SAFETY-AT-SEA ISSUE..... 10**

- 5. DECISION-MAKING ON VESSEL REPLACEMENT 12**
 - 5.1. THE CURRENT APPROACH 12
 - 5.2. SHARED STEWARDSHIP 14
 - 5.3. THE FUTURE OUTLOOK 16

- 6. PRINCIPLES AND POSSIBLE APPROACHES..... 17**
 - 6.1. PROPOSED PRINCIPLES 17
 - 6.2. EXAMPLES OF POSSIBLE RULE CHANGES 18
 - 6.3. PROCEDURAL OPTIONS 19

- 7. NEXT STEPS 20**

- 8. QUESTIONS FOR DISCUSSION 21**

1 Introduction

The current vessel replacement policy for Atlantic fisheries was developed in the 1970s and 80s. Conditions in the industry have changed significantly since then, and many industry stakeholders are calling for greater flexibility in the rules to accommodate new fisheries and new ways of conducting their harvesting operations.

In response to such concerns, the Department of Fisheries and Oceans (DFO) has undertaken a review of the current policy with the goal of developing a new Atlantic-wide approach on vessel replacement. The purpose of this paper is to encourage and support discussion on three questions:

1. Is there a need for ***new rules*** on vessel replacement within fleets?
2. If there is a need for substantial changes in the rules, is there also a need for ***new procedures*** for making the rules on vessel replacement?
3. If the rules and the procedures are to change, what ***policy principles*** should DFO establish to guide such changes?

The paper will describe the reasons why the rules were set up the way they were, and identify changes in the industry that suggest the need for new approaches. It will then look at key factors to be taken into consideration, including limits on harvesting capacity, vessel safety concerns, impacts on conservation issues and international policy commitments.

The paper will then propose principles and provide examples of possible changes and future processes to consider changes to vessel replacement rules. It will conclude with discussion questions to assist stakeholders in preparing their contributions to the consultation process.

2 Reasons to Regulate

At the outset of this discussion it is important to establish the reasons why government and industry have generally agreed on the need for effective vessel replacement rules. Such policies and rules serve three basic purposes:

1. Improved conservation through limitation of harvesting capacity;
2. More orderly fisheries management through limitations on competition within and between fleets;
3. Meeting national and international obligations for management of fisheries and oceans.

2.1 Vessel Size and the Conservation Objective

Vessel replacement has important implications for conservation of fish stocks. Generally speaking, the larger the vessel, the greater its capacity to catch fish. A larger vessel travels farther and faster, carries and deploys more gear, and can store more catch in its holds. If the whole fleet up-sizes the tendency will be for stocks to be harvested at the limits of sustainability with very little margin for error in the determination of sustainable yields.

This is a complex issue, however, because actual harvesting capacity is not just a matter of vessel length or even tonnage. The newer vessels carry space age navigation equipment and deploy more sophisticated fishing gear, they cover more ground and operate in a wider range of sea and weather conditions. All these things can result in increased fishing effort. Fish harvesters understand clearly that vessel size is only one aspect of capacity, and many want more say in vessel replacement policies so that they can develop realistic and timely controls on all these factors.

Another issue is *latent capacity*. Some fleets have access to multiple licenses but are only active in one or two fisheries for short periods during the year because of the lack of other fishing opportunities or of quota for other species. If this fleet was to receive a new allocation in a different fishery, the actual capacity of the overall fleet could suddenly double or triple because all that harvesting power would come into use. In planning new vessel replacement strategies, industry and government participants will need to take account of the latent capacity in the fleet and consider the most appropriate ways to manage and control it.

The added factor is that the bigger and more technologically sophisticated vessels are, the greater the capital, operating and depreciation costs. Owners of “latent capacity” often lobby hard for expanded allocations to help them pay for their underutilized investments. For all vessel owners, the higher the financial risks, the greater the likely temptations to break the rules to increase earnings. Unreported catches and sales, “high-grading” and dumping at-sea are illegal practices that may increase if harvesters are under extreme financial pressure. If there is a stock decline, as happened with groundfish throughout the Atlantic, the pressure to sacrifice conservation objectives may be greatest just when the stocks are most vulnerable.

Vessel replacement policies have therefore been used to control capacity for conservation purposes. In most fleets the rules were intended to define a type and size of vessel that could support a viable enterprise within sustainable harvesting levels without undue pressure to over-exploit resources.

An important goal for the regulation of vessel size and replacement is therefore to help maintain a sustainable balance between the available fish stocks and the number of viable harvesting enterprises.

Rules that work for one fleet at one time may not work well for another fleet or for the same fleet when its conditions change. The challenge for licence holders is to develop a dynamic and flexible approach.

To maintain a sustainable balance between conservation and fleet viability the policy and regulatory system will have to deal effectively, on an ongoing basis, with changes in technology, capital and operating costs, market conditions and the fish stocks themselves. The development of self-adjustment mechanisms in fleets will help to address these changes in circumstances.

2.2 Orderly Management of Fisheries

Before vessel replacement rules were first brought in the majority of fleets operated in competitive fisheries where individual enterprises could try to catch as large a share of the available quota as possible. Having a larger and faster vessel was an obvious advantage, and so the tendency was for some harvesters to buy larger boats to try to out-fish their neighbours. Catching capacity within each fleet would ratchet up, and this in turn created friction between fleets as groups pushed for larger shares of the global quota.

Fish harvesters and government soon recognized that if vessel size was not regulated the tendency would be for the largest enterprises to get the lion's share of the quota while harvesters with smaller vessels would lose their economic viability. These competitive pressures still operate in some fleets and between fleets when overall allocations are contested.

Vessel replacement rules can therefore help to stabilize fleets and ensure that an appropriate number of enterprises have a chance to take a reasonable share of the available resource. In the process these rules also may limit competition between fleets.

2.3 Policy on Capacity Management

Since the early 1990s more effective control of fishing effort and vessel capacity has been a goal of fisheries management policy in Canada and internationally.

The Food and Agriculture Organization (FAO) of the United Nations has taken the lead in the development of international policies and guidelines for the conservation of fish resources. A major focus is capacity reduction in fleets. The FAO estimates that there is excess fish harvesting capacity of at least 50% in the world, and is pressing the major fishing nations to support their plan to solve this problem.

Canada has signed on to the [FAO's International Plan of Action on the Management of Fishing Capacity](#). Canada's Auditor General and the Fisheries Resources Conservation Council have also called for continued capacity reduction measures.

DFO has implemented this policy direction through groundfish adjustment programs since 1991 and the Core License Policy introduced in 1995. DFO does not support any increase in overall harvesting capacity when new fisheries are opened up or established fisheries expand.

After conservation concerns and the rights of Aboriginal peoples, new fishing opportunities in expanding fisheries or new species will be allocated to enterprises that are designated "core", i.e., that hold licences

for key commercial species and have the ability to transfer to others such licences based on a history of committed fishing activity.

The [Core Licensing Policy](#) supports the consolidation of fishing opportunities in the hands of committed professional harvesters and the development of multi-license enterprises that are able to maintain economic viability through the ups and downs in different fisheries. The multi-license approach again suggests the need for greater flexibility in vessel replacement rules to accommodate more diverse harvesting activities.

DFO and the Government of Canada have been successful in bringing about significant rationalization of fleets since the early 1990s. In this current consideration of vessel replacement rules a major goal is to maintain the gains that have been made towards “right-sizing” the industry and promoting sustainable fishing enterprises and operations.

3 Changing Fisheries

3.1 Competitive and Quota Managed Fisheries

When the current vessel replacement policy was set up most fleets were operating in competitive fisheries. This meant that individual harvesting enterprises had considerable leeway to try to catch as much of the Total Allowable Catch (TAC) as possible before it was used up.

Vessel replacement rules were developed in consultation with industry groups as important ways to control such competition for limited resources within fleets. Other important controls for conservation and orderly harvest included limited entry licensing and effort controls such as trap limits, seasons and trip limits.

In some competitive fisheries these management strategies have been successful in maintaining the balance between overall fleet viability and sustainable harvesting levels. In other fisheries, however, concerns about short seasons, gluts in landings, and the costs of enforcing the rules have led to the adoption of Individual Quota (IQ) management systems.

In 1999, IQ fisheries accounted for close to 50% of total landed values in Canadian fisheries. About 21 out of 27 key commercial fisheries in the four Atlantic DFO regions are managed at least partially under IQ or of Individual Transferable Quota (ITQ) systems. The important exception is the inshore lobster fishery.

The shift from competitive to IQ/ITQ management approaches has important implications for the control of vessel size and replacement.

In competitive fisheries there is a continuing need to regulate vessels, gear, and day-to-day fishing activities for the fleet as a whole to maintain fair and appropriate competition within the fleet. Without such controls there is a danger that the most aggressive enterprises will expand their fishing effort at direct cost to the viability of other enterprises and perhaps to the sustainability of the stock.

In IQ fisheries, every enterprise has a well-defined share of the TAC so the incentives should be different. In theory, these harvesters will be concerned with earning the most income from a pre-set amount of fish and there will be no advantage to be gained by building a bigger, faster boat if it increases operating costs.

Many participants in IQ fisheries will argue that there is less need to control vessel size and replacement in their fleets because there is no competitive advantage in up-sizing. Either the fleet or the individual enterprise should therefore have greater room to make these decisions according to their business objectives and safety concerns.

3.2 Changes in Fishing Opportunities and Methods

Along with the shift to IQ management, another factor in the concern about vessel replacement is the ongoing change in fishing activities within fleets.

For example, in the lobster fishery in parts of Maritimes Region harvesters have taken advantage of strong market conditions, new navigation technologies and improved traps to fish right through the winter months and to operate in deeper waters out to 50 miles.

Some harvesters want greater flexibility to modify their vessels for these conditions, while others prefer to maintain the current controls on vessel size and capacity.

Faced with reduced landings in groundfish fisheries some harvesters are turning their attention to improvements in fish quality to attract better prices and maintain their overall revenues. Better on-board facilities for fish handling and storage may in turn require changes in vessel design and layout.

Since the groundfish crisis of the early 1990s fleets have diversified their operations to take advantage of the new fishing opportunities in shellfish. In Newfoundland in particular, harvesters who previously depended on the near-shore cod fishery are now fishing shrimp and snow crab in more distant waters. Shellfish landings in the Newfoundland Region grew from 57,000 mt in 1992 to 152,000 mt in 2001, an increase of 167%.

For the Atlantic fishery overall shellfish landings expanded from 239,000 mt to 423,000 mt, an increase of 77%.

A change of this scale in harvesting activities might in itself suggest the need for changes in the types and sizes of vessels employed in the fishery. In addition, many enterprises are now less specialized than before, and most have significant participation in two or more major commercial fisheries, which provide further support for the need to reconsider vessel size and replacement policies.

All of these trends again point to the need for new approaches to regulating vessel size, and for greater flexibility to adjust the rules to changing conditions and management objectives in the industry.

4 The Safety-at-Sea Issue

Safety at sea is a growing concern throughout the Atlantic fisheries. Transport Canada and the various provincial agencies responsible for workplace health and safety have been developing more stringent regulations on safety including mandatory training.

Because of the many changes in fleet structures and fishing operations discussed above, industry stakeholders are also paying more attention to safety at sea issues. Harvesters often refer to safety concerns when they call for greater flexibility in vessel replacement rules to allow them to use larger vessels in their more diversified fishing operations.

In Newfoundland and Labrador between 1993 and 1999 there was a dramatic increase in the number of incidents at sea where Search and Rescue support was required, and 46 individuals lost their lives in these incidents. A subsequent DFO review concluded that vessel size was a factor in many incidents, but that other issues also had to be addressed. Many incidents could have been avoided with better vessel maintenance and safety equipment.

The majority of harvesters throughout the Atlantic fishery have not yet completed the mandatory Marine Emergency Duties (MED) course and most have no-safety at sea training at all. Only a minority of harvesters has formal qualifications in navigation, vessel handling and rules of the road.

At meetings of Transport Canada's Canadian Marine Advisory Committee (CMAC) harvester representatives generally support expanded flexibility in vessel size rules for particular fleets. However most see this as one of a number of measures to improve safety along with appropriate equipment and training. Recent CMAC discussions focused on mandatory life rafts with the recognition that many fishing vessels are currently too small to be able to carry such equipment.

The DFO review concluded that there are many fishing enterprises that do not generate sufficient revenues to support the necessary investments in safety equipment and training. More flexible vessel size rules will not have much impact on the more marginal enterprises.

Based on its review, DFO has recognized that safety at sea is one factor that should be taken into account in licensing and vessel replacement policies. While DFO is not directly responsible for regulation of commercial vessel safety at sea, it will work with industry and with the appropriate federal and provincial agencies to ensure that departmental policies are consistent with, and supportive of, efforts to improve health and safety in the fishing industry.

The potential safety impacts of fisheries management measures will also be taken into consideration in developing fishing plans.

5 Decision-making on Vessel Replacement

At the current stage in the development of management systems for Atlantic fisheries, decisions on vessel replacement rules are made through the established system of direct, hands-on regulation by DFO Resource Management staff supported by joint planning and consultation processes with stakeholders.

Over the last decade, however, co-management approaches have been developed in many fisheries to deal with a variety of decision-making processes. These approaches effectively transfer various responsibilities for regulating fisheries to fleets for fixed periods of time under formal co-management agreements. In future it may be possible to include regulation of vessel size and replacement within a wider commitment to shared stewardship in Atlantic fisheries.

5.1 The Current Approach

At present the creation, modification and enforcement of rules on vessel replacement are the sole responsibility of DFO, and all take place through established fisheries management procedures dating back to the 1970s. Industry stakeholders are consulted through advisory committees and the wider Integrated Fisheries Management Planning (IFMP) process, but at the end of the day the Department decides.

There is growing criticism of this top-down process and of DFO's role in "micro-managing" many of the practical, day-to-day activities of particular fleets. Some observers see this as part of a tradition of paternalism whereby responsibility for decision-making, and accountability for results, are taken out of the hands of the people who have the most at stake.

According to this view, industry participants who do not feel ownership for the rules are more likely to try to bend or break them. This in turn results in higher costs for surveillance and enforcement.

While it has certain strengths, the traditional management model is not always effective in responding to changing conditions in specific fleets or fisheries. With particular regard to vessel replacement rules, it has three distinct drawbacks:

1. Slowness and inflexibility in controlling or accommodating changes in technology and vessel design;
2. Slowness and inflexibility in reacting to changing operational conditions and management objectives within particular fleets;
3. Over-dependence on DFO to monitor compliance and enforce the rules.

As stated above, the reason to have rules on vessel size and replacement is to maintain a sustainable balance between conservation objectives and the size and harvesting capacity of the fleet. It is possible that better results might be achieved with less direct involvement by DFO and expanded industry self-management on the level of fleets or local fisheries.

5.2 Shared Stewardship

The [Discussion Paper for the Atlantic Fisheries Policy Review](#) (AFPR) has proposed three basic objectives for fisheries management:

1. Conservation and sustainable utilization;
2. Orderly management; and,
3. Shared stewardship.

For the shared stewardship objective the goal is to enable industry stakeholders to ...

*... assume greater responsibilities in fisheries management activities and decision-making in areas related to local allocations and internal fleet shares, co-ordination of different fleet sectors and fisheries, and the preparation and implementation of fishing plans on the local, regional and cross-regional levels.*¹

The AFPR Discussion Paper also provides a definition of co-management as...

*... the sharing of authority and responsibility for fisheries management, and of accountability for results, between DFO and the resource users.*²

The basic idea is that industry stakeholders take on more significant responsibilities for managing their own fisheries and along with it some expanded share of the management costs.

¹ Ibid, p. 39.

² *The Management of Fisheries on Canada's Atlantic Coast: A Discussion Document on Policy and Principles*; DFO, 2000; p. 38.

A shared stewardship approach to the regulation of vessel size and replacement could occur through existing advisory processes, or as a component of a more formal co-management arrangement. More generally, shared stewardship over vessel size and replacement might also involve a more global policy approach for the entire inshore (<65') sector that would be developed through consultation.

In any case, the implementation of a shared stewardship approach to the regulation of vessel size and replacement might involve four steps:

1. DFO would set the overall policy direction and establish guiding principles and policy objectives;
2. DFO would devolve responsibilities to fleet organizations or other legitimate industry groups that demonstrated a willingness and capacity to develop proposals for replacement rules;
3. The fleet organization or other type of industry group would proceed with the development and implementation of new rules, subject to evaluation against principles and approval;
4. Both the proposal and its evaluation will be made public to promote transparency in decision-making; and
5. DFO would oversee monitoring and evaluation of the new rules in full cooperation with the stakeholder groups involved.

In setting the overall policy direction DFO would be responsible to ensure that new rules would be consistent with its overall policy goals and particularly with the objectives of sustainable utilization and orderly management.

DFO would also be responsible to ensure that the decision-making process under such co-management arrangements was fair and equitable. In particular it would insist on:

- Transparency in decision-making processes and outcomes;
- Opportunities for all license holders in the fleet or fishery to participate in decision-making through appropriate and effective democratic procedures;
- Meaningful consultations with other fleets or interest groups who might be impacted by the decisions;

5.3 The Future Outlook

Under the current *Fisheries Act* DFO is limited in its abilities to formally delegate fisheries management responsibilities and authority. Co-management arrangements are currently made on a somewhat ad hoc basis through IFMPs and joint project agreements (JPAs).

Consistent with the approach spelled out by the AFPR, DFO expects that over time, as requisite legislative changes are made and resource user groups demonstrate their capabilities to take on greater responsibilities, aspects of decision-making on vessel size and replacement may be delegated to resource users.

Until these larger changes are achieved, there will continue to be considerable latitude for fleets to make proposals for new rules and procedures, and to marshal industry support for such changes. However the final authority to approve such changes will rest with the Department. It will make these decisions based on larger policy objectives and principles that must be clearly spelt out and communicated to industry stakeholders.

6 Principles and Possible Approaches

This section of the discussion paper suggests three elements of the new approach: proposed principles to govern changes in vessel replacement rules, examples of changes to those rules, and new ways of making decisions about such rules.

6.1 Proposed Principles

In considering changes in vessel replacement rules, DFO will take steps to ensure that any new approach is consistent with the overall policy goals for conservation and orderly management. The following set of principles is proposed:

1. New rules for a particular fleet or fishery should not compromise objectives for conservation and sustainable utilization.
2. There should be no increase in overall harvesting capacity in the fleet, and preferably new vessel replacement rules should contribute to reduced capacity.
3. New vessel replacement rules should encourage self-adjustment mechanisms.
4. New vessel replacement rules should enhance safety and be consistent with the policies and regulations of other agencies responsible for safety at sea.
5. New rules should contribute to improved economic viability of fleets and not generate pressures for expanded allocations.
6. New rules should not result in any changes in allocations, fleet shares or access.
7. Only core licence holders with permanent licences will benefit from changes to rules.
8. New rules should be readily enforceable and should not increase administrative and enforcement workloads for DFO.

9. New rules should be consistent with the objectives of current licensing policy including owner-operator rules and the emphasis on multi-licensed enterprises.
10. New rules should take into account the fact that fishing enterprises may hold licences for more than one fishery.

6.2 Examples of Possible Rule Changes

If there were greater flexibility in the procedures for making vessel replacement rules and in the rules themselves, what new approaches might be developed? Some approaches might be effective in one situation but not another. Fleets might have scope to move towards greater flexibility or, alternatively, to impose more restrictive control on the choices of individual harvesters.

The following are examples of the types of changes that fleets might pursue, which would then be evaluated using the principles outlined above in any particular situation:

1. Flexibility to allow two enterprises to combine/partner by pooling their quota shares or licences or gear (on a temporary or permanent basis), and using a larger vessel than formerly.
2. A community or group quota approach whereby a number of harvesters collectively manage a shared quota with the safest and most efficient fleet of vessels.
3. Adoption of quota management programs, such as Individual Transferable Quotas.
4. Flexibility within IQ/ITQ programs to allow individuals to transfer their quotas to other vessels on a temporary or long-term basis.
5. The removal of any restriction on vessel size in a fleet provided that any new vessel is only used in IQ fisheries.

6.3 Procedural Options

The above section identifies a few possible examples for changes in vessel replacement rules. It is understood, however, that many more such examples might be developed to fit the unique circumstances of different fleets and fisheries. Participants in different fisheries have specific concerns around safety, accommodation of particular types of gear or fishing methods, and ways to control rule breaking and inappropriate forms of competition. Industry groups are often very creative and innovative in coming up with solutions to the problems that are of greatest concern to them in their local situations.

Perhaps the most important area of change, therefore, would be to invite legitimate resource user groups to develop proposals through innovations in the fisheries management planning process and through different types of co-management arrangements. Proposals will be discussed in existing advisory processes and then assessed by DFO against the principles.

To address DFO policy objectives for orderly management, procedures for the development and implementation of any such rule changes should be fully transparent, and there should be full and appropriate consultation with direct stakeholders and other groups who might be impacted by the proposed changes.

7 Next Steps

DFO's objective is to have a new vessel replacement approach in effect for the 2003 fishing season.

Groups and individuals who have reviewed this discussion paper and wish to respond in writing can do so at the following addresses:

1. Vessel Replacement Rules Review, Fisheries and Oceans, P.O. Box 5667, St. John's, Newfoundland and Labrador, A1C 5X1 (FAX : 709-772-3628)
2. Vessel Replacement Rules Review, Fisheries and Oceans, 176 Portland St, 5th floor Marine House P.O. Box 1035. Dartmouth, Nova Scotia, B2Y 4T3 (FAX : 902-426-9683)
3. Vessel Replacement Rules Review, Fisheries and Oceans, P.O. Box 5030, Moncton, New Brunswick, E1C 0E6 (FAX : 506-851-6705)
4. Vessel Replacement Rules Review, Fisheries and Oceans, 104 Dalhousie, Quebec, QC, G1K 7Y7(FAX : 418-649-8082)
5. Vessel Replacement Rules Review, Fisheries and Oceans, P.O. Box 358, Iqaluit, Nunavut, X0A 0H0 (FAX : 869-979-8029)
6. Vessel Replacement Rules Review, Fisheries and Oceans, 200 Kent Street, Station 13026, Ottawa, ONT, K1A 0E6 (FAX : 613-990-7051)

or by e-mail at Vessel-Bateau@DFO-MPO.GC.CA

8 Questions for Discussion

In thinking about new approaches to making vessel replacement rules and about what the rules might be, stakeholders might consider the following questions:

1. Are the principles proposed by DFO clear and appropriate for setting a new policy direction for vessel replacement?
2. In what practical ways are current vessel replacement rules a constraint on vessel and crew safety, or on the viability of fishing enterprises, and how might they be improved?
3. What are the possible benefits of creating greater flexibility for fleets to develop new vessel replacement rules?
4. What are the possible drawbacks if fleets have a greater say in vessel replacement rules?
5. What would be the best ways to balance greater flexibility in vessel replacement rules with controls on harvesting capacity and fleet viability?
6. Do fleets have the organizational capabilities and tools to play a greater role in managing vessel replacement rules and procedures?
7. How should decisions on changes in vessel replacement rules be made within fleets, and what would be the most effective consultation methods?
8. What should be the role of the conservation harvest planning (CHP) and the integrated fisheries management planning (IFMP) processes in dealing with possible changes to vessel replacement rules, and is there a need for additional planning mechanisms to deal with such issues?