

Allocation of Demersal Harvest Rights in Iceland

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Abstract: It is generally understood that since 1984 the Icelandic fishery management system has been based on individual transferable quotas (ITQs), that licenses for commercial fishing in Iceland were allocated to owners of vessels according to their fishing activity for the period 1 November 1982 through 31 October 1983, and quota shares in the demersal fisheries (usually 70–80 % of the annual catch value) were allocated according to the catch history of vessels in the period 1 November 1980 through 31 October 1983. Several judgements have been based on these premises.

The aim of this article is to illustrate that the Icelandic fishery management system has by no means been a 100 % ITQ system since 1984, and that allocation of fishing licenses and quotas in the demersal fisheries in Iceland has been far more complicated than the aforementioned understanding would indicate. In fact since 1984 the Icelandic system has evolved more by trial-and-error than by design, and a substantial portion of the demersal quota shares have been reallocated. These reallocations should influence how the system is judged and evaluated.

Keywords: fisheries management, ITQs, allocation of fishing rights, equality, property right, freedom of employment

1. Introduction

When annual total allowable catch (TAC) is determined for commercial fishing, the allocation of this TAC also has to be decided. Under this management system fishing opportunities are normally defined as individual quotas, but to what extent these are transferable varies. When fishing quotas are individually-allocated and

transferable (ITQ), both the initial allocation of the quota and the transferability of the quota¹ become usually controversial.

This article is in part a case study of this issue, which concerns the allocation of demersal harvest rights² in Iceland. The aim is to describe some fundamental factors in the complicated allocation mechanism of the Icelandic demersal fisheries, focusing on facts rather than interpretation, although some analysis will be presented.

The allocation mechanism employed in the Icelandic demersal fisheries bears some similarity to the Norwegian system, and to a lesser extent that used in New Zealand.³ They resemble one another in four ways:

1. A TAC system was set up because other management systems had failed to secure sustainable use of fisheries resources.
2. When the TAC was decided for the first time, some stakeholders had used the resource for commercial purposes and vessel-owners in particular undertook financial risks based on the expectation to catch a certain volume of fish each year. Vessel-owners usually received loans from financial institutions that in return held collateral on fishing vessels and other properties necessary to conduct commercial fishing.
3. Due to the financial commitment of stakeholders in category two, and for other reasons as well, the initial allocation of harvest rights went to vessel-owners. Their individual quotas were usually defined either according to their catch history, or according to criteria based on their temporary position. Eventually the quotas were made transferable to some extent to enhance economic efficiency in the fisheries. This type of fisheries management system inevitably leads to social change that becomes heavily debated in the political arena. Legal questions regarding equity, freedom of employment, and property rights are bound to arise.
4. The sensitive political situation surrounding the quota system creates a willingness to deviate from the rules for allocating fishing rights. These deviations

1. See *Sharing the Fish – Toward a national policy on individual fishing quotas*, p. 34.

2. A concept that means the right to hold a general commercial fishing license and the right to catch species that are managed with a TAC. The concept refers to the right to catch species that are managed with a TAC and species that are not managed in such a manner.

3. This statement is based on Hersoug's description of the allocation mechanism in Norway, see Hersoug, Bjørn: *Closing the Commons*, pp. 137–158. The allocation mechanism in New Zealand is described for example in Hersoug's book, *Unfinished business*, pp. 31–33, 69–71 and 83–84. Even though many features of the fisheries management system in New Zealand are similar to the Icelandic system, the allocation process in Norway resembles more to the one in Iceland.

or "loopholes" in turn lead to a reallocation of fishing rights, and can happen on a recurrent basis, depending on decisions made by the legislator and the government. It is of some significance that these reallocations have occurred without quota-holders being compensated in Iceland and Norway, while in New Zealand quota-holders have usually been compensated by the state.⁴

In essence this article will focus on category 4, a category legal scholars have not yet analyzed in detail. By conducting this analysis a solid factual basis can be created to evaluate (1) the position of the legislator as an organ that can regulate and manage the fisheries, (2) the position of the holder of harvest rights as a potential owner of the fishing rights, and (3) the position of those who oppose the quota system due to its alleged unfairness. When this complex situation is reviewed by a judiciary, it is reasonable to demand that the facts regarding allocation of fishing rights be laid down. As this article will point out, this has not necessarily been the case prior to important judgements regarding the legitimacy of the allocation process in the Icelandic fisheries management system (IFMS).

2. Icelandic Fisheries Management since 1976 – an overview

2.1 Icelandic fisheries management 1976–1983

Following the extension of the Icelandic Exclusive Economic Zone (EEZ) to 200 nautical miles in 1975–1976, the Icelandic authorities tried to manage the cod fisheries with a system based on day limitations in the period 1977 to 1983.⁵ Allowable fishing days were decided for different vessel groups, and the trawler fleet had fewer days to conduct direct cod-fishing than other vessels groups.⁶ Due to various factors this fisheries management scheme was thought to have failed, and by the autumn of 1983 it became clear that the Icelandic cod stock was in such a poor state that fishing opportunities would have to be seriously reduced.

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4. See how this has been done in New Zealand in Hersoug's book: *Unfinished business*, pp. 31–33 and 69–71.
 5. The total cod wet catch value alone in the period 1970–1990 accounted for 40–50 % of the total wet catch value. However the annual value of the demersal catch was around 75–80 % of the total wet catch value. The annual export of fish products accounted for approximately 80 % of Iceland's commodity exports in the seventies and eighties. See Snaevarr, Sigurdur: *Haglýsing Íslands*, pp. 163, 167 and 362.
 6. When direct cod fishing was banned, vessels could still catch cod but the catch had to be a maximum of 10–15 % of the total demersal catch in each fishing trip.

2.2 Icelandic fisheries management 1984–1990

As a response to this crisis, new management of the demersal fisheries was adopted in 1984, based on assigning catch quotas to each vessel. Although catch quotas had been used before in Iceland (mainly in the capelin and herring fisheries), this decision in 1984 is traditionally considered to mark the beginning of the Icelandic fisheries management system. The cornerstone of the new system was a regulation issued by the Minister of Fisheries determining TACs for the most important demersal species, to be caught for a designated period. Initially this system was enacted for one year, for the year 1984, with Act No. 82/1983, amending Act No. 81/1976.⁷ The catch of the most valuable demersal species, such as cod, haddock, saithe, redfish and *Greenland* halibut, was managed for the most part according to the specified TACs of 1984, but only partially in the period 1985–1990.⁸ With the enactment of Fishery Management Act No. 38/1990 (FMA or FMA no. 38/1990),⁹ ITQs then became the most important feature of the Icelandic fisheries management system.

2.3 Quota entitlements since 1991

When the FMA was promulgated in 1990, the legal concept of a *quota share* was established for the first time. In essence quota share means a long-term percentage of the TAC, while the *catch quota* means the exact figure in tons that a vessel is entitled to catch for a particular fishing year or a season.¹⁰ Quota shares and catch quotas are assigned to vessels, and are sometimes referred to as *quota entitlements*.¹¹ Quota entitlements are *transferable*, but with some restrictions. It is possible to mortgage quota shares indirectly,¹² and those who inherit a vessel with

7. Act No. 81/1976 on Fisheries in the Icelandic fisheries jurisdiction.

8. In the period 1985–1990 the management of demersal fishing, and other fishing as well, was based on three acts: first an act that was the legal basis for managing the fisheries in 1985, i.e. Act No. 118/1984, amending Act No. 81/1976; second, Act No. 97/1985 on Fisheries Management 1986–1987; and third, Act No. 3/1988 on Fisheries Management 1988–1990.

9. FMA came into force on the 18th of May 1990 but took effect on the 1st January 1991. More than forty amendments were made to the Act until the legislation was re-enacted as Act No. 116/2006.

10. Art. 7 (2) and (4), of FMA No. 38/1990, now art. 8 (2) and (4) of FMA No. 116/2006, defined quota share and catch quota in this manner. Since the 1st September 1991 the fishing year has been designated as running from the first of September to the thirty-first of August, cf. art. 3 FMA.

11. Also called catch entitlements.

12. See art. 3 (4) of the Act on Contractual collateral No. 75/1997.

a quota share are obliged to pay inheritance tax according to the market value of the quota entitlements.¹³

Since 1991 quota entitlements have always been a key element to obtain the right to conduct commercial fishing. However an increased proportion of the annual TAC has been allocated on other basis than on quota share.¹⁴ Due to this, the distribution of the annual TAC of the most important demersal stocks, such as cod, haddock, saithe and wolffish, has been subject to recurrent changes.

2.4 Basic objections to the quota system

Many objections have been raised to the basic features of the IFMS and the quota entitlements.¹⁵ The one, that is most relevant for this article, is based on the argument that the initial allocation of the demersal harvest rights was unfair. This criticism has been based on the notion that almost all harvest rights were assigned to operators of vessels engaged in fishing during the three years preceding 1984. Accordingly, it has been claimed that certain vessel operators received the harvest rights free of charge, while others have been obliged to purchase or lease the right to fish from the beneficiaries of these arrangements, or from others who have, in turn, purchased such a right. Some say this has resulted in a two-tier system in Icelandic society, where one group received harvest rights free of charge, while the other group had to buy them from the first group. These basic objections have been raised in court cases where the legitimacy of the allocation process of the demersal fisheries has been questioned.

2.5 Three important court cases

It has been debated in three important court cases whether the allocation of harvest rights in the Icelandic fisheries has violated principles of equality and freedom of occupation, as both these principles are protected by the Icelandic Constitution¹⁶ and the principle of equality before the law is also protected by the International Covenant on Civil and Political Rights (CCPR).¹⁷

13. See art. 4 (2) of the Act on Inheritance Tax No. 14/2004.

14. This will be further explained in chapter 3.2.

15. These objections have often been based on the first article of the Fisheries Management Act, but that article declares, among other things, that the exploitable marine stocks of the Icelandic fishing banks are the common property of the Icelandic nation, and that allocation of harvest rights provided for by the Act neither endows individual parties with the right of ownership nor irrevocable control over harvest rights.

16. See art. 65 and 75 of the Constitution.

17. See art. 26 of the Covenant.

In the first case, the *Fishing permit case* of 1998,¹⁸ in December 1996 a man named Valdimar Jóhannesson applied to the Ministry of Fisheries for a general commercial fishing permit and a catch quota. His application was denied by the Ministry since he did not own a vessel with a general fishing permit, but according to art. 5 (1) of the FMA no. 38/1990, only vessels having received fishing licenses according to art. 4 and 10 of Act No. 3/1988, which vessels had not been permanently decommissioned, were eligible for commercial fishing licenses.¹⁹ Valdimar took his case to the courts, and the Supreme Court of Iceland unanimously held that article 5 FMA no. 38/1990 was not compatible with the principle of equality before the law under article 65 of the Constitution, and the considerations of equality that had to be taken into account when limiting the freedom of employment, cf. Article 75 of the Constitution.²⁰

In the second case, *Quota entitlement case I* of 2000,²¹ in February 1999 the crew of the vessel Vatneyri landed cod without having any catch quota. The captain of the vessel and the director of the company that owned the vessel were prosecuted for violating fisheries legislation. They both maintained, among other things, that allocation of quota shares violated the constitutional principle of equality, and so they should be acquitted. The majority of the Supreme Court (4 out of 7 judges) held that restrictions on the freedom of individuals to engage in commercial fishing, resulting from rules of quota shares and catch quotas, were based on objective considerations, and were in line with the constitutional principles of equality and freedom of occupation. Therefore the defendants were found guilty of violating the fisheries legislation.

In the third case, the *Quota entitlement case II* from 2007,²² in September 2001 the crew of the vessel Sveinn Sveinsson landed catches of four demersal species without having any catch quota. Those who were responsible were prosecuted and found guilty with reference to the precedent of the Supreme Court judgment in the *Quota entitlement case I* of 2000. Subsequently two of the defendants filed a communication to the UN's Human Rights Committee and maintained that they had

18. *Judgement of the Supreme Court of 3 December 1998 in the Case Valdimar Jóhannesson v. the Icelandic State (Case No. 145/1998, Court Records for 1998, p. 4076).*

19. The second and third sentences of the provision related to hook and longline boats.

20. Subsequently Act No. 1/1999, that changed certain provisions in FMA no. 38/1990, was adopted, and the conditions for obtaining commercial fishing permits were substantially relaxed.

21. *Judgment of the Supreme Court of 6 April 2000 in the Case of the Directorate of Public Prosecutions v. Björn Kristjánsson, Svavar Guðnason and Hyrnó Ltd (Case No. 12/2000, Court Records for 2000, p. 1534).*

22. *The views of the Human Rights Committee on 24 October 2007 in the case Erlingur Sveinn Haraldsson and Arnar Snaevar Sveinsson vs. the Icelandic State (Communication No. 1306/2004).*

been victims of a violation of article 26 of the CCPR. It was the view of the majority of the Human Rights Committee (12 out of 18 members of the Committee) that the State had not shown that the particular design and modalities of implementation of the Icelandic quota system met the requirement of reasonableness. Hence, violation of article 26 of the Covenant was found to have taken place.

2.6 How has the allocation process usually been described?

For the purposes of this article it is important to note that the judgement in the Fishing permit case from 1998 was based on the premise that almost all commercial fishing licenses were either assigned to owners of fishing vessels who were active 1 November 1982 until 31 October 1983 which had not been permanently decommissioned, or to owners of fishing vessels that replaced the vessels that were operating 1 November 1982 until 31 October 1983. What is even more necessary to bear in mind is that in the *quota entitlement case I* from 2000 and *the quota entitlement case II* from 2007, it was held to be true that quota shares were more or less defined according to the catch history of vessels in the period from 1 November 1980 to 31 October 1983 (often called the *reference period*).²³

This basic understanding of the allocation process of the demersal fisheries in Iceland has predominated in the writing of academics in various fields who have described the IFMS.²⁴ This understanding is also reflected in articles by legal scholars in Iceland published in the period 1990–2006.²⁵ When the Icelandic gov-

23. See further *Views, adopted by the Human Rights Committee on 24 October 2007, concerning communication No. 1306/2004* (The reply of the Icelandic government to the Human Rights Committee, dated. 6th of June 2008).

24. See for example Gissurarson, Hannes: "The fishery: Agreeing on the rules," p. 60; Runolfsson, Birgir: *The Icelandic system of ITQs*, p. 112; *Sharing the Fish – Toward a national policy on individual fishing quotas*, pp. 82–83; Libecap, Gary: *Implications of First-possession rules*, p. 157.

25. See for example Línal, Sigurdur and Gunnarsson, Tryggvi: *Alitsgerd samin ad beidni 9 alþingismanna vegna tiltekinna þatta frumvarps til laga um stjórn fiskveida*, dags. 1. maí 1990, p. 18; Magnússon, Skúli: „Um stjórnskipulega eignarrettarvernd aflaheimilda”, p. 592; Axelsson, Karl: „Greinargerð vegna nanar tilgreindra hugmynda um breytingar á lögum um stjórn fiskveida og framkvæmd á grundvelli þeirra.”, p. 3; Gauksdóttir, Guðrún: „Eru aflaheimildir eign í skilningi 72. gr. stjkskr?” pp. 249–275.

ernment has argued for the legitimacy of the allocation process before a judiciary, it has described the allocation of demersal harvest rights in a similar manner.²⁶

As will be seen in the next section, this description by academics and courts of the allocation process in the demersal fisheries has been only partially accurate.

3. Facts Regarding Allocation of Harvest Rights in the Demersal Fisheries

Rules regarding allocation of commercial fishing permits and the distribution of quota entitlements in Iceland have always been complex and difficult to understand. It will be necessary to describe these rules in some detail to disprove the commonly-held understanding of the matter. For the sake of clarity the subject will be divided into two time periods, the first being 1984–1990, which discusses also the initial provisions of FMA no. 38/1990. The second period covers developments since 1991.

3.1 The period 1984–1990

(a) *Allocation of commercial fishing permits*

In 1984 commercial fishing permits were distributed to operators of vessels 10 Gross Register Tons (GRT) and larger, that had engaged in fishing for demersal species in the period between 1 November 1982 and 31 October 1983, and which had not been permanently decommissioned.²⁷ This basic criterion was upheld in the period 1985–1990, although exceptions were made. Small boats, those under 10 GRT, were neither part of the fishing permit system nor the catch limit system. In practice this continued to be the case until FMA No. 38/1990 came into force. Another loophole was created when four trawlers and one large boat received commercial fishing permits, even though no existing vessels in the fleet were permanently decommissioned in the period 1986–1988.²⁸

26. In the reply of the Icelandic government to the UN's Human Rights Committee from 6th of June 2008 there are many examples of this understanding. For instance, the following statement was made: "In its fundamental features, fisheries management in Icelandic territorial waters has been based on the same general principles since 1984." See further *Views, adopted by the Human Rights Committee on 24 October 2007, concerning communication No. 1306/2004*.

27. See art. 3 of the Government Regulation No. 44/1984 on the management of demersal fishing for 1984 pursuant to the provisions of Act No. 81/1976 (*cf.* Act No. 82/1983).

28. This loophole was based on temporary provision II of the Fisheries Management Act No. 97/1985, see further Gretarsson, Helgi: *Rettarsaga fiskveida fra landnami til 1990*, p. 133.

These loopholes meant there were more trawlers in the fleet in the beginning of the year 1990 than in the beginning of the year 1984. The number of active small boats in the period 1984–1990 increased considerably, as shown in Table 1.

Table 1 Division of the fishing fleet 1st January 1984 and 1st January 1990²⁹

Year	Small boats	Boat over 10 GRT	Trawlers	Total
1984	1060	573	103	1736
1990	2045	542	115	2702

According to this table, there were 966 more vessels in 1990 than in 1984. This was acknowledged when the FMA bill was discussed in parliament in the spring of 1990, and was seen as an indication that over-investment had occurred in the period 1984–1990.³⁰

(b) Allocation of catch quota in 1984–1990

Catch quotas for the year 1984 were assigned more or less to vessels of 10 GRT or larger, according to their catch experienced during the period 1 November 1980 to 31 October 1983. By 1984 many already felt that defining the catch quota each year according to catch experience in the reference period would not be fair in the long run.³¹ Therefore it was decided in 1985 that vessels 10 GRT and larger could choose to fish according to the so-called *effort quota*³² (also called effort restriction option). This option to choose effort quota was extended for the years 1986–1990 but was subsequently *abolished* when FMA no. 38/1990 took effect.

In order to simplify the matter one can say that the fisheries management system in the period 1985–1990 was three-pronged: *First* were vessels 10 GRT and larger, which fished according to their annual catch quota. This was the *catch quota system*. *Second* were the effort quota vessels 10 GRT and larger, that fished according to their allowable fishing days but with certain catch limitations. This was the *effort quota system*. *Third* was the *small boat system*. In 1985–1990 the catch quota for

29. Runolfsson, Birgir: Sjavartutvegur Íslendinga, p. 21.

30. In 1977 around 1200 vessels landed cod, but in 1990 the number was around 2500. The total cod catch was similar in 1977 and 1990, see State of Marine Stocks in Icelandic Waters 2007/2008, p. 95.

31. See Gretarsson, Helgi: *Rettersaga fiskveida fra landnami til 1990*, p. 149.

32. Effort quota meant an allowable fishing day system with a catch limit in cod. Catch limits were also imposed for effort quota trawlers that caught redfish in 1988–1990, and that caught Greenland halibut 1989–1990.

every catch quota vessel was in many ways defined according to criteria decided in 1984. However, assignment to the catch quota vessels was done after considering the fishing rights of the effort quota vessels and the small boats. In this context it is *vital to understand that in the period 1985–1990 catch quotas were issued for all vessels 10 GRT and larger*. This meant that effort quota vessels received a catch quota every year. However, vessels in the effort quota system were not obliged to catch according to their catch quota.

In 1985–1987, all vessels in the effort quota system could catch at least 20 % more than their assigned catch quota in cod.³³ The effort quota vessels were supposed to get a new catch quota in 1986–1987, so that in 1986 the new catch quota of effort quota vessels was calculated as one-third of the vessel's demersal catch in 1985, and two-thirds of the vessel's catch quota for the year 1985. In 1987 the new catch quota for effort quota vessel was calculated as one-half of the vessel's demersal catch in 1986, and one-half of the vessel's catch quota for the year 1986. In this way the effort quota vessels were de facto able to *gain quota entitlements to the detriment of the catch quota vessels*.

This development in 1985–1987 led to considerably higher landings of cod than indicated by the TAC. It also had the effect of removing fishing rights from catch quota vessels to effort quota vessels. In order to stop this development, certain provisions were enacted with the Fisheries Management Act 1988–1990 No. 3/1988, provisions to ensure that effort quota vessels could no longer dilute the quota entitlements of the catch quota vessels. However, vessels with a low catch quota could choose the effort quota and gain catch quota from those effort quota vessels that had a relatively high catch quota. This was possible because the rules for defining catch quota of every effort quota vessel continued to be based on both the catch (50 %) and on the catch quota (50 %) of the previous year.

These exceptions from the TAC arrangement meant, for example, that cod landings in 1984–1990 were considerably higher than the TAC.³⁴ In retrospect some marine biologists have maintained that overfishing of cod in the late eighties damaged the stock.³⁵ This fishing above the TAC was of course legal, and had the effect that the catch quota was not a dominant source of the total catch. Effort quota vessels and small boats also had a large portion of the landed catch in 1985–1990,

33. Vessels that had a low catch quota compared to the average catch quota in their vessel group were allowed to catch more than this extra 20 %.

34. This was also the case with landings of Greenland halibut, for example, where the landings of that fish stock were 95 % higher than the TAC in 1989!

35. See Marine Stocks in Icelandic Waters 2007/2008, p. 22; Vilhjálmsson, Hjalmar, „Er ekki mál að þessu þvargi fari að linna?” Morgunblaðið, 19 November 2007.

and this can be verified by statistics showing the catch quota of the catch quota vessels as a proportion of the total catch of all vessels, as in table 2.

Table 2 The catch quota of catch quota vessels as a proportion of total catch of all vessels in 1985–1990³⁶

Year	Cod	Haddock	Saithe	Redfish	Greenland halibut
1985	64 %	94 %	105 %	97 %	76 %
1986	32 %	51 %	52 %	37 %	29 %
1987	36 %	68 %	46 %	40 %	24 %
1988	52 %	74 %	66 %	43 %	33 %
1989	53 %	63 %	60 %	41 %	29 %
1990	49 %	58 %	54 %	39 %	46 %
Average	48 %	68 %	64 %	50 %	40 %

It is evident from this table that catch quota was not an overwhelming feature of the fisheries management system in the period 1985–1990. This was particularly the case in 1986 and 1987 in the cod fisheries, and in other fisheries from 1986 till 1990.

(c) *The Allocation According to the Temporary Provisions of FMA*

According to the initial article 5 (1) of FMA, commercial fishing permits were assigned to those fishing vessels that existed in the country and had not been decommissioned permanently. Unlike the period 1984–1990, no exceptions were made to this arrangement when FMA took effect 1 January 1991.³⁷ That arrangement created a double fishery management system, a closed fishing permit system, and a quota system. For the purposes of this article there is no need to discuss allocation of commercial fishing permits any further, although it is necessary to explain in some detail the manner in which quota shares were divided among vessel groups and individual vessels.

36. Source: Runolfsson, Birgir: "The Icelandic System of ITQs: Its Nature and Performance," pp. 119. When the number is higher than 100 % it means the total catch was less than the catch quota.

37. As has already been mentioned there were almost 1000 more vessels active in 1990 than in 1984, cf. table 1.

(c1) Division of quota shares between vessel groups

Allocation of catch shares in the demersal species cod, haddock, saithe, redfish and Greenland halibut was stipulated in temporary provisions I and II of the FMA. The second paragraph of temporary provision II essentially divided the fishing fleet into two vessel groups: *vessels 10 GRT and larger, and small boats*. This provision stipulated that the total quota share of the small boat fleet should equal their share in the landed demersal catch in the year 1989. This basically meant that demersal catches landed by small boats in 1989 decided, for the most part, the division between the two vessel groups. According to article 4 of the governmental regulation on commercial fishing No. 465/1990, small boats did not catch redfish or Greenland halibut in 1989, but their proportional landed catches that year of cod were 12.91 %, of haddock 7.30 %, and 2.83 % of saithe. The quota share of the small boat fleet was then increased further in accordance with rather complicated rules.³⁸ That meant their estimated quota share of cod became 14.34 %, 8.17 % of haddock and 3.18 % of saithe.³⁹ This was a considerable increase compared to their estimated share in 1984, when it was 3.5 % in cod, 1.17 % in haddock and 1.86 % in saithe. This increase in catch by small boats was of course 'taken' from vessels 10 GRT and larger.

(c2) Division of quota shares among vessels 10 GRT and larger

The main rule defining quota shares for all vessels 10 GRT and larger was stated in temporary provision I in the FMA, that basically the demersal quota share of each vessel was to be defined according the catch quota of the vessel for the year 1990.⁴⁰ Therefore it is important to know what criteria determined the demersal catch quota for the year 1990. In order to simplify the matter, one can say that the demersal catch quota of 1990 was based on the catch history of each vessel in the reference period (1 November 1980 to 31 October 1983) but with considerable amendments due to following factors:

1. Deductions due to exceptions to the catch experience rule in the years 1984 and 1985;

38. See paragraph 5, 7, 9 and 10 of the temporary provision II of FMA.

39. Sources: Gov. Regulation on management of the demersal fisheries in 1984; Memo of the Ministry of Fisheries regarding quota shares to small boats, dated 16th February 1991; Art. 4 of the Gov. Regulation on commercial fisheries No. 465/1990; author's own calculations.

40. An exception was made to that rule for vessels in the effort quota system that had a low catch quota. This exception meant that 2–3 % of the total demersal quota share went from vessels with a catch quota that was higher than certain average limits, to those effort quota vessels that had a catch quota below those same limits.

2. Deductions to the catch quota of the catch quota vessels in 1986 and 1987 due to the new assignment of catch quota to effort quota vessels;
3. Deductions from the catch quota of effort quota vessels with a high catch quota due to the increased catch quota of effort quota vessels with a low catch quota in the years 1988 and 1989;
4. Deductions due to increased fishing rights of the small boat fleet;
5. Deductions due to various other factors.

When these deductions are combined it is fair to say that the quota share in demersal species was determined largely according to the catch history of the vessel operators in the period from *1 November 1980 to 31 December 1989*. It is plainly inaccurate or wrong to say that the assignment of quota shares was decided more or less only on the catch experience in the period 1 November 1980 to 31 October 1983.

(c3) Division of quota shares among the small boat fleet

More than 2000 small boats received commercial fishing permits according to the original provision of the FMA. This large number of boats was divided into two groups: around 900 boats that based their fishing rights on a quota share in the quota system, and more than 1100 boats that started to fish with hook and longline in the allowable fishing day system. The latter system was supposed to be temporary until 31 August 1994 but was further extended until it was more or less abandoned 1 September 2004.

All small boats 6 GRT and larger were obliged to catch according to their quota share from 1 January 1991 onwards. Various rules defined the quota share of each and every boat. The most important rule was the catch experienced in the years 1987 to 1989. Boats under 6 GRT were permitted to fish according to an allowable fishing day system in the period 1 January 1991 to 31 August 1994. If the average demersal catch of the hook and longline fleet in this period was 25 % higher than expected, then the fleet was supposed to receive a quota share 1 September 1994. The total quota share for the fleet was then to *equal* the total quota share hook and longline boats were supposed to have when FMA no. 38/1990 took effect.

3.2 Fisheries management since 1991

Despite the system of TACs and individual quota entitlements, landings of demersal species above the TACs have occurred since 1991. However these "extra landings" have decreased considerably compared to the period 1984–1990. Landings above the TACs have been made possible due to various exceptions from the quota entitlement system, most notably fishing off the hook and longline boats.

In order to simplify the matter one can describe the system since 1991 as three-fold. *First*, is the system of quota entitlements. Individual quota entitlements have been the most important harvest right for catching demersal fish stocks commercially within the Icelandic EEZ since 1991. *Second* is the system for hook and longline boats. From 1991 to 2001 most of these boats were managed according to various allowable fishing day systems. In 2001 the *hook and longline quota share system* took effect. From 2001 to 2004 around 300 hook boats participated in an allowable fishing day system, but since 1 September 2004⁴¹ almost all those boats have entered the hook and longline quota share system.⁴² The *third* part of the system is the special allocation of the annual catch quota decided by the legislator and the Ministry of Fisheries.⁴³

This three pillar allocation system has meant that the annual TAC has not only been distributed according to the quota share of each vessel but also on other grounds. Hence, the share of the quota share vessels in the TAC has been deducted.⁴⁴ This means that reallocation of quota entitlements has occurred. They have been stipulated with complicated provisions of acts and regulations, but explanation of the details involving these reallocations is beyond the scope of this article. The most important reallocations have been from the quota share vessels to hook and longline boats. Table 3 shows the difference between the estimated quota share of hook and longline boats in 1991 and their hook and longline quota share on 1 September 2006.

41. The last boat to land a catch according to a fishing day system was in the fishery year 2005/2006.

42. The current hook and longline quota share system is a special quota system for boats under 15 Gross Tons (GT), often referred to as the "the small quota system." It is forbidden to transfer quota entitlements from hook and longline boats to quota share vessels. It is, however, possible to transfer quota shares and catch quota to the "small system." In other respects the principles in the small system are the same as in the "big system," cf. Art. 8 (5) FMA.

43. These allocations of catch quota have been based on the following criteria: (1) A regional quota; (2) Extra fishing rights for boats that catch with certain gear, for example the *longline discount* since 2004, see Art. 8 (3) and Art. 11 (8) FMA; (3) An "equality" demersal quota for boats that have lost their rights to fish certain species due to considerable cuts in TAC in a stock they used to fish; (4) Other special allocations.

44. This can be explained with an example: The TAC for the fish stock Y is decided 125.000 tons in the fishery year X. Due to fishing rights of the hook and line boats and special allocations there are only 100.000 tons to be divided among quota share vessels. The vessel A, that has 1 % quota share in Y, gets therefore 1.000 tons catch quota in the year X ($100.000 \cdot 0,01 = 1.000$).

Table 3: The estimated quota share of hook and longline boats on 1 January 1991 and the hook and longline catch share in the beginning of the fishing year 2006/2007:⁴⁵

Species	Estimated quota shares of the hook and longline boats 1st January 1991	Hook and longline catch share 1st September 2006
Cod	2.18 %	17.50 %
Haddock	0.55 %	14.67 %
Saithe	0.81 %	7.32 %
Wolffish	No TAC	38.52 %
Red fish	0 %	0.59 %
Tusk	No TAC	12.59 %
Ling	No TAC	11.49 %

This table demonstrates convincingly the proportion of demersal fishing rights reallocated from quota share vessels to hook and longline boats since 1991.

4. Summary and Conclusions

4.1 Summary of the facts

Most accounts of the Icelandic quota management system take for granted that general commercial fishing permits were allocated for the most part according to the activity of vessel operators in the period 1 November 1982 to 31 October 1983, and that quota entitlements were allocated according to catch history in that reference period (1 November 1980 to 31 October 1983). It is also believed these two criteria were temporary during 1984 to 1990, but became permanent when FMA no. 38/1990 took effect on 1 January 1991.

What this basic understanding indicates is that since 1984 there has been a quota system in the demersal fisheries, and that the TAC has been more or less upheld since then. It also indicates that from 1984 to 1998 general commercial fishing licenses were allocated to those who received them in 1984, or to those who replaced the original license-holders. Finally it indicates that quota shares in the most valuable demersal stocks were based on a catch history in the reference period, and no substantial change has occurred in that field since then.

45. Source: Parliament reg. Section A, 2006–2007, p. 1403.

As this article proves, this common understanding of the matter is inaccurate, if not plainly wrong. There were almost 1000 more vessels active in the fleet 1 January 1990 than on 1 January 1984. All those new vessels received general fishing permits when the FMA took effect. Allocation of quota entitlements has developed since 1984 in accordance with many complicated provisions of acts and regulations. This development has basically meant that one vessel group has acquired a higher share in the TAC than was decided in 1984. For example, the small boat fleet was estimated to catch around 3.5 % of cod 1984, but in 2006 the total allocated cod quota share of the small fleet was around 30 %.⁴⁶ Reallocations of quota shares were of course taken either from the original rights holders, or those who acquired them via transfers from the original rights holders. This indicates the legislator and the government have at least to some extent reallocated fishing rights as they have seen fit.

From a legal standpoint these inaccuracies regarding the allocation process of demersal fisheries rights in Iceland are of some significance. For instance, it is obvious that many individuals after 1984 could begin commercial fishing without paying any fee to those who held the demersal harvest rights initially. This was made possible through many deviations from the main rules of the quota system, in particular in the period 1984–1990. The consequences of these "loopholes" were that the TAC was not upheld, and many more vessels were active than was necessary from an economic point of view. Hence over-fishing and over-investment in the fishing industry continued to be a problem in Iceland, and that was the main reason why a fairly-universal ITQ system was introduced in 1990 with the enactment of IFM no. 38/1990.

4.2 Conclusions

From a general legal point of view it is important to determine with some accuracy on what basis fishing licenses and fishing quotas have been allocated. This becomes obvious when deciding whether the allocation has been based upon objective criteria, or whether the fishing rights have such a durable nature that they enjoy similar protection as any other type of property rights. Legal debate on these issues should be based on facts. As this article indicates, that has not been the case in the Icelandic debate regarding allocation of harvest rights in the demersal fisher-

46. The whole small boat fleet acquired 14.34 % in cod 1991, and it was estimated that the hook and longline boats would get a total 2.18 % quota share no later than 1 September 1994. By 2006 the hook and longline boats had acquired 17.50 %. There had also been some special allocation to the small boat quota share fleet in the nineties. Altogether the small boat fleet has increased their allocated share of cod from 3.5 % to around 30 %.

ies. It should also be kept in mind that it is hardly possible to allocate harvesting rights to everybody's satisfaction when ITQ systems or any other quota systems are adopted to manage the fisheries.⁴⁷

This article has outlined the facts regarding the allocation of harvesting rights in Iceland, which are important when addressing the following difficult legal questions: (1) Is the allocation unfair or infringe upon principles of equality and freedom of employment? (2) Does the allocation process indicate that so little has changed since 1984 that the rights are protected legally, as for any other type of property? It is not possible to address these questions based solely on the information conveyed here. However, the article indicates that the legislator has used his power to reallocate fishing rights in order to achieve political goals. This appears to have happened in Norway as well. In both Iceland and Norway no compensation has been paid by the state to the holders of harvesting rights whose catch has been reallocated, while in New Zealand rights-holders have usually been compensated.

This complicated reallocation process in the demersal fisheries in Iceland can be explained in various ways. Probably the most logical explanation is that since 1984 the IFMS has stirred on-going political controversy, and consequently many have felt it necessary to maintain "loopholes" in the system so that individual fishers would have the opportunity to begin commercial fishing without paying special fees to those that received harvesting rights initially in 1984. Despite these loopholes there has been no consensus of abolishing the main rules of the system altogether, and this can to some extent be explained by the fact that other management options have been tried and not worked well. The end result is that the ITQ system has been maintained, in part because it has proven to be economically efficient, in particular in comparison with the development of the demersal fisheries prior to 1991.⁴⁸

When all is considered, allocation of harvest rights in the Icelandic fishery management system has hardly ever violated the principles of equality and freedom of occupation on the grounds that these harvest rights were permanently assigned to operators or vessel owners according to their fishing activity 1 November 1982 to 31 October 1983, or according to their catch history in the period 1 November 1980 to 31 October 1983. The fact is that the allocation of these rights was based on far more complicated criteria. It is the author's opinion this seriously weakens

47. According to a recent study "Initial allocations for quota based systems are usually based on historical track record, mostly using a fixed reference period." See MRAG, IFM, CEFAS, AZTI Tecnalia & POIEM: *An analysis of existing Rights Based Management (RBM) instruments in Member States and on setting up best practices in the EU – Final report: Part I*, pp. 1–2.

48. See Arnason, Ragnar: "Property rights in fisheries: Iceland's experience with ITQs," pp. 257–261.

the arguments upon which the judgements of both the Supreme Court and the UN Human Rights Committee were based in the three court cases cited in this article.

Another conclusion is that it is doubtful quota entitlements in the demersal fisheries will be considered equivalent to property, based solely on the premise they have been durable since 1984 or 100 % permanent since 1991. Reallocations of demersal quota entitlements have occurred on a regular basis since 1984 without the holders of the demersal harvesting rights receiving any compensation from the Icelandic state. This development makes it less likely that quota entitlements will enjoy legal protections similar to any other type of property.⁴⁹

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49. Further discussion on property protection of catch entitlements in Iceland can be found for example in Magnusson's article, "Constitutional Property Protection and Transferable Fishing Quotas in Iceland," pp. 57–69, and also in *Views, adopted by the Human Rights Committee on 24 October 2007, concerning communication No. 1306/2004* (The reply of the Icelandic government to the Human Rights Committee, dated 6th of June 2008).

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Распределение прав на подводные ресурсы в Исландии

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Резюме

Многие полагают, что исландская система управления рыболовством в основном регулировалась индивидуальными квотами (ИТК) с 1984 года. Было также распространено мнение, что лицензии на коммерческую ловлю рыбы в Исландии по большей части выдавались владельцам судов, согласно их рыболовецкой деятельности в течение периода с 1 ноября 1982 до 31 октября 1983, что размеры квоты глубоководного рыболовства (обычно 70–80 % от объема ежегодного вылова) выдавались на основе размеров добычи в период 1 ноября 1980 до 31 октября 1983. Ряд судебных дел было построено на этих условиях.

Цель этой статьи состоит в развенчании мифа о том, что исландская система управления рыболовством была 100 %-но основана на квотах ИТК с 1984 года, и то, что распределение лицензий на вылов рыбы и квот в глубоководном рыболовстве в Исландии было намного более сложным, чем указано выше. Фактом является то, что с 1984 года исландская система развивалась более методом проб и ошибок, чем в соответствии с выработанным методом. Это означает, что была перераспределена существенная часть глубоководных квот. Данные перераспределения квот должны учитываться при оценке и обсуждении эффективности системы.

Ключевые слова: управление рыболовством, ИТКs, распределение прав рыболовства, равенство, права собственности, свобода в выборе профессии.