UK sea fisheries policy-making since 1945

Heather Stewart

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Abstract

This is a study of approaches to fisheries management in the United Kingdom (UK) between 1945 and 1996. It examines the choices and incentives faced by UK Governments when designing policy instruments to deliver international commitments to sustainable fishing. The failure of international agreements to sustainably manage fisheries resources is often attributed to international institutions, the politicization of negotiations and their distributive outcomes. This thesis makes an original contribution by arguing that the success of international agreements was also dependent upon local negotiations that shaped the design of national delivery mechanisms.

The central research question concerns the role and influence of local interests in delivering global economic and environmental agendas and how national governments accommodate local tensions within this process. A sustained content analysis of UK Government archives is used to argue that local political and sectional industry interests had a significant bearing on the development of UK fisheries policy and the design of domestic delivery mechanisms. The exception was UK policy on the international distribution of fisheries resources at the United Nations Law of the Sea Conferences (1958, 1960 and 1973-82). Economic considerations drove early environmental policy with sectional fishing industry interests of secondary importance to the potential economic benefits associated with the more valuable energy resources.

In then seeking to implement controls on fishing activity, this thesis argues that UK fisheries management mechanisms were designed to compensate for tension between global commitments mandating a reduction in fishing effort and the local fleets and communities that had to bear the costs of industry contraction. This created a policy-making environment in which social and political motivations continually trumped the application of economic and scientific advice. This advice advocated a contraction in the size of the fleet which had become necessary as technical change and falling stocks resulted in overcapacity. The use of fisheries policy as a political tool to ease local tensions incentivised policy choices that directly contributed to the UK's failure to reduce fishing pressure and deliver international commitments. This thesis demonstrates the importance of local negotiations and interests in the construction of national and international approaches to environmental and natural resources problems.

Lay Summary

This study of UK fisheries policy-making between 1945 and 1996 argues that the success of international agreements on the sustainable management of fish stocks have been influenced by negotiations with local interests. It provides evidence of local actors shaping national and international approaches to environmental and natural resource problems. Local political and fishing industry interests in the UK had less influence on the international distribution of fisheries resources at the United Nations Law of the Sea Conferences (1958, 1960 and 1973-82). In these negotiations, fishing industry interests were of secondary importance to the more valuable energy resources.

This thesis argues that UK fisheries policies were designed to protect the fleets and communities from the economic and social costs of a reduction in the size of the industry. This had become necessary as technical change and falling stocks resulted in overcapacity. The political importance attached to the socio-economic outcomes of fisheries policy reduced the influence of economic and scientific advice in the policy-making environment. The outcome was the design and application of national policies that directly contributed to the UK's failure to reduce fishing pressure and meet international commitments.

Declaration

I declare that this thesis has been composed solely by myself and that it has not been submitted, in whole or in part, in any previous application for a degree. Except where it states otherwise by reference or acknowledgement, the work present is entirely my own.

Heather Stewart
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UK legislation and international conventions and treaties

1945	Truman Proclamation on the Continental Shelf
1946	Convention on the Regulation of Meshes of Fishing Nets and Size Limits of Fish
1946	International Convention for the Regulation of Whaling
1957	The European Economic Community Treaty of Rome
1956	First United Nations Law of the Sea Conference, Geneva.
1958	Convention on the High Seas, the Territorial Sea and the Contiguous Zone, the Continental Shelf and on Fishing and Conservation of the Living Resources of the High Seas.
1959	North-East Atlantic Fisheries Convention
1960	Second United Nations Law of the Sea Conference, Geneva.
1964	UK Fishing Limits Act
1964	European Fisheries Convention
1967	UK Sea Fish (Conservation) Act
1970	European Commission regulation on common structural policy and common organisation of the market
1973	Accession of UK, Denmark and Ireland to the European Economic Community
1973	Third Conference on the Law of the Sea Convened
1976	Extension of European Fishing Limits to 200-miles
1982	United Nations Convention on the Law of the Sea
1983	European regulation (EC 170/83) establishing a Community system for the conservation and management of fishery resources
1983	UK Fishing Vessels (Financial Assistance) Scheme
1984	UK Fishing Vessels (Acquisition and Improvement) Grants Scheme
1992	Sea Fishing (Days in Port) Regulation in 1992

Abbreviations

ACFM	Advisory Council of Fisheries Management
AFPO	Aberdeen Fish Producers' Organisation
BFF	British Fishermen's Federation
BNOC	British National Oil Corporation
BUT	British Union of Trawlers
CAP	Common Agricultural Policy
CFP	Common Fisheries Policy
CPR	Common Pool Resource
CPUE	Catch Per Unit of Effort
DAFS	Department of Agriculture and Fisheries Scotland
DAS	Days at Sea
DANI	Department of Agriculture Northern Ireland
DEFRA	Department for Environment, Food and Rural Affairs
DOPO	Defence and Overseas Policy Committee
DTI	Department of Trade and Industry
EC	European Commission
EEC	European Economic Community
EU	European Union
EEZ	Exclusive Economic Zone
FAO	Food and Agricultural Organisation of the United Nations
FCO	Foreign and Commonwealth Office
FEOGA	European Agricultural Guidance and Guarantee Fund
FPO	Fish Producers' Organisation
GB	Great Britain
GDP	Gross Domestic Product
GRT	Gross Registered Tonne
JR	Judicial Review
ICJ	International Court of Justice
ICES	International Council for the Exploration of the Sea
IEA	International Environmental Agreement
IEM	Internal Energy Market of the European Union
ILC	International Law Commission
IQ	Individual (non-transferable) Quota
ITQ	Individual Transferable Quota
IPHC	International Pacific Halibut Commission
ISA	International Seabed Authority

IWC	International Whaling Committee
LOS	Law of the Sea
MAF	Ministry of Agriculture and Fisheries, 1919-1955
MAFF	Ministry of Agriculture Fisheries and Food, 1955-2002
MAGP	Multi-Annual Guidance Programme
MEY	Maximum Economic Yield
MGT	Million Gross Tonnes
MOD	Ministry of Defence
MP	Member of Parliament
MS	Member State (of the European Union)
MSY	Maximum Sustainable Yield
NAO	National Audit Office
NAS	The National Archives of Scotland
NEAFC	North East Atlantic Fisheries Commission
NDPB	Non-Departmental Public Body
NFFO	National Federation of Fishermen's Organisation
NFU	National Farmers' Union
OFA	Orkney Fishing Association
OECD	Organisation for Economic Co-operation and Development
PAC	Public Accounts Committee
PO	Producer Organisation
PSL	Pressure Stock Licence
RLS	Restrictive Licensing System
SBFPO	Scarborough and Bridlington Fish Producers Organisation
SFF	Scottish Fishermen's Federation
SFO	Scottish Fishermen's Organisation
SFIA	The Sea Fish Industry Authority
SFPA	Scottish Fisheries Protection Agency
SFPO	Shetland Fish Producers' Organisation
SSFA	Secretary of State for Fisheries and Agriculture Scotland
SO	Scottish Office
SOAFD	Scottish Office Agriculture and Fisheries Department
SNP	Scottish National Party
STF	Scottish Trawlers Federation
TAC	Total Allowable Catch
TAL	Total Allowable Landings
TNA	The National Archives
TQR	Total Allowable Catch and Quota Regulation
TURF	Territorial User Rights in Fisheries
TW	Territorial Waters

TWC	Territorial Waters Committee
UNLOS I	The First United Nations Conference on the Law of the Sea, 1958
UNLOS II	Second United Nations Conference on the Law of the Sea, 1960
UNLOS III	Third United Nations Conference on the Law of the Sea, 1973-82
UNCLOS	United Nations Convention on the Law of the Sea, 1982
UK	United Kingdom
UN	United Nations
USA	United States of America
USSR	Union of Soviet Socialist Republics
VMS	Vessel Monitoring System
WFA	White Fish Authority
WVQ	Weekly Vessel Quota

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1. Introduction

This thesis is a study of the development of approaches to fisheries management in the United Kingdom (UK) between 1945 and 1996. It analyses attempts by UK Governments to manage fisheries resources within the context of international concern for over-fishing. The choices and incentives faced by successive administrations when deciding on the policy instruments for delivering international commitments are examined. This thesis is concerned with the management of property rights as well as stocks and the experiments with developing politically-acceptable and economically-viable management mechanisms.

A theme of this thesis is the accommodation of local interests within international environmental and economic agendas. In this thesis, the term 'local interests' represents sub-national political interests and sectional industry interests that were often representative of regions and local communities within the UK. This thesis argues that the success of international commitments on stock conservation were dependent on local negotiations and shaped by the influence of local interests in the choice of national policy mechanisms.

The global and fugitive nature of sea fisheries resources necessitated international cooperation and agreement. The tendency for international fisheries management agreements to fail to conserve stocks is commonly attributed to inadequacies and failures of international machinery and structures. Key criticisms of the European Common Fisheries Policy relate to the politicization of fisheries advice, negotiations and the distributive outcomes (Holden 1994; Symes 1997; Daw and Gray 2005; Khalilian et al. 2010). Academic consideration has been given to the influence of UK national politics on the creation of EEC and EU fisheries policy sub-national (Wise 1983; Holden 1994; Symes 1997, Asgeirsdottir 2008) but less to the role and influence of national and sub-national interests in the design and effectiveness of national policy implementation.

This thesis argues that attempts by successive UK Governments to adopt economic and conservation-based approaches to fisheries policy were repeatedly frustrated by local political tensions. Analysis of this process is used to demonstrate the influence of local concerns on the delivery of international commitments. It traces a need to use national policy as a tool of

arbitration between the global agenda and local interests to the marginalisation of local concerns in the development of global agreements.

Analysis of UK Government archives demonstrates that from the mid-1980s increasing use was made of economic and scientific advice, fisheries management theory and international experience. Yet a policy-making environment prevailed in which these influences were continually trumped by social and political motivations. Domestic politics led to the use of fisheries management as a tool to maximise the social value of fisheries resources. Policies were designed to spread the costs of industry contraction across the UK and support fishing activity as a source of employment in economically marginal areas of the UK. Fishing opportunities (*de facto* property rights) were allocated on the criteria of political acceptability, administrative ease and distributive equity. This thesis argues that the resulting policy choices directly contributed to the UK's failure to reduce fishing pressure and meet international commitments.

This thesis makes an important contribution to the existing literature by providing insight into the local negotiations that had to occur if policies were ultimately to be successful. It identifies that property rights were crucial at a supranational United Nations level as well as a local level, with local property rights more effective when they attached access to stocks to individuals.

Context

Overfishing became a global concern during the 20th century. Overfishing can be defined as biologically and economically unsustainable levels of fishing that can lead to the depletion and exhaustion of stocks. The transference of a fish stock from a renewable to a non-renewable resource occurs when its biomass has been reduced to the point where it is unable to reproduce and replace members removed.

Opportunities for over-fishing were driven by technological advances and facilitated by the *res communis* status of global fisheries resources. From the mid-19th century, new technologies created opportunities for an intensification of fishing pressure. Railway infrastructure and ice and canning technology expanded markets. The shift from sail to steam power and the development of more efficient engines increased the size and power of vessels and the area of fishing grounds. These increasingly powerful fishing vessels had unimpeded access to the vast majority of the seas and the fisheries resources within. The international law of the sea

was ground in the 17th century principle of *Mare Liberum*. Coastal states had sovereignty over a 3-mile belt of water known as territorial waters. [1] Beyond this, the sea was international territory and all nations were free to use it.

The combination of technological advances and the international legal regime allowed the rate of fisheries exploitation to increase at an unprecedented rate throughout the 20th century. Global catches increased 7 per cent per annum in the two decades following the end of the Second World War.[2] Roberts (2007) described the intensification of fishing pressure in these decades as "mirror[ing] the industrialisation of terrestrial agriculture".[3] While the initial application of technology allowed for increased catches per unit of effort (CPUE), exploitation rates gradually outstripped the biologically determined supply of stocks.[4] Initial signs of overfishing – falling CPUE– were masked by the greater efficiencies offered by technology and the ability to fish for longer, trawl larger nets and reach previously unexploited distant and deep waters.

Though recognised as a modern global environmental crisis, the impact of overfishing was often felt initially and most severely at local levels. This was influenced by the relative immobility of local fishing fleets and a traditional lack of alternative economic opportunities in the coastal communities allied to the industry. Roberts' (2007) study of the industrialisation of fishing indicates that the UK's local fleets experienced the initial effects of overfishing due to the damage fishing trawls caused to the inshore seabeds that housed important immature fish and spawning stocks.[5] Similarly, Jónsson (1982) argued that initial attempts to conserve stocks were often spatially local such as the attempt by the Icelandic Government in the 1930s to prohibit trawling in the Faxa Bay nursery grounds.[6]

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[1] The three-mile limit is now an outdated concept in international law originally intended for military purposes. It represented a stretch of water, often referred to as 'Territorial Waters' that extended three nautical miles from the shoreline of a coastal state over which the littoral state had sovereignty over the foreshore, waters, seabed and air above.

[2] Roy I. Jackson, "Some observations on the future growth of world fisheries and the nature of the conservation problems*", Proceedings of the Second Annual Conference of the Law of the Sea Institute*, June 26-29, 1967, ed. Lewis M. Alexander (Rhode Island: University of Rhode Island, 1968), p.11.

[3] Callum Roberts, *The Unnatural History of the Sea: The Past and Future of Humanity and Fishing* (London: Island Press, 2007), p.176.

[4] James A. Crutchfield, "Overcapitalization of fishing effort", *Proceedings of the Second Annual Conference of the Law of the Sea Institute*, June 26-29, 1967, ed. Lewis M. Alexander (Rhode Island: University of Rhode Island, 1968), p.24.

[5] Roberts (2007), p.160.

[6] Hannes Jónsson, *Friends in Conflict: The Anglo Icelandic Cod Wars and the Law of the Sea* (London: C. Hurst & Co, 1982), p.51.

The effects of the First World War (1914-18) confirmed early suspicions of stock depletion. The interruption to fishing activity allowed stocks to recover and a short post-war increase in catches was experienced.[7] The 19th century perception of the "inexhaustibility" of fisheries resources was gradually dislodged.[8] In 1936 and 1946, international conferences on 'Overfishing' were convened with the latter producing the Convention for the Regulation of the Meshes of Fishing Nets and Size Limits of Fish (hereafter, the 1946 Mesh Regulation Convention), an attempt to protect juveniles and stock biomass by regulating fishing inputs.[9]

Increasing scientific evidence of over-fishing coincided with a growing academic interest in the application of property rights theory to natural resources. During the 20th century, economic theory was increasingly applied to environmental policy to control actions that produced negative externalities such as overfishing and pollution. The contributions of H. Scott Gordon (1954), Anthony Scott (1955), Dales (1968) and Garett Hardin (1968) drew attention to the potential use of private property rights as a tool for global fisheries management. Like clean air and air pollution, private ownership of fisheries resources was complicated by the nature of the resource, the environment in which the resources existed and the local and transnational externalities created by uncontrolled use. Assigning tracts of the sea to individuals was unrealistic given the fugitive nature of the resource. Fish stocks would simply swim between physically invisible man-made boundaries. Traditional input controls such as the Mesh Regulation Convention became replaced in the global fisheries management literature with property-rights inspired instruments such as permits and quotas to control access to fish stocks and limit how many fish could be removed. As overfishing produced environmental as well as economic externalities, a meaningful limit on take from a stock had to be informed by natural science knowledge.

The second key development in the 20th century's increasingly economic approach to environmental policy was a shift in the literature to favour the use of economic incentive instruments as opposed to traditional command-and-control regulations. While the traditional tax

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[7]Roberts (2007), p.193.

[8] In 1884, the prominent British biologist Thomas Huxley claimed that "all the great sea fisheries, are inexhaustible.*"* Tim D Smith, *Scaling Fisheries: The Science of Measuring the Effects of Fishing, 1855-1955* (Cambridge: Cambridge University Press, 1994), p.38.

[9]The first conference on 'Overfishing' was held in 1936 in London. While agreement on mesh regulations was achieved, it was not implemented due to the outbreak of the Second World War. TNA (1959) MAF 209/1678, Committee of Inquiry into the Fishing Industry: Departmental Evidence Report II 'International Action- Historical Background*'*, 14 September 1958, p.2.

and subsidy approach associated with Pigou (1920) attempted to correct the consequences of market failure, the property rights approach – influenced by the work of Dales (1968) - considered how the market could be reformed to internalise externalities.[10]

Recognition of a need to manage fishing practices and create missing property rights implied a role for government. The nature of fisheries resources necessitated international agreements. Initiated by the League of Nations' ambition to codify international law, the first United Nations Law of the Sea (LOS) Conference was held in Geneva in 1958. The conference produced four Conventions on marine jurisdictional matters but failed to settle the issue of international fishing limits. A second LOS Conference convened in 1960 but a new international legal regime for marine spaces and activities was not created until the Third LOS Conference (1973-82). This produced the United Nations Convention on the Law of the Sea (UNCLOS) in 1982. The creation of a new international legal framework did not displace the role for national governments who were required to negotiate on behalf of their domestic interests and accept responsibility for domestic compliance with the new international agreements.

Table 1.1. UK demersal landings by weight and value, 1948-95

Year	UK demersal landings by weight (tonne)	UK demersal landing by value (£'000)	£ per tonne (in market prices)
1948	783,031	39,867	50.9
1960	693,420	48,184	69.5
1965	798,660	55,072	68.9
1970	730,961	64,025	87.6
1975	579,120	122,578	211.6
1980	383,803	158,368	412.6
1985	402,254	227,175	564.8
1990	268,347	298,377	1,111.9
1995	386,000	369,400	956.9

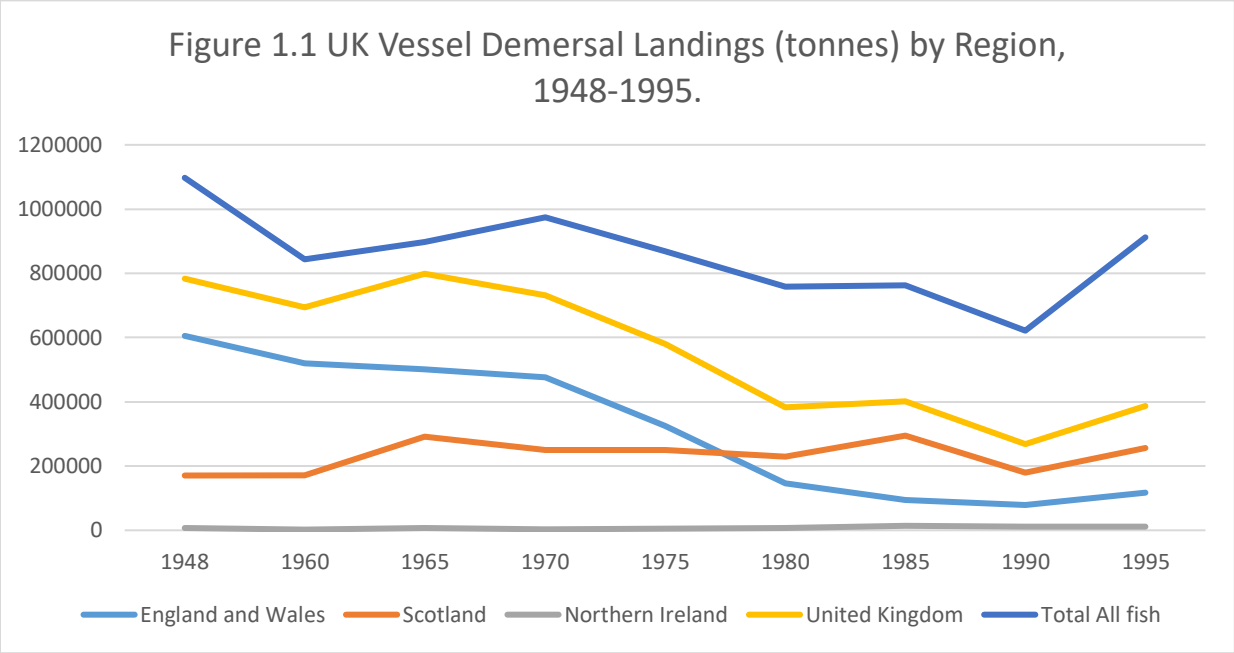
Source: *UK Sea Fisheries Statistics*, 1960-95. (London; HMSO).

Structure of the thesis

This thesis examines the development of UK Government policy on fisheries management at an international and national level. From 1945, the role for UK Governments to manage domestic fishing activity increased significantly. This accelerated from the mid-1970s.

[10] Dieter Helm ed., *Economic Policy Towards the Environment* (Oxford: Blackwell Publishers, 1991), p. x.

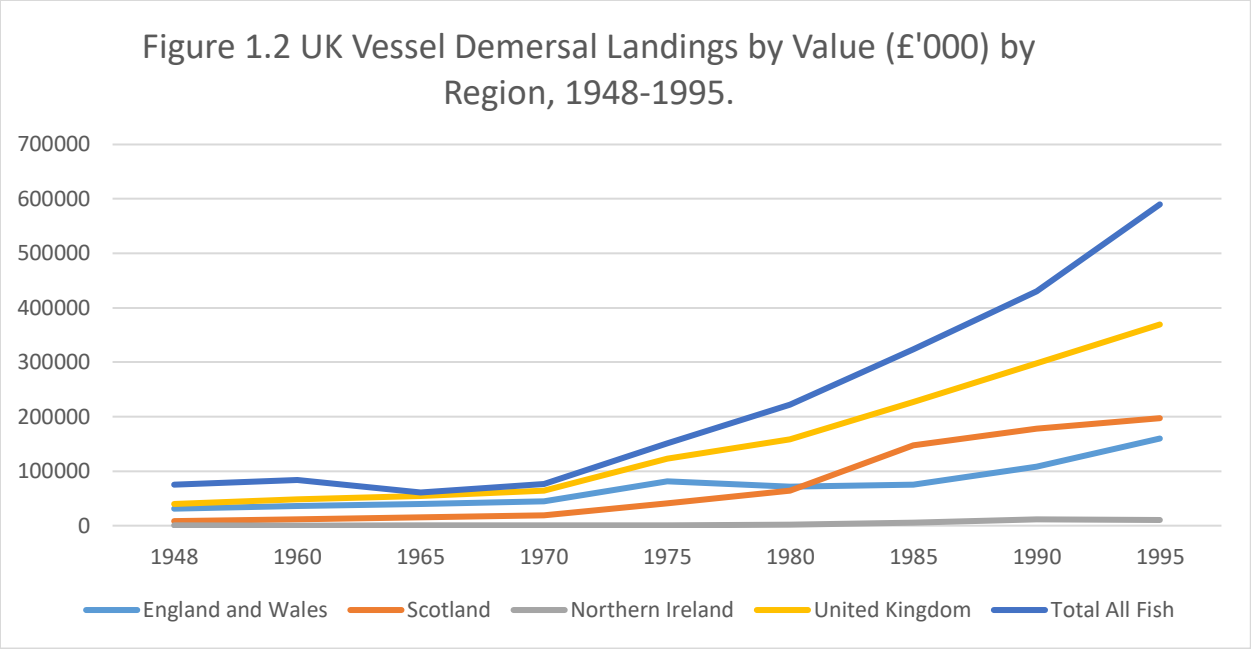
This study focuses on the management of offshore whitefish (demersal) stocks which were of commercial interest to fleets across the UK.[11] Figure 1.1 shows that demersal landings as a proportion of total UK fish landings decreased sharply from the mid-1960s. From a peak in 1965, UK demersal landings by weight halved from 798,600 tonnes to 386,000 tonnes by 1995 (Figure 1.1). From the mid-1970s, remaining UK demersal landings were increasingly landed into Scottish ports.



Source: *UK Sea Fisheries Statistics Tables*, 1948-95. (London; HMSO).

Despite declining volumes of demersal landings, Table 1.1 and Figure 1.2 show that the value of demersal landings increased from the 1970s. Over the periods 1970-75, 1975-1980 and 1985-90, the per tonne price of UK demersal landings doubled. While total supplies of demersal fish were constrained by international restrictions on fishing areas and conservation measures that limited total landings, the value of the remaining catch increased. Excluding the costs of fishing (vessel, crew and fuel), this would have worked to offset the economic incentives for fishers to exit the industry in response to declining fishing opportunities.

[11] The term demersal fish covers species living on or near the sea bed. Species historically targeted by UK vessels include haddock, cod and whiting. The term pelagic refers to species found mainly in coastal waters in shoals near the surface of the sea such as mackerel and herring.



Source: *UK Sea Fisheries Statistics Tables,* 1948-95. (London; HMSO).

Chapter two provides a review of the literature relevant to this thesis. Chapter three then examines the development of UK policy for the UN LOS Conferences. It argues that over the period 1945-71 the incentives for the UK Government to support the extension of fishing limits as a tool for global stock conservation were severely weakened by its position as a maritime nation. Policy on international fishing limits was shaped primarily by domestic non-fishing interests. Unlike the Norwegian and Icelandic Governments, up until 1973 the principal aim of UK policy on international fishing limits was not to secure access to offshore waters for its own fleet but to retain access for UK maritime interests to waters off other nations' coastlines. Growing concern and international disputes related to fish stocks arose more from considerations of access than from those of conservation.

The incentives for the UK to support broad national marine jurisdictions shifted sharply from 1971. This was primarily shaped by confirmation of the extent of hydrocarbon resources in the Continental Shelf surrounding the UK. From 1971, the UK Government consciously traded-off national fishing interests in international negotiations as part of a strategy to maximise ownership of hydrocarbon resources.

While policy in this period was predominantly driven by non-fishing interests, the UK Government was still required to arbitrate between conflicting sectional industry interests. This

chapter argues that this conflict had a strong geo-political dimension as extending national limits would have affected the Scottish and English fishing fleets in broadly contrasting ways. At several points, local interests surfaced to shape national negotiations in international matters.

New international agreements in the 1970s required the UK Government to take on increasing responsibility for managing domestic fishing activity. Chapter four examines the early years of UK fisheries policy prior to the implementation of the Common Fisheries Policy (CFP) conservation regime in 1983. It argues that the replacement of an initial laissez-faire approach with increasingly interventionist and distributive policies was a direct response to industry calls to protect local fleets from competing for quota. Two dominant local tensions shaped the design of the first quota management mechanism. The first was the decline of the economically dominant English distant-water fishing sector which heightened political concern for the social and political costs of industry contraction. The second was the strong Scottish identity attached to the first whitefish stocks, haddock and whiting, to be managed. Together, the influence of the local concerns on national politics worked to embed UK fisheries management as a tool for social policy.

This chapter argues that over 1974-81 the objectives of quota management evolved to become the maintenance of employment and the spreading of potential industry profit in an equitable manner. Policy mechanisms that favoured labour were prioritised and little consideration was given to the impact on the economic performance of the fleet or the behaviour of fishers. This chapter identifies that the early politicisation of fisheries management created a conflict within government as to the adoption of a short- or long-term approach to fisheries management. Economic and scientific advice that advocated a shift from a labour to a capital focus was marginalised within decision-making processes due to the perceived political costs associated with increased unemployment.

The UK Government's decision to devolve decision-making to local industry bodies from 1984 is examined in chapter five. It argues that the introduction of Producer Organisation (PO) management represented an acknowledgment by the UK Government that a local and/or sectoral approach to fisheries management could be more effective in delivering international commitments than a centralised, top-down approach. PO management led to a step-change in the

government's approach to quota management as the role of capital was given increasing attention. Policy change was driven by a need to appease multiple sources of local political pressure and alleviate severe economic pressures experienced by the UK fleets. To achieve the latter, PO management would grant vessels greater autonomy over the time of use of capital and quota. PO management did not represent a shift to an economic approach to fisheries management. This chapter argues that it represented a continuation in the UK Government's attempt to avoid the social and political costs of addressing the underlying issue of excess capacity.

In examining the development of UK structural policy, chapter six argues that the UK Government adopted an increasingly economic approach to fisheries management from 1989. This was influenced by policy learning, the increased use of economic and scientific advice in policy-making and the favouring of a markets-based approach to economic policy from 1983. Attempts were made to use market mechanisms to allocate quota and reduce fishing capacity and effort and adopt a long-term approach to fisheries management. However, this chapter argues that these attempts were obstructed and diluted by local political pressures. This led to the UK failing to meet a series of targets set by the European Commission over 1983-1995 to reduce fishing capacity and effort. The aim was to conserve and protect deteriorating fish stocks. Industry opposition to the use of market forces was prominent in Scotland. In this period, the Scottish Office and Scottish Fisheries Department used its considerable influence in this area to weaken the impact of market forces to protect Scottish fishing interests. From 1989, intra-governmental tension was no longer between government economists and politicians but between the UK and Scottish Fisheries Departments.

Sources

This thesis studies UK policy-making and implementation. Material for the thesis has been almost exclusively sourced from UK Government documents in the National Archives at Kew and Edinburgh. From these sources, a systematic content analysis of government documents over the period 1945-1996 provided a wealth of relevant information and evidence. This has been used to identify and account for specific outcomes as well as key trends and policy developments over time. Given the cyclical patterns in which policy is drafted and implemented,

attention has been paid to the feedback loops that exist between the different policy stages. This includes the tempering of initial policy objectives by subsequent consultation and engagement; the shaping of policy implementation by practical and political barriers; and continuous policy refinement and development through monitoring, evaluation and changing political circumstances. The scope of this thesis has been narrowed to consider policy-making and implementation for only one sector of the UK fishing industry, the whitefish fleet. Given the complexity of fisheries regulation and the wide range of competing local interests within the UK-wide whitefish fleet, a narrowing of the subject matter has allowed for a sustained in-depth and detailed study over a fifty-year period.

While rich archival material exists for this subject, written documents in the archives do not always provide a comprehensive view of policy-making processes. Key discussions and decision-making junctures may not have been written down or kept as records. To accommodate this, consideration was given to the supplemental use of oral history. Early on, and through practice, it became clear that this would be of limited use. The information obtained was unlikely to be sufficiently systematic and robust to be useful, with recruitment of respondents difficult. Where possible, existing literature has been used to provide context for key decisions and policy development junctures not adequately detailed in the archives.[12]

[12] For example, both The National Archives at Kew (TNA) and the National Archives of Scotland (NAS) were unable to account for a notable hardening of UK Government policy towards extended fishing limits global after the Second World War (1939-1945). Carmel Finley's 2011 study of the United States (US) State Department's diplomatic efforts over 1949-55 is used to provide important context for this UK policy shift.

2. Literature Review

This chapter provides a review of the academic literature relevant to this thesis. The literature crosses histories and contemporary studies of environmental policy and natural resource management, economics, international law and relations, politics, public choice and theories of governance. Seven themes within this literature have been selected for their relevance: overfishing in the 20th century; the influence of economics in fisheries management; the international cooperative management of environmental resources; political distributions of international fishery resources; evaluation of the European Union's Common Fisheries Policy and UK fisheries policy; the role of local actors and local decision-making in fisheries governance; and history, policy and policy learning.

Overfishing as a 20th century phenomena

Studies on the emergence of overfishing as an economic and environmental problem contain two key commonalities concerning time and cause. The First World War (1914-1918) is identified as playing a key role in dislodging the 19th century belief in the inexhaustibility of fish supplies. Historical analyses of fisheries management often reference the prominent zoologist Thomas Huxley (1825-1895) in accounting for the 19th and early 20th century myopia towards increasing evidence of overfishing. Smith's 1994 historical analysis of the development of fishery science between 1855-1955 quotes Huxley directly: "[P]robably all the great sea-fisheries, are inexhaustible".[13] Crutchfield and Pontecorvo (1962) refer to the "myth of limitless supply" as a key factor in inhibiting the 20th century understanding of the impact of commercial fishing on fish stocks.[14]

[13] Tim D. Smith, *Scaling Fisheries: The Science of Measuring the Effects of Fishing, 1855-1955 (*Cambridge: Cambridge University Press, *1994*), p.38.

[14] James Crutchfield and Giulio Pontecorvo, "Crisis in the Fisheries", *Bulletin of the Atomic Scientists* 18 (1962), p.18. Roberts (2007) provides greater insight into the direct impact of Huxley's work on popular misconceptions of humanity's impact on its natural environment. In *An Unnatural History of the Sea*, Roberts details Huxley's involvement in the 1863 and 1883 Royal Commissions which investigated complaints regarding the impact of trawl fishing on the marine environment and depletion of coastal stocks. Given the evidence heard, Roberts refers to the 1883 Commission as a 'whitewash' as it concluded that trawl fishing had an insignificant impact on the food of fish

With the cessation of fishing over the war, Roberts (2007) argues that "suspicions about the previous depleted state of fish stocks were confirmed as fishers enjoyed a catch bonanza".[15] This was supported by the period's increased scientific and economic interest in explaining the size of fish populations and the impact of commercial fishing upon them. The first mathematical models for determining fisheries population dynamics were created by the American biologist Milner Baily Schaefer in 1954. Smith (1994) traced the concept of Maximum Sustainable Yield[16] (MSY) to the ideas of 'surplus yield' and 'optimum catch' developed by the Norwegian fisheries researcher John Hjort in work for the International Whaling Committee (IWC) in the 1930s.[17]

The importance of the First World War is echoed in Engesaeter's analysis of the history and role of the International Council for the Exploration of the Seas (ICES), the world's oldest intergovernmental scientific organisation.[18] While the possibility of overfishing received attention following the foundation of ICES in 1902, Engesaeter argues that a defining point was a meeting of Denmark, The Netherlands, Norway and Sweden in May 1918 to discuss "the effects of reducing fishing intensity, due to the war, on fish stocks in the North Sea".[19] The beginning of international, cooperative dialogue on the effects of fishing on fish stocks culminated into the first international conference on fisheries, the so-called 'Overfishing Conference' held in London, 23-28 November 1936. International action to address overfishing was delayed until the cessation of the Second World War in 1945.

The second common feature within the literature on overfishing as a growing environmental problem is the evaluation of the role of technology. Barrett (2003), Leal (2005), Roberts (20017) and Harrison (2011) all identify the application of technological advancements as a key driver of unsustainable levels of fishing. The interplay between technology and evidence of overfishing is an interesting theme. Technological advances increased the market for fish and the opportunities for increased catches per unit of effort. The opportunity for larger catches was

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and the seabed environment (Callum Roberts, The *Unnatural History of the Sea: The Past and Future of Humanity and Fishing.* London: Island Press, 2007, p.163).

[15] ibid., p.193.

[16] In population ecology and economics, maximum sustainable yield or MSY is theoretically, the largest yield (or catch) that can be taken from a species' stock over an indefinite period.

[17] Smith (1994), p.264.

[18] Sigmund Engesaeter. "The Importance of ICES in the Establishment of NEAFC." I*CES Marine Science Symposia* 215 (2002), pp.572-581.

[19] ibid., p.572.

influenced by the movement from sail to steam, the mechanisation of hauling and the use of larger boats. On land, the development of the railways and canning and freezing technology expanded the market.

The application of technology also worked to mask initial evidence of the effects of overfishing. This is considered by Roberts: "catches were sustained only by growing fishing power, by fishing further afield, by going deeper and by switching to previously less favoured specifies like dogfish and monkfish."[20] While evidence and popular interest in overfishing increased from 1945 so too did catches – global catches increased 7 per cent per annum in the two decades following the end of the Second World War. [21]

The work of Smith (1994) and Roberts (2007) has played an important role in framing this thesis. Their analysis of the growing concern for overfishing during the 20th century provides important context for understanding the attitudes and actions of the UK Government in the period from 1945. This thesis identifies that UK fisheries policy in this period was resistant to the ideas of overfishing and stock conservation. It argues that this was due to the UK Government's opposition to the idea, which was taking hold at a global level through the extensions to marine jurisdiction as a tool for conservation. It provides evidence of the UK Government actively using superficial catch data in the 1950s to obstruct calls from the scientific community and Icelandic Government to control and limit fishing levels. While there was a clear political and economic rationale to this mind-set and behaviour, it is important to understand that evidence of overfishing in this period was limited.

The influence of economics in fisheries management

Helm (1991) identifies two general economic approaches to addressing environmental problems.[22] The Meade-Pigou tax/subsidy approach focused on correcting the consequences of market operations and the Chicago approach which used property rights to internalize externalities. Property rights theory has had a significant impact on fisheries regulation. The vast

[20] Roberts (2007), p.199.
[21] Roy I. Jackson, "Some observations on the future growth of world fisheries and the nature of the conservation problems", *Proceedings of the Second Annual Conference of the Law of the Sea Institute*, June 26-29, 1967, ed. Lewis M. Alexander (Rhode Island: University of Rhode Island, 1968), p.11.
[22] Dieter Helm eds., *Economic Policy Towards the Environment*, (Oxford: Blackwell Publishers, 1991), p.x.

economic literature on fisheries management consistently identifies that overfishing - in both a biological and economic sense – stems from the existence of fisheries as a common pool resource. Barnes (2009) defines the term 'common pool' as "describe[ing] the quality of the resource, rather than the legal regime applying to it".[23] While Barnes distinguishes common pool resources from the legal regimes that customarily govern their use, fisheries economists (such as Scott in his 2008 study *The Evolution of Resource Property Rights)* use the term common pool interchangeably with those that define property rights arrangements, notably 'open-access' or 'common property'.[24] This reflects the dominance of property rights theory in explaining over-entry into the industry and the outcome of overfishing.

Garrett Hardin's 1968 essay The Tragedy of the Commons is commonly held to have argued that natural resources exploited in an unrestricted common property form would lead to over-exploitation by individuals acting in their rational self-interest.[25] Fourteen years earlier in 1954, the Canadian economist H. Scott Gordon published The Economic Theory of a Common Property Resource: The Fishery in the *Journal of Political Economy.*[26] This provided an economic theory of common property resources using the example of sea fisheries. Examined in greater detail in chapter 3, Gordon argued that to promote a biologically and economically sustainable level of fishing, the property rights status of fisheries should be redefined from that of common property to private property.

One of the most recognisable ways in which property rights theory has been applied to global fisheries management is through the 20th century 'enclosure movement' whereby some national governments unilaterally extended jurisdiction over the littoral seas and resources within. This approach to resources management became enshrined in international law through the concept of Exclusive Economic Zones (EEZs) at the Third LOS Conference which awarded coastal states economic jurisdiction over the waters out to 200-miles off their coastlines. Barnes argues that the scholarship of economists such as H. Scott Gordon and Frances Christy in

[23] Richard Barnes, *Property Rights and Natural Resources* (Oregon: Hart Publishing, 2009), p.1. He identifies two key attributes of common pool resources: it is costly to exclude others from their use and one person's use of the resource subtracts from benefit available to others.
[24] Anthony Scott, *The Evolution of Resources Property Rights (*Oxford: Oxford University Press, 2008), p.55.
[25] Garrett Hardin, "The Tragedy of the Commons", *Science* 162 (1968), pp.1243-1248.
[26] H. Scott Gordon, "The Economic Theory of a Common Property Resource: The Fishery", *Journal of Political Economy* 62 (1954), pp.124-142.

advocating for private property regime of fisheries provided "strong intellectual support for the enclosure movement represented by the exclusive economic zone".[27]

While the influence of these academics in international scientific and economic circles is evident, consideration of how property rights theory influenced national policy-making is limited. A good example is Carmel Finley's 2011 study of the origins of MSY as a leading scientific concept and the actions of the US State Department over 1949-1955. Finley argues that in this period the US State Department used its political influence in international forums to promote the use of the scientific concept of MSY to block the enclosure movement and the application of the 'sole owner' concept. Finley identifies that the USA Government's approach to stock conservation was dictated by foreign policy considerations. The USA Government prioritised the retention of free passage for American ships and planes through international seas and skies over the extension of national jurisdiction as a tool for stock conservation.

Finley's analysis provides insight into the influence of domestic non-fishing interests in the distribution and management of global fisheries resources. Early environmental policy was dictated by foreign policy as the use of MSY as a management tool offered an alternative to the extension of jurisdiction. Her conclusion that fisheries were of strategic importance during the Cold War period is important but confined by the scope of her research and the period considered. This thesis complements Finley's work by arguing that military concerns also influenced UK sea fisheries policy-making during the 1950s and 1960s. Yet, by examining the development of UK Law of the Sea negotiation positions over a longer period, it argues that fisheries had a strategic influence beyond the Cold War. It argues that in the 1970s, the UK Government moved to support the marine enclosure movement as part of a concession to secure maximum access to more economically valuable subsea energy resources.

Wise (1983) acknowledged the UK's policy shift to support the EEZ concept but did not identify the non-domestic fishing interests driving this policy reversal. This thesis provides detailed analysis of the domestic trade-offs required by the UK Government to produce a negotiation position that would support agreement at the Third LOS Conference.[28] Together with Finley's work, it argues that economic and scientific support for the EEZ concept had limited influence on the US and UK's policy-making.

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[27] Barnes (2009), p.5.
[28] Mark Wise, *The Common Fisheries Policy of the European Community* (London: Methuen, 1984), p.60.

Property rights theory also played a dominant role in fisheries management through its use in creating regulatory tools and instruments for environmental policy. These tools were used to create *de facto* private property rights in common property resources and therefore replace missing property rights. The most prominent mechanism can be traced back to the Canadian economist John Dales. Dales published *Pollution, Property and Prices* in 1968, the same year as Hardin's The Tragedy of the Commons.[29] As Bond and Erion (2012) note, Dales went much further than Hardin by providing a solution to the overexploitation of common resources.[30] Examining water pollution, Dales proposed a total quota of allowable waste for each waterway and the creation of a market in which polluting rights could be traded between firms. Drawing upon Coase (1960), Dales argued that the ability of firms to trade pollution rights amongst themselves would lead to the most efficient firms making the largest pollution reductions and then selling their remaining rights to the less efficient firms.[31] This would reduce pollution at lowest social cost.

In contrast with the substantial body of work designing economic approaches to environmental regulation, little consideration has been paid to how governments and fisheries managers choose between different theories and tools. As Hahn and Stavins (1992) note, there has been insufficient attention paid to the political and institutional environment of instrument choice.[32] This is an important deficiency given Scott's caution in 1979 that "observed action or apparent effect of a regulation may not tell us much about the motives that originally inspired it."[33]

Studies that consider the practical application of economic theory to environmental and economic policy-making identify that market-based approaches only became used from the mid-1980s.[34] It is broadly recognised that Dale's 1968 proposal took a back seat to the command-and-

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[29] John Dales, *Pollution, Property and Prices – An Essay in Policy-making and Economics.* (Toronto: University of Toronto Press, 1968*)*.

[30] Patrick Bond and Graham Erion, "South African carbon trading: A counterproductive climate change strategy", in David A. MacDonald ed., *Electric Capitalism: Recolonising African on the Power Grid* (London: Routledge, 2012), p.346.

[31] R. H. Coase, "The Problem of Social Cost", *Journal of Law Economics* 3 (1960), pp.1-44.

[32] Robert Hahn and Robert Stavins, "Economic Incentives for Environmental Protection: Integrating Theory and Practice", *The American Economic Review* 82 (1992), pp.464-468.

[33] Anthony Scott. "Development of Economic Theory on Fisheries Regulation," *Journal of the Fisheries Research Board of Canada* 36 (1979), p.727.

[34] T.H. Tietenberg, "Economic instruments for Environmental Regulation", in Helm (1991), pp.86-110.

control approach to environmental policy that characterised the 1970s. This thesis seeks to contribute to this area by examining the incentives facing key decision-makers when choosing between different regulatory and resource allocation instruments. It uses a study of UK fisheries policy-making to consider how economic theory maps across to political objectives for fisheries management to understand better the political-economic realities surrounding the application of economic theory.

International relations: the international cooperative management of environmental resources

This thesis is concerned with the behaviour and actions of the UK Government in the design and delivery of international agreements that aimed to distribute and sustainably manage global fisheries resources. It therefore feeds into the well-studied literature of why nations cooperate and voluntarily enter such agreements.

The post-1945 customary legal framework of 'Freedom of the High Seas' and the naturally fugacious nature of fisheries meant that any change to the property status of regional and local fisheries required international cooperation. International agreements are a common tool for the global, cooperative management of nature resources. The European Union has concluded more than 20 international fisheries agreements.[35] Scott Barrett's 2003 analysis of climate change treaties argued that the post-1945 increase in the number of global agreements was due to the increasing trans-boundary nature of 20th century global environmental problems. D'Arge (1975) in turn attributed increased transnational environmental externalities to the growth of the human population and increased material consumption per capita relative to the environment's assimilative capacity.[36] Within the global agreements, the use of a property rights approach to overfishing - or the realpolitik appropriation of natural resources – implied a role for government. In his 2008 study of the long evolution of rights associated with fugacious (fish and water), mineral (mining rights to minerals, gold, coal, oil and gas) and wood resources, Scott

[35] These include bilateral agreements and multilateral agreements with regional fisheries management organisations and international conventions such as UN Convention on the Law of the Sea.

[36] Ralph C. D'Arge, "On the economics of Transnational Environmental Externalities", Edwin S. Mills ed., *Economic Analysis of Environmental Problems* (NBER, 1975), pp.397-416.

identifies national governments as the key supplier of exclusive property rights through legislature.[37]

The growth in theoretical and empirical work on international cooperation mirrored the post-Second World War growth in the number of international agreements.[38] A seminal contribution is Olson's 1971 study of group and organization behaviour '*The Logic of Collective Action'.* Olson refuted the assumption in economic and social sciences that if a group shared a common interest, individuals within the group would act in a rationale, self-interested manner to collectively further those interests. Olson argued that:

"though all the members of the group have a common interest in obtaining this collective benefit, they have no common interest in paying the costs of providing that collective good. Each would prefer the others pay the entire cost".[39]

Olson was describing the practice of free-riding. Individuals within a group will be unwilling to pay the costs of action if others will act to deliver the outcomes for them. 'Free-riders' benefit from the actions of others while carrying none of the costs. Olson argues that in the absence of coercion or an incentive to make individuals act in the common interest, individuals – particularly in a large group such as the international community – would not do so.

Harrison's 2011 study of law of the sea regime and Barrett's 2003 analysis of environmental policy-making both identify sovereignty as the key obstacle to collection agreement.[40] Harrison argues that "creating a universal regime for the seas and oceans is complicated by the decentralized nature of the international legal system".[41] There is no global legislature that can impose rules on all relevant actors and national governments. To remedy this, both authors tack back to Olson's 1971 conclusion that coercion or incentives are required to achieve agreement.

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[37] Scott (2008), p.25.
[38] Barrett notes that only four of the 225 multilateral environmental agreements place were adopted by 1945. Barrett (2003), p.135.
[39] Mancur Olson, *The Logic of Collective Action: Public Goods and the Theory of Groups* (Massachusetts: Harvard University Press, 1971), p.21.
[40] James Harrison, *Making the Law of the Sea: A Study in the Development of International Law* (Cambridge: Cambridge University Press, 2011), p.2.
[41] ibid., p.45.

Barrett and Harrison argue that the choice of incentive structures and mechanisms in the negotiation process and final agreements are vital if the issue of sovereignty is to be accommodated and compliance with agreements achieve. Harrison attributes the success of the Third Law of the Sea Conference to the adoption of consensus voting procedures and the negotiation of a 'package deal'.[42] The Third LOS Conference had separate committees covering the seabed regime, law of the sea and marine environment and scientific research but all parts of the final Convention was negotiated as "an entity, a single negotiated package".[43] This forced nation states to compromise and make trade-offs between different domestic preferences.

This thesis supports Harrison's argument and provides a case-study for understanding how this occurs in practice. An examination of the decision-making processes that created UK compromise positions allows this thesis to go further and provide insight into how domestic trade-offs were made. It argues that central UK Government departments, notably the Cabinet and Foreign Office, chose to marginalise the Fisheries Department and fishing industry in the creation of compromise positions as it prioritised the production of a global agreement over its acceptability to key national objector groups. This thesis aims to draw attention to a limitation of studies that evaluate the success of global agreements by examining international to nation-state negotiations. It examines how the repercussions of this exclusory approach adopted by the UK Government at the Third LOS Conference negatively impacted domestic delivery mechanisms as tensions with local actors were left to be accommodated through sub-national negotiations. This thesis explores the importance of local negotiations to the success of global commitments.

National policy in an international setting – distributing fisheries resources

As Scott explained, "in economists' language, the phrase 'property rights' is typically little more than a synonym for 'ownership' or perhaps 'possession'."[44] A change in property rights therefore donated a redistribution. Redistributions that occur at an international level are felt by national and local actors. A theme in the international relations literature is that domestic

[42] The weakness of earlier agreements on new legal regimes for the seas (the 1958 Law of the Sea Conventions) was due to them becoming quickly outdated by technological advances and because nation states could pick and choose between which of the four Conventions to ratify. While 62 states ratified the High Seas Convention, only 37 states ratified the Fisheries Convention.
[43] Harrison (2011), p.45.
[44] Scott (2008), p.4.

politics is therefore a crucial factor shaping a nation's international objectives, its bargaining space and the shape and content of final agreements.

A good example of this is Asgeirsdottir's (2008) study of seven years of negotiations between Norway and Iceland that sought to distribute straddling fish stocks.[45] Her work takes the study of international cooperation further by examining why states cooperate and how international regimes and domestic factors shape negotiations and final agreements. Asgeirsdottir argues that while international legal regimes and agreements (in this case UNCLOS and the Straddling Stock Agreements) create a structure for distribution, it is domestic level politics and the influence of local interest groups that have shaped changes in the distribution of quota over time.

Asgeirsdottir's analysis is important in outlining the influence of local pressures on national policy for international spheres. Firstly, it identifies the power of local lobby groups as a key determinant of the bargaining space available to national governments when making international arrangements. This bargaining space, and final agreements, tend to reflect what domestic actors are willing to bear.[46] She attributes Iceland's increasingly favourable outcomes during the negotiations to the strengthening of Icelandic domestic fishing interests compared to the weakening of Norwegian domestic fishing interests.

Wise's 1983 study of the formation of the Common Fisheries Policy gives similar insight into how UK domestic electoral considerations influenced the formation of the CFP. Wise describes Member States as being "locked into a bitter struggle over who should get what of a diminishing resource". This indicates that the CFP can be identified as a distributive conflict.[47] Though he adopts an impartial view in examining the factors shaping the formation of the CFP, a clear argument is that UK national electoral issues interfered with the formation of the CFP and caused delay in achieving an agreement. Wise argues that the UK Government maintained a stalemate on agreement in 1978 due to the likelihood of an election by Spring 1979. Fishermen represented 0.1% of the British labour force during this period. Wise explains their ability to gather national support and the prominence of electorally marginal consistencies in fishing

[45] Aslaug Asgeirsdottir, *Who Gets What? Domestic Influences on International Negotiations Allocating Shared Resources* (New York: SUNY Press, 2008).
[46] ibid., p.141.
[47] Wise (1984), p.176.

communities as key to explaining their influence in national politics.[48] Wise argues that the deadlock – where the UK Fisheries Minister Mr Silkin rejected an offer of 31.5% of total community TAC –was only overcome with the election of the new Conservative Government in 1979.[49] As Wise clearly demonstrates, perceptions of national interest were "inevitably more potent determinations of behaviour than any wide sense of European Community."[50]

Asgeirsdottir and Wise both argue that domestic fishing interests have shaped the outcome of international agreements. Tracking back to Harrison (2011) and the package-deal nature of the UN LOS Convention, negotiation positions and international arrangements are often the result of trade-offs and concessions at nation-state level. This thesis starts with this acknowledgement but provides evidence of the explanatory power of examining the intersections where different industries and policies meet. It argues that non-fishing interests often played a dominant role in shaping international fisheries distributions.

Evaluations of the European Union's Common Fisheries Policy

In 1997, Symes argued that "given that the greatest challenge facing Europe's fisheries is overexploitation and depletion of the resource base, the CFP must surely be judged a failure."[51] This assessment is echoed throughout the literature evaluating the CFP, in particular EU fishing structural policy and the operation of a Total Allowable Catch (TAC) and quota regime.

CFP Structural Policy

Academic consideration of the CFP's structural policy is the more limited of the two. Hatcher (1999) provides a concise overview of the development of the European Community's structural policy between 1971 to 1999.[52] He identifies that while European funding for the community fishing fleet increased over the period, the purpose of financial aid shifted from grants for building vessels to removing vessels. From 1983, EU structural policy sought to balance industry capacity with stock availability by reducing the capacity of the European fleet.

[48] Of the 22 fishing seats held by the incumbent Labour Government over 1974-1979, only 9 were held with majorities of less than 6%. ibid., p.201.
[49] ibid., p.204.
[50] ibid., p.231.
[51] David Symes, "The European Community's Common Fisheries Policy", *Ocean and Coastal Management* 25 (1997), p.152.
[52] Juan C. Suris-Regueiro, Manuel M Varela-Lafuente and Carlos Iglesias-Malvido, "Effectiveness of the Structural Fisheries Policy in the European Union', *Marine Policy* 27 (2003), pp.535-544.

By reviewing how EU fisheries structural policy developed over time, Hatcher provides insight into how the objectives, ambition and penalties associated with non-compliance changed over time as many Member States failed to meet their capacity reduction targets.

A limitation of the literature on EEC and EU structural policy is that it tends to evaluate Member States' performance against their targets. It contains little analysis or insight into why targets were achieved or missed. Suris-Regueiro et al., (2003) made some progress by identifying a correlation between quota availability and compliance with capacity reduction targets. They found that greater relative availability of quota led to poorer performance but acknowledged that the correlation was "not very strong". This thesis aims to contribute to this literature by examining how the choice and design of different policy instruments for delivering capacity reduction affected the UK Government's achievement of EU targets. It also examines the incentives faced by UK policy-makers to reduce capacity in line with EU obligations.

CFP TAC and Quota Regime

The literature on the development and effectiveness of the CFP's TAC mechanism has consistently argued for a failure of the CFP to achieve its objectives of maintaining fish stocks and conserving the resources. Several themes are used to account for this failure, with a central tenet the prioritisation of a politically acceptable allocations of quota over the "scientific imperative of resource conservation."[53] Karagiannakos' (1996) analysis of North Sea demersal fisheries and Daw and Gray (2004) both argued that scientific advice was diluted by political considerations.[54] Karagiannakos identified that over 1980-1994 TACs were frequently set higher than the levels recommended by scientific advice. Daws and Gray argued that this continued from 2002. Holden (1994) and Symes (1992 and 1997) provided a similar analysis by arguing that the need for an equitable allocation, which was defined by political acceptability, prohibited the implementation of a rigorous conservation regime.[55] The notion of scientific recommendations being at variance with the political desire for economic opportunities is

[53] David Symes, "The European Community's Common Fisheries Policy", *Ocean and Coastal Management* 35 (1997), p.1.
[54] A. Karagiannakos, "Total Allowable Catch (TAC) and Quota Management System in the European Union", *Marine Policy* 20 (1996), pp.235-248. Tim Daw and Tim Gray, "Fisheries Science and Sustainability in International Policy: A Study of the Failure in the European Union's Common Fisheries Policy", *Marine Policy* 29 (2005), pp.189-197.
[55] Holden (1994), David Symes, "The Common Fisheries Policy and UK Quota Management", *Ocean and Coastal Management 18* (1992), p.320, and Symes (1997).

mirrored in evaluations of the International Whaling Commission (Gambell 1977, Andresen 1989, Heazle 2004).

A second key theme within evaluations of the CP is poor enforcement of quota restrictions and technical rules. Da Rocha et al., (2012) emphasised "regular lack of enforcement at national fisheries authority level."[56] Karagiannakos' discussion of non-compliance highlighted two separate impacts from a lack of control: lax enforcement of rules and non-compliance by individual fishers, and deficiencies in the design of the TAC mechanism that result in a lack of control or limit on actual fishing mortality.[57] Khalilian et al., argued that the "insufficient control and enforcement" of the CFP was more evidence of "short term political considerations overriding scientific advice".[58]

Evaluations of UK Fisheries Management

Analysis of UK fisheries policy within the CFP has tended to produce a descriptive account of policy development with a focus on domestic quota management. Valatin (1999), Symes (1992), Hatcher and Read (2001) and Le Floc'h et al., (2015) tend to catalogue changes in UK fisheries policy rather than identify the factors which drove and altered policy outcomes and account for their relative influence. Le'Floc'h et al., made an initial in-road into this by identifying a general trend in which Member States have implemented management mechanisms centred on 'fishing rights individualisation' and limited access. They argued that this has been shaped by increasing restrictions on accessing fish stocks.[59]

Symes (1992) identified the CFP as creating significant distributive issues between sectors of the UK fleet.[60] The UK was one of the EC9 to sustain the heaviest landing losses from the loss of access to third-party waters (waters outside the EEC 200-mile EEZ). He argued that

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[56] Jose-Maria Da Rocha, Santiago Cerbino, Sebastian Villasante, "The Common Fisheries Policy: An Enforcement Problem", *Marine Policy* 36 (2012), pp.1309-1314.

[57] Specifically, up until the introduction of the Landing Obligation from 2015, the TAC operated as a Total Allowable Landings limit thereby creating no control with insufficient knowledge of actual volumes of fish caught and removed from populations.

[58] Setareh Khalilian, Rainer Froese, Alexander Proelss and Till Reuate. "Designed for Failure: A Critique of the Common Fisheries Policy of the European Union." *Marine Policy* 34 (2010), p.1182.

[59] Pascale Le Floc'h, Arantza Murillas, Martin Aranda, Fabienne Daurès, Mike Fitzpatrick, Olivier Guyader, Aaron Hatcher, Clair Macher, Claire and Paul Marchal, Paul, "The Regional Management of Fisheries in European Western Waters", *Marine Policy* 51 (2015), pp.375-384.

[60] David Symes, "The Common Fisheries Policy and UK Quota Management", *Ocean and Coastal Management* 18 (1992), pp.319-338.

this carried a disproportionate cost for the distant-water fishing ports at Grimsby, Hull, Fleetwood and Aberdeen. From 1965 to 1986, Hull moved from being the first UK port to the sixth, and combined landings at Hull and Grimsby fell from 40% to 5% of total UK demersal landings. A regional shift in UK fishing opportunities was identified, with an expansion of landings in the North-East and North-West of Scotland such that Peterhead emerged as the leading UK port in 1986. However, by examining the outcomes of quota allocations as opposed to the design and decision-making behind the chosen allocation mechanisms, there was a lack of visibility over how local political pressures and social policy attempted to mitigate against or encourage such changing regional variations.

Role of the local in fisheries management

This thesis is concerned with the negotiations that occurred between national administrators and local interests in the delivery of international commitments. Interest in the local dimension of fisheries management began in the 1990s as certain academics came to question the prevailing policy approaches of the 1970s and 1980s to common-pool problems - either privatisation of the resource (Demsetz 1967; Johnson 1972) or regulation by the state (Hardin 1978).

An alternative approach developed which put resource users at the centre of decision-making. It rejected the traditional evaluation of why resource depletion occurred as set out in Gordon (1954) and Hardin (1968) that rational users of a common pool resource would exploit it until expected benefits equalled expected costs leading to eventual resource exhaustion.[61] In 1990, Ostrom et al., rejected the view of resource views as "helpless individuals caught in an inexorable process of destroying their own resources."[62] By 1999, Ostrom et al., claimed more defiantly that it was "time for a reassessment of the generality of the theory that has grown out of Hardin's original paper".[63]

The new approach instead posited that resource users themselves could create contracts and resource management programmes that supported the sustainable use of the resource. In 1992 Schlager and Ostrom drew upon Clark (1977) to challenge the prevailing assumption that only 'owners' of a resource made long-term investments to improve the resource as if a private

[61] Ostrom et al., (1999), p.278.
[62] Ostrom et al., (1990), p.8.
[63] Ostrom et al., "Revisiting the Commons: Local Lessons, Global Challenges", *Science* 5412 (1999), p.278.

owner used a high discount rate – high enough to discount almost all future returns – the decision could be taken to exhaust the resource.[64]

The resulting user-participation model of governance retained the location of decision-making with resource users and communities, as opposed to decisions being made by government through a bureaucracy-based mechanism or by economic forces through a market mechanism. It drew from a body of empirical evidence that detailed informal management arrangements used in predominantly indigenous, artisanal fisheries that had developed with little or no help from government authorities (Cordell 1972; Alexander 1977; Forman 1970; Berkes 1986). The collective management arrangements in these fisheries often rested on the creation of de *facto* rules and rights agreed between users and reflected custom or community practice.[65]

The argument was that user-participation could deliver an alternative governance structure that would deliver a more effective system of fisheries management at lower cost.[66] Delivery of this rested upon two central concepts in the literature. Firstly, that user-participation in decision-making would overcome principal-agent problems associated with management by an external regulatory agency. Involvement of resource users in the design of rules would improve their legitimacy while social capital - which Grafton (2005) identified as trust, civic engagement, cooperation and social networks – between fishers would improve levels of international monitoring and compliance. The second element was the idea that resource users had better, more timely information on the fisheries than a regulatory agency.[67] When combined with scientific knowledge, local knowledge (seasonal fluctuations in stock density and migration, local market conditions and the methods of fishing) could work to create more effective allocation and management structures.[68]

A central tenet of the user-participation model is the use of the relationships and social and cultural norms and connections norms between fishers to create cooperation as opposed to

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[64]Edella Schlager and Elinor Ostrom, "Property-Rights Regimes and Natural Resources: A Conceptual Analysis", *Land Economics* 68 (1992), p.256.
[65] Schlager and Ostrom (1992), pp.254-255.
[66] R. Quentin Grafton, "Social Capital and Fisheries Governance", *Ocean and Coastal Management* 48 (2005), p.761.
[67] Sclager and Ostrom (1992), p.255.
[68]Steven Mackinson and Leif Nottestad, "Combining Local and Scientific Knowledge", *Reviews in Fish Biology and Fisheries* 9 (1998), pp. 481-490. While fishers' knowledge has an important role to play, it is emphasised in the literature that biased perceptions regarding resource abundance and their own impacts have often worked to undermine the use of its application (Mackinson and Nottestad 1998, Silver and Campbell 2005).

competition. Social networks, shared norms and trust are argued to lead to higher levels of individual and group compliance. As Ostrom noted:

"When an individual has strongly internalized a norm related to keeping promises, for example, the individual suffers shame and guilt when a personal promise is broken. If the norm is shared with others, the individual is also subject to considerable social censure for taking an action considered to be wrong by others.*"*[69]

Grafton (2005) sets out the important role that social capital can play in improving monitoring and enforcement. Monitoring is a prerequisite for effective fisheries management:

"In every group, there will be individuals who will ignore norms and act opportunistically when given a chance. There are also situations in which the potential benefits will be so high that even strongly committed individuals will break norms".[70]

Cooperation between fishermen is viewed as limiting the likelihood that an individual will behave in a way that impinges on their neighbours as the expectation of social sanctions and penalties creates a social incentive to comply with collectively agreed to fishing rules.[71] If fishers trust one another to comply with regulations, then the cost of monitoring the actions on individual fishers is reduced. User-participation management frameworks are argued to create improved conditions for internal monitoring, thus reducing the need and cost of external monitoring programmes. Self-monitoring, or the monitoring of others by resource users, can occur in fisheries due to the close physical presence between fishermen in that they can observe the type of gear their neighbour uses, the size and type of fish he lands and where he catches. Reporting on observed behaviour is incentivised by self-interest in that the free-riding of another will reduce the benefits others will derive from the agreement. Self-monitoring and reporting will reduce costs of enforcement.

This thesis provides a detailed insight in to the relationship between government officials and industry prior to the development of the user-participation literature. It finds that successive governments consulted with industry groups regularly and that industry representatives consistently fed into policy-making processes. However, it identifies a strong political tenet to the contributions from industry representatives. Their aim was political and protectionist to get

[69] Ostrom, (1990), p.35.
[70] ibid., p.36.
[71] Grafton (2005), p.787.

the most for their members. Moreover, if they supported mechanisms and policies that were focused on economic and biological sustainability, this was often conveyed to government in private. This negated the idea of the industry input creating compliance and legitimising policies as their members were unlikely unaware of their support for high cost policies. This thesis contributes to the participation governance literature by providing insight into the nature of government-industry relations and supports the case for fisheries managers working more closely with resource users as opposed to local representatives who were, in effect, lobbyists.

History and Policy and Policy Learning

While this thesis is focused largely on policy implementation, the fifty-year time period considered provides insight into policy learning over time. Some consideration has therefore been given to the literature on history and policy and policy learning. The cyclical nature of policy-making and implementation witnessed in UK fisheries policy makes this literature particularly relevant. Practical experience, evaluation and the changing relative abilities of different interest groups to influence policy-making created feedback loops in which implementation influence future policy design.

Pemberton (2003) builds upon the rich literature on policy outcomes, networks and policy learning supplied by the likes of Hall (1993), Peters (1998) and Marshal and Smith (2000) in his archival study of British economic policy-making during the 1960s.[72] His study of the new economic 'growth' policy networks in the 1960s revealed several similarities with the movement for a more economic approach to fisheries management in the UK from 1979. Both newly formed networks drew upon negative feedback to previous policies, with new ideas for correcting policy failure coming from academia.[73] Pemberton argues that despite a rich environment of policy learning and new networks, the application of new policy and change was obstructed by networks of actors that had the power to resist change. Of specific relevance to this thesis is his argument that the UK Government was reliant on producer networks to implement policy change. This was a crucial barrier to the application of new ideas. In Pemberton's study,

[72] Hugh Pemberton, 'Learning, governance and economic policy', *British Journal of Politics and International Relations* 5 (2003): pp.500-524.
[73] Pemberton (2003): 505-506.

the key producer networks were financial and industrial networks. In this thesis, the government was reliant on the fishing industry and the Producer Organisations.[74]

Similarly, Berridge's (2008) study of the use of history in public health policy-making offers relevant insights for this thesis.[75] While this study concentrates on the role and use of economic advice in policy-making, the time period considered and the role of policy legacy in fisheries management creates a strong historical dimension to the advice and ideas considered from 1945. Berridge's discussion on institutional memory is interesting and directly relevant to this thesis. In part, she attributes "a lack of such memory within government" and amongst civil servants to the realities of the work.[76] The constant movement of civil servants between posts, the lack of time and space in a working week to dedicate to reading, and the relative 'openness' of different stages of the policy cycle to external ideas all created barriers to the incorporation of academic ideas (whether historical, economic or scientific) into the policy process. Berridge's insights are important context for considering the policy learning processes identified in this thesis. Successive UK Governments considered the same ideas and mechanisms for fisheries management, with little reference made to previous discussions. The use of transferable quotas or effort controls are a key example with many discussions on their potential use repeated over several decades. This thesis contributes to this literature by providing insight into the factors which altered the government's position on certain ideas over time; arguing that economic advice was used in a selective manner when it was politically convenient.

[74] Ibid, p. 519.
[75] Virginia Berridge, 'History Matters? History's Role in Health Policy Making,' *Medical History* 52 (2008), pp.311-328.
[76] Ibid., p. 316.

3. Sovereignty, property rights and marine resources: UK Government policy on national fishing limits from 1945

This chapter argues that the formation and development of UK Government policy on the international issue of national fishing limits over 1945-76 was shaped predominantly by domestic non-fishing interests. UK fisheries policy in this period initially reflected the needs of the economically and politically dominant distant-water fishing fleet. This led to the government rejecting the extension of jurisdiction as a tool for stock conservation or local economic protection. Over time, the ability of this sector and the Fisheries Department to influence UK policy diminished. In 1964 and 1976, the UK extended fishing limits to reconcile growing political tension in Scotland where support for an extension of limits had been marginalised within UK policy-making. More fundamentally, however, the extension of UK fishing limits represented negotiated concessions at an international level designed to protect military and foreign policy interests in the 1960s and energy interests in the 1970s. This chapter argues that the UK Government's agreement to the concept of 200-mile fishing zones at the Third LOS Conference represented an acknowledged direct trade-off between UK fishing interests in return for maximising domestic oil interests.

Ownership and the extension of national jurisdiction over the seas became an important international issue from 1945. This was driven by increased interest from national governments in exploiting resources in and under the seas that technological advances had made both economically and technically viable. From its early beginnings in the 1900s, technological developments enabled the offshore hydrocarbon industry to flourish from the 1950s. In October 1947, the first commercial offshore oil well was drilled out of sight of land by a mobile rig in the Gulf of Mexico. Though the rig only drilled through a water column of less than 20 feet, a new event horizon was created for the exploitation of offshore hydrocarbons. A decade later developments in offshore technology took off on an upward march with the physical limitations

to extraction continually re-defined.[77] Similarly, the application of new technologies to the exploitation of sea capture fisheries facilitated a shift to offshore, deep-water and industrial fishing practices. The transition from sail to steam technology in the late 1800s enabled larger, more powerful vessels to fish for longer, farther from home and hold larger catches. War-time technologies such as sonar and the use of on-board freezing allowed vessels to target fish more effectively and protected against spoilage on long trips. The application of technology allowed British vessels to fish off the coast of Iceland by the turn of the 19th century. Iceland as a region of capture entered the British Sea Fisheries Statistics in 1921, with 73,708 tonnes landed off the coast of Iceland. By 1950 this has doubled to 137,685 tonnes, reaching a peak of 228,000 tonnes in 1970.[78]

Technology-driven advances in marine resource exploitation produced two predominant international concerns. The first was a reconsideration - initially at nation-state level - of the traditional boundaries of marine jurisdiction. Prior to 1945, the international legal position was defined by the 17th century doctrine 'Freedom of the High Seas' – that all waters beyond the territorial seas and the resources within were considered *res communis* and free for all to exploit. The second concern was for technology-enhanced exploitation rates and for the over-exploitation of fish stocks. Prior to the application of new technologies, sea fisheries were offered protection from heavy-exploitation by high costs and dangerous physical conditions.[79] Rapidly changing fishing practices eventually enabled fleets to increase catches, often in excess of the natural sustainable yield of the stocks. Concern for over-fishing was present in the late 19th and early 20th century. However, it was not until the end of the Second World War (1939-45) that over-fishing and the conservation of fish stocks became a persistent international environmental matter.

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[77] Shunsuke Mangi, James J. Opaluch, Di Jin, Thomas A. Grigalunas, "Technical Change and Petroleum Exploration in the Gulf of Mexico", *Energy Policy* 33 (2005), pp.619-632.

[78] Ministry of Agriculture, Fisheries and Food. *Sea Fisheries Statistical Tables*, Landings by Region of Capture. (HMSO: London, 1950 and 1970).

[79] Gordon Munro, "*The Efficiency of Rights-Based Fisheries Management Schemes and the Quest for Resiliency: An Overview*", paper presented as Keynote Address to the Efficient Fisheries Management Conference, Reykjavik Iceland 27-28 August 2009. Munro argues that the new opportunities offered by technology altered the status of fish resources from that of free capital to scarce natural capital.

The two issues of marine jurisdiction and over-fishing became intertwined as certain national governments unilaterally extended jurisdiction over littoral waters to protect fish stocks and national fleets from the new danger of over-fishing. These extensions – to which the 1945 Truman Proclamation is often held as a catalyst – often had a dual economic and conservationist objective.[80] The intention was often to protect fish stocks from over-exploitation by limiting the right of access (and in turn capture) to sea areas to nationals of the littoral coastal state. Such national actions had international ramifications as unilateral extensions by countries such as Norway and Iceland displaced vessels from traditional maritime nations such as the UK from rich fishing grounds. In response, the maritime nations contested the lawfulness of the nationally-imposed fishing limits, arguing that the extensions contravened the existing international law of '*Freedom of the High Seas'*. While the objections to extensions of jurisdiction and sovereignty were often arguments based on principles, the conflict spawned from the distributional consequences of such actions.

Political and economic motives were inherent in both the extensions of national marine jurisdiction and the protests against the unilateral acts. This process and the concern for over-exploitation of fish stocks overlapped with a growing academic interest in the application of property rights theory to natural resources. Economic policy was applied to environmental problems and natural resources as a means of correcting market failures and resulting negative externalities. Economic analysis and approaches have been used in the design of environmental policy. Economic approaches to the environment have typically followed two schools of thought: the Meade-Pigou tax/subsidy approach and the Chicago approach associated with Coase that focuses on property rights. Helm (1991) differentiated between the two approaches by arguing that "the former approach is essentially aimed at corrections of the consequences of market operations. The latter considers how market institutions can be reformed to internalize externalities".[81] The application of economics to environmental problems coincided with a post-1945 growth in the number of international agencies and resulting international environmental agreements (IEA). Barrett (2003) argued that the rapid growth of international agencies and IEAs

[80] Three decades earlier in 1907 Argentina had initiate a ten-mile exclusive fishing zone and from the 1930s the ICJ had intended to codify maritime law.
[81] Dieter Helm ed., *Economic Policy Towards the Environment* (Blackwell: Oxford, 1991), p. xi.

was driven by need because of the arrival in the middle of the 19th century of transnational externalities as a "pervasive feature of international relations".[82]

With an inevitable time lag between the implementation of new technology and the formation of legal institutions to control and channel risks and benefits, the first UN LOS Conference held in Geneva in 1958 attempted to create a new international consensus on marine jurisdiction.[83] Four conventions were produced but the issue of national fishing limits was not settled and a second LOS Conference was held in 1960.[84] The failure of the 1960 Conference to reach agreement and an escalation in international conflict led to the Third LOS Conference convened in New York in 1973 which produced the UN Convention on the Law of the Sea (UNCLOS) in 1982.[85] The 1982 Convention - brought into full force in 1994 - enshrined in international law the rights and responsibilities of the international community with respect to the seas and seabeds. In terms of national marine jurisdiction, it defined territorial waters as being measured out to 12-nmiles in breadth and introduced the concept of Exclusive Economic Zones (EEZ) that extended from the edge of the territorial sea out to 200 n-miles. Within the EEZs, adjacent coastal states were awarded exploitation rights over all natural resources in the water and the exclusive right to harvest mineral and non-living minerals in the subsoil of their continental shelves.

Negotiations in the Third LOS Conference continued for 10 years as it represented a complex process of distributing international access to and ownership of marine space and the resources within. From 1958-73, the number of nation states participating in the UN LOS process increased from 86 to 163. Due to the multiple uses of the seas, the competition between domestic interests for priority in national negotiation strategies was often complex and varied. As discussed in the last chapter, Harrison (2011) argued for the importance of the Conference's incentives structures and negotiation mechanisms in facilitating trade-offs at nation-state level.

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[82] Scott Barrett, *Environment and Statecraft: The Strategy of Environmental Treaty-Making* (Oxford University Press: Oxford, 2003), p.136.

[83] J.D. Nyhart, "Interplay of Law and Technology in Deep Seabed Mining Issues", *Virginia Journal of International Law* 15 (1974), p.830. The International Law Commission began to draft articles for an international regime that would guide nation states in their use of the high seas in 1949. The Commission's drafts were used as the basis for the 1958 LOS Conference (Maurice Hope-Thompson, "The Third World and the Law of the Sea: The Attitude of the Group of 77 Towards the Continental Shelf", *Boston College Third World Law Journal* 1 (1980), pp.37-70.)

[84] The 1958 LOS Conference produced four Conventions on the territorial seas, the high seas, fishing and conservation of living marine resources; and the continental shelf.

[85] As of 2015, 166 countries and the European Union are party to the UN LOS Convention.

Marine issues were considered in separate committees with the Convention negotiated as a single package deal.

The development of UK Government policy on fishing limits and wider marine jurisdiction within the UN LOS process is of relevance and interest for several reasons. The UK fishing fleet was diverse in its character, operations and structure. This produced a stark division at a local-community level in terms of the industry's attitude towards the extension of national fishing limits. The English and Welsh fleets were predominantly comprised of large distant-waters trawlers that fished off the coasts of other nations. The Scottish fleet was made up of smaller vessels fishing in the inshore and offshore waters of the coast. Table 3.1 highlights the concentration of large (over 140ft) trawlers in ports in England and Wales and Aberdeen in Scotland. An extension of limits would have affected the fleets very differently. This forced the government to arbitrate between the conflicting local interests when forming national policy. This chapter argues that local politics play a decisive role in shaping national policy. Over time, the dominance of the distant-water fleet declined as Scottish fishing interests became increasingly politicised and organised but more importantly as the interests of the distant-water fishing sector became misaligned with broader UK marine interests.

Table 3.1 Fishing vessels at main ports, 1970

Port	Trawlers				Liners		Seiners			
	Under 40ft	**40-110ft**	**110-139ft**	**Over 140ft**	**Under 40ft**	**40-110ft**	**Under 40ft**	**Over 40ft**	**Under 40ft**	**40-110ft**
Fleetwood	12	52	24	9	-	1	-	4	12	52
Grimsby	4	27	51	50	4	-	-	105	4	27
Hull	-	1	-	93	2	-	-	6	-	1
Lowestoft	6	84	26	2	2	2	-	-	6	84
Milford Haven	3	18	-	5	-	-	-	-	3	18
North Shields	3	14	4	-	-	-	-	16	3	14
Other Ports (England Wales)	490	497	105	97	395	53	3	41	490	497
Aberdeen	3	48	60	2	27	3	7	15	3	48
Buckie	4	68		-	13	-	-	33	4	68
Fraserburgh	7	44	8	-	40	2	1	42	7	44
Leith	9	38	-	-	2	-		15	9	38
Lossiemouth	-	20	-	-	-	12	37	69	-	20
Other (Scotland)	81	170	68	-	325	17	-	257	81	170

Source: *UK Sea Fisheries Statistics, 1970*. (London: HMSO, 1971). Table 15, p.36-37.

Local political tensions within the fishing industry were crucial in shaping UK fisheries policy. Nonetheless, this chapter argues that UK Government policy on fishing limits was shaped by non-fishing interests. In the 1950s and 1960s, defence interests were the key policy driver. This was replaced by energy policy in the 1970s. From 1945 UK fishing interests and the Fisheries Department became increasingly marginalised within the UK LOS policy process. By the early 1970s, UK fishing interests had been trumped by domestic oil interests. This chapter argues that the UK Government's agreement to 200-mile fishing limits was a trade-off for securing maximum jurisdiction over the seabeds and hydrocarbon resources within.

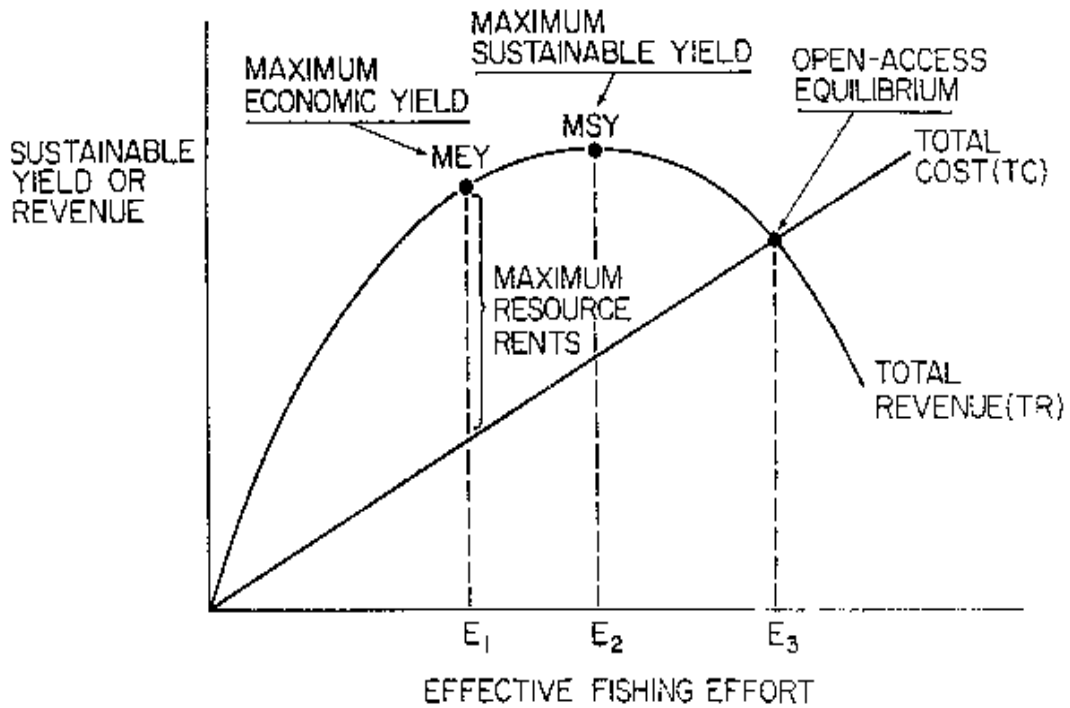
Section 1 of this chapter provides an overview of the development of economic thought on the application of property right theory to fisheries resources in the decades following World War Two. Section 2 analyses the early development of UK policy on extended fisheries limits from 1945-64. It is argued that the UK Government's rejection of extended limits as a tool for stock conservation was determined by the negative impact this would have had on the commercially dominant distant-water fishing sector and defence interests. Section 3 focuses on UK policy development for the Third LOS Conference 1973-82 to demonstrate that UK fishing interests became increasingly marginalised within UK LOS policy-making. It provides evidence of the key trade-offs made by the government whereby fishing interest were intentionally trumped by energy interests.

3.1. The sole owner: the application of property rights theory to fisheries

Early academic interest in the issue of over-fishing and the application of property rights theory to fish resources flowed from the concern of economists with externalities. Externalities are the consequences of industrial or commercial activity that affect other parties without being reflected in market prices. A common example is pollution. Economic instruments are commonly adopted to align the private and social marginal costs of activities by forcing the actors creating externalities to take associated costs and benefits into account in their operations.

Garrett Hardin's 1968 Tragedy of the Commons in *Science* is regarded as the seminal work which addressed how common ownership of a resource could lead to its over-exploitation.[86]

Figure 3.1 Simple static model of an open-access fishery



Source: Ian R. Smith, *Territorial use rights and economic efficiency: the case of the Philippines fishing concessions*. FAO Fisheries Technical Paper 24. (FAO UN: Rome, 1992).

Fourteen years earlier, a fisheries-specific analysis was published by H. Scott Gordon in his article The Economic Theory of a Common Property Resource: The Fishery, published in *The Journal of Political Economy in 1954*.[87] In 'The Fishery', Gordon argued that to promote biological and economic sustainability the property rights status of fisheries should be redefined from that of common property to private property. Gordon's economic interest in fisheries exploitation grew from his objection to the monopoly held by biologists in the formation of fisheries research and regulation. In 1958, Gordon argued in 'Economics and the Conservation Question', that "a great deal (perhaps the greater part) of what has been done in the name of "conservation policy" turns out, upon subjection to economic analysis, to be essentially

[86] Garrett Hardin, "The Tragedy of the Commons", *Science* 162 (1968), pp.1243-1248.
[87] H. Scott Gordon, "The Economic Theory of a Common Property Resource: The Fishery", *Journal of Political Economy* 62 (1954), pp.124-142.

worthless".[88] In 1954, Gordon argued that the question of conservation was one for the traditional theory of capital and that conservation of fish stocks was not related to the ecology of the seas but to "man's use of the resources for his own (economic) purposes".[89]Gordon's application of property rights theory to fisheries resources mirrored Frank H. Knight's analysis of externalities and property rights in the 1924 paper 'Some Fallacies in the Interpretation of Social Cost'.[90] Knight challenged Pigou's view that road congestion was justification for the taxation of roads.[91] Knight argued that the application of property rights – private ownership of the road – would produce the same outcome without the need for government intervention. Gordon applied Knight's analysis of the 'two-roads' paradigm to two fisheries to argue that over-exploitation of fish stocks was caused by the common-property status of fish resources.[92] The combination of the common property regime that allowed for unrestricted or open access with the fixed biological yield of a fishery led to what Gordon termed the 'bionomic equilibrium' (Figure 3.1. open-access equilibrium).

Gordon argued that if access to fish resources remained unrestricted, fishers would continue to enter the fishery and exploit the resource beyond the point where the harvest was both biologically and economically sustainable. The fishery would be exploited until total revenues equalled total costs (open-access equilibrium). While irrational at a fishery-level and leading to rent dissipation and overexploitation, it was driven by the rational behaviour of individual fishers as the marginal private cost of entry was lower than the marginal social cost. If a fisher wanted to limit their activity and fish less for economic or biological reasons, the common property status of the resource meant that the benefits of this - such as larger future yields and revenue streams as remaining fish reproduced – were not guaranteed. Abatement at an individual level would benefit other fishers as fish left would be taken by others. Strong incentives operated for individuals to fish as hard as possible as any remaining catch was not guaranteed to be available on their return.

Several negative externalities were created when fishing effort increased up to and beyond economic and biological equilibriums. The first was biological and related to the

[88] H. Scott Gordon, "Economics and the Conservation Question", *The Journal of Law and Economics* 1 (1958), pp.110-11.
[89] H. Scott Gordon (1954), p.125.
[90] Frank. H. Knight, "Some Fallacies in the Interpretation of Social Cost", *The Quarterly Journal of Economics* 38 (1924), pp.582-606.
[91] Arthur C. Pigou, *The Economics of Welfare* (London: Macmillan and Co, 1920).
[92] Fish stocks outside territorial waters were defined in international law in 1954 as *res communis.*

theoretical concept of maximum sustainable yield (MSY). The European Commission defines MSY as the "optimal catch that may be taken from a fishing stock year after year without endangering its capacity to regenerate for the future."[93] Overfishing of a stock occurs when catch exceeds MSY.[94] This is when more fish are removed than is required to maintain the stock's population size and biomass through growth and spawning. Constant fishing in excess of MSY will lead to stock collapse. The second set of externalities are economic in nature and relate to the concept of maximum economic yield (MEY) – the harvest or level of fishing effort that maximizes the net returns from fishing. As demonstrated in Figure 3.1, fishing beyond MEY – based on the assumption that fishing costs rise proportionately with effort – produces a sub-optimal resource rent and as fishing effort approaches the bionomic equilibrium total marginal costs equal total marginal revenue.[95] As fishing at MEY is lower than fishing at MSY, optimal economic management of a fishery will allow for conservation of the stocks.

Gordon's approach to bridging the gap between private and social marginal costs in a fishery was influenced by Knight as opposed to Pigou. He argued that over-fishing could be addressed by re-defining the property regime for fisheries away from common property by awarding private property rights over the resources. This immediately worked to limit entry and, like Knight's two-roads analysis, vested power in the owner to control exploitation levels. Gordon argued that the owner of the resource would attempt to maximize profit and would therefore establish fishing effort at MEY thereby protecting against over-exploitation. Ownership of a fishery would create new incentives for lower levels of fishing effort. The owner could incur present costs associated with restricting effort to MEY as the benefits of this action would accrue to them in the future through larger yields. This extended the fishers' time horizon as rational behaviour became less about short-term economic gains and more about husbandry of a renewable resources to produce an indefinite revenue stream. The economic case for applying property rights to fisheries as a solution to over-fishing was reinforced in Anthony Scott's 1955 article The Fishery: The Objectives of Sole Ownership. Scott mirrored Gordon's argument that if a single body had a secure property right for a yield, the resource would be husbanded rather

[93] European Commission Regional Advisory Council Factsheet. Available: http://ec.europa.eu/fisheries/documentation/publications/cfp_factsheets/maximum_sustainable_yield_en.pdf
[94] The European Commission considers that overfishing occurs when a stock when its biomass is below BMSY.
[95] Due to the common property status of the stocks, over-capitalization occurs as fishermen invest in larger and more powerful boats to 'out-fish' one another. This increased the unit cost of effort but not necessarily catch per unit of effort.

than over-exploited.[96] Scott's analysis took Gordon's original proposition further by emphasizing the element of time. He outlined that not only was complete control of the asset necessary but that the ownership rights would have to be secure over the long run.

The concept of sole ownership has been applied most directly as a fisheries management tool in circumstances where small, spatially defined fisheries can be harvested by an individual or single authority.[97] These fisheries tend to be inshore and for shellfish such as mussels and cockles that do not move between defined jurisdictions. Sea capture fisheries, especially for migratory stocks that move between sea areas, are too vast and complex for a literal application of sole ownership. In practice, the approach has been to interpret sole ownership in terms of national sovereignty – an exclusive claim by nation state governments over a defined sea areas– over areas of sea and the resources within and later as national economic jurisdiction over sea areas. From 1945 to the 1982 Law of the Sea Convention, coastal states universally extended sovereignty and jurisdiction over littoral seas in a bid to gain exclusive access to the fisheries resources within. The most notable examples include a series of extensions of national fishing limits by the Icelandic Government to 12 miles in 1958 and 50 miles in 1972 and the application of 200-mile fishing limits by several Latin American countries in the 1960s. The concept of national fishing limits was then enshrined in the 1982 Law of the Sea Convention that established exclusive economic zones up to 200-miles in international law.

3.2. The cost of conservation: UK policy on exclusive fishing limits, 1945-64.

This section argues that UK policy on national fishing limits between 1945 and 1964 was shaped by the needs of the UK's distant-water fleet and national defence policy. The concentration of the distant-water fishing industry in Hull, Grimsby and Fleetwood created local communities with strong cultural and economic ties to the industry. The political and economic clout of these local and national interests led the UK Government to reject the use of extended fishing limits as an international tool for stock conservation.

[96] Anthony Scott, "The Fishery: The Objectives of Sole Ownership", *Journal of Political Economy* 63 (1955), pp.116-124.
[97] Territorial User Rights in Fisheries (TURFs) is a global management tool that utilises the 'sole owner' concept. TURFs have been used successfully in Chile and Australia.

UK policy on the extension of Norwegian and Icelandic territorial waters, 1948-52.

The need to develop UK policy on national fishing limits arrived in 1948 as the Norwegian Government enforced a 1935 Royal Decree to measure territorial limits from a series of base points around the coast. Territorial waters were traditionally drawn from the low-water mark. Norway's heavily indented coastline meant the effect and intent of measuring territorial waters from base-lines was to increase Norwegian territorial waters from 3 to 4 miles.[98] The Norwegian Government's motivation, as cited by the International Court of Justice (ICJ) in its judgment on 19 December 1951, was to protect local and dependent fishing communities from the larger, more powerful foreign trawlers.[99]

The UK's delegation to the ICJ presented its objection as one of principle: by drawing territorial waters from the low-water mark, the Norwegian extension contravened customary international law. Internal government discussions indicated that the issue for the UK Government was not one of legality but of how UK economic and commercial interests would be affected. A 1949 Cabinet Memo outlined that the government's position was shaped by concern for the reciprocal effects of broader territorial waters upon maritime freedoms for military and commercial shipping interests.[100]

An attempt to produce a settlement that aimed to protect UK distant-water fishing interests indicates that the impact of the Norwegian decree on this fleet was a primary concern for the UK Government. Before the government chose to take Norway to the ICJ, bilateral negotiations attempted to produce a settlement with the UK Government proposing that the area in dispute be divided length ways into two equal parts. In the Southern half, the UK would accept Norway's claim and in the Northern half Norway would permit UK vessels access on account of the historical presence of UK vessels in the area since 1900. The Cabinet Memorandum noted that this would largely safeguard UK fishing interests which largely fished

[98] Several large bays and fjords became enclosed under Norwegian sovereignty and therefore inaccessible to foreigners.

[99] International Court of Justice. *Fisheries Case*. Judgment 18 December 1951. Available: http://www.icj-cij.org/docket/files/5/1811.pdf

[100] TNA (1949) CAB 129/32/9. Anglo-Norwegian Fisheries Dispute. Cabinet Memorandum CP (49) 9 'Anglo-Norwegian Fisheries Dispute,' note by the Secretary for State for Foreign Affairs, 13 January 1949.

in the Northern area.[101] The predominant fishing-related issue for the UK was that of securing an access arrangement for UK trawlers.

The Norwegian dispute provides evidence of the political influence held by the UK's distant-water fishing fleet. The UK and Norway were both major fishing nations. Asgeirsdottir (2008) argues that the influence of the Norges Fiskarlag (Norwegian Fishing Association) on Norwegian domestic politics and the international system has decreased since the mid-1970s. Asgeirsdottir attributes this to a fall in the number of fishermen and the rise of the oil sector.[102] Prior to this, domestic fishing interests played an influential role in Norwegian domestic politics with the country's rejection of EEC membership in 1973 led by fishing and agricultural interests.

The UK Government's Law Offices advised the government against taking the case to the ICJ but pressure to do so came from the distant-water fishing lobby. The FCO noted that the industry was now "highly organised and united against any concessions to the Norwegians…[they] are pushing to go to the ICJ rather than yield to Norwegian claims which they consider…detrimental to British fishing interests".[103] The pressure from the fishing industry also severely limited the ability of the UK Government to negotiate bilaterally with Norway with the FCO stating that "finding any agreement that would be accepted by the Norwegian Government and by the British fishing interests was now very slim".[104]

The 'British fishing interests' alluded to in this quotation specifically meant those of the distant-water fleet. This fleet was comprised of large steam trawlers of over 40ft that fished in deep, distant waters far from the UK's coastline. The fleet was typically owned by large fishing companies and operated on a high capital to labour ratio. The fleet was economically dominant in terms of its economic contribution to the wider UK fishing industry. Of total UK landings of £53 million in 1951, £42 million was landed by the distant water fleet, with £7.5 million caught within 12-miles of the Icelandic and Norwegian coastlines.[105] In 1951, over half of the total landings from the deep-sea fleet (6,827,208 cwts of 11,735,343 cwts) were of cod, a high-value

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[101] TNA (1949) CAB 129/32/9. 'Anglo-Norwegian Fisheries Dispute,' p2, para 5.
[102] Aslaug Asgeirsdottir, *Who Gets What? Domestic Influences on International Negotiations Allocating Shared Resources.* (New York: SUNY Press, 2008), p.54.
[103] TNA (1951) MAF 209/229. Anglo-Norwegian Fisheries Dispute: Reference to the International Court of Justice at The Hague. Note from the FCO 'Anglo-Norwegian Fisheries Concessions', January 1949.
[104] ibid.
[105] NAS (1957) AF62/4050/2, Law of the Sea: Geneva Conference 1958. Briefing Note 'Report on Landings for 1951,' DAFS.

species, and almost 50 percent of the landings were caught in the Barents Sea or off the coast of Iceland (Table 3.2). The Cabinet was aware that 86 per cent of UK landings from Iceland would be reduced by an extension of fishing limits to 12-miles.[106]

Table 3.2 UK deep-sea landings by area of capture, 1951.

Area of Capture	Quantity (weight cwts)	% of Total UK Deep Sea Landings by Area of Capture
Barents Sea	2,943,315	25.1
Norwegian Coast	666,397	5.7
Bear Island and Spitzbergen	1,871,421	15.9
Faroe	558,746	4.8
North Sea	1,313,596	11.2
Iceland	2,618,721	22.3
West of Scotland	554,746	4.7
West Coast of Greenland	227,392	1.9
Total UK Deep-Sea Catch	**11,735,343**	**91.6**

Source: UK *Sea Fisheries Statistics, 1951*. (HMSO: London, 1952).

Distant-water fishing interests were also politically organised. This was facilitated by its commercial nature, industrial scale and geographical concentration in the large ports in England and Wales. In 1951, 88 per cent by weight and 81 per cent by value of total UK deep-sea landings were made into the three ports of Hull, Grimsby and Fleetwood.[107] In Scotland, the deep-sea fleet operated out of Aberdeen with over 70% of Scottish landings from steam trawlers landed into this port in 1951.[108] Representative groups included the British Trawler's Federation (BTF), the British Fishermen's Federation (BFF) and National Federation of Fishermen's Organization (NFFO). The economic value of the fleet in terms of its landings, capital assets and employment in the catching and onshore ancillary sectors, led to the UK Government viewing distant-water fishing interests as representative of the UK fishing industry. The economic dominance and political organisation of the distant-water fleet enabled the local interests attached to the sector to influence and define UK national fisheries policy.

The ability of the distant-water fleet to shape UK policy was strengthened by its alignment

[106] TNA (1962) CAB 134/2190, Committee on the Law of the Sea: Meetings 1-3, Papers 1-11. Note of meeting 'Committee on the Extension of Fishery Limits,' 24 June, para 16.
[107] Ministry of Agriculture and Fisheries, *Sea Fisheries Statistics Tables 1951* (London; HMSO, 1952), Table 2a.
[108] Scottish Home Department, *Scottish Sea Fisheries Statistical Tables, 1951* (Edinburgh: HMSO, 1962).

with wider UK maritime interests. On 18 December 1951, the ICJ found in favour of Norway. Anthony Eden, Foreign Secretary for the third time, called for a policy re-set to consider how the UK could benefit from extending fishing limits. In a Cabinet Memo, Eden argued that the new 'Hague Court Principle' could be used to increase considerably the area over which the UK Government could claim jurisdiction. Eden's argument was two pronged. Firstly, prior to the ICJ's ruling several other countries had adopted the principle of extension. He noted "evidence of support for the principle in Court and internationally and that Britain's ability to resist and influence this was weak, even within the Commonwealth."[109] The UK would be better able to exert influence by applying the principle in a "moderate and conservative fashion". [110]

Secondly, Eden proposed use of the principle – the measuring of territorial waters by baselines - as a tool to reconcile domestic pressure in Scotland. Like the Icelandic and the Norwegians, Scottish inshore fishermen had long resented the presence of foreign trawlers in the Moray Firth, the Minch and the Firth of Forth. The White Fish Authority (WFA) and the Scottish Office had lobbied central government to enact measures to protect inshore fishermen from competition with larger, foreign trawlers. The issue was presented as one of conservation and not competition in that the deep-water trawling equipment of the foreign vessels damaged the important shallow waters and sea beds that housed important spawning masses. The use of baselines under the ICJ ruling would rectify this as large tracts of inshore waters would come under national sovereignty because of the heavily indented coastline of the UK and Scotland.

In comparison to the politically organised and economically dominant distant-water fleet based in England, outside of the port of Aberdeen the Scottish fishing fleet was predominantly made up of small vessels that fished in the inshore and offshore waters of the UK (Table 3.3). The ownership structure of the Scottish fleet was also different with vessels primarily owned by families or through share-partnerships from within local communities. The vessels were smaller, often under 40ft and employed higher levels of labour to capital. The Scottish offshore fleet was largely made up of sail vessels, motor vessels, steam drifters or liners as opposed to the more powerful steam trawlers. Of 14,531 registered as full and part-time employees in the Scottish fishing industry in 1951, only 2,025 (14%) worked on steam trawlers.[111] Political organization by

[109] TNA (1958) CAB 21/2762. Territorial Waters and Law of the Sea. 'Application of Hague Principle', Note by the Secretary of State for Foreign Affairs, 1952.
[110] ibid.
[111] Scottish Home Department. *Scottish Sea Fisheries Statistical Tables, 1951*. (Edinburgh: HMSO, 1952), Table 14.

Scottish fishing interests was made harder by the geographical dispersion of the fleet around the heavily indented Scottish coastline.

Table 3.3 Scottish vessels by port, 1951

Port	Total	Trawler motor	Trawler steam	Steam liners and drifters	Motor vessel under 40ft	Motor vessel over 40ft	Sail vessel
All districts	3,458	4	206	12	2,097	683	22-
Eyemouth	61	-	-	-	36	25	-
Leith	134	-	33	-	50	49	2
Anstruthur	111	-	-	4	69	38	-
Arbroath	96	-	-	-	58	24	2
Aberdeen	278	4	173	7	70	65	-
Peterhead	152	-	-	-	86	85	-
Fraserburgh	162	-	-	-	77	83	-
Macduff	165	-	-	-	82	92	-
Buckie	119	-	-	-	27	106	-
Lossiemouth	128	-	-	-	22	28	-
Helmsdale	65	-	-	-	34	52	3
Wick	129	-	-	-	73	34	4
Stornoway	603	-	-	-	450	34	119
Loch Broom	101	-	-	-	79	4	18
Kyle	160	-	-	-	97	35	38
Oban	64	-	-	-	58	2	4
Campbeltown	106	-	-	-	72	30	4
Tarbet	54	-	-	-	38	13	3
Ayr	169	-	-	-	116	42	11
Orkney	377	-	-	-	364	1	12
Shetland	224	-		--	139	8	-

Source: *Scottish Sea Fisheries Statistics 1951*. (HMSO: Edinburgh, 1952): Table 20, p59.

On 22 July 1952, a memorandum was submitted to the Cabinet by the Secretary of State for the Co-ordination of Transport, Fuel and Power, the First Lord of the Admiralty and the Ministry of Transport.[112] Eden's moderate and progressive approach was rejected and an argument was advanced that UK policy on the width of territorial waters "should be defined by her existence as a great naval and maritime power and not as a coastal state".[113] UK defence interests were defined by maximum freedom of movement. The joint memo argued that the costs of supporting The Hague Principle were far reaching and would disadvantage the Royal Navy

[112] TNA (1958) CAB 21/2762. Cabinet 'Territorial Waters', Joint Memorandum by the Secretary of State for the Co-ordination of Transport, Fuel and Power and the First Lord of the Admiralty, 22 July 1952, para.4, point a-f.
[113] Op. cit.

and UK commercial shipping interests.[114] UK defence interests would be further harmed as sovereignty over the seas carried equal sovereignty over the air above.

The memo pointed out that 90% of total UK landings came from distant-waters in the offshores of foreign countries. Therefore, "any advantage pertaining to inshore interests would be undermined by substantial losses as deep-sea trawlers were excluded from distant grounds".[115] Further to the memorandum, on 29 July 1952 the Ministry of Defence submitted a commissioned report to the Cabinet outlining the negative military impact of extended jurisdiction. It argued that the Royal Navy would be hampered in war as the use of straits would become impeded as countries extended sovereignty. With the protection of local Scottish fishing interests coming up against the combined political and economic weight of the Admiralty and UK commercial shipping interests, the Cabinet concluded: "the substantially wider naval, maritime, aviation and deep-water fishing interests should not be subordinate to much narrower Scottish opinion."[116]

UK distant-water fishing, defence and shipping interests underwrote the UK Government's rejection of extended fisheries limits as a tool for stock conservation. This materialised in 1952 when on March 19 the Icelandic Government extended its territorial limits by applying the baselines principle. This prohibited trawling and seine-netting within the enclosed area with access only permitted to local inshore vessels. The Icelandic extension of territorial waters to 4 miles was shaped by two factors. The first was scientific advice from the International Council for the Exploration of the Seas (ICES) that the Faxa Bay area and the shallow waters off the coast of Iceland were important nursery grounds for domestic stocks in the North Atlantic, in particular for the heavily exploited cod stocks further off the Icelandic shore. ICES commented that trawling activity in the areas had led to the destruction of spawning beds and spawning biomasses.[117] In 1946 ICES proposed that Faxa Bay - an indent of water running 30 miles along the southeast Icelandic coastline - should be closed for an experimental ten-year period.

Secondly, with the 1951 ICJ ruling on the Anglo-Norwegian fisheries dispute awarding

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[114] Op. cit.
[115] Op. cit.
[116] Op. cit.
[117] TNA (1953) MAF 209/125. International Council for the Exploration of the Sea: Report of Sub Committee on Conservation of Fish in Faxa Bay, 'Note on the ICES study of the need for conservation of fish stocks in Faxa Bay', August 1949, p.1, para.1.

them legal precedent, the Icelandic Government argued that they had a moral entitlement to implement baselines because of the dependence of the Icelandic economy on fisheries resources. As of 2008, fish and fish-related products made up 75 per cent of Iceland's export earnings.[118] Economic and conservation arguments became intertwined, with Iceland arguing that urgent conservation measures such as the extension and the ban were required for long-term economic prosperity. The Norwegian and Icelandic extensions references to the dependence of littoral local populations on fisheries resources were representative of a wider trend at the time to foster a factual relationship between coastal states and adjacent seas based on proximity to, and a social and economic dependence upon, coastal waters. This argument can be identified in the 1945 Truman Proclamation that stressed a physical and social-economic connection between the coast and sea beds. It stated that the: "*effectiveness of measures to utilize or conserve these resources would be contingent upon cooperation and protection from the shore, since the continental shelf may be regarded as an extension of the land-mass of the coastal nation…. self-protection compels the coastal nation to keep close watch over activities off its shores which are of the nature necessary for utilization of these resources".*[119]

Following legal advice, the UK Government chose not to fight the Icelandic extension on legal grounds. The Cabinet accepted the FCO's recommendation that on account of "a regrettable tendency" on the part of the ICJ to be influenced by non-jurisdictional considerations such as economic and social dependency, it was better to avoid further harm to UK prestige with another failure in The Hague.[120] Instead, the decision was taken to contest the conservation basis of the Icelandic argument. In building a case against the 1952 Icelandic extension of territorial waters, the UK Government made use of scientific data, specifically superficial catch data to undermine the argument that stocks around Iceland were showing signs of over-exploitation and that the Icelandic economy, in terms of its fish supplies, had been negatively affected.[121] The FCO produced landings data to demonstrate that over the period 1936-38 and 1953-55 Icelandic demersal landings had increased two-fold. The FCO pointed out that Icelandic landings had increased relative to the landings of all other countries that fished in the area. It argued that any

[118] Asgeirsdottir (2008), p.81.
[119] Harry S. Truman, 'Proclamation 2667—Policy of the United States with Respect to the Natural Resources of the Subsoil and Sea Bed of the Continental Shelf', September 28, 1945. Available: http://www.presidency.ucsb.edu/ws/?pid=12332.
[120] TNA (1958) CAB 21/2762, Territorial Waters and the Law of the Sea. 'Icelandic Fisheries Dispute', note by FCO, December 1952.
[121] TNA (1958) CAB 21/2762. 'Icelandic Fisheries Dispute', FCO No 105 INTEL, 29 May 1958, p.1, para.3.

impact from over-fishing was due to Icelandic fishing effort and if Iceland was concerned with conservation it could mitigate against this by decreasing Icelandic fishing effort. The UK Government argued that increased landings were evidence that the stocks were not being over-exploited and pointed to haddock catches per unit of capacity increasing 50% 1930-38 to 1946-49.[122]

Table 3.4 Average landings by country from Icelandic coastlines, 1936-38 to 1953-55

	Average annual landings 1936-38		Average annual landings 1953-55	
	Quantity (million kg)	Percentage of total landings from area	Quantity (million kg)	Percentage of total landings from area
Iceland	149	31	384	45
United Kingdom	175	37	225	26
Germany	117	24	200	23
Other	37	8	48	6
All Countries	478	100	857	100

Source: TNA (1958) CAB 21/2762, Territorial Waters and the Law of the Sea, 'Icelandic Fisheries Dispute', FCO No. 105 INTEL, 29 May 1958, p.1.

What the UK Government failed to appreciate was that landings can be sustained and even increased while stocks declined. This was facilitated by greater effort per unit of catch or the application of new technology that enabled catch per unit of effort to increase. The UK also failed to consider that ICES had identified Icelandic coastal waters as important nursery grounds for incoming year classes. Therefore, increasing landings of adult fish did not necessarily mean that the future year classes, current juveniles, were sustainable. In 1952, scientific data was used in a superficial manner to support an already ingrained political position as opposed to providing advice and evidence as a basis for policy-making. The outcome was that the UK Government positioned itself against stock conservation as justification for the extension of fishing limits. This spawned from its understanding that extensions would bring the UK negligible benefits but high costs for the economically and politically dominant distant-water fishing and for defence interests.

[122] NAS (1953) AF62/3788, 'Territorial Waters: Iceland. Letter to Fisheries Secretary from Lowestoft Fisheries Laboratory', December 1952. The table also served to highlight the incredible increase in fishing effort in the regime,

The 1964 extension of UK fishing limits

This section argues that the decision to extend UK fishing limits in 1964 was forced by changing international and domestic circumstances that altered the associated costs and benefits to the UK from extending maritime jurisdiction. The extension of fishing limits represented a tool to reconcile local domestic tension within the national fishing industry. It was also an internationally strategic decision designed to protect dominant military interests.

In 1964, the UK Government introduced the Fishery Limits Act. This had the intent and effect of securing exclusive UK national access to over 20,000sq miles of offshore waters. The Act allowed for this appropriation in two ways. In accordance with the 1951 Hague Ruling and the subsequent 1958 Geneva Convention, UK territorial waters became measured by baselines. This limited foreign access to a significant number of bays and inlets by drawing straight lines up to 24 miles in length across prominent landmarks particularly in Scotland.[123] The UK Government then established a 12-mile fishery zone measured from the baselines. Access to the first 6-miles was exclusively restricted to UK nationals. Within 6-12 miles of the UK coastline, nationals of countries party to the European Fisheries Convention were granted access but were subject to UK legislation.

The first factor that influenced the extension of UK fishing limits in 1964 was growing local political pressure in Scotland. From the 1951 Anglo-Norwegian fisheries dispute to the formation of UK policy for the 1958 LOS Conference, the archives indicate that the Scottish fishing interests were marginalized within the UK fisheries policy-making process. From 1951, Scottish interests had supported an extension of UK territorial waters to protect inshore waters from foreign trawlers. The Territorial Waters Committee (TWC) – a government committee formed explicitly to consider maritime jurisdiction – rejected the Scottish inshore interests by placing them in the wider context of the UK's maritime interest. In a TWC paper 'Review of UK Policy', 30 November 1959, it was stated that any advantage gained by the inshore industry would be offset by the disadvantages incurred elsewhere due to the "negligible economic

[123] This would have significantly affected the heavily indented West Coast of Scotland, and the Orkney and Shetland Isles. Some effect was felt in England, Wales and the East Coast of Scotland.

contribution of the [inshore] industry".[124]

By the 1960s, the ability of the inshore interests to influence central government had increased considerably. This was driven by improvements in political organisation, the use of official channels such as the Scottish Office and politicization of the issue by the Scottish National Party (SNP). A letter from the Department of Agriculture and Fisheries Scotland (DAFS) to the Scottish Office, 21 October 1960, outlined that ever since the government had affirmed its support for three-mile territorial waters, the Conservative Governments had come under intermittent fire from the SNP for "allowing the interests of Scotland to be suppressed to those of England."[125] Prior to this in March 1959, the SNP had submitted a six-point memorandum to the Committee of Inquiry into the Fishing Industry calling for the restoration of a 15th-17th century Scottish claim of territorial waters out to 12 miles or for the establishment of a 12 mile exclusive fishing zone.[126]

The political sensitivity of the issue increased in 1959 as a Scottish political consensus was formed on the issue. John Smith, SNP Party Secretary wrote to Prime Minister Harold Macmillan, 24 November 1959, to highlight that while the SNP's campaign for extended jurisdiction had been resisted by other Scottish political parties, the Scottish Unionist Party, and Scottish Liberal and Labour Ministers had "come round to the SNP view that straight baselines are essential in determining Scottish territorial waters."[127] Smith proposed that the Prime Minister "put forward proposals to give effect to this unanimous Scottish opinion".[128] Though the SNP's proposition was rebuffed, the Cabinet was aware of the growing pressure in Scotland, with a note entitled 'Scottish Fishing Interests' 28 May 1959, stating that policy on UK fishing limits had taken on "nationalist connotations".[129] The Scottish Office commented in a LOS Committee meeting that the "propaganda" of the inshore industry was attracting considerable

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[124] NAS (1960) AF62/4675, Committee on the Law of the Sea. L.S(59)6, 'Review on UK Policy', 30 November 1959, p.5, para b.

[125] NAS (1960) AF62/4512. Territorial Waters of Scotland. Note by DAFS 'Scotland', 21 October 1960, p.7.

[126] NAS (1959) AF62/4668. Law of the Sea. Aberdeen Press and Journal, 'Fishing Limits', March 11, 1959. The 'traditional' limit referred to by the SNP was based upon a 15th-17th century claim by Scottish Kings over an area of Scottish coastal waters over which they exercised jurisdiction and exclusive fishing rights. NAS (1960) AF62/4514, Territorial Waters Scotland, DAFS note on 'Fishery Limits', 12 June 1962, section 5 para 8.

[127] NAS (1962) AF62/4512. Letter from John B Smith to Harold Macmillan, 24 Nov 1959.

[128] ibid.

[129] NAS (1959) AF62/4489. Territorial Waters. Note by N.J.P Hutchison, 'Scottish Fishing Industry', 28 May 1959, para 3. On 2 November 1959, Smith received a response from officials outlining that the government did not intend to consider any alternative to UK policy on territorial or fishing limits. NAS (1962) AF62/4469. Territorial Waters Scotland. Letter H. Whitworth to John B. Smith, 2 Nov 1959.

attention at home and aboard which the government attributed to the work of the SNP and a belief that the inshore industry had the ear of the media.[130]

Scottish inshore interests also became better organized. Compared to the well-represented and resourced distant-water sector that operated out of the major fishing ports in England and Wales, inshore fishing interests initially lacked strong political representation. This was influenced by the size of the industry, the more solitary nature of fishing operations and its sporadic distribution around the coast. In 1962, inshore fishing interests amalgamated into a single voice – spear-headed by the Scottish Inshore Fishermen's Association and the Clyde Fishermen's Association – to lobby government.[131] The group wrote to the Secretary of State for Scotland calling for an extension to UK territorial and fishing limits.[132] The letter argued that "due to recent developments in the international scene and the encroachment of trawlers off the Scottish coast…the balance of advantage to British fishermen has altered and the time has come when the British Government must take steps to protect the legitimate interest of its own citizens".[133] The letter led to a meeting between the group and the Secretary of State at which the issues of territorial waters and a 6-mile exclusive fishing zone to protect inshore fishing gear and promote stock conservation were discussed.[134] The Scottish Office became an effective line of communication for the Scottish industry to central UK Government. On 14 December 1962, the Secretary of State for Scotland wrote to the LOS Committee outlining the pressure in Scotland and stated that that the government "can no longer go on stalling about the future British policy on fishing limits".[135]

Despite this, the decision by the UK Government to stress publically that an eventual extension to UK fishing limits in 1964 was not related to stock conservation highlighted the continued influence of distant-water fishing interests in national policy making. In the first

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[130] NAS (1960) AF62/4675. Committee on the Law of the Sea. Note by Scottish Home Department, 'Review of UK Policy,' 20 Nov 1959 and NAS (1959) AF62/4489. Note by N. Hutchison, 'Scottish Fishing Industry', 28 May 1959, para 3.

[131] The group represented over 6,000 fishermen from across Scottish, English and Isle of Manx.

[132] In Scotland, the group also included the Firth of Forth Fishermen's Association, the Mallaig and North-West Fishermen's' Association, the Scottish Herring Producers, the Scottish Inshore White Fish Producer and the Shetland Fishermen's Association.

[133] NAS (1962) AF62/4513. Territorial Limits Scotland. Letter from Clyde Fishermen's Association to the Secretary of State for Scotland, 2 May 1962.

[134] NAS (1962) AF62/4513. Note of meeting 5 April. The industry argued that an extension was warranted as it would protect the inshore industry's gear from conflict with foreign trawlers and that prohibiting trawling in the shallow waters would protecting important spawning beds.

[135] NAS (1962) AF62/4516. Official Committee on the Law of the Sea Conference. 'Further Action on UK Fishing Limits', note by the Secretary of State for Scotland, 14 December 1962.

reading of the Bill in the House of Commons, on 15 June 1964, Parliament argued that "the sole motivation in taking this decision was to secure more scope for our own fishermen in the waters around our coasts…to secure for inshore fisherman a wider area in which they can conduct their operations without interference from foreign vessels."[136] A key motivation identified was "international changes out with the government's control".[137] Similarly, the LOS Committee outlined that "the main effects of extending fishery limits is not so much to conserve the fish as to enable our fishermen to catch more while fishermen of other countries catch less. *"*[138]

The 1964 Fishery Bill was designed to improve the government's relationship with Scottish fishing interests. Though the Bill gave the government the power to regulate and control fishing effort within 12-miles of its coast, it had no intention to do so *in toto.* While foreign activity would be limited, the Commons debate showed that the government intended to use this displacement to facilitate an increase in the number of UK nationals fishing in this area, with a focus on increasing fishing activity in the Highland areas.[139]

The government's openness in defining its motivation for the Bill was also a tactical decision designed to protect the UK Government's negotiating position and the UK distant-water fleet against further extensions of fishing limits. The government was concerned with the "dangers in attempting to justify an extension by reference to conservation since it might give the Icelanders and others a pretext for advancing claims for further extensions of their own limits on pseudo-conservation grounds."[140] A LOS Committee meeting that considered a paper entitled 'Effects of the Extensions of UK Fishery Limits on Conservation' decided that the preferred route was to avoid a justification of the Bill on conservation grounds as this would protect the distant-water fleet from further extensions elsewhere.[141] In the House of Commons debate on the Bill, it was put forward that the UK "[did] not accept conservation as justification for other countries extending their limits and we do not claim it today in justification of the Bill*".*[142]

This tactic of rejecting conservation as a reason for extending jurisdiction enabled the UK

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[136] House of Commons Debate Order of the Day – Fishery Limits Bill, Opening speaker MP for Bedford Mr Christopher Soames, 15 June 1964.
[137] ibid.
[138] NAS (1962) AF62/4516. Note 'Law of the Sea – Fishing Limits and Conservation', 25 September 1961, p.1, point 2.
[139] House of Commons Debate Order of the Day – Fishery Limits Bill, 15 June 1964.
[140] NAS (1962) AF62/4516. DAFS note 'Fishing Limits and conservation', 19 September 1962, para 2.
[141] NAS (1962) AF62/4516. Territorial Limits Scotland. Minute of the Law of the Sea Committee meeting, L.S. (62), para 4.
[142] House of Commons debate, Order of the Day – Fishery Limits Bill, 15 June 1964.

Government to continue to insist internationally that conservation would not be best served by extensions of national jurisdiction over sea areas but by international cooperation over common pool resources. This allowed the UK Government to resist further extensions of jurisdiction over deeper waters.

UK negotiation strategy for the Second Law of the Sea Conference 1960

The creation of the 12-mile UK fishing zone in 1964 was used to appease growing Scottish political pressure. However, this section argues that UK Government support for 12-mile fishing limits had in fact been established in preparation for the Second LOS Conference in 1960 (LOS II). The UK's agreement to exclusive fishing zones out to 12-miles represented a trade-off in the UK's negotiation position for LOS II in which defence interests trumped distant-water fishing interests.

In the run up to LOS II, UK officials met with traditional allies to gain support for retaining narrow limits to territorial waters. The aim was to discuss the detrimental impacts extended limits would have on maritime activities such as defence and commerce. Through this process, the UK Government became aware that countries such as Belgium and Canada did not share the UK's need to secure narrow territorial waters for defence and commercial interests. It also became clear that several nations prioritised fishing interests over defence interests.[143] Following a meeting of nation states in Ottawa, Canada on 11 March 1959, the UK Government understood that many countries were planning to support 12-mile territorial waters not for defence purposes but because this offered "the surest way to extend their exclusive fishing rights".[144]

[143] A memo to the Indian Government, 16 July 1959, outlined that the UK attempts to secure Belgium support at LOS II had been unsuccessful. Belgium had a small merchant and military navy that operated locally. The Belgium Government was therefore not concerned with changes to territorial limits but instead attached great importance to the introduction of fishing limits. NAS (1959) AF62/4671, 'Effect on the UK of an extension of Fishing Limits to 12 miles,' Memo to Government of India, 16 July 1959. The UK argument that an extension of territorial waters would curtail navigational freedoms had also fallen upon deaf ears at the Ottawa Conference, 4-5 Feb 1959, wherein the UK Government failed to secure Canadian support. With a small merchant navy, the Canadian Government "regrettably informed" the UK Government that it would be supporting 12-mile fishing limits. NAS (1959) AF62/4668. Law of the Sea. 'Exploratory discussion between UK and Canada in Ottawa', 4 Feb 1959.

[144] NAS (1959) AF62/4667. Law of the Sea. paper 'Possible Limitation on the Amount of Fishing", Item II, a and NAS (1959) AF62/4668. Territorial Waters Committee meeting 7, 1959, paper 'Policy of India and Canada', 11 March 1959.

This realisation led to a policy re-set and a shift in the UK Government's position on both territorial water and fishing limits. The UK's Territorial Waters Committee published a paper on 23 June 1959 entitled '*Law of the Sea: Review of Policy and Tactics'*. This set out the UK Government's tactic to move away from supporting a 3-mile limit to territorial waters.[145] This was part of a strategy to separate out the issues of territorial waters and fishing limits so that the former would not be used to deliver the latter. In agreement with the US, the UK would support an extension of territorial waters up to 6-miles in a bid to stem the international trend towards 12-mile territorial waters and ensure the 1960 conference produced an agreement.[146] The Cabinet defined the objective for LOS II as being "to secure a universally acceptable rule which would provide for no more than a six-mile territorial sea."[147] The UK would concede on fishing limits to secure a narrower territorial sea.

This concession represented a willingness on the part of the Cabinet to supress domestic distant-water fishing interests so as to increase its bargaining space in international negotiations. This approach is evident in the construction of fishing concessions. In this period, the ability of the Ministry of Agriculture and Fisheries (MAF) to influence the UK Cabinet declined. For the TW Committee paper 'Law of the Sea: UK Review of Policy and Tactics', MAF argued that to protect UK fishing interests any extension of national fishing limits had to allow access for foreign vessels on grounds of historical rights with a phase-out period of 10 years.[148] This would allow the UK distant-water fleet reciprocal access to the fishing zones of the nations it had previously fished off. MAF's position was that short-term access rights would have to be secured if the LOS II agreement was to be acceptable to the distant-water industry.

The issue facing MAF was that in November 1959 US officials had outlined to the UK Government that the concept of historical access rights would not gain support at the conference and a six-mile territorial water and further six-mile exclusive fishing zone should be pursued.[149]

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[145] NAS (1959) AF62/4670, Law of the Sea. Territorial Waters Committee, paper 'Law of the Sea: Review of Policy and Tactics', June 1959.
[146] NAS (1959) AF62/4667. 'Conclusion of bilateral 5th December between US and UK', London 5 December 1958, item IIIa.
[147] TNA (1960) CAB 134/2193. Official Committee on the Law of the Sea: Meetings 1-9. Cabinet Committee on the Law of the Sea, paper 'Agenda to Draft Brief', March 3, 1960, p.1.
[148] NAS (1959) AF62/4670. Law of the Sea. Territorial Waters Committee, paper 'Law of the Sea: Review of Policy and Tactics', June 1959, para.4.
[149] NAS (1960) AF62/4675. Law of the Sea. Ministerial Brief 'Preparations for the 1960 Conference', 12 November 1959.

Despite a MAF warning that this would "carry significant political consequences", MAF was unable to influence the Cabinet's position.[150] MAF's influence was further diminished when the UK Government was unable to gain sufficient support for 6+6 negotiation at LOS II and the Cabinet sanctioned a 9-mile limit to territorial waters without consulting with MAF or the industry. Strategically, side-stepping MAF and the industry, retaining decision-making within the Cabinet gave the UK delegation at LOS II a larger bargaining space as consulting with MAF or the industry would have limited the options available to the government. The 9-mile territorial water concession was ultimately unsuccessful as the 1960 LOS Conference failed to reach an agreement by one vote thus leaving the question of territorial waters and fishing limits inconclusive in international law.

Overview

The 1964 Fishery Limits Bill was the first piece of UK Government legislation to address the issue of fishing limits since the Sea Fisheries Act of 1883. Prior to this, legislation had focused on encouraging the industry to expand through grants and loans.[151] The decision to extend national jurisdiction over offshore-waters was shaped by the intention of securing national access to the fisheries resources within. The decision was not directly influenced by a concern for the health of stocks, a desire to limit fishing pressure upon the stocks or an attempt to rationalize the fishing industry's labour and capital inputs. UK policy on the national fishing limits over 1945-64 was instead shaped by domestic and international pressures. The extension to fishing limits in 1964 represented a concession to Scottish political pressures and a strategic move to protect commercial and military navigational freedoms. The process of policy-making in this period also represented the beginning of a trend in UK LOS negotiation tactics whereby support for extended fishing limits was used as a trade-off to secure what the Cabinet deemed to be economically and politically more substantive interests.

[150] TNA (1960) CAB 134 /2192. Official Committee on the Law of the Sea, Meetings 1-3. 'Implications of the 6+6 plain principles', 15 December 1959.
[151] NAS (1964) AF62/4038. Fishery Limits - Proposed Legislation. 'Fisheries Legislation in Scotland', DAFS notes, July 1957, p.1.

3.3 UK policy at the Third Law of the Sea Conference (1973-82): The concept of Exclusive Economic Zones

This section argues that the UK Government's agreement to the concept of a 200-mile Exclusive Economic Zone (EEZ) for fisheries resources at the Third LOS Conference was shaped primarily by changes in the UK energy scene in the 1960s and 1970s. The UK Government agreed to support the concept of 200- mile EEZs for fisheries resources as part of a deal that would give the UK maximum jurisdiction over the seabed and the hydrocarbon resources within. It is argued that the UK Government consciously traded off UK fishing rights to secure exclusive rights to the oil resources around Rockall.

With the ICJ ruling in favour of the 1958 extension of Icelandic fishing limits to 12-miles and with no agreement reached at LOS II, a further round of unilateral extensions took place in the 1960s. In 1967, 40 coastal states claimed a territorial sea of 12-miles and 17 a jurisdiction out to 200 miles.[152] Gradually the concept of extended state jurisdiction over fisheries began to crystalize into customary international law.[153] The continuing lack of international consensus on the legal rights of states in marine spaces and the limitations of the 1958 Conventions in providing a robust legal regime led to calls for a Third LOS Conference (LOS III).[154] The first session of the LOS III convened in New York in December 1973 with the ambition of preparing a single, comprehensive convention to guide nation states in the use of the seas. Eleven sessions were held between 1973 and 1982 and the Committee on the Peaceful Uses of the Seabed and the Ocean Floor beyond the Limits of National Jurisdiction (hereafter the UN Seabed Committee) held six sessions over 1971-73 and acted as a preparatory body for the Conference.

The Conference was split into three committees: the first dealt with the international

[152]Roy I. Jackson, 'Some observations on the future growth of world fisheries and the nature of the conservation problems', Lewis M. Alexander ed., *Proceedings of the Second Annual Conference of the Law of the Sea Institute*, June 26-29, 1967, Session 26 June, (Rhode Island; University of Rhode Island, 1968), p.16.

[153] In the International Court of Justice's ruling on the 1958 Icelandic extension of fishing limits to 12-miles, the Court held that the 12-mile exclusive fishing zone had crystallised into customary international law. Fisheries Jurisdiction case (UK v Iceland) in Barnes (2009), p.213.

[154] The 1958 Conventions were viewed as outdated for several reasons: they did not cover new issues such as marine pollution or marine scientific research; technological developments had again pushed the potential for marine resource exploitation further offshore and into deeper waters; the increasing unilateral extensions over fishing limits that the 1958 and 1960 Conference had failed to resolve international disputes; and finally the new plethora of independent states created from the decolonisation process viewed the 1958 Geneva Conventions as protecting the interests of the traditional maritime powers.

regime and institutions for the seabed beyond the limits of national jurisdiction; the second with the territorial seas, straits, the economic zone, access to the sea and the continental shelf; and the third committee addressed issues of pollution and marine technology. The Convention, provisionally adopted by the Delegation on 30 April 1982, represented an integral package agreement across the committees. Almost four decades after the Truman Proclamation of 1945 had initiated discussions on the issue of national jurisdiction over the seas and its fisheries resources, a new international regime of nation-based access rights was created.

One of the most recognizable concepts of UNCLOS was that of the Exclusive Economic Zone (EEZ). Article 55 of the Convention defined the legal definition of the EEZ as: *"*an area beyond and adjacent to the territorial sea…under which the rights and jurisdiction of the coastal State and the rights and freedoms of other States are governed by the relevant provisions of this Convention." UNCLOS granted coastal states "sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources, whether living or non-living, of the waters superajacent to the seabed and of the seabed and its subsoil."[155] From a coastal states baseline, territorial waters extended out to 12-miles and the EEZ out to 200-miles. The extension of national jurisdiction out to 200-miles enclosed approximately 90 per cent of global fish stocks under a new property regime analogous to that of private property.

UK Energy Policy and the Third Law of the Sea Conference 1973-1982

The UK Government's acceptance of the EEZ concept during the Third LOS Conference - translated into national primary legislation through the 1976 Fishery Limits Act - represented a significant shift in UK policy.[156] A certain inevitability surrounded this. By 1974 international opinion had begun to galvanize behind the EEZ concept and, in a bid to protect itself in the fall-out of a lost fight, the UK fishing industry moved to favour national fishing limits. In April 1974, the FCO argued that "[the EEZ concept] would deprive us of our distant-water fishing grounds. There has however been pressure from the industry that we should pronounce in favour of 200-mile fishing limits lest we get the worst of both worlds by losing our distant water interests while

[155] The United Nations Convention on the Law of the Sea, Part V Exclusive Economic Zone, Article 56. Available: http://www.un.org/depts/los/convention_agreements/texts/unclos/part5.htm
[156] The Act extended UK fishing limits from 12-nmiles to 200-nmiles from 1 Jan 1977.

being unable to protect our interests in home waters."[157] This created political space for a shift in the position of the government with the MAF Minister stating that "it would be in our interests to support this concept".[158] This position was put forward despite awareness that the UK would not have exclusive rights to fish in the waters 200-miles off its coastline because of geographical and existing treaty obligations, notably its membership of the European Economic Community (EEC).

This section argues that the UK Government's decision to support the EEZ concept occurred before the Third LOS Conference and, as such, pre-dated both MAF and the UK fishing industry's support for the concept. Defence and Overseas Policy Committee (DOPO) papers - the Committee responsible for UK policy for the UN Seabed Committee and the Third LOS Conference – and Cabinet discussions over 1971-73 are used to argue that this policy shift was not shaped by the potential of ownership as a solution to overfishing or by a desire to capture the commercial benefits that could flow to the fishing industry from controlling access to offshore waters and the fish stocks within. The significant reversal in the UK's international and domestic fisheries policy was instead forced by changes in the UK fuel and power scene in the 1960s and 1970s.

Despite efforts by the government to protect the domestic coal industry from the competitive effects of oil's price advantage, from 1950 to 1970 UK crude oil imports increased tenfold and by 1969, oil had captured 40 per cent of the UK's energy market.[159] A memorandum by the Minister of Technology of 12 October 1970, revealed concern over the increased cost of imported oil on the country's balance of payments - with net oil imports of £400million in 1968 - and perceived security of supply fears as 80 per cent of the UK's oil supplies came from the Middle East and North Africa.[160]

The Ministry of Power's 1965 'Fuel Policy' White Paper outlined that the economic benefits of North Sea oil and gas were not yet fully realised. The White Paper was conscious that

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[157] TNA (1974) FCO 30/2329. United Nations Law of the Sea Conference. Caracas 20 June to 29 August 1974, Note by Secretary of State for Foreign and Commonwealth Affairs 'Law of the Sea Conference', 30 April 1974, p.2.
[158] TNA (1974) FCO 30/2329. Minute of a meeting of the Defence and Overseas Policy Committee Cabinet. 23 May 1974, p2. A seminar with MPs in 1974 on EEZs found the "majority in favour of 200-mile zone of fishing limits."
[159] Martin Chick, *Electricity and Energy Policy in Britain, France and the United States since 1945* (Cheltenham UK; Edward Elgar, 2007), p.9, D.I. Mackay, D.I and G. A. Mackay, *The Political Economy of North Sea Oil* (London; Robertson, 1975), p.5 and TNA (1970) CAB 129/153, Cabinet. CP (70) 80, 'The Energy Scene', Minister of Technology, 12 October 1970, para 2.
[160] TNA (1970) CAB 129/153. 'The Energy Scene', para. 4.

the "discovery of oil and natural gas in the North Sea could help to alleviate the UK's reliance on imported oil", with the White Paper projecting the balance of payments bill for imported oil to rise to £600 million by 1970.[161] The White Paper emphasized that in 1965 "major uncertainty about the availability of natural gas from under the North Sea" existed and that government policy towards North Sea oil remained in an exploratory phase.[162]

In contrast, by 1970 the Minister of Technology foresaw the introduction of North Sea gas as bringing "big economic benefits" with the industry estimated to produce up to 4,000 cubic feet a day by the mid-1970s.[163] In a 1974 policy paper 'North Sea Oil Policy', the Secretary of State for Energy projected annual oil production forecasts to rise to 100-140 million tons per annum by 1980, with this increasing across the decade to 100-150 million tons.[164] With prices remaining high, annual pre-tax profits were estimated at £3,000 million.[165]

It was the UK Government's position on the distribution of seabed territory for LOS III that redefined the UK's marine interests away from that of a maritime, distant-water fishing nation. The UK's position on jurisdiction over the seabed came into focus for the government over 1971-73 following the publication of a 1971 Department of Trade and Industry (DTI) report on prospective resources in the shelf surrounding Rockall and was shaped by its geographical and geological position. The 1958 Convention on the Continental Shelf awarded coastal states sovereign rights over their continental shelves "to a depth of 200 meters or, beyond that limit, to wherever the depth of the superajacent waters admits of the exploitation of the natural resources".[166] As the areas of the North Sea, the English Channel and the Irish Sea allocated to the UK were at a depth of less than 200-meters, domestic oil interests had been protected. With the advent of new technology permitting exploitation of the seabed at depths far greater than 200-meters and a DTI assessment of an "excellent prospect of finding hydrocarbon resources

[161] TNA (1965) CAB 129/122/30. Cabinet Memorandum. C (65) 130, 'Fuel Policy', Ministry of Power, 11 October 1965, para. 58.
[162] TNA (1965) CAB 129/122/30. 'Fuel Policy', para. 34 and 66.
[163] TNA (1970) CAB 129/153. 'The Energy Scene', para. 6.
[164] TNA (1974) CAB 129/177/15. Cabinet Memorandum C (74) 65. 'North Sea Oil', 1 July 1974, p.1.
[165] Op. cit.
[166] United Nations 1958 Convention on the Continental Shelf, Article 1, in United Nations, *Treaty Series*, Vol. 499. (United Nations, 2005): p.311.

around Rockall*",* from 1970 the Cabinet was no longer satisfied with the 1958 Convention in delimiting seabed jurisdiction.[167]

Table 3.5. UK Landings (Demersal and Pelagic) by Region of Capture in 1971

Region of Capture	England and Wales		Scotland		UK Total	
	Cwts (000)	£'000	Cwts (000)	£'000	Cwts (000)	£'000
Distant-waters (outside 200-miles of Britain)						
Norwegian Coast	558	3,336	1	2	571	3403
Barents Sea	880	6,404	29	168	909	6,572
Iceland	3,000	23,030	73	480	3,073	23,510
Faroes	130	910	327	2,249	457	3,159
Bear Island and Spitzbergen	98	732	0	0	98	732
West and South of Ireland	7	61	0	0	7	61
Rockall	2	12	68	408	60	480
West and East Coast of Greenland and Labrador	92	670	0	0	92	670
Grand Banks of Newfoundland	159	1,127	0	0	159	1,127
Total	**4,926**	**36,282**	**498**	**3,311**	**5,426**	**39,714**
Offshore Waters (within 200 miles of Britain)						
North Sea	2,781	19,223	4,631	23,372	7,412	42,595
West Coast of Scotland	117	1,176	3,507	10,853	3,678	12,029
English and Bristol Channel	356	2,134	0	0	356	2,134
Total	**3,254**	**22,533**	**8,138**	**34,225**	**11,446**	**56,758**

Source: *UK Sea Fishing Statistics 1971.* (HMSO: London, 1982).

The UK Government used its position on 200-mile fishing limits as a strategic compromise to secure maximum economic jurisdiction over the seabed and hydrocarbon resources within. Despite an increasingly clear direction of travel for wide fishing limits at an international level, up until 1973 the UK Government and most of the UK fishing industry remained in support of narrow fishing limits. This was defined as a policy priority of the DOPO Committee up until March 1973. The rationale for this, set out in a note by the MAF of 18 January 1972, was the UK fishing industry's "reliance on fishing off other nation's coasts rather

[167] TNA (1970) CAB 148/107, Defence and Overseas Policy Committee (70) 6, The Peaceful Use of the Sea-bed Beyond the Limits of National Jurisdiction, 'Future British Policy in United Nations Seabed Committee', 15 December.

than within inshore British waters".[168] In a brief for the UN Seabed Committee sessions, 30 October 1972, the stated objective was to press for an agreement which allowed coastal states to make preferential claims to fisheries resources outside an exclusive 12-mile national fishing zone as this concession would allow UK vessels some access to distant-waters.[169] The notion of the industry's 'reliance' on access to distant-waters can be challenged. While Table 1.3 highlights that in 1971 the English and Welsh sectors of the UK fleet were reliant on fishing in distant-waters (around 60% of their catch by weight and value came from distant-water fishing), at a UK-level almost 60% of the total catch by value and almost 70% by weight came from offshore fishing regions within the 200-miles of UK shores. This indicates that the formation of UK policy on fishing limits was still dominated by distant-water fishing interests in England and Wales.

In March 1973, the UK Government's position on fishing limits was significantly altered as it became aware that its position on retaining access rights for distant-water fishermen could undermine the newly-dominant domestic interest in oil and gas resources in the continental shelf. This policy shift is evident in a series of exchanges between the MAF and the Treasury. A MAF memorandum argued that UK tactics should continue to treat national distant-water fishing rights as a priority in the international negotiations.[170] The MAF paper was received coldly by the Treasury. In a note on the 'Law of the Sea' 6 of March 1973, the Treasury argued that the "authors were too preoccupied with the immediate problem of the Icelandic Cod War" and that it "attached too much importance to the objective of securing a positive outcome for the UK fishing industry".[171] The Treasury's position had been influenced by the DTI assessment of hydrocarbons on the continental shelf surrounding the UK. The assessment led the Treasury to conclude: "hydrocarbons now represent the major economic interest [for LOS III]" and 'if conflict between these objectives [UK distant-water fishing and oil rights] does arise there can surely be no doubt that we should be prepared to sacrifice our-distant water fishing rights".[172]

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[168] TNA (1972) CAB 148/126. Defence and Overseas Policy Committee (S) (72). 'Extension of Territorial Waters', Annex C 'Fishing Interests', Note by the Ministry of Agriculture, Fisheries and Food, 18 January 1972, p.9.
[169] TNA (1971) CAB 163/993. Sub-Committee on the Peaceful Use of the Deep Seabed. 'Brief No.10- Fisheries', 1 November. This was reiterated as a policy objective for the Third LOS Conference in DOPO (72) 22, 30 October 1972. TNA (1972) CAB 148/126, DOPO Subcommittee, note by FCO on 'Second 1972 Session of United Nations Seabed Committee', 30 October, para. 1.
[170] TNA (1973) CAB 148/135/24. DOPO (73) 4, 'Icelandic Fisheries Dispute', 22 January, p.3.
[171] TNA (1973) T 224/3092. Law of the Sea: Fishing Limits Negotiations. Note 'Law of the Sea', C. J. Carey, 6 March.
[172] ibid.

This assertion redefined the UK's primary interest in the economic uses of the seas. The ascension of domestic oil interests had swung the spotlight of policy-making for the LOS process away from the maintenance of fishing and navigational freedoms. In DOPO meeting (74) 1, in a paper entitled 'Law of the Sea Policy: Fishery Limits', it was agreed that "Ministers should wish to take decisions on fisheries policy in the context of our overall objective at the Law of the Sea Conference."[173] The DOPO Committee settled its position in support of the EEZ concept and in November 1973, MAF was instructed to begin confidential talks with fishing industry leaders to develop a strategy for the future of the industry.[174]

The decision to support the EEZ concept at a domestic level allowed the UK Government the bargaining space it required internationally to achieve its objective of maximum jurisdiction over the seabed. In a DOPO Committee meeting of 2 July 1970, the UK Government concluded that its position for the UN Sea Bed Committee and LOS III would be to support national jurisdiction on the seabed out to 200-miles.[175] Up to this point the UK Government had assumed that jurisdiction of the valuable seabed around Rockall would be secured by recognition of UK sovereignty over Rockall. In 1955, a team of naval officers had attempted to stake the UK Government's claim to the island by cementing a brass plaque on the island and hoisting the Union Flag. It was through this claim of sovereignty over Rockall - and subsequent jurisdiction out to 200-miles on the surrounding continental shelf - that the UK Government aimed to control the resources of the plateau embracing Rockall, the bank to the North-West and the area in between.

The UK Government was forced to reconsider its support for a 200-mile definition to seabed jurisdiction as the UN Seabed Committee moved towards a position whereby uninhabited

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[173] TNA (1974) CAB 148/142. Defence and Overseas Policy Committee. Sub-Committee Paper 1-7, 'Law of the Sea Policy: Fishery Limits', DOPO (74) 1, item 3, para. 1.

[174] TNA (1973) CAB 148/135. DOPO (73) 4. 'First Session of United Nations Seabed Committee', note by MAFF, 20 July.

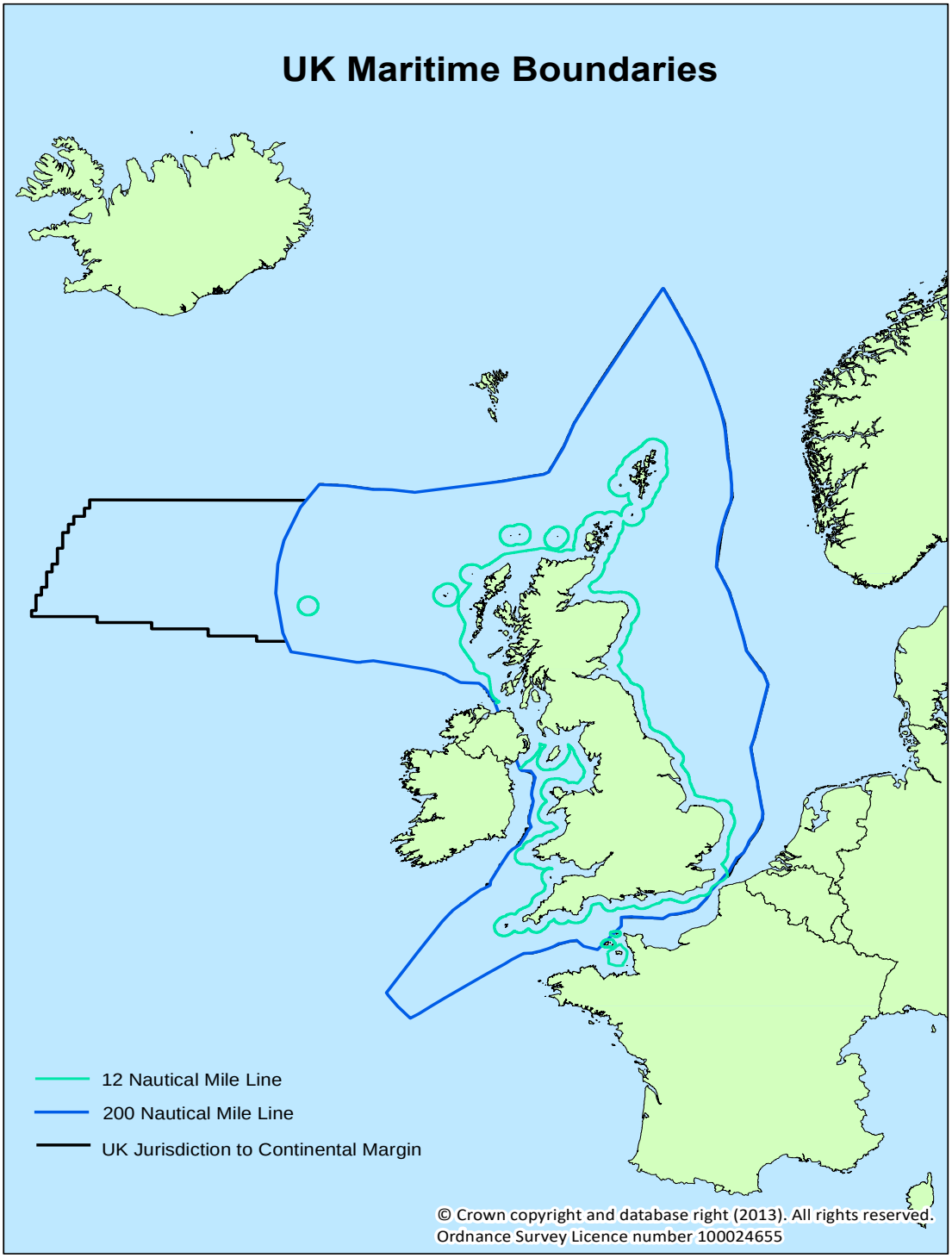
[175] TNA (1970) CAB 148/107 'Future British Policy in United Nations Seabed Committee', 2 July 1970. The movement to support a distance criterion, as opposed to continuing with a depth criterion, came from the motivation to secure maximum access to the adjacent seabed. This position was influenced by a 1970 DTI assessment that outlined that the depth criterion would have to increase from 200 meters to 1,500meteres for Britain to secure ownership of the seabed out to the foot of the continental rise and capture the valuable seabed around Rockall (TNA (1970) CAB 148/107. 'Future British Policy at the UN Seabed Committee'.) In a note to the Cabinet on the 'Use of the Ocean Floor,' 2 July 1970, the Committee acknowledged that a depth of 1,500-meters had little prospect of receiving majority support amongst UN nations and that the UK should therefore support a 200-mile limit to jurisdiction over the seabed at the United Nations Seabed Committee (TNA (1970) CAB 148/107. C 289/5, Cabinet 'Use of Ocean Floor', 2 July, para 7).

islands would not be awarded their own EEZ. The DOPO Committee set up a working group to report on the UK's economic interests at the LOS Conference. This concluded that "further discussions have shown that our primary economic interest lies in securing jurisdiction over mineral resources out to the edge of the continental margin".[176] To secure exclusive rights to the oil resources around Rockall, the UK Government agreed to support a limit to national jurisdiction on the seabed out to the continental margin - later known as the 'Irish Formula'.

For the negotiating block of developing countries at LOS III (G-77) to support seabed jurisdiction out to the continental margin, the UK Government knew it would have to support a 200-mile EEZ for fisheries. The Working Group's report to the Committee stated that "following the DTI note on the probability of hydrocarbon deposits on our continental shelf and margin, it is clear that this is our major economic interest at stake" and that "to secure agreement of the Group of 77 to modify the EEZ concept in this respect [secure definition of seabed jurisdiction out to continental margin]; this will require our acquiescence to a 200-mile fishery zone".[177]
This process represented an important trade-off for the G-77 as well as the UK Government and the other coastal states desiring maximum control over offshore hydrocarbons. The Group of 77 was a conglomerate of developing states acting as a unified negotiating block during the nine sessions of the LOS III process.[178] The wider the limits to coastal state jurisdiction over the seabed, the less left for the International Seabed Authority (ISA) to govern. Influenced by the Maltese Ambassador Arvid Pardo's famous speech to the UN General Assembly 1 Nov 1967 calling for the seas and sea bed areas outside national jurisdiction to be defined as the 'common heritage of mankind' and distributed to help close the gap between rich and poor nations, UNCLOS created the ISA. Hope-Thompson (1980) estimated that that an estimated 98 per cent

[176] TNA (1973) CAB 143/135. Defence and Overseas Policy Committee (70) 6. The Peaceful Use of the Sea-bed Beyond the Limits of National Jurisdiction (73) 6, 'Law of the Sea Conference- Report of Working Group A', p2.
[177] TNA (1973) CAB 143/135. Defence and Overseas Policy Committee (70) 6. The Peaceful Use of the Sea-bed Beyond the Limits of National Jurisdiction (73) 6, 'Law of the Sea Conference- Report of Working Group A', p7. TNA (1974) CAB 148/142, Defence and Overseas Policy Committee, Sub-Committee Paper 1-7, Report of Working Group A, DOPO (S) (73), 6th Meeting, Item, p2 reads: "in discussions, it was argued that our primary economic interest lies in securing jurisdiction over mineral resources to the edge of the continental shelf. To secure the agreement of the Group of 77 to modifying the EEZ concept in this respect might require our acquiescence in a 200-mile fisheries zone. Not all Community nations share our interest in mineral resources and we might have to make some concessions in our fisheries policy to secure their support for a coordinated approach to the Group of 77".
[178] The strategic unity of the group enabled developing countries to have a significant impact on the treaty making process at the Third LOS Conference. The G-77 Group largely represented African, Asian and Latin American states and Yugoslavia and Romania.

Figure 3.1. UK Marine Jurisdictions from 1976



of seabed petroleum supplies lay within the continental margin.[179] The ISA has hitherto been principally concerned with governing the exploitation of manganese nodules that lie outside the Continental Shelf.

In negotiations over the size and rules for EEZs, the UK also placed oil interests ahead of those of fishing. The DOPO Committee agreed that EEC policy should reflect a 'common European position' to maximise the chances of seeking the Irish Formula accepted at the LOS conference. To foster this common position, the UK Government fostered the notion of a 'pooling of resources' to encourage the other EEC countries to form a uniform position on the EEZ concept and the Irish Formula. Offering the EEC countries access to the UK EEZ would have been a strong pull for the EEC as 60 per cent of Community catches were taken in the prospective UK 200-mile EEZ.[180] The Committee stated that while the government would be willing to do this for future fishery resources, "this would of course not be acceptable for subsoil oil resources".[181] This tactic was employed despite a warning from the FCO that it would "effectively nullify any commercial benefit to be gained from a 200-mile exclusive fishery for the UK".[182] The intention of the UK Government was to play upon the 'common access' principle of the EEC's Common Fisheries Policy (CFP) to gain support across Europe and then re-negotiate the conditions of the CFP following the conference. As was noted in the FCO "British policy as approved by Ministers is to seek modifications to the CFP following the conclusion of the Conference to provide preference in favour of the coastal state in its zone in matters of fisheries jurisdiction and catch levels."[183]

The Third Law of the Sea Conference and UK Defence Interests

International agreements emanating from negotiations in the UN Seabed Committee also worked to reduce support for narrow fishing limits from the policy position representing aggregate UK marine interests. Central to this was the de-coupling of distant-water fishing and

[179] Maurice Hope-Thompson (1980), p.51.
[180] Eugénia da Condeição-Heldt, *The Common Fisheries Policy in the European Union: A study in Integrative and Distributive Bargaining*. (London, New York: Routledge, 2004), p.70.
[181] TNA (1973) CAB 143/135. 'Tactics on Fisheries', Annex to DOPO (73) 4, para.1.
[182] TNA (1973) CAB 143/135. 'Law of the Sea: Fisheries Policy', note by Secretary of State for Foreign and Commonwealth Affairs, para.1.
[183] TNA (1974) FCO 30/2329. United Nations Law of the Sea Conference, Caracas 20 June to 29 August 1974. Note 'Law of the Sea Conference, EEZ Draft Articles on Fisheries,' R Hitch.

defence interests in that both traditionally supported a narrow limit to national jurisdiction. This came in 1974 with the DOPO Committee announcing that "the defence interest has been settled".[184] UK policy for LOS I and II had been shaped by the Admiralty and Ministry of Defence (MOD) arguing strongly for narrow limits. The high level of influence that these departments exerted over the formation of central UK policy reflected the prioritisation of defence interests and the UK Government's strong identification as an island and trading nation.[185] In 1974, the DOPO committee estimated that 98.5 per cent of the UK's trade by weight and 80% by value was transported by sea and in 1974 the UK commercial shipping fleet was estimated to be 29 million gross tonnes (MGT).[186] This represented 10 per cent of the world's fleet, with the UK ranking third in size after Japan (35MGT) and Liberia (50MGT).[187] The defence interests of the UK and other maritime nations was to retain maximum manoeuvrability for ships at sea with this need heightened by the Cold War. The extension of territorial waters to 200 miles by Peru, Chile and El Salvador during the 1960s threatened this goal. In 1973, UK Ministers agreed to support a 12-mile territorial waters on the understanding this would receive a high level of support at UN LOS III.

A threat to defence and shipping interests remained in the form of growing support for the EEZ concept. DOPO Working Group B, charged with examining UK defence interests for the UN Seabed Committee and UN LOS III, outlined that UK support for the EEZ concept should be on condition of the preservation of freedom of overflight, navigation and the laying of submarine cables in the EEZs beyond 12-mile territorial waters. As the DOPO committee noted in 1974: "a broad limit to sea bed jurisdiction has always been clearly desirable for our petroleum interests. For defence and fishery reasons, we previously favoured narrow limits. But now our defence interests can be accommodated within the economic zone, provided this grants coastal states rights only in respect of the sea and seabed."[188] With key navigational freedoms

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[184] TNA (1974) CAB 148/150. Defence and Oversea Policy Committee. Meetings 1-9, Brief for the UK Delegation to the UN LOS Conference, Caracas 1974, para.3.

[185] This was also given strength by being a coherent policy position of the traditional maritime nations such as the UK and USSR, including Japan, Netherlands and France, as the requirement for maximum freedom of movement for warships was heightened by the Cold War. The narrow remit enabled maritime nations to enjoy the freedom of the high seas for defence and navigation purposes.

[186] TNA (1974) CAB 148/139. Defence and Oversea Policy Committee: Meetings 1-4, Papers 1-12 and Index for DOP (73-74) Meetings, 07-30 Jan 1974, Report of Working Group B, DOPO (73) 21.

[187] ibid.

[188] TNA (1974) CAB 148/139. 'UK Policy on Territorial Waters', para 2, p.1. This position was also accepted by the Treasury department: "in the past our defence and fisheries interests pointed to narrow limits. It now seems our

protected within the design to the EEZ, UK defence interests were no longer opposed to the extension of marine jurisdiction out to 200-miles.

The result was that overflight and innocent passage clauses were inserted into the parameters for EEZs. Retention of these freedoms within another nation's EEZ was one, if not the, key condition stopping a 200-mile EEZ from being virtually indistinguishable from a 200-mile limit to territorial waters. Coastal states did not have sovereignty within their 200-mile EEZ but economic jurisdiction to exploit resources in their waters. This process allowed for the alignment of UK defence and hydrocarbon interests for LOS III. The main beneficiary was UK defence interests as government discussions indicated that it was prepared to accept an unfavourable outcome for defence and navigation freedoms to secure access to offshore subsea hydrocarbons.[189]

Conclusion

The UK Government's lack of support for conservation as a reason for supporting the extension of fishing limits reflected its calculation of the relative costs and benefits for the UK of the implementation of such a principle. In terms of the formation of UK Fisheries Department policy, national concern for employment in the fishing industry overshadowed international concerns for stock conservation. Throughout the period from 1945 to the early 1970s, UK policy on fishing limits was influenced primarily by non-fishing marine interests, firstly, by national defence and later oil interests with fishing interests only of secondary importance.

In the 1950s and 1960s, the costs to defence and distant-water fishing interests of maritime restrictions and limits significantly outweighed the benefits expected to flow to the offshore Scottish fishing fleet. Yet, by 1973, support for wide fishing limits represented a means by which to unlock and secure access to the hydrocarbon resources in the seabed. The UK Government's support for the EEZ concept was not shaped by the potential solution that national ownership offered to the problem of over-fishing or the conservation-related benefits of re-

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defence requirement will be adequately secured by freedom of navigation an overflight". TNA (1974) T 224/2092. Law of the Sea Fishing Limits Negotiations. Note 'Law of the Sea Fishing Limits Negotiations', 9 April.

[189] TNA (1973) CAB 148/135. Defence and Overseas Policy (Official) Committee: Sub-Committee on the Sea; Meetings 1-10 and Papers 1-23. A DOPO 73 note, 19 Feb 1973, outlined that if UK defence interests threatened to jeopardise the creation of a convention the UK should ratify the agreement because of the "greater relative interest in submarine hydrocarbons, and the possibility of securing navigation conditions through bilateral agreements."

defining property rights at sea. The significant switch in its negotiating stance and outlook reflected its changed perception of national self-interest. Oil was worth more than fish.

Over time fishing interests represented by the industry and the government departments MAF and DAFS became increasingly marginalised. Nowhere was this more evident than in the government's decision to agree to a European common pool for fish resources to secure the agreement of the EEC to a delimitation of sea bed jurisdiction stretching to the continental margin. Though the UK industry moved to coalesce behind the EEZ concept in 1974, this represented an attempt to protect itself from what it deemed 'the worst of both worlds." The UK Government's decision to support this approach was taken in 1973 without any consultation with the MAF or the UK industry leaders and fully aware of the consequences of a 200-mile EEZ for the fishing industry. In return, UK negotiators worked to secure an international agreement that gave the government greater control of sub-sea hydrocarbon resources. While government arbitrated between the differing interests represented by different departments, it (and probably the Treasury) was not a neutral participant. Potential economic benefits won out over sectional industrial interests, although the conjunction in Scotland of inshore and offshore fishing interests, an important proximity to hydrocarbon resources in the Continental Shelf and its representation by a specific Scottish Office assisted the efforts of fishing interests in making their case heard.

While concern for conservation significantly increased over the period, the debates driving policy shifts were shaped by the relative ascension and descent of specific interests and lobby groups' ability to influence central government. UK Government policy was the outcome of a process in which the government acted as an arbitrator between such conflicting interest. The ability of key interests to influence government was shaped by interacting international and domestic forces. In the case of the changing dominance of fishing interests, the improved organization of Scottish interests and use of political channels such as the Scottish Office, paired with the gradual expulsion of the distant-water fleet from foreign waters, worked to shift the weight of influence north of the border.

4. The management of UK fishing opportunities between 1974 and 1981

The previous chapter examined the extension of international fishing limits and the role of domestic fish and energy interests in shaping UK policy. This chapter focuses on the development of UK domestic fisheries policy in the period around the introduction of EEZs and following the accession of the UK to the EEC. It argues that the primary objective of UK fisheries policy in the period 1974-1981 was to maintain employment in the fishing industry. The political aim given to the civil service was to managing fishing opportunities in a way that would minimise the political and socio-economic costs of fleet contraction that became necessary as technical change and falling stocks resulted in over-capacity in the fleet. The primary focus was to maintain employment in the catching sector, although consideration of industry-related employment in the onshore processing sector also influenced policy decisions. It is argued that the political primacy given to this objective constrained policy-makers' choices when designing mechanisms for allocating fishing opportunities by necessitating mechanisms that would deliver outcomes that favoured labour over capital inputs. In the period, little account was taken of the impact policy choices would have on the economic performance of the fleet or on conservation.

The UK Government's new requirement to intervene directly in the operations of the industry and actively manage fleet activity was influenced by developments at an international level. The introduction of EEZs and a developing European fisheries conservation agenda created a need to manage a contraction in domestic fishing activity. Article V of the United Nations Convention on the Law of the Sea (UNCLOS) provided a legal mechanism for national governments to limit international entry into newly-designated national fishing waters. The exclusivity of EEZs provided the opportunity for more effective fisheries management.[190] The

[190]New access conditions increased the likelihood that future benefits of regulation would flow to those incurring the short-term costs of conservation. A key determinant of this was the new legal precedence to deny third parties (free-riders) entry into national fishing zones. Free-rider issues had undermined previous attempts to regulate post-Second World War fishing and whaling activity. Regulations, set by international bodies like the North East Atlantic

UK's fishing limits were extended out to 200-miles through the 1976 Fishery Limits Act. However, the UK had not and never would operate an exclusive 200-mile fishing zone. This was due to the UK's geographical proximity to eight other countries (Ireland, France, Belgium, The Netherlands, Germany, Denmark, Norway and the Faroes Islands). This proximity (less than 400-miles in distance) required large tracts of the countries' EEZs to be defined by median lines as opposed to 200-miles.

The exclusivity of UK fishing rights within its EEZ was also determined by membership of the EEC and later the European Union (EU). The UK, Ireland and Denmark joined the EEC on 1 January 1973. Article 38 (4) of the 1957 Treaty of Rome contained an intention to establish a Common Agricultural Policy (CAP) (the "establishment of a common agricultural policy among the Member States") with Article 38 (1) defining agricultural products as "the products of the soil, of stock-farming and of fisheries".[191] On 30 June 1971 - the day that entry negotiations for the UK, Norway, Denmark and Ireland commenced -, the European Common Fisheries Policy (CFP) (Article 2 Regulation (EEC) No 2141/70) was established by the EEC's 6 founding members.[192] The most controversial element of Regulation 2141/70 was the principle of equal access that allowed Member States equal access to fellow Member States' waters. In 1972, the Norwegian electorate rejected EEC membership partly due to the access provisions of the CFP. In 1974, under Article 100 of the Accession Treaty, the three joining countries negotiated a derogation from the principle for 10 years within their existing 6-mile fishing limits. [193]

The derogation delayed the introduction of the CFP's conservation regime until 1 January 1983. One of the most well-known components of the conservation regime has been the use of a Total Allowable Catch (TAC) and Quota Regime for commercially important stocks (hereafter referred to as the TQR).[194] A TAC regulates fishing effort by limiting the amount of fish taken from a stock by fishing activity. This is known as fishing mortality. Prior to the introduction of

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Fisheries Commission (NEAFC) and the International Whaling Commission (IWC), were binding only on the fleets of nations party to the conventions.

[191] European Union, Treaty Establishing the European Economic Community (Treaty of Rome), March 25, 1957, Article 38 (4) and (1).

[192] The founding six members of the EEC were France, West Germany, Italy, Belgium, the Netherlands and Luxembourg. Christopher Barclay, *The EU Common Fisheries Policy*. House of Commons Research Paper 96/6 (London: HMSO, 1996), p.6.

[193] Henry Valen, "Norway: 'No' To EEC", *Scandinavian Political Studies* 8 (1973), pp.214-226.

[194] From 1 January 1983, the CFP operated under a mandate granted under Article 5 of the 1970 CFP Regulation 2141/70: "Where there is a risk of over-fishing of certain stocks…to adopt the necessary conservation measures" with specific reference made to the inclusion of restrictions relating to "the catching of certain species, to areas, to fishing seasons, to methods of fishing and to fishing gear" (Barclay (1996), p.7).

the CFP's TQR in 1983, the North East Atlantic Fisheries Commission (NEAFC) operated a TAC for selected European fisheries from 1974-76. From 1977, NEAFC quotas were replaced by a series of EEC quota agreements. These aimed to limit fishing effort in new Community waters at 1977 levels until the CFP TQR was implemented in 1983.[195] The allocation of fishing opportunities (the TACs) between Member States was primarily on a historical basis.[196] Wise (1984) and Holden (1994) both provide a thorough analysis of the negotiation process for the CFP allocation system.[197]

Member States party to the NEAFC, EEC and CFP quota regimes retained key competencies that allowed for relatively autonomous national fisheries policies to develop. This chapter focuses on the UK Government's responsibility for managing access to and allocations of national shares in TACs.[198] This chapter argues that, despite this autonomy, choices made by the UK Government regarding access and quota management were shaped primarily by a need to manage declining opportunities. From the mid-1970s through the 1980s, TACs for commercially important stocks almost continually declined with significant declines for certain key commercial stocks such as haddock and cod triggering policy changes.

The downward trend in fishing opportunities reflected the introduction of quota management as a reactive measure to over-fishing and flaws within the TAC mechanism. One of the most notable flaws within the CFP machinery had been the operation of controls on Total Allowable Landings (TAL) as opposed to a TAC.[199] The operation of a TAL created no limit on

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[195] The UK Government's first decisions regarding white fish quota management came November 1974 when NEAFC allocated the UK 84,000 tonnes of cod quota, 106,000 of haddock quota and 44,000 of whiting quota for 1975. Over the period 1970-1975, these three-species represented around 72 per cent of total UK demersal landings. NAS (1976) AF62/3884. White Fish Conservation. 'Background Note: Quota',5 February 1975.

[196] Historical catches – national landings over a defined reference period - was the key determinant of the fixed TAC shares awarded to the Member States. The allocation formula also included a proviso for areas deemed heavily dependent on fishing activity (known as The Hague Formula) and for jurisdictional losses that compensated Member States that would be adversely affected by loss of access to external EU waters. The allocation formula was known as Relative Stability as it aimed to fix a Member State's share of a TAC and stabilise the allocation of total opportunities between Member States. This fixed share was to allow for long-term industrial planning. (Holden 1994: 43). The fixed percentages did not, however, create stability in terms of how many tonnes of fish a Member State could expect its share to produce on a year by year basis. Fluctuations in the TAC were liable to produce increases or decreases in aggregate total fishing opportunities and apportioned shares.

[197] Mike Holden, *The Common Fisheries Policy* (London: Fishing News Books, 1994). Mark Wise, *The Common Fisheries Policy of the European Community* (London: Methuen, 1984).

[198] Member States also retain responsibility for monitoring fishing activity and enforcing regulations at a national level.

[199] For the purposes of this thesis, reference to a CFP TAC will denote the TAL system that operated up until 2015. It is likely that the decision to implement a TAL instead of a TAC was due to issues of monitoring and enforcement.

actual fishing mortality as vessels were legally permitted and perversely incentivised to catch in excess of their landings quota and discard the difference between total catch and the legal amount they could land.[200] As discarded fish were often returned to the sea dead or dying, actual control or accurate information on fishing mortality eluded fisheries scientists and managers for decades. In 2015, the European Commission began to address this with the phased implementation of the Landing Obligation which will be fully implemented by 2019. Control and information on actual levels of fishing mortality was further undermined by illegal over-quota landings.

With policy decisions taken through the prism of declining opportunities, the period 1974-1981 is one characterised by a strong degree of consistency in terms of successive administrations' attempts to use quota management to maintain employment. This chapter argues that the government rejected, chose and designed approaches to fisheries policy based on the likely impact on employment levels. Section 1 examines the design of the UK licensing system introduced in 1975 and Section 2 the quota management policy choices of the Labour Wilson-Callaghan administrations of 1974-79. Section 3 examines the succeeding Conservative Government's approach to fisheries management defined by the 1980 Ministerial Review of Quota Management.

It finds that the new Conservative administration in 1979 coincided with a growing concern for the impact of policies on the economic performance of the fleet. Yet, it is argued that the new concern for efficiency – driven by practical experience with earlier fisheries policies – was ultimately unable to displace the political prioritisation of employment. While this period witnesses an increase in the political use of economic and scientific advice, this did not produce a movement towards a more economic approach to fisheries management.

Monitoring landings has historically been far easier than monitoring catches at sea. A shift to a TAL under the Landing Obligation has been driven by public pressure to reduce the discarding of fish and gain better control of actual fishing mortality

[200] The practice of discarding was in many ways incentivized by the operation of landings quotas as fishermen had an incentive to discard small perfectly marketable fish above Minimum Landings Sizes (MLS) for larger counterparts to maximize the price received. This practice, known as 'high-grading', is one of several known drivers of discarding. Heather Stewart, *Review of Management Options for the Landing Obligation* (Marine Scotland Science: The Scottish Government, 2014), pp.9-10.

4.1. The Administration of Fisheries Regulation: Designing the UK Licensing System

This section argues that while the introduction of a licensing system in 1975 removed the 'public right to fish', political and resource constraints led to the management tool serving a largely administrative function for the first decade of its operation. From 1 January 1975, a vessel could only fish commercially for sea fish and land catch for profit if it had the necessary licence to do so, with vessels required to register and formally apply through the Fisheries Departments. The conferring of the right to fish through a licence by government represented a significant conceptual shift as vessels had previously been free to go to sea and fish as an unrestricted public right.

The licensing system was to act as a crucial administrative framework that would allow the government to manage its quota holdings. A political decision was taken to grandfather access rights by placing no limitation on licence numbers and to issue free of charge. This was politically pragmatic but represented a missed opportunity to use licensing as a tool to regulate the size of the industry relative to the new internationally determined UK fishing opportunities. The decision to place no restriction on entry by limiting the number of licences issued cut against the grain of evolving fisheries management theory and practice. The experience of the Pacific Halibut fishery, studied by Crutchfield and Zeller (1962), was that if the economic and biological benefits of quota restrictions were to be realised then limiting access to the TAC through a restrictive licensing system was crucial.[201] The intention was that allocation of a TAC to individuals would limit access to the stock, without which regulated-open access problems would occur.[202]

For the UK Government, there was a strong political reason for retaining open access. A recurring debate in the history of fisheries policy-making concerns the political acceptability of restricting entry as this would force industry exit on some fishermen. There was a high risk

[201] Gordon (1954) and Crutchfield and Zeller (1962) outlined the benefits of limited entry. However, the concept of restricting access and granting individual, semi-private rights in a TAC was not a common feature of fishermen's management literature until David G. Moloney and Peter H. Pearse's 1979 article "Quantitative rights as an instrument for regulating commercial fisheries" in the *Journal of Fisheries Research Board of Canada* 36 (1979), pp.869-866. No specific mention was made of trading quota entitlements until Dales (1968).

[202] Regulated open-access issues arise when fisheries managers have control over the harvest (the TAC) but not over the fleet. Excess capacity and a race to fish for the TAC will therefore persist without limited entry and allocated shares in the TAC.

attached to this in the early years of quota management when fishers could argue for established historical rights and the use of grandfathering. In January 1975, the government decided not to limit or charge for licensing, so that licenses would "be freely available for any vessel wishing to participate in the fishery."[203] MAFF officials saw this as reflecting the Ministerial wish "to manage remaining rights in such a way as to sustain opportunities for all those interested… and to allow fair and equal fishing opportunities for all those interested."[204]

The design of the licensing system indicated that its principal intention was to act as an administrative framework through which the government could manage and monitor national quota uptake against holdings. The power of the licensing system was that it enabled the government to condition the right of access by specifying rules that vessels had to adhere to while at sea and on landing. The ability to vary licence conditions also enabled Fisheries Ministers to implement new regulations through a non-statutory instrument, thus by-passing the need for a Parliamentary process when changes were required.

The way in which the UK Government used the licensing system reflected its awareness that additional regulatory tools were required if national fishing activity was not to overshoot internationally determined national quota limits. The licensing system supported this by altering fishers' behaviour in three key ways: it was used to define the stocks a vessel could target; to monitor landings; and, later, to allocate fishing opportunities.

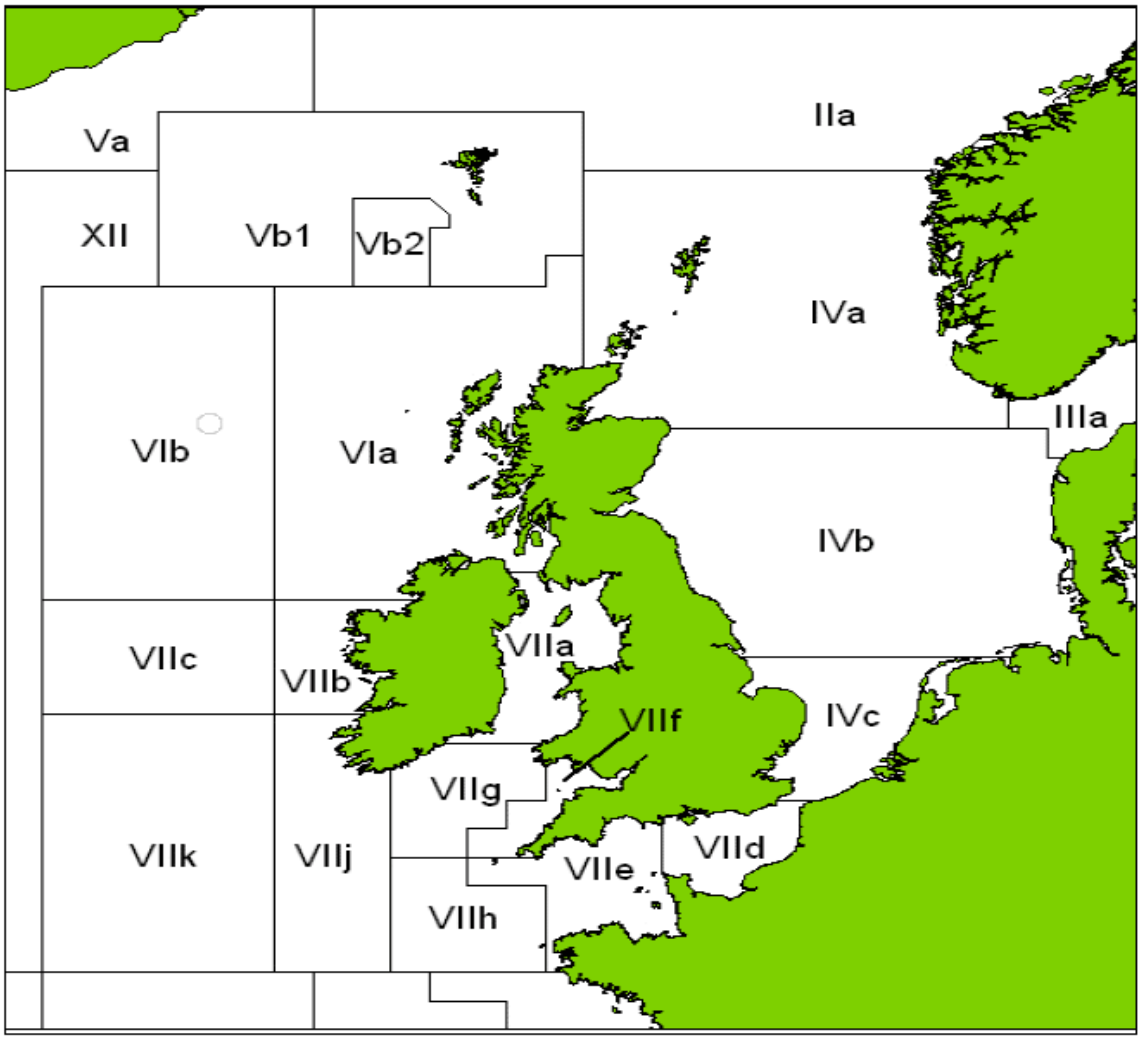
The licensing system removed a vessel's ability to fish in and land catches from sea areas of its own choosing. Control over this was necessitated by the basing of the TAC mechanism on the concept of fish *stocks* as opposed to fish *species*. From the turn of the 19th century, fisheries biologists became aware that - aside from a few species that formed a single homogenous population- most species could be subdivided into local populations.[205] To aid the collection and

[203] NAS (1976) AF62/3884. 'Management of NEAFC White Fish Quota', G. P. Jupe, 29 Jan 1975, para. 5. This decision was made although the government had the legislative power to control entry to fisheries under Section Four of the Sea Fish (Conservation) Act of 1967.

[204] NAS (1992) AF62/5942. Fisheries Quota Management. Letter from M.T. Haddon, MAFF to R.J.W. Clark, DAFFS, 29 October 1986.

[205] These are often referred to as 'population units' that have varying degrees of temporal and spatial integrity (Carvalho and Hauser 1994). The benefit of basing scientific assessments on stocks as opposed to species is that it enables scientific advice to take into consideration genetic differences between stocks of the same species and to consider local environmental factors such as feeding habits, habitat preferences, predation threats and varying degrees of fishing pressure.

Figure 4.1 ICES Sea Areas around the UK and North-West Europe.



Source: *UK Sea Fisheries Statistics Tables*. (London; HMSO, 1995).

analysis of individual stock data, sea areas were geographically delineated (see Figure 4.1).[206] Multiple TACs were set for an individual specie in the different sea areas where it was found. Allowed fishing mortality (the TAC) was based on an assessment of each local population's

[206] Halliday and Pinhorn's 1990 analysis of the delineation of the Northwest Atlantic concluded that the process of creating sea areas for stock analysis was influenced by biological indicators (stock structure, species and fishery distributions, oceanographic features and submarine topography), political and administrative boundaries, the homogeneity of international fisheries activities and the practicalities of data collection and fishery regulation (R.G. Halliday and A.T. Pinhorn, "The Delimitation of Fishing Areas in the Northwest Atlantic*", Journal of Northern West All Fish Science* 10 (1990), pp.1-51).

individual structure – an assessment of growth, natural mortality, sexual maturity and reproduction. For example, individual TACs were set for haddock *(Melanogrammus aeglefinus)* in the three ICES sea areas (Areas IV, VI and VII) that bordered the UK and within the 16 sub-divided areas within these (IVa, IVb, IVc, VIa, VIb and VIIIa-k). The licensing system was used to define whether a vessel could land catches from haddock stocks in the West of Scotland (Area VI) or the North Sea (Area IV).

The licensing system was also a key mechanism for monitoring landings. A licence condition that increased in importance with the introduction on individual vessel quotas from 1978 was that vessel operators had to record all landed catch and submit a landings declaration to the Fisheries Inspectorate. MAFF collated the data to monitor quota uptake at a national level and could close a fishery when quota limits were about to be exceeded.[207]

In practice, poor quality information and time delays undermined the ability of the licence system to control quota uptake. The self-reported nature of the data created the incentive for vessels to under-declare landings and thereby increase revenue. Resourcing was also an issue. In March 1984, the government identified a key issue as the lack of inspectors in many of the small ports around the Scottish coast. A culture of non-compliance with misreporting in terms of quantity and area of capture was known to exist, which "spread from the vessels to the port authorities and markets".[208] Timing was also an issue, with a six-week time lag between input of landings data and the output of statistical analysis and a subsequent policy response. This resulted in several quotas being overshot. Over 1985-87, four of the five main UK fisheries were overfished as entry was not suspended in time. Lastly, with the move to individual vessel quota allocations from 1978, a vessel's licence was used to confer the weekly weight of fish it was permitted to land. Once a vessel had landed its limit of a stock, its licence for that fishery was suspended. [209] This provided a mechanism for the government to limit how much an individual vessel could land.

[207] NAS (1976) AF62/3884. 'Draft consultation letter on North Sea White Fish Quota – letter to industry from White Fish Authority', 23 December 1974.
[208] NAS (1984) AF62/5615. 'North Sea cod 1979-84', 3 May 1984.
[209] NAS (1976) AF62/3884. 'Draft consultation letter on North Sea White Fish Quota – letter to industry from White Fish Authority', 23 December 1974.

4.2. The Management of UK Quota Holdings, 1974-79.

This section examines a series of policy decisions made by the UK Government under the Labour and Labour-Liberal Coalition Governments from 1974-1979. It identifies an early shift in the UK Government's approach to fisheries management from one of arms-length regulation to the adoption of an increasingly interventionist set of policy objectives. This shift was forced by the industry lobbying for greater protection from the socio-economic impacts of quota restrictions. It argues that the subsequent objective of sustaining employment necessitated an administrative and labour-saving approach to quota management. The design of the Individual Vessel Quota system in 1977-78 evidences the extent to which policy-makers' decisions were constrained by political objectives and industry influence.

The Management of NEAFC Quota, 1974-76

The government's initial policy objective for quota management was to create business-as-usual conditions for the fleet. When considering how to manage quota awarded to the UK through the 1974-76 NEAFC quota scheme, MAFF outlined its intention to "have a system which is as simple as possible and interferes to the minimum extent with the industry's management of its own affairs, both on the catching and processing side."[210] This policy steer led to the favouring of what was called a 'whistle-blowing' mechanism – the fleet would fish unimpeded against national quota holdings with the government closing the fishery once quota for the stock has been taken.

The fishing industry rejected this management mechanism as it sought to protect itself from the economic impacts of new quota restrictions. In a meeting between the industry and government on 17 February 1975, industry representatives outlined that a lack of control over quota uptake would reduce the length of the fishing season.[211] The industry argued that "the free-for-all concept was an abhorrent idea and a recipe for an economic and bureaucratic nightmare. "[212]

[210] NAS (1984) AF62/5615. 'North Sea cod 1979-84', 3 May 1984.
[211] NAS (1976) AF62/3884. 'Meeting with Industry on Fisheries Quota', 17 February, para. 4. The government-industry meeting on 17 February 1975 also discussed the onshore impacts of not maintaining a 12-month fishery.
[212] Op. cit.

The industry's concern was two-fold. Firstly, international experience from the Pacific Halibut fishery in the 1950s was used to argue that a "scramble to take the fish as quickly as possible" would occur.[213] The economic impacts of this 'race to fish' – whereby fishermen would try to capture as much of the quota for themselves before the fishery was closed– were identified as a shortening of the fishing season, unsafe fishing practices, an overinvestment in capital (to fish harder and faster than competitors) and periodic oversupply in the market.[214]

Secondly, the industry argued that a system that did not allocate within and between fleets would lead to unfair competition between the different sectors. This was influenced by the on-going displacement of distant-water trawlers from foreign grounds. Both the Orkney Fishing Association (OFA) and the Scottish Trawler's Federation (STF) wrote to DAFS in early 1975 to argue that national quota holdings should be allocated to mitigate local tensions and protect smaller fleets and the local communities they represented from having to compete with the more powerful and mobile vessels. [215] The STF letter suggested separate allocations of UK quota to the offshore and distant-water vessels and in a meeting between government and industry on 27 November 1974, national allocations to England, Scotland, Wales and Northern Ireland were suggested.[216]

In the note 'Quota Management', 2 February 1975, the government rejected the option of sub-dividing the quota between sectors, nations or fleets.[217] Influenced by the industry's concerns, the government did adopt an increasingly interventionist approach to quota management. The initial policy of minimal intervention was replaced with the objective of managing quota to produce specific social and economic outcomes. The primary policy objective

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[213] Op. cit.

[214] NAS (1976) AF62/3884. 'White Fish Quota for 1974', J. Ross, 3 January 1975, point C. It was understood that early closure of the fisheries could work to disadvantage sectors of the fleet that operated on a seasonal basis and began fishing in October.

[215] The Orkney Fishing Association (OFA) referred to a visible increase in distant-water trawlers operating off the coasts of Orkney. The OFA argued that the issue was not just one of sheer capacity and fishing power but of the choices available to the vessels; while the larger vessels had the economic mobility to move on to other grounds following the closure of a fishery, the smaller were not nomadic. The result was that the costs of this competition would be disproportionately carried by the smaller and less competitive vessels of the inshore and middle-distant fleet and by the onshore ancillary industries and communities dependent upon the operation of the local vessels.

[216] NAS (1976) AF62/3884. 'Meeting with Industry on Fisheries Quota,' 17 February. The latter idea was introduced almost four decades later under the 2012 Concordat on management arrangements for fishing quotas and licensing in the UK put in place. This allocated annually agreed shares of UK quotas to the Department for Environment, Food and Rural Affairs (Defra), the Northern Ireland Executive, the Scottish Government and the Welsh Assembly Government for distribution to their fleets.

[217] NAS (1976) AF62/3884. paper 'Quota Management', A. Bowie, 10 February 1975.

was to use quota management to sustain industry employment.[218] This was first considered by the White Fish Authority (WFA) in December 1974, a quasi-government organisation established in 1951 to operate jointly with the private fishing industry to further the interests of the fleet.[219] In a letter to industry organisations, 23 December 1974, the WFA defined the objective of quota management as "to ensure continuity for employment for fishermen and avoid disruption for buyers and consumers."[220]

The aim of using quota management to sustain employment limited the allocation and management mechanisms available to the government. Industry lobbying on the importance of a 12-month fishery led the government to decide that "in order to ensure continuity of employment for fishermen and avoid disruption of supplies for buyers and consumers, it is desirable for some measure to be taken to spread the quota over the calendar year".[221] This was to be achieved by "dividing the quota into quarterly seasons and allocating the quota appropriately."[222] Managing quota uptake through a seasonal whistle-blowing mechanism would create the same perverse incentives as an annual scheme, the difference being that closures would be seasonal as opposed to annual. This would soften the impacts of quota restrictions on employment with a note on 'White Fish Quota' of 2 January 1975, confirming that "the main aim of the seasonal division is to spread out the possibilities for the sake of fishermen's employment."[223]

The decision to use a seasonal whistle-blowing mechanism represented a balance between the new socio-economic objective of quota management and a lingering preference for minimal intervention. This mechanism had a dual objective of "ensur[ing] that fishing can be spread throughout the year to prevent unemployment for fishing and ancillary industries and to create a system which interferes to a minimum with industry operations."[224]

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[218] NAS (1976) AF62/3884. 'Meeting with industry on fisheries quota', 17 February, para.4.
[219] Under the 1981 Fisheries Act, the White Fish Authority was amalgamated with the Herring Industry Board to establish The Seafish Industry Authority, a Non-Departmental Public Body (NDPB). Activities were funded through a levy placed on the first-hand sale of fish.
[220] NAS (1976) AF62/3884. Draft consultation letter 'North Sea White Fish Quota', letter from the White Fish Authority to industry organisations, 23 December 1974.
[221] ibid.
[222] ibid.
[223] NAS (1976) AF62/3884. 'White Fish Quota for 1974', J. Ross, 3 January 1975.
[224] NAS (1976) AF62/3884. 'Quota Management', 10 February 1975.

Individual Vessels Quotas 1977-1978

As the concept of fishing effort became a key determinant in the government's quota management considerations, the objective of minimal interference gave way to a fully interventionist approach to fisheries management. Fishing effort, in the economic approach to fisheries management, is a measure of the 'amount of fishing' that takes place and reflects parameters such as time spent fishing and the use of different gear and mesh sizes.[225] This new priority was shaped by practical experience with managing haddock and herring quota stocks over 1975-76 and evidence of a growing misalignment between available quota and fishing effort. In 1976, the UK haddock fishery was closed prematurely despite two additional quota top-ups from NEAFC, and the North Sea herring fishery was forced to close early. In January 1977, the two Fisheries Departments identified the problem as "effort in some fisheries [being] too great in relation to the quota."[226] The government was aware that the situation was not only jeopardising compliance with national quota limits, but that it was also adversely influencing the behaviour of fishermen.[227]

Alternative management mechanisms were considered in a paper on 'Quota Management' published on 1 June 1977. Alternatives included the introduction of selective licensing (limiting entry into the fisheries), allocating quota allowances to individual vessels, and deferring management to the industry through the Producer Organisations.[228] The use of mechanisms that would directly restrict fishing effort – such as a regime that limited the amount of time a vessel could spend at sea – was rejected outright as it was deemed to limit the operational options available to vessels.[229]

Further pressure on the government to adopt a new management approach came from the European Commission's decision to reduce TACs. In 1977, it proposed a 10 per cent reduction

[225] This differs from fishing capacity which measures the size of the fleet in terms of vessel numbers, size and engine power. Fishing effort is more reflective of how capacity is used (Jesper Lerving Andersen, 'Fishing effort: A review of the basic biological and economic approaches,' *European Association of Fisheries Economists*, 6-10 April 1999: p.12).
[226] NAS (1977) AF62/5972. White Fish Conservation. Note of meeting, 19 January 1977, p3.
[227] In 1976, the government became aware that vessels were landing ungutted haddock to maximise catching time at sea. While the landing of ungutted herring was a traditional practice amongst the small, inshore vessels, it was widely recognised as a wasteful practice that reduced the quality of the catch as it rotted prematurely. In 1976, the government introduced a ban limiting the landing of ungutted haddock to 10 cwts a trip. NAS (1977) AF62/5972. 'Ungutted haddock', J. W. Craddock, 7 December 1976.
[228] NAS (1977) AF62/5972. 'Quota Management', MAFS/DAFS, 1 June 1977, p.3.
[229] ibid. Industry representatives agreed that allocating according to vessels length would have the unwanted effect of freezing the overall structure of the fleet in its present state.

in the EEC's total catch for 1978.[230] UK overshoots of its haddock quotas for 1975-76 resulted in a 13% reduction in UK haddock quota for 1978.[231]

Table. 4.1. UK and Scottish haddock and demersal landings (tonnes), 1970-1979.

Year	Total Scottish Haddock Landings (tonnes)	Total UK Haddock Landings (tonnes)	Scottish Haddock Landings as a % of UK Total Haddock Landings	Total Scottish Demersal Landings (tonnes)	Total Scottish Landings (tonnes)	Scottish Haddock Landings as a % of Total Scottish Landings
1970	133,813	176,335	75.9	250,608	543,788	24.6
1971	143,669	181,263	79.3	272,898	453,187	31.7
1972	114,966	156,624	73.4	262,077	463,042	24.8
1973	99,268	149,511	66.4	262,382	500,837	19.8
1974	84,586	126,193	67.0	262,077	477,012	17.7
1975	72,834	112,479	64.8	249,503	409,199	17.8
1976	90,837	127,461	71.3	273,966	442,231	20.5
1977	93,653	122,938	76.2	251,275	412,231	22.7
1978	63,114	82,399	77.6	232,910	426,152	14.8
1979	55,527	72,759	76.3	203,292	354,976	15.6

Source: *Sea Fisheries Statistics Tables* and *Scottish Sea Fisheries Statistics Tables* 1970-79.

A Ministerial Submission, 'Quota Management', outlined that the government presented the industry with a choice – whistle-blowing could continue or the government "could attempt to manage UK effort relative to the quota in order to minimize closures".[232] The industry chose the latter with individual vessels quotas (IVQs) chosen for managing Area IV and VI haddock and whiting for 1978-79. The choice and design of the IVQ mechanism was shaped by the desire to sustain employment and by the lobbying power of the sector traditionally dependent on the haddock fishery. During the 1970s, the Scottish demersal fleet landed around 66-79% of the UK's total haddock landings, with the specie representing around 40% of the total Scottish demersal landings (by weight) and 20% of Scottish total landings (by weight) (Table 4.1).[233]

[230] Mark Wise, *The Common Fisheries Policy of the European Community* (London: Methuen &Co. Ltd, 1984), p.187.

[231] The UK's haddock quota share was reduced from 190,000 cwts to 165,000 cwts for 1977. In 1979, the haddock license was replaced with the haddock and whiting licence with specific quantitative catch restrictions for both stocks.

[232] TNA (1994) MAF 452/34 Quota Management Measures. Ministerial Submission 'Quota Management', Fisheries Division IV, 27 October 1980, para. 2.

[233] Over 1970-79, Scottish and UK total landings of haddock fluctuated. The Scottish fleet's share of total UK landings remained relatively stable, averaging 73 per cent over the decade. Haddock in Areas IV and VI represented

Economic dependence translated into political weight, the result of which was the choice of quota management rules that worked to reflect and maintain the sector's traditional working patterns.

In a meeting with the Scottish Fishermen's Organisation (SFO) on 30 January 1979, the Secretary of State for Scotland outlined that the aim of the government was to "sustain a twelve month fishery."[234] The aim of MAFF was to accommodate the Scottish haddock fleet's argument that this was a necessity for its operations and required to protect seasonal fisheries that fished in the last months of the year.[235] To protect traditional working patterns, the government had to use a mechanism that artificially restrained quota uptake over a 12 month period. The decision to use this type of time-control was taken despite awareness that this tool, popular in the 1950s, was by this point discredited.[236]

The decision to operate a weekly as opposed to monthly or seasonal quota was again chosen to complement the traditional weekly working pattern of the Scottish whitefish fleet. This required the annual haddock quota to be divided into 52 weekly allocations. For allocating weekly allocations, several options existed. They could be allocated equally amongst vessels or allocations could reflect capital conditions such as vessel length or engine power. The objective to sustain employment led the government to choose a labour-saving criterion that would favour labour over capital. A 'per-man' allocation criteria was chosen for allocating weekly quotas between vessels with a vessel's weekly allocation the aggregation of its crew's entitlement. The intention was for this allocation criterion to work to sustain employment by creating a direct incentive for vessels to employ higher ratios of labour to capital. It also favoured the Scottish demersal fleet that operated smaller boats with higher crewing levels. It was therefore welcomed by the Scottish industry.[237]

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an important commercial species for the Scottish fleet. Landings represented around 40 per cent of the Scottish total demersal landings and a quarter of Scottish total landings.

[234] NAS (1980) AF62/4969. Fisheries Quota Management. 'Briefs for meetings, visits and debate – meeting of the Secretary of State with the Scottish Fishermen's' Organisations', 1978.

[235] The seasonal patterns of the different sectors depended upon the stocks targeted. For instance, the offshore English fleet in the North-east relied disproportionally on fishing cod in the last few months of the year. TNA (1979) MAF 452/1, Cod and Whiting (Licensing) Order 1979, 'North Sea Cod and Whiting', D. Boreham, Fisheries IV, 1 August 1979.

[236] TNA (1982) MAF 452/4. White Fish Stock Management: Areas IV and VI. Note 'Quota Management', by W. E. Mason, 4 November 1980, para.2.

[237] TNA (1982) MAF 452/1. Letter from Scottish Office to A. Buchanan-Smith, MAFF, 15 May 1979.

Yet the per-man IVQ mechanism necessitated a heavily administrative and restrictive system of quota management. It was bureaucratically burdensome on the government and restricted the operations of individual vessels in a way that was in stark contrast to the days of *Mare Liberum*. The support for this approach came from it being couched in the politically acceptable language of fairness and equity. The government defined its approach as "manag[ing] remaining rights in such a way as to sustain opportunities for all those interested and to allow fair and equal fishing opportunities for all those interested."[238]

This rhetoric and the primacy of sustaining employment worked to constrain severely the policy options available to the government. It had to retain unlimited entry and award licences free of charge. In practice, it had little choice but to adopt a quota management mechanism that would produce a twelve-month fishery and allocate quota on a labour-favouring basis. National and local political considerations resulted in policy that protected and promoted traditional behaviour and reflected rather than restrained pre-TAC fishing patterns. At an international level, this found little opposition due to the European Commission's quest for economic growth in the 1970s.[239] Absent during this period was any consideration of the impact of fisheries management choices on the economic performance of the fleet. The first step towards rights-based fisheries management in the UK through licences and IVQs was not driven by an attempt to counter perverse behaviour and promote efficiency and sustainability within a TAC regime. It was to prevent fleet contraction in terms of the number of fishermen employed and stave off the social and economic costs of attempting to recover and sustainably manage stocks.

4.3 The 1979 Conservative Government's Approach to Fisheries Management and the 1980 Ministerial Review.

This section argues that the first Thatcher Administration (1979 -1983) engaged with fisheries policy in a considerably different manner to the Wilson and Callaghan Labour administrations it succeeded. The new environment in which fisheries policy decisions had to be taken was driven by factors external to government. International and local pressures from 1978

[238] NAS (1992) AF62/5942. Letter M.T. Haddon, MADD to R.J.W. Clark, DAFS, 29 October 1986.

[239] Wise (1984): p.145. This narrative was built upon the understanding that the creation of the 200-mile European common pool had left the EEC with a deficit of most fish species. Based on 1973 landings data, 72 per cent of the EEC catch came from within its 200-mile/median line EEZ. Holden (1994: p.21) argues attempts to eliminate this deficit were provided for by CFP policies that encouraged the "building of more vessels to catch more fish" by providing grants and subsidies for fishing boat building.

interacted to create a policy environment ripe for a departure from the narratives and choices of fisheries policy in the 1970s. It is argued that this opportunity was lost due to the continued political prioritisation of avoiding the costs associated with running down the industry. The result was a schism between policy-makers and politicians who favoured a short-run approach to fisheries management and economic and scientific advisors in government who argued for a long-run approach.

As Thatcher's first administration entered government, it faced a fisheries policy and quota management crisis that demanded fresh thinking. This crisis was driven by international pressures (the looming introduction of the CFP in 1983) and by national and local pressures (fleet economics, non-compliance and administrative burden).

CFP Conservation Policy A factor demanding a new approach to fisheries management was the looming introduction of the CFP's conservation policy scheduled for 1983. In 1980, the UK Government began to accept that future fishing opportunities would decline as the Commission attempted to counter the persistent overfishing of stocks through TAC reductions. A 1980 Ministerial Submission reflected that "the only certainty regarding future European and UK fishing opportunities is that they would be lower than present catch levels."[240]

The first steep cut in quota was introduced in 1981. The Minister was advised that: "The Commission have proposed 1980 quotas for the UK which are, for about half the stocks covered, significantly lower than expected UK catches this year."[241] The other new issue for the UK Government and all Member States was that reduced opportunities would have to be managed within a legally-binding framework of national allocations for which non-compliance would be met with infraction.

To avoid a situation in which the UK overshot legally binding national quotas and faced infraction proceedings, a new objective to reduce fishing effort in line with reduced fishing opportunities was created. This objective was defined by MAFF in March 1980 as "the need to

[240] TNA (1986) MAF 452/34. Submission to the Minister of State 'Quota Management', Fisheries Division IV, 27 October 1980.
[241] ibid, p.2, para. 5. MAFF concluded: "What quotas the UK may get in 1981 is still a matter for negotiation" but that "for many stocks, the UK's quotas seem likely to be lower than the UK's potential catch."

align present exploitation patterns with future opportunities."[242] This represented a significant shift in the time considerations of UK fisheries policy as it represented a move from focusing on the present to the future.

The 1980s Ministerial Review of Quota Management described policy in the 1970s as "aimed at keeping UK catches in line with our quota aims."[243] Quota management was an in-year allocation and annual balancing exercise. The new objective to match "present exploitation patterns with future opportunities" shifted the focus into the future as it became clear that how in-year allocations were managed would deliver either future benefits or costs. Current levels of over-exploitation would result in future costs in the form of fewer fishing opportunities, with the government commenting that "if a system of free competition continues, the UK will overshoot its quota allocation, jeopardising future TAC allocations".[244] Though the principal motivation was the amount of quota the UK could expect to receive in the future, this shift brought the objectives of UK quota management into line with the ethics of conservation, an aim of which is to minimise the future costs of present action.

The Quota Management Review indicated that the UK Government understood the management of quota to have been complicated by increasing fishing effort. The policy result was several inter-departmental meetings on the fishing capacity of the vessels targeting white fish stocks.[245] This led to the Minister of State deciding that the government would have to take the initiative of controlling fishing capacity.[246]

Impact of Policies on Fleet Profitability Political pressure and industry lobbying on the impact of policies on the economic performance of the fleet also drove the government's reconsideration of how UK quota was to be managed. In April 1980, the Scarborough-Bridlington Fisheries Producer Organisation (SBFPO) wrote to MAFF describing the impact on its members: "Boats

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[242] NAS (1984) AF62/5615. 'Whitefish North Sea Cod,1979-84', letter from DAFFS to MAFF 12 March 1980.
[243] TNA (1986) MAF 453/34. Submission to the Minister of State 'Quota Management', Fisheries Division IV, 27 October 1980, p.2, para. 3.
[244] NAS (1984) AF62/5615. 'Whitefish North Sea Cod', letter from DAFFS to MAFF, 12 March 1980.
[245] TNA (1986) MAF 453/34. Submission to the Minister of State 'Quota Management', Fisheries Division IV, 27 October 1980, p.2, para. 3.
[246] TNA (1986) MAF 453/34. Submission to the Minister of State 'Quota Management', Fisheries Division IV, 27 October 1980, p.2, para. 3. This awareness reinvigorated the Fisheries Department's consideration of more active management of quota and fishing effort. A 1979 DAFS report, 'North Sea and West of Scotland Cod and Whiting Stocks', concluded that several of the UK's key fisheries would be closed within months if fishing against quota remained unregulated. NAS (1980) AF62/4969. Note on the management of 'North Sea and West Coast Cod', 21 November 1979.

have often been able to take their whole week's whiting quota in one or two hauls, and then they have to tie up for the rest of the week... A boat with three-man crew is allocated 459 stones of whiting in a week, and with the depressed prices that we are experiencing this year, this has been fetching generally between £500-600. Boats cannot survive for long on weekly earnings of this order."[247]

This extract points to the weekly per-man allocation of quota increasing the cost per unit of catch. Though fish prices increased steadily in this period (Table 1.1.), under this system vessels were inhibited from responding to economic indicators such as market demand and economics of scale. Vessels had to fish every week and one vessel could not be used to catch two vessels' weekly allocation or carry over its own quota to the next week. This led to the underutilisation of capital and labour and limited the ability for cost reduction through economies of scale and rationalisation. The inability to land catches according to market demand also restricted the ability to improve net returns by earning higher prices. The impact of the allocation mechanism on vessel profitability worsened throughout the year as the government was continuously reducing weekly landings to make up for over-shooting of weekly limits. The almost constant reduction in weekly allowances throughout 1979 forced vessels to fish weekly but land less and less. A 1980 Ministerial Submission acknowledged that the per-man per week system tended to "force up fishermen's costs per unit of catch… to discourage reduced manning and discriminate against the relatively high capitalized".[248]

The impacts of this were felt unevenly across the UK fleet as the labour-based allocation of quota awarded less quota to the larger vessels with higher capital to labour ratios. This economic cost translated into a high political cost as these vessels were concentrated in the traditional distant-water fishing ports in England that had effective representation. In February 1979, the National Federation of Fishermen's Organisation (NFFO), the British Fishermen's Federation (BFF) and the Grimsby Seiner's Association (GSA) – organisations representing the larger, more capital-intensive vessels predominantly based in English ports - wrote to MAFF

[247] TNA (1980) MAF 452/3 White Fish Stock Management: Areas IV and VI. Letter to C. Cann from M.T. Gowan, Chief Executive of the SBFPO, 1 April 1980, pp.1-2.
[248] TNA (1986) MAF 453/34. Ministerial Submission 'Quota Management', Fisheries Division IV, 27 October 1980, p.5, para.18.

arguing that controls based on crew size discriminated in favour of fishermen of the Scottish fleet which was predominately made up of small, labour-intensive vessels.[249]

Non-compliance and Enforcement Unknown levels of non-compliance with quota restrictions also worked to create national and international issues. In 1980, the government acknowledged that the mackerel and haddock quotas were evaded on a significant scale. The UK's Fisheries Inspectorate identified the problem as one of industry behaviour and government resourcing.[250] The Head of the Inspectorate, M.G. Jennings identified the quota management mechanism as creating a direct incentive for vessels to conceal or under-declare landings due to the use of self-reporting. The incentive for fishers to over-fish was increased by inadequate resourcing and infrastructure on the part of the Inspectorate. Vessels could land at up to four ports a week, many of which did not have a residential inspector.

The issue for the government was not only illegal over-fishing but an issue of fairness at a national level. In 1979, MAFF officials were concerned that poor enforcement of quota restrictions allowed fishers breaking the law to survive while law-biding fishers faced bankruptcy. As the head of MAFF, Charles Cann, noted that: "Measures which restricted catches have, until recently, at least allowed the law-abiding fisherman to keep his head above water- and those less law-abiding have done well. But I suspect that it is becoming clear to fishermen that quota enforcement at present is fraught with difficulty and with the economic pressure presently surrounding the industry, there must inevitably be ill-will created among the law-abiding men by our inability to act effectively against the wrong-doer."[251]

Non-compliance, principally through the under-declaration of landings, was also presenting itself as an international and scientific issue. Illegal landings and discarding undermined the data for biological stock assessments and the effectiveness of quota restrictions in delivering long-term, sustainable levels of fishing.[252] In a 1982 report, ICES argued that: "Misreporting of data, i.e. deliberate reporting of falsified data, has become an issue in Atlantic fisheries statistics in recent years… such practices of misreporting will corrupt the entire programme; invalidate the only coherent time series internationally available on fishing activities

[249] TNA (1982) MAF 452/1. Note 'Quota Management: Cod and Whiting', C.R. Cann, 8 February 1979.
[250] TNA (1986) MAF 453/34. 'Quota Management', M.G. Jennings to C.R. Cann, 26 August 1980.
[251] ibid, p.1, para.2.
[252] Discarding is the act of throwing catch back into the sea.

and thereby make international analyses of effects on management actions impossible."[253] Unknown levels of over-fishing against quota meant that there was no real control on fishing mortality and TACs were not working to arrest over-exploitation and help deliver sustainable levels of fishing.

Administrative Burden A final reason for the government's reconsideration of quota management was the administrative burden the weekly quota allocation system placed on the government. The system created an excessive administrative task for the government as it had to monitor continually and adjust the weekly haddock and whiting quota to produce a 12-month fishery. If an under- or over-shoot occurred, the national and individual vessel allocations would have to be recalculated and disseminated through the licencing system. This was a time- and resource-heavy duty with variations occurring monthly.

The 1980 Ministerial Review on Future Quota Management

The government responded to the quota management crisis by launching a Ministerial Review on '*The Future of Quota Management'*. This assessed the current system for quota management and consider alternative options. On 3 October 1980, Cann wrote to the Director of Fisheries Research at the Lowestoft Research Station outlining: "My submission [announcement of the Review] arises primarily from the hideous problem we have got into with our present so-called quota management measures. I believe that we cannot go on as we are."[254]

The Review indicated that a significant shift in UK quota management was imminent. This came primarily from the inclusion of rationalisation of the fleet as a key objective of UK fisheries policy. The Review defined the objectives for quota management as: "a) the extent to which they enable fishermen to rationalize their fishing, to minimize costs and to maximize returns and to which allow the more efficient to displace the less efficient, b) the relative

[253] International Council for the Exploration of the Seas. *Report of the Eleventh Session of the Coordinating Working Parts on Atlantic Fisheries Statistics*. FAO Fisheries Report No. 274 (ICES, Luxembourg, 1982). Available: http://www.ices.dk/sites/pub/CM%20Doccuments/1982/D/1982_D11.pdf

[254] TNA (1986) MAF 453/34. Letter 'Quota Management', C. Cann to D.J. Garrod, 3 October 1980. In September 1980, Charles Cann, the Head of MAFF's Fisheries Division, announced: "with the prospect of CFP quotas being in force next year, it seems timely to consider whether changes can and should be made to our approach to quota management". TNA (1986) MAF 453/34. Ministerial Submission 'Quota Management', Fisheries Division IV, 27 October 1980, p.2, para.7.

difficulty of enforcement and the extent to which planned restrictions of catches is likely to be achieved, c) acceptability of public opinion and in particular to fishermen."[255]

Alongside enforcement and acceptability, rationalisation replaced the previous focus on sustaining employment and continuity. This substitution indicates that lessons had been learnt regarding the impact of quota controls on fleet profitability and fishers' behaviour. A reference to "allow[ing] the more efficient to displace the less efficient" signalled an acknowledgement that industry contraction was required. The economic performance of the fleet was signalled to be a priority within the accompanying Ministerial Submission outlining "the need for management measures which enable fishermen to maximise their profitability".[256] The key question in the review was whether the UK Government's approach to fisheries management (the weekly per-man landing restrictions) should be simplified or refined since. In 1980, the government considered that the: "current weekly vessel quota arrangements have serious defects. It seems necessary to move either in the direction of less management i.e. periodic closures, possibly combined with sectoral divisions, or in the direction of more but more flexible management i.e. more flexible vessel catch quota or flexible vessels days at sea quotas."[257]

The case for a long-run approach to fisheries management In response to the review, the advice given by government economists and scientists gave overwhelming support for the use of mechanisms that represented a long-run approach to fisheries management. Consistent advice was to use mechanisms that would deliver fleet rationalisation including Individual Transferable Quotas (ITQs), effort controls and restrictive licensing. There was a clear rejection of Cann's stated preference for moving to a system of seasonal closures.

The Head of Fisheries Research at the Lowestoft Laboratory, David J. Garrod, warned Cann in September 1980 that seasonal closures were not a "viable option for rationalisation."[258] Garrod prioritised rationalisation as a fisheries policy objective. Garrod warned Cann of the issue

[255] ibid., p.3, para.7.
[256] ibid., p2, para 6. The Review stated: "it will be necessary that any measures to keep UK catches [landings] within our quotas should not prevent the UK fleet catching our quotas reasonably profitably."
[257] TNA (1986) MAF 453/34. Ministerial Submission 'Quota Management', Fisheries Division IV, 27 October 1980, p.11, para.36.
[258] TNA (1986) MAF 453/34. 'Quota Management', D.J. Garrod to Cann, no date. Garrod wrote: "the idea of closures instead of the tonnage per man time-period scheme might be appropriate to the short-term problem in particular fisheries but it is unlikely to provide a general solution."

of effort displacement associated with seasonal closures. If access to a sea area or fishery was prohibited by a closure, the rational reaction for a fisher was not to cease fishing but to move, where possible, to prosecute other less restricted stocks and areas.[259] Seasonal closures would not create a downward impact on overcapacity but exacerbate capacity issues in other sea areas as fishers attempted to diversify operations.

To deliver rationalisation, fisheries scientists supported a move to market-based approaches. Garrod outlined support for the use of ITQs which he argued would have "a more certain effect on fishing capacity."[260] The Review had considered the option of "more flexible vessel quotas" which would allocate vessels a share of national quota on an annual basis with rules for transferability and aggregation. Quota would be awarded to fishers "in perpetuity so that fishermen had a form of transferable property rights."[261] The Review acknowledged the benefits of ITQs for rationalisation as this approach "would provide increased scope for rationalization by individual fishermen as those wishing to enter the fisheries concerned or to expand activities would be able to buy fishing rights from, probably, the less efficient."[262] Lowestoft scientists also demonstrated support for restricted entry, with one writing that: "with the knowledge of overcapacity… it is difficult to see how we can continue to allow free entry into the fishery."[263]

The position of fisheries scientists was mirrored by MAFF economists, albeit with economic advice displaying stronger support for the use of effort controls.[264] Philip Lund, Head of Fisheries Division 3 (Economics), expressed his reservations with the Ministerial Review to

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[259] Op. cit.

[260] Op. cit. Garrod wrote: "Effort regulation could do it [rationalisation] but remember that unless effort limits were set at a very conservative level, fishing could and would concentrate on high value species. These high-risk species would still need to be protected by TACs within effort regulation."

[261] TNA (1986) MAF 453/34. Ministerial Submission 'Quota Management', Fisheries Division IV, 27 October 1980, p.6, para.21. Several variations of an ITQ system were discussed, including the ability for vessels to aggregate entitlement so two vessels' quota could be caught by one, for vessels to be sold with entitlement attached, for fishers to transfer quota to a new vessel or sell their vessels with their quota attached, transfer their quota to new vessels or sell quota rights independently of vessels

[262] ibid., para.22.

[263] TNA (1986) MAF 453/34. 'Quota Management', A.J Lee to Cann, 27 August 1980.

[264] Lowestoft's preference for ITQs over effort controls may have been influenced by a letter sent by Cann to the Lowestoft Laboratory the week before. In the letter Cann set out his scepticism over the feasibility of replacing quota controls with effort controls because of the EEC's use of quotas. For Cann, "ICES set TACs and the EEC are intending to set national quotas derived from those TACs." (TNA (1986) MAF 453/34. 'Quota Management', letter C. Cann to A. Preston, 2 October 1980).

Cann. Lund commented that the paper was "too dismissive of effort quotas"[265] and that he did "not accept your [Cann's] somewhat summary dismissal of transferable effort quotas". Lund argued that "effort controls … generally provide the most efficient solution."[266] Referring to a seminar in Melbourne on the economic aspects of limited entry and fisheries management measures, Lund reported that fisheries economists had discussed transferable catch quotas, limited entry schemes and landings taxes. Transferable quotas had been identified as the preferred management measure as they ranked "more highly on the criteria of efficiency since they allowed fishermen as a group the flexibility in matching their available effort to the quota provided or bought."[267]

The correspondences to Cann from government economic and scientific advisors demonstrate coherent and consistent advice from both analytical wings of MAFF. Officials at Lowestoft were primarily concerned with overcapacity and the MAFF Economics Department with improving economic efficiency. Yet, both objectives were interrelated and resulted in the advocacy of fleet rationalisation through restricted entry and the use of either ITQs or effort controls. MAFF economists and scientists both attempted to normalise the use of these instruments to policy-makers. Lund argued that a system of comprehensive individual property rights for fisheries was no more restrictive on fishermen than what was widely accepted on land:
"A farmer cannot simply decide to plant (and pick!) a crop on any piece of land which he may happen to fancy without first acquiring some form of property right in the land, why should fishermen be allowed to catch fish without any regard for the fishing equivalent of rotation and land improvement."[268]

Lee, an official in Lowestoft, also placed the question of access to fisheries within the wider context of other nationally owned natural resources. He argued: "I don't see why fishermen should not pay for their transferable property rights. The national quotas allocated under the CFP will be a piece of national property like North Sea oil and gas, and it would be fair to charge a rent for parts of it."[269]

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[265] TNA (1986) MAF 453/34. 'Quota Management', P.J. Lund to C. Cann, 24 August 1980.
[266] ibid.
[267] ibid.
[268] ibid.
[269] TNA (1986) MAF 453/3. 'Quota Management', A.J. Lee to C Cann, 27 August 1980.

Cann supported seasonal closures because they were easy to administer and, in the short-term, "relatively easy to enforce".[270] Yet his prioritisation of short-term enforcement overlooked the fact that this would make enforcement harder in the long-run. Overcapacity was acknowledged to a principal cause of overfishing. In addition to adverse impacts on the biological health of stocks, overcapacity created economic and social costs. With available quota spread too thinly across too many vessels, available profit from the fisheries was dissipated. The link between poor economic performance and the incentive to cheat was experienced by the UK Government in its weekly quota system. High costs and low returns created perverse incentives for fishermen to land illegally and under-report landings. The Head of the Inspectorate was aware of the link between overcapacity and enforcement. In January 1979, it was explained to Cann that the enforcement problem was the result of "the UK fleet being too large for the available quota."[271] Mechanisms that could have delivered rationalisation were also likely to improve enforcement in the long-run by reducing the number of vessels in the fleet and weakening incentives to cheat by improving economic returns.

The politics of a short-term approach to fisheries management In contrast to the advice provided by government economists, scientists and enforcement staff, MAFF policy-makers opted for a short-term approach to fisheries management. This section argues that this was the result of a conscious political prioritisation of the welfare value of fisheries, principally in terms of employment, over the wider economic value of the resources.[272]

MAFF rejected ITQs and effort control and opted for seasonal closures as a quota management mechanism. The long-term, market-based approach to quota management offered by ITQs and effort control was not rejected due to its inability to deliver rationalisation and the associated economic benefits of managing and utilising quota more efficiently. This decision was influenced by the political and administrative costs of rationalisation which were judged to outweigh the opportunity to improve the economic performance of the fleet. The government prioritised the socio-economic and political costs associated with running down the industry.

[270] TNA (1986) MAF 453/34. Ministerial Submission 'Quota Management', Fisheries Division IV, 27 October 1980, p.3, para.11.
[271] TNA (1986) MAF 453/34. 'Enforcement of Quotas', M.G. Jennings, 31 January 1979.
[272] The social cost of rationalization was not lost on Lund. In his letter to Cann, Lund accepted that for ITQs: "Their main disadvantage is that they might be too efficient and lead to too small a remaining fleet and too great a disruption to existing communities" (TNA (1986) MAF 453/34. 'Quota Management', P.J. Lund to C. Cann, 28 August 1980).

Rationalisation meant fewer jobs which carried high political costs for Ministers. Cann anticipated the Ministerial steer, explaining to Lund in October 1980 that while rationalisation was "a theoretically attractive objective" it was "not one which Ministers are bound to want to pursue if the political (or administrative) costs are too high."[273]

The steer to minimise political costs over fleet performance would have come from UK Government Ministers. On 4 November 1980, W.E. Mason wrote to Cann setting out the question to be put to Ministers: "Viewed simply from the economic point of view, there would seem to be strong arguments for letting fishing concentrate in the hands of the most efficient fishermen, using the most efficient methods. This would seem to be consistent which the government's general approach to economic questions… on the other hand there is the competing political/socio-economic question of the welfare of and employment in the many small and in some cases remote fishing communities around our coast. For example, do Ministers in fact want the (efficient) purse seiners to take the bulk of the pelagic fish? I have suggested that much depends on the weight that Ministers give to the political consideration of economic use of resources versus the welfare of, and employment in, local fishing communities."[274]

No direct reference to the Ministerial decision on this question was in the archives. However, several key policy decisions indicated that preference was given to the welfare value of the industry with rationalisation as a policy objective effectively dismissed due to its associated political costs. Firstly, MAFF's retained their preference for the use of seasonal closures. This went against the advice of economists and scientists and with MAFF aware that this mechanism would work against rationalisation. The adverse economic effect of this policy choice was communicated to Ministers, with a letter to the Minister of State outlining that simplifying quota management measures meant "giving up possible economic gains in terms of

[273] TNA (1986) MAF 453/34. Letter 'Quota Management', C. Cann to P.J. Lund, 3 October 1980. Cann argued: "I agree that a policy of periodic closures is unlikely to achieve much in terms of rationalization. However, while I well understand the theoretical advantages of rationalization there seems to me to be a major political and administrative price to be paid in developing and applying the sort of management measures that might encourage rationalization. To a large extent, what my submission is trying to do is to ask Ministers whether they are prepared to pay that price for achieving the benefits of rationalization".

[274] TNA (1982) MAF 452/4 White Fish Stock Management: Areas IV and VI. Note 'Quota Management', by W.E. Mason, 4 November 1980, p.2, para.7.

more efficient exploitation of fish".[275] The Ministerial Review concluded that while management based on periodic closures would be less disruptive than "whistle-blowing", it would not encourage rationalization. The government understood that "fishermen would still be encouraged to fish as hard as they could whenever they could, without much regard to marketing and maximization of returns", the result of which was "over capacity and market instability."[276]

Secondly, in February 1981 MAFF defined the objective of UK quota management as "the need to sustain employment within the industry" and to "spread the reduction in opportunities evenly across the country."[277] Finally, political concerns shaped other areas of fisheries policy. In 1980, the government chose to continue to place no restriction on entry through the licensing system. Cann explained that this was due to the government's "assumption that it would not be politically acceptable to exclude established fishermen."[278]

An alternative approach to restricted entry put forward by MAFF economists was also rejected on the grounds of political acceptability. Lund argued that all existing fishermen could be compensated for the removal of their quota and then, along with new entrants, be given "the right to bid for effort quotas."[279] Cann responded that an auction-based mechanism for allocating fishing licences or "putting fishing rights up for sale, which would exclude fishermen from fishing" was "really not likely to be a political starter."[280] The allocation of access rights via the market was strongly opposed by Scottish officials. DAFS argued that "due to the low income and profit earnings of fishermen, few local operations would be able to financially compete for rights."[281] This indicates that a predominant concern of the Scottish department was the ownership structure of the industry.

The administrative costs of different management mechanisms also influenced MAFF's decision to reject a more comprehensive management system that would support rationalisation. The costs of UK fisheries management were not borne directly by resource users but by the

[275] TNA (1986) MAF 453/34. 'Quota Management', C. Cann to W.E. Mason, 2 October 1980.
[276] TNA (1986) MAF 453/34. Ministerial Submission 'Quota Management', Fisheries Division IV, 27 October 1980, p.3, para.10.
[277] TNA (1982) MAF 452/4. Report on minutes of meeting with Sec of State, 9 February 1981.
[278] TNA (1986) MAF 453/34. 'Quota Management', letter C. Cann to A. Preston, 2 October 1980.
[279] TNA (1986) MAF 453/34. 'Quota Management', P. Lund to C. Cann, 24 August 1980.
[280] Ibid.
[281] NAS (1980) AF62/4969. Letter J. Polley, DAFS, to C. Cann MAFF, 15 January 1980.

government and taxpayers.[282] MAFF's ability to dedicate sufficient resources to fisheries management was constrained by government fiscal policies which at the time were under pressure due to the government's attempt to reduce the Public Sector Borrowing Requirement. On 31 October 1980, Cann received a letter from the department responsible for manpower and staffing stating that "it is important for Ministers to be aware of the effect on manpower before they take a decision... This is especially the case at the present time when ministry staff numbers are going down and have to go down further."[283] A letter between Cann and Mason highlighted that resource and staffing availability were considered in the context of quota management:

"To refine our quota management method could secure economic gains but at a price in terms of considerable political controversy and increased number of civil servants and increased public expenditure on administration and enforcement."[284]

The issue with a more comprehensive approach to quota management put forward by government economists and enforcement staff was that it was resource intensive. The resource requirements of an effective quota management system were implied in a note by W. E. Mason, 4 November 1980:

"one has to recognise the difficulties which we have experienced in administering weekly vessel quotas, difficulties which are likely to be even more difficult with a more refined system. This form of quota has much in common with the income tax system. As we plug each loophole, the industry finds another, and we do not have the manpower resources to indulge very much in this kind of activity. This consideration points very strongly away from any form of vessel quotas and towards whistle stopping, periodic closures or sectoral division."[285]

Cann's contribution to Tim Gray's The Politics of Fishing highlights the importance of political (Ministerial) will and support in securing adequate administrative resources. As Cann noted: "For the fisheries manager to be able to impose his will in the difficult situations where fishing capacity and effort are excessive, the fisheries manager needs to be able to deploy massive resources on administration and enforcement, prosecutions and so on. In normal circumstances the political will and resources to see such a battle through to success will not be

[282] This is standard across most national fisheries and within calculations of industry profitability, the costs of research, administration, negotiation and enforcement are treated as external to the costs and revenues of the industry.
[283] TNA (1986) MAF 453/34. 'Quota Management', G. Seymour to C Cann, 31 October 1980.
[284] TNA (1986) MAF 453/34. 'Quota Management', C. Cann to W.E. Mason, 2 October 1980.
[285] TNA (1982) MAF 452/4. Note 'Quota Management', by W.E. Mason, 4 November 1980, p.2, para.8.

forthcoming."[286] In this situation, political will to address rationalisation was diminished by an awareness of the associated political costs of such action. This in turn worked to reduce the political support required for the Fisheries Department to secure adequate financial resources to deliver this objective.

The decision to simplify quota management arrangements and tolerate such continued economic underperformance within the industry was due to the political and administrative costs of fleet rationalisation being deemed too high by Ministers and officials. Policy choices – notably the preference for the use of seasonal closures – demonstrates that the primary concern of the government was to find the easiest and least costly way of distributing quota that was acceptable to the industry. Cann described the benefits of seasonal quotas as being "relatively easy to enforce"[287] and that "fishing organisations have said that a system of periodic closures would be the least unacceptable management technique for the Area VII white fish stocks."[288] Quota management mechanisms were to mitigate against the associated costs of running down the industry as oppose to facilitating the efficient and rational use of quota and fishing resources.

Conclusion

The period from 1974-1981 represents the early years of modern fisheries management in the UK. In this period, the UK Government took on responsibility for actively managing both industry inputs and outputs and allocating fishing opportunities. In these formative years, several notable shifts occurred in the government's approach to fisheries management. The government's initial preference for arm's length regulation reluctantly gave way to an increasingly administrative and interventionist approach. The reluctance felt by government in inserting itself into the day-to-day affairs of the industry was only overcome by pressure from the industry for protection from the socio-economic effects of quota restrictions.

The next shift came as a challenge to politicians and policy-makers' preference for a short-term, reactive approach to fisheries management. The challenge came from inside government and from economic and scientific advisors who pressed for a long-term economic approach to

[286] Charles Cann, 'The Politics of Fishing: A Fisheries Managers' Point of View', Tim S. Gray, *The Politics of Fishing* (London: Macmillan Press, 1998).
[287] TNA (1986) MAF 453/34. Ministerial Submission 'Quota Management', Fisheries Division IV, 27 October 1980, p.3, para.11.
[288] ibid., p.4, para.12.

fisheries management as a solution for the practical problems experienced by both government and industry.

This chapter has highlighted that the beginnings of an economic approach to fisheries management in the UK, wherein the impact of policies upon fishers' behaviour and the economic performance of the fleet were considered as part of the decision-making process, was influenced primarily by practical experience and learning from the implementation and operation of earlier policy choices. The 1980 Ministerial Review indicates that policy-makers were influenced by the wider economic ideas and theories of fisheries management as civil servants considered the use of ITQs and other market-based approaches like the use of an auction mechanism for licences. However, the economic hardship experienced and communicated to government by sectors of the fleet and the growing administrative and enforcement burden felt by government departments created an opening for rationalisation to be identified as a policy objective by 1980. From 1979, there is an evident increase in the use of economic and scientific advice within the government fisheries departments.

Nonetheless, the key consistency within this period was the primacy given to stemming the political and social costs of running down the industry. Policy-makers and politicians during the Wilson-Callaghan administrations can arguably be excused on the grounds of ignorance and inexperience for failing to consider the economic impacts of fisheries policies. By 1981, the continued dismissal of policy approaches and management mechanisms that would have facilitated fleet rationalisation represented a wilful rejection of advice by Ministers and civil servants. The continued political prioritisation of the social value of fisheries over the economic value of the resources obstructed the practical application of an economic approach to fisheries policy. Policies that failed to take economic considerations aside from employment levels into account continued. The result was that the economic hardship the government had attempted to avoid by maintaining employment was experienced by the fleet as profitability began to decline. The subsequent impacts of this outcome on policy decisions are explored in the next chapter.

Lastly, analysis of this period also revealed evidence of the barrier to policy development created by the government's use of language in the mid-1970s. In the formative years, the government had couched the labour-saving approach to fisheries management in the language of fairness and an equitable distribution of rights. This narrative was used to support the retention of open-access conditions by making licences unlimited and free and the allocation of quota on an

equitable, per-man basis. This set a dangerous precedent as any attempt to move away from these mechanisms would be deemed as increasingly discriminatory and inequitable. Evident in the government's overtly political rejection of the restriction, sale or auctioning of fishing licences is an awareness of the high political cost such actions would carry.

5. Fisheries governance: devolving decision-making to the Producer Organisations

This chapter argues that the introduction of Producer Organisation (PO) management from 1984 represented a further attempt by the UK Government to use fisheries policy to avoid the issue of excess fleet capacity. This chapter is concerned with the issue of governance. PO PO management brought changes in where and by whom quota was administered, managed and allocated. The intention was to appease multiple sources of local political pressure and alleviate the symptoms of economic underperformance by allowing vessels greater autonomy over the time of use of capital and quota.

Chapter four argued that over 1974-1981 a long-term, economic approach to fisheries management was repeatedly trumped by short-term political and administrative considerations. The resulting failure to support fleet rationalisation allowed the misalignment between the size of the fishing fleet and fishing opportunities to increase. By 1983, political lobbying repeatedly highlighted the damaging impact this had on fleet efficiency and profitability. In tandem with TAC reductions for key commercial stocks, this political pressure forced the government to act with PO management introduced in a bid to protect the economic performance of nationally significant sectors. The greater operational flexibility awarded to vessels through PO management was an attempt to carry through further reductions in fishing opportunities at lower cost.

Producer Organisations were voluntary membership organisations made up of fishers. They are a product of European Legislation (Regulation (EEC) No 1939/72) and, as such, are "the direct result of British membership of the European Union".[289] Originally intended as marketing organisations, the founding legislation provided for groups of fishers to come together and market their catch in a way that supported the common organization of the European market. The criteria (Regulation (EEC) 170/71) for recognising a PO was a level of economic activity that enabled the PO to "play their part in the common organization of the market" with this defined as the "ab[ility] to provide a concentrated supply sufficient in quantity, continually

[289]John Goodlad, "Sectoral Quota Management: Fisheries Management by Fish Producer Organisations", Tim S. Gray ed., The *Politics of Fishing* (London: Macmillan Press Ltd, 1998), p.148.

available and homogenous in quality" and "adapt production to the requirements of the market".[290] In 1973, 24 European POs operated in the UK, France, Belgium, the Netherlands and Germany. In the following three decades, the number of European POs increased fourfold.[291] POs in the UK have had dynamic identities, with Goodlad referring to them as "largely, although not entirely, regionally based" and with the 19 POs in the UK in 1998 "reflect[ing] the geographical and sectoral diversity of the British fleet."[292]

Table 5.1 UK Fish Producer's Organisations	**Year of Recognition**
The Fish Producer's Organisation (FPO)	1973
South Western Fish Producer's Organisation (SWFPO)	1974
Aberdeen Fish Producer's Organisation (AFPO)	1974
Scottish Fishermen's Organisation (SFO)	1974
Anglo-Scottish Fish Producer's Organisation (ASFPO)	1975
Anglo North Irish Fish Producer's Organisation (NIFPO)	1976
Cornish Fish Producer's Organisation (CFPO)	1976
Yorkshire and Anglia Fish Producer's Organisation (YAFPO)	1977 -2003
Fife Fish Producer's Organisation (FIFPO)	1980
South East Fish Producer's Organisation	1980
North East of Scotland Fish Producer's Organisation (NESFO)	1980
Grimsby Fish Producer's Organisation (GFPO)	1981
Eastern England Fish Producer's Organisation	1982 -1985
Shetland Fish Producer's Organisation (SFPO)	1982
Fleetwood Fish Producer's Organisation	1983
Wales and West Coast Fish Producer's Organisation	1993
Lowestoft Fish Producer's Organisation (LFPO)	1993
North Sea Fishermen's Organisation (NSFO)	1993/4
West of Scotland Fish Producer's Organisation (WSFPO)	1995
Northern Producer's Organisation (NPO)	1995
Northern Ireland FPO (NIFPO)	1976
Scarborough and Bridlington FPO (SBFPO)	N/A
Orkney Fish Producer's Organisation	2000
North Atlantic Fish Producer's Organisation (NAFPO)	2010

Source: European Commission. European Atlas of the Seas – Producers' Organisations.[293]

[290] Official Journal of the European Communities, No L 207/10, Regulation (EEC) No.1939/72 of the Commission, 8 September 1972, preamble: 961. Under Article 4 of (EEC) No. 1939/72, the functions of a PO included the production of pre-marketing year supply plans that estimated landings and forecast the use for supply, the establishment of fishing plans which included measures to adjust fishing methods and catching opportunities to meet demand and the standardization of production and quality control.

[291]European Commission European Atlas of the Seas. Available: http://ec.europa.eu/maritimeaffairs/atlas/maritime_atlas/#lang=EN;p=w;pos=2.483:51.461:5;bkgd=5:1;gra=0;mode=1;theme=95:1:1:0;time=2013;

[292] Goodlad (1998), p.149.

[293]Accessible: http://ec.europa.eu/maritimeaffairs/atlas/maritime_atlas/#lang=EN;p=w;bkgd=5;theme=95:0.75

From 1 June 1984, specific fisheries management responsibilities were devolved to the POs. This introduced a new element of co-management into UK fisheries policy whereby the government and industry came to share managerial responsibilities. UK quota holdings continued to be managed through an administrative licensing system that allocated shares in UK quota holdings to individual vessels. However, from 1984 certain POs were allocated a share of UK quota based on the aggregate historical fishing patterns of their members - if a PO's membership had collectively landed 10 percent of total UK haddock landings over the reference period (initially a three-year rolling reference period) then the PO would be awarded 10 per cent of the future UK haddock quota. PO management replaced the per-man criterion for allocating quota with one that allocated shares in future UK quota based on a vessel's historical performance, otherwise known as grandfathering.[294]

The POs were given complete autonomy over how to manage and allocate their members' quota shares. Several internal allocation arrangements would have been used, the most common being individual allocations to vessels or companies based on track-records and the pooling of quota and use of monthly landings limits for the PO's member vessels.[295] Alongside allocation duties, the POs became responsible for monitoring the activities and landings of member vessels and ensuring that total PO quota was not over-fished.

By devolving responsibility for allocating quota and monitoring uptake at individual-vessel level to the POs, the direct link between government and vessels in a PO was severed. The government retained responsibility for managing vessels outside PO membership. The number of non-PO vessels gradually declined with vessels in this category primarily engaged in the prosecution of non-quota species.[296] Outside of this, the government moved to manage quota

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[294] Grandfathering is a common method of quota allocation, used most prominently as the key allocation criterion in the US emission trading programme. Raymond (2003: p.51) points to the relatively high level of political acceptability of the method as it allocates rights (quota) without cost to present users as quota is allocated to those holding or occupying rights at the time of regulatory change. By reducing the costs to those already engaged in the economic activity, it can offset political opposition to new regulatory institutions (Tietenberg in Helm (1990), p. 98)

[295] Aaron. Hatcher, Sean Pascoe, Richard Banks and Ragnar Arnason. *Future Options for UK Fish Quota Management: A Report to the Department of Environment, Food and Rural Affairs*. The University of Portsmouth, June 2002, 40.

[296] Alongside the extension of PO management to all sea areas around the UK and other TAC stocks, the size of the non-sector has reduced over time. From 1 June 1984, the UK Government had responsibility for around 70% of UK quotas to the industry. "Sectoral Quota Management: Fisheries Management by Fish Producer Organisation", Tim S. Gray ed. *The Politics of Fishing* (London: Macmillan Press Ltd, 1998), p.153. Over time, larger vessels in the non-

uptake at a PO-level to ensure the UK was not placed in an over-fishing position. The other responsibilities retained by government included the administration of licencing, enforcement and, with the introduction of transferability of quota into the PO system in the 1990s, the sanctioning of in-year quota swaps and transfers.

Section 1 discusses PO management as a concept developed by the Scottish industry in 1977. It argues that the initial theoretical aim of PO management was to improve compliance with quota restrictions by creating an additional layer of local enforcement that would be more effective than enforcement at a national-government level. Section 2 argues that the UK Government rejected PO management in 1977 because a move to the use of a historical allocation of quota would disadvantage the English and Welsh fishing fleets. Section 3 examines the decision-making process behind the introduction of PO management in 1984. It argues that the MAFF policy shift was driven primarily by concern for cod quota management. The decision to introduce PO management was a reaction to political pressure from fishing constituencies and industry representatives which lobbied the government about the economic pressures facing their fleets. PO management was supported by the UK and Scottish Fisheries Departments as it represented a way for the departments to protect politically important parts of the fleet and distinct ownership structures. DAFS viewed PO management as a way to improve conditions for the Scottish vessels targeting haddock, while MAFF looked to it to provide relief to the large, company-owned vessels targeting cod. Ultimately, however, PO management was a tool to inject greater flexibility into vessel operations to allow for improvements in efficiency and returns to protect economic performance as fishing opportunities sharply declined.

5.1 The Development of PO Management as a Concept in UK Fisheries Management

PO management as an approach to fisheries management was developed by the Scottish fishing industry interests in 1977. It was proposed to the Scottish Office as a tool for improving the compliance and enforcement of quota restrictions. Industry support for the idea that POs should manage quota is acknowledged in a note prepared for Scottish Office meeting with the

sector have typically becomes members of a PO, in effect taking their share of the UK quota from the non-sector to the PO. The non-sector is now largely comprised of small under 10-meter and inshore boats.

Scottish Fishermen's Organisation (SFO) on 17 December 1977.[297] The rationale for PO management rested on the industry's argument that the implementation of quota restrictions would be ineffective without industry cooperation.[298] In March 1978, the Aberdeen Fish Producers' Organisation (AFPO) argued that "the UK Government had insufficient resources to monitor and control landings". AFPO argued that the government had to "rely on the active co-operation of catchers in quota management" to ensure compliance. "[299]

In a paper produced by AFPO in 1978, entitled 'Producer Organisations at the Crossroads', PO management was presented as an alternative system of bottom-up enforcement that would use a carrot-and-stick incentive system to create compliance at vessel level. The paper argued for POs to be allocated their own percentage of any future quotas to manage. AFPO believed this would make PO membership attractive to fishers, which would in turn make it worthwhile for fishers to abide by the PO's rules. Expulsion from the PO would carry a high economic cost with overfishing against the members pooled quota creating a strong incentive for self-discipline.[300]

The concept of PO management rested upon two fundamental assertions. Firstly, that the POs needed to acquire control of their members' quota. This was to be achieved by allocating the POs their memberships' aggregate share and giving them a mandate to allocate this quota to individual vessels as they saw fit. This would incentivise PO membership as it would generate greater flexibility and more representative quota allocations. POs would use local and sector-specific knowledge to allocate quota and manage uptake in a manner that would more accurately reflect traditional fishing patterns, seasonality and local market conditions.

The second assertion was that once vessels had joined a PO, membership rules - designed and implemented at a local level by the PO - would work to regulate vessel behaviour more effectively than national laws. The idea that fishermen would now have an incentive to "watch each other" represented a new monitoring tool as collective management of a group of fishermen's quotas meant that overfishing or rule infringement by one fishermen directly harmed

[297] NAS (1978) AF62/5973, White Fish Conservation, Background notes for Alan Brown, MP Scottish Office meeting with SFO, 17 Dec 1977.
[298] In 1976 and 1977 the UK was awarded, through informal EEC agreements, national allocations of 96,000 tonnes of haddock, 84,500 tonnes of cod and 32,200 tonnes of whiting. NAS (1978) AF62/5973. White Fish Conservation, Background notes for Alan Brown, MP Scottish Office meeting with SFO, 17 December 1977.Good
[299] NAS (1978) AF62/5973, White Fish Conservation, 'Producer Organisations at The Crossroads', Aberdeen Fish Producers' Organisation, no date circa: March 1978, p1.
[300] ibid., p.3.

the collective membership. This changed the dynamic of free-riding behaviour as the costs of such action were now borne at a local as well as a national level. This utilised the role for social capital - the relationships and social connections between fishermen – in creating more effective fisheries regulations. New, locally-administered social incentives and penalties for illegal practice/free-riding were created, which used fear of social exclusion and damage to reputation and relationships with fellow PO member vessels.

Goodlad's (1998) evaluation of growing industry support for PO management also points to disillusionment on the part of the fleet with the weekly quota system and the desire on the part of the industry to use its knowledge to improve quota management.[301] Specific reference is made to criticisms regarding the lack of sectoral and local considerations in the operation of the weekly vessel quota mechanism. Goodlad points to the problems experience in the Shetland haddock and sandeel fishery in 1982 – wherein the absence of regard for the seasonality of the fisheries within the quota allocation system led to the loss of the summer haddock fishery- as underwriting the justification for the Shetland PO management trial in 1983.

The issue identified in the AFPO paper was that to create effective levels of internal discipline the POs required the power to tie rule infractions to a member vessel's licence. In 1977, the POs were generally regarded as lacking control over their memberships with repeat infringements of PO rules by members. AFPO acknowledged that the "POs have no control over ports, buyers, processors or members."[302] To resolve this, the POs called for the power to effect changes, known as variations, in the fishing licenses of their members. In a letter to the Scottish Office, 27 January 1978, the Chief Executive of the Scottish Fishermen's Organisation (SFO) Iain MacSween wrote: "the preferred solution by the SFO, to introduce discipline into any management scheme, would be to tie the rules of a PO to the licences issues by HM Government…a licence [would] contain a condition that a vessel landing in any particular area abides by the management rules set down by the PO in the whole economic area in which the vessel is landing. This solution would give the actual role of management to the PO whom we

[301] John Goodlad, "Sectoral Quota Management: Fisheries Management by Fish Producer Organisation", Tim S. Gray ed., *The Politics of Fishing* (London: Macmillan Press Ltd, 1998), p. 147.
[302] ibid., p3.

feel are best equipped to act within the day-to-day role… in this way POs would be responsible for running management and the courts would be responsible for punishing offenders.*"*[303]

Non-compliance with PO rules would be reprimanded by a member's licence conditions being varied so that it was unable to go to sea or prosecute certain stocks. PO management, when conceived in 1977-78, represented a devolution of responsibility in terms of quota allocation and control functions.

5.2 The UK Government's Assessment of PO Management 1977-1978

This section argues that the UK Government's rejection of PO management in 1977 was shaped by regulatory and distributive concerns. These flowed from doubts regarding the ability of the POs to create effective levels of internal discipline and the political ramifications of using a historical criterion for allocating quota.

The government was aware of industry support for PO management and the administrative and political benefits of devolving certain responsibilities. A joint MAFF and DAFS paper published in May 1977 concluded that "it is generally agreed that as much management as possible should be left in the hands of the industry itself and this points to a system whereby allocations are made to industry organisations".[304] The Head of MAFF, Charles Cann, commented that PO management was "a good way to avoid the administrative burden and inequities [of fisheries management]".[305] Despite this, official advice to the Fisheries Minister in October 1977 was to reject the idea of PO management. Officials argued that "to attempt to sub-divide quotas between all the individual enterprise or vessels in the UK fleet would pose

[303] NAS (1978) AF62/5973, White Fish Conservation, letter from Ian MacSween, SFO to Hugh Brown MP, 27 January 1978.

[304] TNA (1977) MAF 452/10, Producer Organisations- Quota Management, 'North Sea White Fish: Stock Management,' MAF/DAFS, May 1977, Section H, para.1. POs had been identified by the government as the only industry organisations capable of managing quota because of their status under EC law. They were the only industry bodies that could sub-divide and allocate quota without contravening Restrictive Trade Practices. Following a government and industry meeting, 9 September 1977, MAFF commented: "the views given by the industry indicate a consensus that stock management should be a function of the POs" (TNA (1977) MAF 452/10, Producer Organisations, 'White Fish Stock Management', note of a meeting held in St Andrew's House, Edinburgh 9 September 1977, para.3).

[305] TNA (1977) MAF 452/10, Producer Organisations, 'UK Fishing in 1978', Charles Cann, 8 November 1977.

enormous administrative and political problems and does not seem to be a practical approach for the foreseeable future. ”[306]

Officials were concerned that the POs would be unable to create sufficient levels of internal discipline and control their members. A 1977 Ministerial Submission commented that “some POs may not be able to effectively manage their members’ operations.”[307] The government’s concern was shaped by experience with the PO system with DAFS reflecting that “experience so far indicates that there can be problems for the POs in enforcing, allocation and allied arrangements against their own members.”[308] MAFF agreed, responding that “admittedly some POs may not be able to manage the activities of their members… even those POs which think they are able to do this, cannot necessarily be relied upon to succeed.”[309]

Resourcing was also highlighted as a concern during the government’s consideration of PO management in the 1980 Ministerial Review of Quota Management. Though officials spoke of a “temptation to try to pass the buck to the fishing producer organisations”, advice to Ministers was that this option should not be pursued.[310] MAFF officials reflected that given how hard it had been for the government to cope with the pressures of quota management “in spite of all our resources, the immense advantages of being the government, elected by national suffrage, the support that the safety value of Parliament gives, what real chance has a small PO with limited resources?”[311]

The reference to “the immense advantages of being the government, elected by national suffrage, the support that the safety value of Parliament gives” highlights an issue that has persisted throughout the history of UK PO management. Identified in Section 1, the original PO management structure involved the POs being awarded the power to revoke and vary members’ licences to create effective discipline. This would have given the POs the mandate to control and revoke an individual’s economic rights and their means to make a living. Under Article 4 of the Sea Fish (Conservation) Act 1967, the granting of a license and its conditions was a function and

[306] TNA (1977) MAF 452/10, Producer Organisations, ‘Quota Management’, Submission to the Minister, Fisheries Division IV, 19 October 1977, p.3, para.6.
[307] TNA (1977) MAF 452/10, Producer Organisations, ‘Quota Management’, Submission to the Minister, Fisheries Division IV, 19 October 1977, p.2.
[308] TNA (1977) MAF 452/10, Producer Organisations, ‘White Fish: Sectoral Management’, DAFS to MAFF, May 1977.
[309] TNA (1977) MAF 452/10, Producer Organisations, ‘Quota Management’, C.R. Cann, 24 May 1977.
[310] TNA (1983) MAF 452/5, White Fish Stock Management, ‘White Fish Stocks: Area IV and VI’, para.2.
[311] Op. cit.

power of the Minister with fishing licences granted in the Minister's name. MAFF's comments on PO management alluded to a perception that it was acceptable for government to limit the economic opportunities of individuals to produce stock conservation.[312]

The international setting of the regulatory requirements reinforced the government's reluctance to relinquish control of licencing. In response to a 1984 Committee recommendation that more fisheries management should be devolved to local authorities DAFS wrote: "Along with the other UK Fisheries Ministers, the Secretary of State has the responsibility to ensure that national quotas are not exceeded. There could therefore be no question of the Secretary of State giving up his central role in controlling the uptake of catch, and indeed in enforcing the numerous fishery regulations both Community and domestic… Fisheries Minister have to retain decision-making powers to ensure compliance with national objectives."[313]

This quotation indicates that the government's perception was that, as the Member State and competent authority, it carried the risk. Therefore, it should control the means to avert this risk. As the Member States and competent authority, the government was ultimately responsible for implementing EC law. It was liable if UK quota shares were overfished and mismanaged. Penalties for infringements and non-compliance with CFP regulations were levied at Member State government level and most often took the form of infraction, with the EC taking Member States to court, risking fines and reputational damages that could affect future negotiations and allocation.[314] The need for government to retain control over vessel licensing became further engrained from 1984 when, following the agreement of the CFP in 1983, a Restrictive Licensing

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[312] If power and function over licencing had been devolved to the POs the nature of the POs as organisations would have been fundamentally altered in a way that was incompatible with their creation under EEC regulation. POs would be performing governmental functions thus becoming non-governmental organisations i.e. quasi-autonomous non-governmental organisation (Quangos), now more commonly referred to as non-department public bodies (NDPBs).

[313] NAS (1985) AF62/5588, Fish Farming - Montgomery Committee, 'Committee of Inquiry into the Functions and Powers of Island Council- Regional Fisheries Management', para.2, June 1983.

[314] While there has been a proliferation in the number of international treaties and international environmental agreements (IEAs) since 1945, the functions and responsibilities of national governments within these frameworks and agreements have not been superseded as IEAs are not a product of a 'world government' but of nation states participating in collective action. The role and responsibility of national governments have tended to increase as they have become increasingly bound by international laws and conventions. Mulkey and Chanon (2002) identify the indispensable role played by national governments in negotiating the agreement in line with national interests and their responsibility for implementing and translating the transnational agreement into effective law and regulation at national and local levels (Mulkey, Marcia E and Keith E. Chanon, "National Compliance of International Environmental Treaties", paper presented at the Sixth International Conference on Environmental Compliance and Enforcement. April 15-19, 2002, San Jose Costa Rica. Available: http://www.inece.org/conf/proceedings2/19-Nationalompliance.pdf).

Scheme was introduced as UK Ministers took powers to restrict fishing for a wide range of species subject to quota caught by UK fishermen.

MAFF also rejected PO management in 1977 as it was aware that the use of historical allocation criterion would create distinct regulatory problems and severely disadvantage the English and Welsh fleets.[315] Prior to 1977, quota allocations had included vessel characteristics such as length, engine power or crew size. A historical allocation was viewed as having several benefits. Firstly, it was viewed by the industry as the fairest way to allocate quota, it was administratively straight-forward and, as it was not tied to physical inputs, it would allow the fleet greater flexibility in employing capital and labour. A historical allocation was also viewed as providing the fleet with a greater sense of stability.[316]

Table 5.2 UK Regional Landings (tonnes) by Region of Capture, 1969-1978

	Landings (tonnes) from within European Pool*				Landings (tonnes) caught in water external to the European Pool**			
	England and Wales	Scotland	Northern Ireland	UK Total	England and Wales	Scotland	Northern Ireland	UK Total
1969	152,204	326,151	5,842	484,197	370,146	30,430	0	400,576
1970	217,078	361,205	8,433	586,716	334,182	35,308	0	369,490
1972	206,411	401,283	7,925	615,619	285,768	29,109	0	314,877
1972	202,650	418,460	8,332	629,442	249,792	22,454	0	272,246
1973	198,942	450,668	11,278	660,888	256,906	26,011	0	282,917
1974	182,075	429,280	12,590	623,945	253,704	29,365	0	283,069
1975	176,911	361,318	9,772	548,001	219,099	26,272	0	245,371
1976	249,963	387,484	11,353	648,800	170,186	25,392	0	195,578
1977	330,097	369,956	8,283	708,800	111,935	16,412	0	128,347
1978	484,187	393,353	6,612	884,152	45,817	6,087	0	51,904

Source: UK Sea Fisheries Statistics 1969-1978. *Landings from; West Coast of Scotland, Irish Sea, North Sea, Rockall, West of Ireland and Sole Banks, English Channel and Bristol Channel. ** Landings from; Iceland, Faroe Islands, Barnets Sea, Norwegian Coast, Bear Island and Spitzbergen, Skagerrak, East Coast of Greenland, West Coast of Greenland, Labrador and Great Banks of Newfoundland.

[315] Under PO management, there would be three distinct allocations: i) allocation of total UK quota between the POs as a group and the remaining non-sector (the non-sector reflected the group of vessels that were not members of a PO), ii) allocation of the aggregate PO share of UK quota between the individual POs, and iii) allocation of an individual PO's share of total UK quota amongst its member. The first two allocations took place using historical data with the third allocation formula at the discretion of the individual POs.

[316] As with 'Relative Stability', a historical allocation provided some sense of stability for the industry in terms of what each PO or vessel could expect in future years, assuming stable TACs.

In 1977, the ability to allocate quota on a historical basis in practice was identified as being undermined by the classic regulatory problem of missing or incomplete information. Data on uptake of UK quota landings at an individual vessel level did not existed. The SFO acknowledged that *"*one of the problems inherent in attempting to do this is the lack of statistical data available to POs as regards their members' activities."[317]

The second and more pressing issue with allocating on a historical basis was that it would have severely disadvantaged the English and Welsh fleets.[318] A DAFS consultation paper on PO management, 24 February 1978, had used data from 1975 to create an allocation formula for PO management. Data from 1975 had been used as it represented "the most recent year in which the North Sea white fishery was not subject to statutory restrictions affecting catches."[319] A separate industry paper had produced a similar allocation formula using annual average landings data from 1972-75.[320] In August 1977 MAFF was concerned that a historical allocation using data from the 1970s would create a distributed outcome that reflected the slow pace of restructuring that was taking place following the extension of 200-mile EEZs from 1976. Table 3.2 demonstrates that over 1969-78 the English and Welsh fleets had increased their landings from within EU waters threefold. Yet while in 1978 English and Welsh landings from within EU waters represented 55% of total UK landings in this area, for 1975 (the year of the DAFS analysis) this figure was 32%.

A historical allocation based on track-records in the mid-1970s would therefore distribute EU quota in a way that favoured the Scottish fleet. The internal note outlined that a historical allocation "would severely constrain the operations of POs whose members had been historically

[317] TNA (1977) MAF 452/10, Producer Organisations, letter Iain MacSween Scottish Fishermen's Organisation to John Cormack, Undersecretary for Fisheries, DAFS, 27 October 1977.

[318] A concern for the political costs of allocation remained in the 1980 Quota Allocation Consultation. (TNA (1986) MAF 452/34, Quota Management Methods, 'Quota Management', Submission to the Minister, p4, para 14, Fisheries IV, 27 October 1980). Moreover, while enforcement of sectoral quota management was evaluated to be "not much more difficult than with periodic closures," the policy was concluded to be "inevitably more contentious than a policy of periodic closures. The decision on what share to give different sectors would be controversial. On the other hand, those sectors which felt protected by the policy could be expected to welcome the protection" (ibid., para.8).

[319] NAS (1978) AF62/5973, White Fish Conservation, 'Draft Consultation Paper- Interim Arrangements for Management of Certain Fish Stocks', Note by The Fisheries Departments' 24 February 1978, p.3, para.4.

[320] TNA (1977) MAF 452/10, Producer Organisations, 'North Sea White Fish Management', Scottish Fishermen's Organisation Ltd, 27 October 1977.

reliant on fishing in the non-EEC waters from which they had recently been displaced."[321] The DAFS formula, based upon track records from 1975, awarded the Scottish POs twice as much North Sea haddock quota as the English and Welsh (Table 3.3) and the SFO industry paper, using 1972-75 data, awarded Scottish vessels 84.7 per cent of total UK quota shares and within this 83.7 per cent of UK whiting quota and 49.9 per cent of UK cod quota.[322] MAFF concluded in a note of 18 August 1977, that "it [historical performance] cannot be the only factor…it will be necessary to try and divide up any UK quotas in a way which balances the claims on the stocks in question of those fishermen who have traditionally fished it with a need to allow those displaced from other stocks to re-deploy at least some of their effort on to stocks not traditionally fished."[323] In the Ministerial Submission of 17 October 1977, MAFF also outlined the long-term impacts of this allocation and tied it to the issues of efficiency and fleet rationalisation: "In the longer term, the fundamental problem would be to avoid quota management through the POs leading to the pattern of UK fishing being frozen, with the more efficient unable progressively to displace the less efficient."[324]

Table 5.3. Haddock landings by British vessels, 1975

	England and Wales	Scotland	Total	%
Aberdeen FPO	116	18,218	18,334	18.1
Anglo-Scottish FPO	3,387	3,716	7,103	7.1
Fish Producer Organisation	27,627	17	27,644	27.2
Scarborough & Bridlington FPO	755	0	755	0.8
Scottish FO	85	29,502	29,587	29.1
Others	7,616	20,162	27,778	17.2
Under 40m	45	543	588	0.5
Total	**39,631**	**72,158**	**111,789**	

Source: NAS (1978) AF62/5973, White Fish Conservation. 'Interim arrangements for management of certain fish stocks', 24 February 1978.

[321] TNA (1977) MAF 452/10, Producer Organisations, 'North Sea White Fish Management', J. Ross, 18 August 1977.
[322] TNA (1977) MAF 452/10, Producer Organisations, 'North Sea White Fish Management', Scottish Fishermen's Organisation Ltd, 27 October 1977. TNA (1977) MAF 452/10, Producer Organisations, 'White Fish Stock Management', Note of a meeting held in St Andrew's House, Edinburgh 9 September 1977, para.3.
[323] TNA (1977) MAF 452/10, Producer Organisations, 'North Sea White Fish Management', J. Ross, 18 August 1977.
[324] TNA (1977) MAF 452/10, Producer Organisations, 'Quota Management', Submission to the Minister, Fisheries Division IV, 19 October 1977, p.3, para.8.

The advice given to Ministers in October 1977 counselling against the introduction of PO management stemmed from an amalgamation of regulatory and political concerns. The decision to reject - but ultimately delay PO management – represented an attempt by MAFF to protect the English and Welsh fleets from the distributive outcome of a historical allocation. This decision acts as evidence of the UK Government continuing to use quota management decisions to shape social and economic outcomes through the allocation of fishing opportunities.

The case for maintaining a UK-wide and centralist approach to fisheries management was reinforcement in evidence submitted by the government to the 1984 Montgomery Committee. This was an inquiry into the functions and power of the islands councils of Scotland:

"In face of conflicting demands from the industry and from local authorities, given the varying interests of sectors of the fleet based in different parts of the country, there is a need for the Secretary of State to retain a unifying influence on the direction to be taken for the good of the industry and the country as a whole…. The government has a duty to manage the fisheries for the benefit of all the participants; that duty often requires striking a balance between and among interests which can be in conflict and which may not be represented in the areas in question."[325]

The extract implies that the government was aware that a key responsibility was to arbitrate between conflicting local interests and that decisions taken were to spread out remaining opportunities to avoid sectoral and geographical concentrations. The reference to "all the participants" of fisheries also hints at a widening of the government's focus. Historically fisheries policy had focused immediately on the catching sector and the onshore ancillary services. As policy developed, fishing communities and towns that surround the ports, and more recently consumers and wider public interests, had also come to be regarded as those having a stake in the management of fisheries.

5.3 The 1984 Policy Shift and the Introduction of PO Management

This section argues that the UK Government agreed to the introduction of PO management in 1984 to feed through decreases in fishing opportunities in a least cost manner by altering industry behaviour. The government aimed to give the fleet additional flexibility over

[325] NAS (1985) AF62/5588, Fish Farming - Montgomery Committee, 'Committee of Inquiry into the Functions and Powers of Island Council- Regional Fisheries Management', June 1983, para.4. NAS (1985) AF62/5588, Fish Farming - Montgomery Committee, 'Response to Recommendations', 27 August 1984, p.1

the time of use of capital and quota in ordered to improve economic efficiency and returns to offset TAC reductions. In this regard, the decision to use PO management was shaped primarily by economic pressure bearing down on the industry from European conservation policies. In 2010, an independent panel reporting to Marine Scotland recalled that: "Following a successful trial in 1984 with the Shetland PO managing the haddock quota on behalf of the member vessels, responsibility was gradually devolved to POs through a system that became known as sectoral quota management and which was unique to the UK."[326] However it was argued that the decision to implement PO management – an agreement brokered between MAFF and DAFS - preceded the conclusion of the trial in which the Shetland PO had been awarded a share of UK Area IV and VI haddock quota to manage on behalf of its members.

Table 5.4 UK Landings of Haddock, Cod and Whiting by Region 1975-1984 (1,000 tonnes)

	Haddock			Cod				Whiting				
	E&W	Scot'd	UK Total	E&W	Scot'd	N. I	UK Total	E&W	Scot'd	N.I.	UK Total	Total Demersal Catch
1975	39.6	72.8	112	195	46.7	1	242	6.38	37.1	2.02	45.5	579
1976	36.6	90.8	127	164	47.1	1	212	6.92	39.2	3.29	49.4	576
1977	29.3	93.6	123	108	37.9	1.18	147	8.32	38.9	2.69	49.9	499
1978	19.3	63.1	82.4	82.6	42.7	1.07	126	9.37	45.4	3.08	57.9	434
1979	19.2	55.5	72.7	64.8	42.8	1.58	109	8.74	49.4	2.95	61.1	359
1980	19.2	65.6	84.8	57.3	44.8	2.16	104	8.04	44.4	3.95	56.4	384
1981	15.7	84.4	100	58.8	54.1	2.81	115	7.34	35.6	9.5	52.4	413
1982	16.4	112	128	56.2	54.9	3.23	114	8.71	34	9.93	52.6	448
1983	11.1	109	124	53.3	56.4	2.92	112	6.28	45.4	5.26	56.9	427
1984	11.7	95.7	107	34.7	53.9	2.22	90.8	6.56	48.4	5.66	60.6	395

Source: *UK Sea Fisheries Statistics*, 1975-84. (HMSO: London).

In April 1984, MAFF took the view that "the time [was] ripe to take a closer look at the role, structure and potential of our FPOs."[327] MAFF's new position on PO management was not

[326] The Scottish Government. *The Future of Fisheries Management in Scotland.* Report of an Independent Panel. (The Scottish Government, 2010). Available: http://www.gov.scot/Publications/2010/11/02103454/17
[327] TNA (1985) MAF 452/77/2, Producer Organisations, letter from MAFF to J. Finnie, DAFS, 18 April 1984.

shaped by identified regulatory problems being resolved.[328] Indeed, an improvement in the government's working knowledge of quota management and fisher's behaviour post-1980 worked to increase its awareness of potential problems. Additional concerns related to information and monitoring were identified. In a MAFF submission on '*North Sea White Fish: Quota Management'*, 28 March 1984, an official wrote that: "the status and expertise of some POs is by no means proven and we are far from certain that they could exert the necessary internal discipline on their members…in practical terms, it is difficult at this stage to obtain the data necessary to establish accurate sectoral quotas for the POs…the whole venture represents a step into the unknown".[329] Doubts persisted following the decision to allow for PO management more widely than the Shetland trial.[330]

The primary factor shaping MAFF's new position on PO management was the need to pass through an 18 per cent cut in UK cod quota for 1984.[331] PO management was an attempt to improve fleet profitability to dampen the economic impact of TAC reductions.[332] In 1983 scientific advice had warned that cod stocks in Union waters were badly depleted.[333] UK cod landings had fallen dramatically over the 1970s as access to the cold, cod-rich waters around

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[328] The issue of mandate and whether POs should be granted the authority to vary licences was sidestepped rather than addressed. For both the Shetland trial and the final implemented structure, POs were not given control of licensing powers.

[329] TNA (1984) MAF 452/6, White Fish Stock Management, 'North Sea and West of Scotland Quota Management', D.H. Griffith, 28 March 1984, para.6.

[330] TNA (1985) MAF 452/77/2 Producer Organisations, 'Cod IV and VI Sectoral Quotas for 1984', E. Morgan, 16 July 1984. The MAFF had doubts regarding monitoring and the efficacy of the PO management to deliver effective quota management: "In my minute 25 April, I had serious misgivings about the granting of PO quotas at this stage, in particular because of the difficulties in monitoring catches and reconciling Ministry and industry figures. I currently have little reason to change my view and for a variety of reasons still feel that it is going to be extremely difficult."

[331] UK cod allocations fell from 114,000 tonnes in 1983 to 93,000 tonnes for 1984.

[332] The TAC reduction coincided with the end of the ten-year derogation that delayed the introduction of the conservation component of the CFP until 1 January 1983.

[333] While this represented a sharp and unprecedented decline in quota, it should have come as little surprise to both industry and government. A minuet to the Minister of State, 3 April 1984, reveals that the government and industry were aware of the "scientific opinion that the stock [North Sea cod] had been badly depleted" and that low catches in 1983 supported this position (TNA (1984) MAF 452/6, White Fish Stock Management, 'North Sea and West of Scotland Quota Management- Draft Minute for Signature by Mr Griffiths', 3 April 1984 para. 3). Despite a government warning at the end of 1982 that the cod TAC for 1983 would be overfished without new management restrictions; in November 1983 Fisheries Division IV recalled that: "Once again the industry rejected the possibility of restriction on cod although at that time it was evident that the 1983 quota level would be exceeded. Throughout they were warned that in both cases [North Sea and West of Scotland stocks] there was a real risk of having to pay compensation to Norway if they contributed to a Community overshoot of the joint stock. This message was reinforced by officials on 24 and 25 October [1982] but the industry was unanimous in the view that it would vigorously oppose any further restrictions on effort of the early closure of the fisheries" (TNA (1983) MAF 452/5, White Fish Stock Management, 'Quota Management 1983- Area IV Cod and Haddock', Fisheries Division IV, 1 November 1983, para.3-4).

Iceland and the Faroes had been lost due to the introduction of new international fishing limits. From 1975-84, UK cod landings fell by two-thirds from 242,000 to 90,800 tonnes (Table 5.4). Yet cod remained a commercially important stock for the UK fleet, accounting for 27 per cent of all UK demersal landings by weight and 37 per cent by value in 1980. UK. Attempts to manage cod quota uptake under the NEAFC and interim-EEC quota agreements had failed due to the diverse nature of the vessels targeting cod. As was concluded in a Ministerial Submission in March 1980, "as the groupings of vessels targeting [cod] stocks are so diverse, no agreement could be made at a national level regarding the best method to manage catch."[334]

The issue was the criterion for allocating cod quota between vessels as each group of local and sectoral interests lobbied for a criterion that would maximise their share of national TACs. The fleets of smaller vessels lobbied for a criterion that favoured labour over capital in order to be protected from displacement by the larger, more mobile vessels. This criterion was rejected by the distant-water fleets who lobbied for a criterion that would allow their more powerful and versatile boats to maximise their capacity. The SFO's 'per-man' proposal was rejected by several English POs and the Aberdeen FPO. The Fish Producers' Organisation wrote to MAFF on 10 December 1979, outlining its "unqualified opposition to the implementation of the per man regime for the regulation of cod landings."[335] The FPO argued that a per-man allocation undermined the efficiency and profit margins of the larger vessels. The Scarborough and Bridlington Fish Producers Organisation (SBFPO) petitioned MAFF for the use of either a flat-rate weekly quota (a 250cwts vessel quota "irrelevant of size or crew") or a weekly quota based on vessel length with this justified on the premise that it would be "more equitable, less open to abuse and easier to police."[336] The SBFPO's proposals, in particular allocation based on vessel length, would have allocated a greater share of UK cod quota to larger vessels. A lack of agreement within the industry led to the UK Government continually deferring the question of allocating cod quota to individual vessels.[337]

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[334] TNA (1980) MAF 452/3, White Fish Stock Management, 'North Sea and West of Scotland Cod, Haddock and Whiting- Submission to the Minister of State', 23 April 1980, para.3.

[335] TNA (1980) MAF 452/3, White Fish Stock Management, Letter to Charles Cann MAFF from N. D. Aitkens, The Fish Producers' Organisation, 10 December 1979.

[336] TNA (1980) MAF 452/3, White Fish Stock Management, letter to Cann, MAFF from Scarborough & Bridlington FPO Chief Executive M.T. Gowan, 28 March 1980, p.2.

[337] TNA (1980) MAF 452/3, White Fish Stock Management, 'White Fish Stock Management: ICES Areas IV and VI', Note by Fisheries Departments, DAFS/MAFF November 1979, para 2. As mentioned in Chapter 4, the design and implementation of the haddock and whiting weekly quota scheme was aided by the fact that the vessels traditionally prosecuting these fisheries represented a relatively homogenous group of Scottish vessels. In the period

A political backlash erupted as the UK Government was forced to implement a 200 cwts per week flat vessel quota for cod from 1 January 1984 in order to meet its legal obligation to reduce UK cod landings by 18 percent.[338] The decision was met with particular hostility in the fishing constituency of Grimsby, where a political campaign was spearheaded by two local MPs for the area Michael Brown and Austin Mitchell.[339] The campaign centred on the narrative that the region was dependent on the cod fisheries and would suffer disproportionately under the new weekly quota restrictions.

A joint petition submitted to MAFF, 11 January 1984, argued that the region "will be harder hit than any other port in the UK by a curtailment of its main activity which cannot be compensated for in any other type of catch."[340] Specific reference was made to the importance of the fishing companies to the area and the impact of the weekly quota on the economic viability of the vessels. The petition argued trawlers were the "mainstay of the port" as they were the only vessels "catching sufficient quantities to provide a base for the market". However, the vessels were to be "badly hit" by new quota arrangements as "no account had been taken of what the vessels required to operate successfully."[341]

Political pressure and awareness of the economic impacts of the cod quota restrictions on the large trawlers led the government to focus on how quota reductions could be absorbed by the industry at least cost. With quota regimes fixing output by limiting landings and TAC reductions reducing output, the issues of time and capital came into play. With fixed or falling output,

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1975-1979, UK landings of haddock and whiting had remained relatively static, with Scottish landings as a percent of the UK total averaging 73 percent and 79.5 per cent respectively.

[338] TNA (1984) MAF 452/6, White Fish Stock Management, '1984 North Sea Quota Management- Cod and Haddock', A. Wilson, 17 February 1984, para.2.

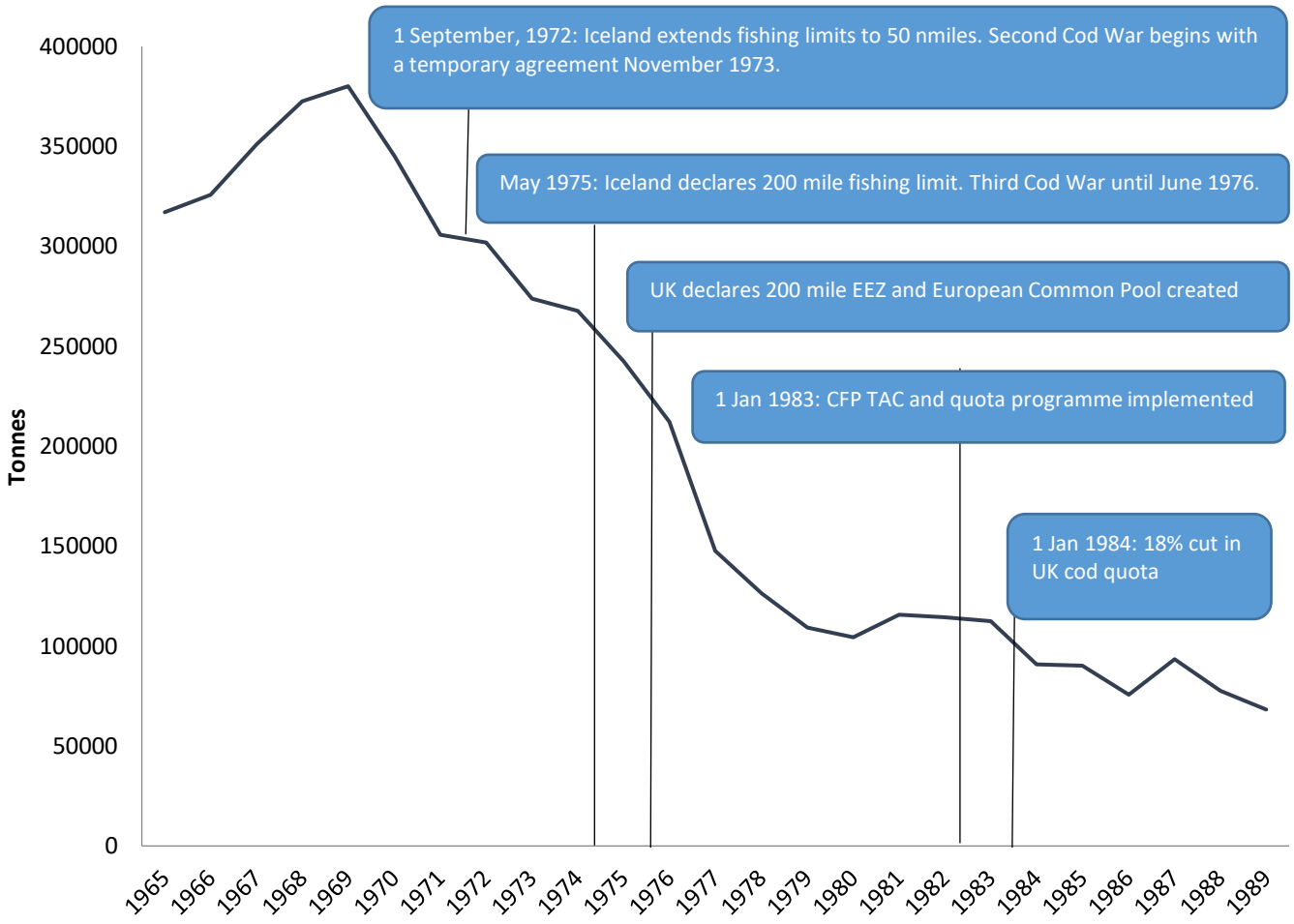
[339]In a subsequent meeting between MAFF and the Grimsby Fishing Vessel Owners' Association, 19 January 1984, it was claimed that, excluding British Union of Trawlers vessels which were the biggest local company, the annual total gross income for the port of Grimsby from fishing related activities was £14 million per annum (TNA (1984) MAF 452/6, White Fish Stock Management, 'Cod Quotas Grimsby: Meeting with Grimsby Fishing Vessel Owners' Association', Note by D.W. Harbourne, 19 January 1984.

[340] TNA (1984) MAF 452/6, White Fish Stock Management, letter to John MacGregor, Minister of State, MAFF from Michael Brown MP and Austin Mitchell MP, 11 January 1984.

[341] ibid. The petition outlined the fear that because inadequate provision for cod quotas the competitiveness of the area would continue to decline: "Without such a measure… the long-standing trend for the Grimsby industry to decline and for sections of it to transfer to Scotland will be accelerated". The BUT also wrote to MAFF to outline the disproportionate impact this would have on the larger trawlers: "this method of cod quota management (monthly quotas) will effectively impose on this company a reduction that far exceeds that imposed on other sections of the industry. Even if the current level of cod quota (170 cwts per week) was to prevail thorough out the year, it would result in our vessels landing 30 per cent in June and 48 percent in July less than last year, thus rendering it totally uneconomic to put those vessels to sea." TNA (1984) MAF 452/6, White Fish Stock Management, letter to J Henshaw MAFF from L.A.J Dalrymple, British United Trawlers Ltd, 15 February 1984, p.2.

vessels could retain profitability by using inputs such as capital more efficiently, by making more appropriate decisions regarding when to land quota to capture higher market prices.

Figure 5.1 UK Cod Landings by British Vessels into British Ports 1965-1989



Source: *UK Sea Fisheries Statistics Tables* 1965-1989. (HMSO: London).

Pressure to allow the industry to have greater flexibility in the use of capital came from the industry. In a meeting between the industry and government, 20 January 1984, the National Federation of Fishermen's Organisation (NFFO) lobbied for the weekly cod quota restriction of 250cwts per week to be replaced by a monthly allocation of 1,000cwts. The NFFO argued that a longer time in which to catch and land against quota would allow for the more efficient use of capital and labour. The NFFO argued that, if desired, a whole month's quota could be caught in one trip as opposed to the same amount over four separate weekly trips. The same amount of

revenue would be received but variable costs could be avoided, thus allowing for better profit margins as economies of scale could be captured.[342]

Profitability could also be maintained by giving the vessels greater autonomy over when to land fish. In support of the Shetland trial, the Scottish Office argued that greater flexibility would allow vessels to land in response to local market demand and seasonal fluctuations and secure a higher price. MAFF conceded by recognising that vessels fished for the market differently.[343] Even though market prices were less firm, some vessels took the bulk of their quota in the middle of the year when cod was plentiful to reduce fishing costs. Alternatively, some vessel fished out with the season to target higher market prices.

The outcome was the design of a two-tier system that remains the basis of UK quota management three decades later. Annual sectoral quotas would be allocated on a historical basis to groups who could provide "evidence of internal discipline in the group so that enforcement is possible".[344] For vessels choosing to remain outside PO membership (the non-sector), a monthly vessel quota would be allocated based on vessel size. While MAFF referred to the non-sector arrangements as "an inflexible instrument", the basis of the new system was to give vessels the choice between the systems and greater operation flexibility under PO management: "Our hope would be that a combination of these 2 methods of control would give the various sectors of the fleet the maximum flexibility to choose a system to suit their needs, within the constraints imposed by the requirement to achieve an 18% reduction for the year."[345]

The decision to adopt PO management before the completion of the Shetland trial was triggered by a conflict of a political nature between MAFF and DAFS that rested upon the issue of fleet ownership and structure. Each department was drawn to PO management as a way of protecting certain elements of the UK fleet. DAFS and the Scottish industry looked to PO management to get rid of the inflexibilities of the weekly vessel quota and sustain the operations of the smaller-scale, local Scottish fleets targeting haddock. MAFF's position on PO

[342] TNA (1984) MAF 452/6, White Fish Stock Management, Note of Meeting on 'Area IV and VI White Fish Stock Management', 20 January.
[343]TNA (1984) MAF 452/6, White Fish Stock Management, 'Whitefish Quota Area IV and VI', Fisheries Departments March 1984, p4, para 11/2.
[344] TNA (1984) MAF 452/6, White Fish Stock Management, Note to the Minister 'North Sea and West of Scotland Quota Management', D.H. Griffiths, 28 March 1984.
[345] TNA (1984) MAF 452/6, White Fish Stock Management, 'Whitefish Quota Area IV and VI', Fisheries Departments March 1984, p.5, para.12.

management was forced by an attempt to protect the economic viability of the large trawlers and fishing companies targeting cod stocks. MAFF papers show that the department intended to use PO management as a mechanism to award the large companies annual individual quotas, for which the British Union of Trawlers (BUT) had begun lobbying in February 1984. This annual company quota would allow the companies maximum freedom to realise economies of scale. The archives suggest that through a series of meetings between the English POs and MAFF, an arrangement was made in which annual Individual Quotas (IQs) for individual vessels and companies would be 'parked' within PO management. As was outlined in a letter of 31 October 1984 from MAFF, "what we had in mind was little more than a window-dressing exercise under which the Producer Organisation would assume umbrella responsibilities, i.e. it would normally receive the allocation but leave the individual members to more or less carry on with present arrangements".[346]

The problem was that DAFS and the Scottish industry objected to the introduction of company quotas. The reason for this hostility was outlined in a letter to the Minister of State, 3 April 1984: "The Scottish industry were strongly opposed to a sectoral quota being allocated to groupings other than Producer Organisations… Their principal objection was that individual companies would be afforded undue flexibility to lay up or scrap some of their vessels, with the aid of laying up premium and decommissioning grants, while prosecuting the company quota with the remaining vessels in their fleet. This they claim would be unfair to the POs, who because they tend to consist of a number of individually owned vessels cannot operate so flexibly…The English industry disagree with this and made a strong case for company sectoral quotas. "[347]

The letter to the Minister of State outlines that MAFF was "clearly committed to satisfying the English companies, particular at Grimsby" and aimed "to give further consideration as to how to reconcile these conflicting views." [348]

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[346] TNA (1985) MAF 452/77/2, Producer Organisations, 'Company Sectoral Quotas,' note by A. Wilson, 31 October 1984.

[347] TNA (1984) MAF 452/6, White Fish Stock Management, letter 'North Sea and West of Scotland Quota Management', D.H. Griffiths to the Minister of State, 3 April 1984.

[348] ibid. In a letter entitled 'Company Sectoral Quotas' from MAFF to the FPO, 29 October 1984, it appears that MAFF consulted with the companies without DAFS's awareness: "we are of course always ready to discuss quota management questions with the FPO without the Scots being present- as we did early in the summer on the freezer trawler sectoral quota for mackerel." TNA (1985) MAF 452/77/2, Producer Organisations, letter from D.H. Griffiths to N.D. Aitkens, The Fish Producers' Organisation, 29 October 1984.

MAFF used knowledge of industry pressure on DAFS to broker a political agreement that provided for the use of both PO management and company quotas. MAFF was aware that DAFS was under increasing pressure from its industry to extend PO management of haddock to other POs before the completion of the Shetland pilot and that the Scottish purse seine fleet had been petitioning to manage an annual cod quota.[349] On March 28, 1984 a MAFF official wrote:
"DAFS now want to extend the facility for PO management to cod and to areas other than the Shetlands, the purpose of this being to provide their large number of pair trawlers with the same sort of flexibility which our companies will enjoy from their proposed sectoral quotas. DAFS seem much more committed to PO management than we are and wish to allow bids for PO management for cod." [350]

In May 1984, MAFF offered DAFS a deal. MAFF would "swallow [its] reservations over PO management" if DAFS was "prepared to recommend the acceptance of company quotas".[351] In an internal MAFF note on May 21, 1984 an official concluded that the department should accept the DAFS deal as it offered the only way of securing what was required for the companies.[352] This approach was also seen to offer the industry more time to adapt to PO management with many of the POs in England and Wales not being ready to take on new responsibilities.

The outcome was that to protect the cod sector, MAFF agreed to the introduction of PO management despite significant reservations regarding the actual ability of some of the POs to deliver effective quota management, especially in England and Wales. This led to a long lead-in time for PO management in England and Wales as it took several years for some POs to convince the government of their ability to adequate manage quota and their members' behaviour.

Changes to PO management since 1984 have primarily been shaped by attempts to correct perverse incentives. From an initial focus on haddock and cod stocks in Areas IV and VI 1984, in 1985 annual allocations to POs were extended to include saithe and whiting as well as

[349] In the UK, the purse seine sector was traditionally regarded as a predominantly Scottish fleet due to their concentration in Scottish ports. In 1984, 44 out of the 51 UK purse seiners were registered at Scottish ports. (UK Sea Fisheries Statistics 1984, p30, table 15 'Fishing vessels at main ports').
[350] TNA (1984) MAF 452/6, White Fish Stock Management, Note to the Minister 'North Sea and West of Scotland Quota Management', D.H. Griffiths, 28 March 1984, p.1.
[351] TNA (1984) MAF 452/6, White Fish Stock Management. 'Company Quotas', D.H. Griffiths, May 21.
[352]ibid.

Area IV herring.[353] In 1991 the opportunity to manage whitefish quota stocks in the English Channel and Western waters (Area VII) was created. By 1990-91, all UK POs were choosing to manage some quotas on behalf of their members. In 1995, the decision was then taken to require POs managing quota allocations for whitefish stocks in Areas IV, VI and VII to manage all stocks with similar requirements made for the pelagic stocks in 1999. This made it obligatory for all POs to manage all quota stocks. The reason for this, as outlined in Hatcher et al., (2002), was to mitigate against perverse behaviour on the part of the POs resulting from the use of a track-record allocation criteria and to push the POs into taking up more managerial responsibility.[354]

From 1997, the allocation criteria – historical track record – was also adjusted and in 1999 it was replaced with the Fixed Quota Allocation (FQA) method which awarded each vessel a fixed percentage of UK quota shares. While this was a fixed percentage, the actual amount of quota (FQA units) and its economic value would fluctuate depending upon the size of national quota and prices. [355] The change aimed to counter perverse incentives created by the track-record allocation. To increase or maintain allocation quota shares, vessels would inflate landings and track records known as 'ghost-fishing'. The third significant evolution in PO management concerns the use of the PO structure to introduce trading into UK quota management which is addressed in the next chapter.

Conclusion

The devolution of quota management responsibilities to the POs represented a significant shift in UK fisheries policy. In part, it represented an acknowledgment on behalf of government that a highly-centralised, top-down method of allocation had its limitations. The flexibility provided in the shift from national to local and/or sectoral quota allocations and the choice awarded to the industry in terms of use of capital and quota would enable the UK fleet to meet the challenges of the CFP's TAC regime. A Ministerial Submission showed that the government

[353] Aaron Hatcher, "Producer Organisations and devolved fisheries management in the United Kingdom: Collective and Individual quota systems", Marine *Policy 6* (1997), p.521.
[354] Prior to 1995, POs could freely choose which quotas they managed. Hatcher (1997:521) argues that this led to strategic behaviour as they could build up strong track records fishing against the alternative monthly allocation system before moving to receive annual allocations. They could also decline to manage certain stocks if the annual quota would result in stricter controls on their members than the monthly pool.
[355] Aaron Hatcher *et.al*, (2002), p.ixi.

had realised different policies were required by different sectors of the fleet to obtain a 18% reduction at least cost. [356] More than one method of quota management was needed.

PO management represented an acknowledgment on the part of government of the sectoral nature of the UK fleet, the differing operations of the sectors and the conflicting interests and needs this produced in terms of quota allocation structures. Conflicting sectoral interests and industry fragmentation had resulted in a policy deadlock for cod management. PO management created a new administrative mechanism to allocate quota in a way that would circumnavigate such deadlock and allow for the sectoral interests to allocate as they saw appropriate.

The government's acquiescence in or with the idea that more autonomy and decision-making should occur at sectoral and individual vessel level was forced by new economic constraints that politically validated the need to focus fisheries policy on improving the economic performance of vessels. This was forced by the need to sustain performance and profitability in line with declining opportunities. This economic pressure and the political lobbying that amplified its importance within central government worked to shift the policy focus away from labour-favouring policies towards a more favourable appreciation of capital inputs. The experience of the cod-targeting fleet and the primacy it received in government considerations of quota management help to underline the extent to which the impact of quota allocation mechanisms on vessel economic viability was vital. Spreading out declining fishing opportunities equally across the country would not protect against economic hardship as TACs reduced.

It is also clear that the original motivations for PO management did not embody the user-participation theories of governance discussed in the literature review. Certain themes within the literature are, however, present within the concept of PO management. For instance, more accurate industry knowledge of local economic conditions and the seasonality of fisheries was to be used firstly in guiding the POs towards a sector-appropriate internal allocation structure and secondly, vessels awarded IQs could use their own knowledge and expertise to fish for the market and improved returns. Moreover, the industry conception of PO management saw PO management improving the legitimacy of fisheries regulations with industry-established membership rules improving compliance. Despite echoes between theory and practice, analysis

[356] TNA (1984) MAF 452/6, White Fish Stock Management, Note to the Minister 'North Sea and West of Scotland Quota Management', D.H. Griffiths, 28 March 1984, para.12.

of the government's decision-making process shows that the introduction of PO management was not motivated by a desire on the part of government to increase industry participation in centralised decision-making processes. Instead, the POs were to represent an extension of government and carry out and implement centrally-determined administrative tasks. The archives show that PO management was highly attractive to government as it freed it from an unwanted, resource-intensive administrative burden and would deliver political benefits in terms of giving the industry what it wanted. Equally clear, however, is that the government saw itself as retaining a strong, central role in fisheries management, most notably in terms of control and enforcement and through the decision not to devolve licensing powers to the industry. PO management was not originally intended to be a mechanism that enabled greater industry involvement in the remaining centralised components of UK fisheries policy making; it offered the industry autonomy and control over decisions over quota allocation and uptake at a local level and not at a national level.

Arguably, a key criticism that can be levied against the PO management structure introduced in 1984 is not that it was an inauthentic user-participation governance structure but that, given its principally administrative nature, it created an imbalance for the POs in terms of responsibility and power. This imbalance came from the government's decision not to devolve powers of control such as the POs request to limit and vary the fishing licences of members. While the government's reluctance to devolve control (and keenness to devolve responsibility) is understandable – it was the body ultimately responsible for ensuring that the UK as a fishing fleet and Member States did not breach EU law – the decision regarding control of licences worked to undermine the efficacy of PO management in the UK as the POs as management organisations were left with too few powers to control their members. Membership rules were the main vehicle for this, with expulsion from the PO a key stick. However, POs had themselves been reluctant to carry out such sanctions as expelled members would take with them their track records/FQAs and the PO would have a reduced amount of quota to allocate. A sense that POs have ultimately been unable to control the actions of rogue members that threaten their collective membership has arisen again recently with POs lobbying government for this power to implement the landing obligation.[357]

[357] Stewart (2014): p.50.

6. UK fishing industry structural policy between 1983 and 1996

This chapter argues that from 1989 the UK Government knowingly embraced an increasingly economic approach to fisheries policy to reduce fishing capacity. However, in line with the central thesis, the translation of this new approach into practiced policy was obstructed and diluted by sub-national political pressures. The key constraint was government-industry tensions and pressure from the Scottish Office. As a result, the UK failed to meet EU targets to conserve and protect declining fish stocks.

From 1984, the UK Government could no longer skirt the issue of fleet capacity. Chapter 4 argued that while fleet rationalisation was identified as an objective of fisheries policy in 1980, mechanisms that would facilitate capacity reduction were rejected by UK Ministers as the political costs of running down the industry were deemed too high. This pressure lessened somewhat from 1983 as economic and political pressures arising from the growing misalignment of the size of the fleet and fishing opportunities forced the government to consider a capital- as opposed to labour-favouring approach to quota management. Regardless, chapter 5 argues that the decision to devolve quota management to the industry in 1984 represented an attempt to address the symptom of declining economic performance and not the root cause of overcapacity.

The introduction of the CFP's conservation regime in 1983 ended the government's ability to defer decisions on capacity management. The CFP reflected the European Commission's intention to reduce excess fishing capacity and effort. A 1986 Ministerial Submission commented that CFP restructuring measures reflected the Commission's recognition "in the mid-1970s that the capacity of the European Community fishing fleet would exceed the fishing opportunities likely to be available to it in the foreseeable future."[358]

The structural policy component of the CFP was the Multi-Annual Guidance Programme (MAGP). Five MAGPs operated over the course of 1983-2002: MAGP I over 1983-1986; MAGP II 1987-1991; MAGP III 1993-1996; MAGP IV 1997-1999; and MAGP V 2000-2002. The Commission used the MAGP to set targets for Member States to reduce fishing capacity.

[358] TNA (1987) MAF 452/86, Quota Management – Restrictive Licensing for Pressure Stocks. 'Review of First Year's Operation of Restrictive Licensing Scheme for Pressure Stocks', Submission to Minister of State, p.1, para.2.

The aim was to adjust the size and shape of national fishing fleets relative to total fishing opportunities.[359] The UK Government understood "the objective of the [EC Structural Policy] scheme as being to control fishing effort in the interests of conserving the stocks".[360] The definition of the MAGP scheme as one to assist fleet restructuring as opposed to fleet reduction indicates an economic as well as a biological objective. EC Structural Policy aimed to promote the restriction and reduction of fishing effort while reducing the costs of fishing through capital rejuvenation and modernisation.[361]

The MAGPs adopted a results-based approach leaving Member States free to implement and achieve their targets through means of their own choosing. All Member States bar France and Germany failed to meet their MAGP I target. By 1991, results improved slightly with five Member States (Denmark, Germany, Spain, Italy and Portugal) meeting their objectives.[362] The UK was one of four Member States (alongside Belgium, Greece and the Netherlands) to fail in meeting their 1991 objectives by margins of at least 11 per cent. The fleets of Greece, Belgium, the Netherlands and the UK were larger on 31 December 1991 both in terms of tonnage and kilowatts than their MAGP objectives for 31 December 1986.[363]

This chapter uses the UK Government archives to identify the incentives faced by UK policy-makers when choosing between different instruments for reducing fishing capacity and effort. It examines the decisions made by the UK Government to understand how national and local political pressures interacted and led to the UK failing to achieve legally-binding European targets. Section 1 examines the period 1983-89 in which policy for MAGP I and II was developed. This period is defined by the use of administrative and grants-based approaches to capacity reduction and is identified as one of policy failure. It argues that an increase in UK fishing capacity was facilitated by a mix of policy inexperience, a failure to consider how fishers

[359]The structural policy differed from the Total Allowable Catch and Quota Regulation (TQR) component of the CFP in that it aimed to conserve fish stocks by controlling fishing effort – the 'amount' of fishing that took place. This is often defined as a combination of inputs into fishing activity such as time spent at sea, time spent fishing and vessel characteristics such as engine power, size and gear. This worked alongside the TQR regime - which limited how much of each quota stock could be landed- as it influenced how and by whom this amount of fish was caught.

[360] TNA (1987) MAF 452/86. 'Review of First Year's Operation of Restrictive Licensing Scheme for Pressure Stocks', p.1, para.2.

[361] A UK Government note entitled 'The Commission of the European Communities' outlined: "the programme submitted by the UK to restructure the activities of the UK fleet in a manner which will ensure the appropriate development of the fleet in line with actual catch possibilities and will lead to an improvement in the incomes of those employed in the industry." TNA (1987) MAF 452/86. Note 'The Commission of the European Communities', Annex II, para 1.

[362] Holden (1994), p.26.

[363] ibid., p.27.

would respond to new regulations and a limited working definition of the concept of fishing capacity.

Section 2 examines policy-making from 1989 and identifies the adoption of an increasingly economic approach to fisheries policy. It argues that while economic and scientific advice was increasingly use in policy-making, the Scottish Office used its political leverage to obstruct the application of this advice by objecting to mechanisms that would have exerted downward pressure on fishing capacity and effort. Compared to the 1970s-80s, policy-making tension was no longer between government economists and politicians but between the UK and Scottish Fisheries Departments. The result was that by 1996 the UK's approach to capacity reduction was based on the use of publicly-funded decommissioning - an approach which the UK Government knew to be ineffective for conserving rapidly deteriorating stocks.

6.1 MAGP I and II: UK Structural Policy, 1983-1989

This section argues that the period over which the first and second MAGPs operated (1983-1991) represented a period of policy failure and stagnation in the UK Government's approach to capacity reduction. By 1989, there were fewer vessels in the UK fleet but the overall capacity of the fleet had increased. It attributes policy failure to a poor design of capacity-reduction mechanisms. Choices were shaped by the political aim of maintaining distance from decisions regarding how the fleet should be structured, a flawed understanding of the concept of fishing capacity and a failure to anticipate the reactionary behaviour of fishermen to the new rules and regulations.

MAGP I: The 1984-86 Decommissioning Scheme and Restrictive Licensing

The UK Government's response to the first MAGP (1984-1986) was to introduce a decommissioning scheme. The 1983 Fishing Vessels (Financial Assistance) Scheme used public funds to pay for vessels to be temporarily and permanently removed from fishing activity. A laying-up premium was paid to vessels that temporarily removed themselves from fishing activity by staying in port while decommissioning grants subsidised the permanent withdrawal of

vessels from the UK fleet.[364] From 1984-1986, £17.35 million was spent decommissioning 225 vessels.[365]

The decision to use a decommissioning scheme to reduce capacity was shaped primarily by the availability of European funding. The 1983 Community Structural Package Directive 515/83 permitted "Member States to introduce measures to take vessels permanently out of fishing (decommissioning grants) and encourage the temporary reduction of capacity (laying up premium)."[366] Member States were allowed to pay decommissioning grants up to a maximum of €650 (£400) per gross registered tonne.[367] The European Agricultural Guidance and Guarantee Fund (FEOGA) then reimbursed up to 50 per cent of a Member State's expenditure on decommissioning vessels over 12 meters.[368] The UK was one of the first Member States to take advantage of this facility with UK decommissioning grants paid at the maximum permitted rate.[369] European funding to reduce the capacity of the European fishing fleet followed a period over 1971-1979 1979 wherein financial assistance had been awarded to the building of vessels.[370]

A decommissioning scheme supported the government's intention to retain distance from decision-making as to which vessels should be removed from the fleet. Decommissioning grants would allow vessels to exit the industry, thus reducing the size of the fleet. At the same time, decisions as to who would exit the industry would be taken by individual vessels. Grants offered operators a choice over how best to use their resources. They could go to sea, fish and earn a return or they could take the grant and exit the industry. In making this decision, operators weighed the benefits of action (industry exit) against the benefits of remaining. A wider benefit of this approach was that those exiting would theoretically be the less efficient and profitable; the

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[364] Decommissioned vessels were either to be scrapped, sold to a third country (outside the EU) or assigned to non-fishing purposes. TNA (1987) MAF 452/86. M.G. Jennings, 26 April 1985, p1.

[365] TNA (1987) MAF 452/86. 'Review of First Year's Operation of Restrictive Licensing Scheme for Pressure Stocks'.

[366] TNA (1984) MAF 452/68. 'Review of Structural Measures and Restrictive Licensing Scheme - Industry Consultation Paper', p.1, para.1.

[367] ibid.

[368] TNA (1984) MAF 452/68. Industry Consultation Paper, p.4., para.9.

[369] With 50% of the expenditure for decommissioning vessels over 12 metres reimbursed by FEOGA, the UK Government introduced a supplementary national measure through which it paid for the whole remaining grant from the Exchequer for eligible vessels between 10 and 12 meters. TNA (1984) MAF 452/68, Industry Consultation Paper, p.5, para.9.

[370] Aaron Hatcher, "Subsidies for European fishing fleets: The European Community's Structural Policy for Fisheries 1971-1999," *Marine Policy* 24 (2000), p.130. From 1978-82, a total of 81.7million ECU was provided for the construction and modernisation of vessels between 6-24m in length. From 1971-79, 65.2m ECU was made available for the construction of projects.

fixed per tonne grant rate would represent a greater return to those with lower marginal profitability and earnings.

Evidence given by MAFF officials to the 1987 National Audit Office (NAO) Committee indicates the government understood decommissioning to represent the use of a market mechanism to deliver the policy objective of a reduction in capacity. As was stated to the PAC: "the emphasis, certainly in the mind of Ministers, was that we should allow the market to sort this out, not seek within government to take a view as to precisely what sort of fleet we were looking for".[371] The government saw the use of grants as reinforcing and encouraging individuals to "response to existing economic pressures, leading to a withdrawal of vessels no longer viable."[372] Evidence given to the NAO indicates that the government had come to view "the operation of market forces [as] more likely to achieve a realistic fleet structure than a centrally-imposed blueprint".[373] While the use of grants did not represent the use of a market-mechanism, the government's thinking indicated a shift away from a traditional preference for an administrative approach to fisheries management.

A 1985 policy review prematurely declared the government's capacity reduction policy a success with "progress made towards a better balance between fishing opportunities and catching capacity."[374] It concluded that policies had "reduced the overall size of the UK fleet from 150,592 GRT on 31 December 1983 to 131,065 GRT on 31 December 1984." In 1987, the decommissioning programme was suspended after MAFF became aware of a NAO investigation into the scheme.[375] The subsequent 1987 Public Accounts Committee (PAC) inquiry into 'Financial Support for the Fishing Industry in Great Britain' scrutinized the 1984-86 decommissioning scheme and questioned the value the scheme had provided for public money.

The inquiry's conclusion was that the decommissioning scheme had represented poor value for public money. Criticisms were made not of the use of a decommissioning scheme as a

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[371] NAS (1991) AF62/5545, European Economic Community: Structure Scheme 1986. Minutes of evidence take before the Committee of Public Accounts on 'Financial Support for the Fishing Industry in Great Britain', 20 January 1988, p.2, para.1414.
[372] TNA (1987) MAF 452/86. 'Review of the First Year's Operation of Restrictive Licensing Scheme for Pressure Stocks', p.1, para.4: "Ministers decided that structural measures should not be used to define an optimum structure for the fleet by attempting to secure the removal of a specific number of vessels from any particular sector."
[373] ibid.
[374] TNA (1987) MAF 452/86. Note 'Success of Restrictive Licensing Scheme so far', 20 June 1985, p.1, para.2.
[375] NAS (1991) AF62/5545. Committee of Public Accounts, 'Financial Support for the Fishing Industry in Great Britain', Session 1987-88, p.1, para.2, (London: HMSO).

tool to reduce fishing capacity but of the government's administration of the grants scheme. The scheme was judged to have "lacked precise objectives and qualified targets" with the PAC questioning whether "MAFF was well enough informed on the financial state of the industry to enable them to make proper judgments."[376] The PAC inquiry and the NAO investigation both drew attention to the government's decision to pay decommissioning grants at a flat rate of £400 per gross tonne irrespective of the size of the vessels. This decision, when combined with no assessment of the value of vessel to be decommissioned relative to the size of the grant to be received, was said to have led to "evident abuse of the system".[377] The PAC inquiry identified that over half of total decommissioning expenditure in the period was paid to 15 large trawlers which each received an average grant of £562,000.[378] The inquiry heavily critiqued both the benefits and the costs of the decommissioning scheme. The inquiry found that several of the trawlers awarded grants had been brought back into commission with the sole intent of qualifying for decommissioning grants.[379]

The limited success of the scheme was further undermined by inflated delivery costs. The EC was set to refund 50 per cent of eligible costs. However, due to the rebate given under the Fontainebleau agreement and the UK's nominal contribution to EC expenditure, the level of EC reimbursement was closer to 14 per cent.[380] With the total costs of the scheme at £17.5 million, the cost to the UK was over £15million.[381] The inquiry concluded that "unnecessarily large sums were paid to decommission vessels."[382]

Capacity reduction policies in this period were also undermined by the narrow remit given to a new license limitation policy. The introduction of the Restrictive Licensing Scheme (RLS) for certain demersal stocks from February 1984 represented the second and more enduring

[376] ibid., p.1, para.2.
[377] Op. cit.
[378] ibid., p.vii, paras.9-10.
[379] Op. cit. The inquiry found that: "three vessels which had already been laid up received a grant… Another vessel was brought back into fishing to qualify for a grant. Two freezer trawlers were acquired by non-fishing companies who applied to decommission them. In four instances decommissioning grant exceeded the disposal price."
[380] ibid., p.vii, para.8.
[381] Op. cit.
[382] NAS (1989) AF62/5704, Fisheries Management Arrangements – Strategy Group. 'Decommissioning and Fisheries Management', Fisheries Department, 18 July 1988, p.2, para.1.

component of the UK Government's initial approach to capacity reduction.[383] The introduction and gradual extension of the RLS represented a fundamental change in UK fisheries policy. A limit was placed on the number of fishing licenses thus ending the unrestricted nature of access to UK quota. Licenses had been required for several stocks fished by the UK fleet since the 1970s. Until 1984, these had been unrestricted in number and free of charge. As argued in chapter 4, this policy choice arose from the Labour Government's attempt to protect employment in the industry by retaining the free, public right to fish. The decision had been taken despite the status of restrictive licensing as a well-established fisheries management tool since the late 1960s.[384] By 1980, license limitation programmes were in use in Canada, the US and New Zealand.[385]

The design of the RLS scheme determined its limited impact on fleet capacity. A Pressure Stock Licence (PSL) was created with a stock deemed a pressure stock if it was "one for which the UK's quota is considered insufficient to allow unrestricted fishing".[386] PSLs were then allocated on an administrative basis that used a historical allocation criterion. A vessel was allocated a PSL if it could prove to have fished a pressure stock within the 12 months prior to the introduction of the scheme.[387] The number of PSLs was then capped following this initial

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[383] This tool had been introduced for the management of pelagic vessels in 1980 because overcapacity in the western mackerel fishery. A moratorium was announced on licences for additional purse seiners and freezer trawlers in 1980 and in 1981 entry into the herring fishery was limited through the licensing system. This had shown some signs of success as a modest decline in the number of Scottish purse seiners and the virtual extinction of the English freezer trawler fleet was referred to. TNA (1986) MAF 452/69, Quota Management – Restrictive Licensing. Note 'Licensing and Quota Management: Background', p.3, para.6.

[384] Crutchfield and A. Zellner (1963).

[385] G.R. Munro and A.D. Scott, "The economics of fisheries management", A. V. Kneese and J.L. Sweeney eds., *Handbook of Natural Resource and Energy Economics* 2 (1985), pp.623-676. The concept behind limited entry was that even when access to fisheries was controlled by catch limits, if access to the available quota (in terms of the number of operators, size of vessels etc.) was not restricted then an open access situation would prevail. In 1985 Munro and Scott identified this situation as a Class II fisheries problem. Class I occurred where a lack of regulation resulted in dissipation of rent (open-access) with Class II representing a situation wherein authorities set a TAC but failed to prevent a race to fish the quota. Under a Class II or a regulated open-access situation, too many vessels fishing against a fixed quota led to a race to fish the quota, overinvestment, higher costs and eventual rent dissipation. While quota could be captured in a biologically sustainable manner, it may still be captured in an economically unsustainable manner.

[386] TNA (1984) MAF 452/68. Question and Answer Brief on Restrictive Licensing and Pressure Stocks, February 1984, p.1, para.3.

[387] TNA (1984) MAF 452/68. Telex from J. Burns, DAFS 12 March 1984, para.4. PSLs were allocated on a historical basis to all vessels that could prove a valid entitlement in the form of a record (typically a sales notes) of fishing a pressure stock. A 12-month window was chosen to avoid "old hulks" that had not fished for years applying to the scheme. PSLs were also only required for vessels of above 10 meters therefore retaining open-access not only for smaller vessels targeting pressure stocks as well as all vessels targeting non-pressure stocks.

allocation."[388] The government was aware that this system created no active downward pressure upon the number of vessels able to fish against pressure stock holdings with MAFF commenting that "the effects of which [PSL] will be largely to restrict pressure stocks licences to the existing fleet."[389]

The government's limited ambition for the RLS is explained by the fact that the mechanism was forced on the UK Fisheries Departments by the Treasury to protect public investment in decommissioning. It was adopted "to satisfy the Treasury that decommissioning grants would not be used for replacement vessels"[390] and to "prevent the money spent on taking vessels out of service being used simply to replace the unwanted capacity."[391] The RLS would support public investment in decommissioning as once a vessel was decommissioned its PSL was revoked to ensure it could not be attached to a replacement vessel. The objective given to the RLS in 1984 was to "protect the valuable effects expected to flow from the introduction of decommissioning grants", with the scheme designed to avoid being "overly restrictive on fleet activities or too complicated to administer."[392]

The reason behind the introduction of license limitation in UK fisheries management bears little reflection to its roots in fisheries management theory and literature. Limited entry was viewed by academics and fishery managers as a key tool to mitigate against rent dissipation and protect the economic performance of fleet within TAC regimes. Townsend (1990) argued that limited entry as a management tool dominated fisheries economics for 25 years.[393] In UK fisheries policy, one of the most seminal and long-running approach to fisheries management was instead applied to protect public expenditure in decommissioning. The RLS was to be a supplementary, supportive measure for the primary decommissioning scheme and no

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[388] TNA (1984) MAF 452/68. Question and Answer Brief on Restrictive Licensing and Pressure Stocks, February 1984, p.1, para.3.

[389] TNA (1984) MAF 452/68. 'Instructions for District Inspectors', p1, para.1. Licences and Pressure Stocks Licenses were only required by vessels over 10 meters in length.

[390] TNA (1984) MAF 452/68. Note of 'Meeting with NFFO Representative on 9 December 1983,' J. Dason, Fisheries Division IVA, 13 December 1983, p.2, para.11.

[391] TNA (1984) MAF 452/68. 'Licensing and Quota Management – Background Note', p.5, para.3. The note outlined: "The present RLS came into force within the UK on 4 February 1984 as an adjustment to the measures introduced by the government in pursuing the Community's fleet restructuring objectives."

[392] TNA (1984) MAF 452/68. Question and Answer Brief on Restrictive Licensing and Pressure Stocks, February 1984, p.5, para.2.

[393] Ralph E. Townsend, "Entry Restrictions in the Fishery: A Survey of the Evidence", *Land Economics* 66 (1990), p. 359.

consideration of the wider economic benefits it could bring to harvesting quota is identifiable in the archives.

The limited pressure applied by the RLS on fleet capacity was due to its design, which was in turn a product of the government's shallow ambition for the mechanism. This weakness was acknowledged by the government in a 1986 Review of the RLS, when it was accepted that although RLS was "designed to protect the benefits of the restructuring scheme… in practice it seeks to do no more than contain the number of vessels fishing the pressure stocks at the level, which existed before February 1984… Licences were freely available at that time".[394] The progressive extension of license limitation to a greater number of stocks – eventually covering all TAC species and vessels lengths – serves to highlight the reactive nature of fisheries policy-making in the period. In 1986, the government designated additional stocks as pressure stocks following a round of CFP TAC reductions.[395] This indicates that when the government considered "fisheries structural policy [as] the adaption of the size and composition of the fishing fleet to the fishing opportunities available to it", the adaptation was to diminishing fishing opportunities. [396]

The Concept of 'Fishing Capacity' in UK Sea Fisheries Policy-Making over 1983-87.

This section uses the UK Government archives to examine how conflicting European structural objectives operated at a national level. It argues that, within the confused Community structural policy, the increase in UK fishing capacity over 1984-89 was shaped by the UK Government's flawed understanding of the concept of fishing capacity and the failure to consider how fishers would react to new rules and incentives.

The UK was not the only Community Member State to experience an increase in fishing capacity. In 1991, the fleets of Greece, Belgium, and the Netherlands increased in terms of both tonnage and kilowatts relative to their 1986 objectives.[397] Increasing fleet capacity was a Community issue. It was a product of conflict within the CFP structural policy that sought to

[394] TNA (1987) MAF 452/86. Note 'Restrictive Licensing Scheme: Background', p.8, para. 20.
[395] TNA (1984) MAF 452/68. Note 'Restructuring of the fishing fleet and restriction of access to certain stocks', J.S.W Henshaw, 27 January 1984, p1, para.2: "In response to what seems likely to be a continuing squeeze on the whitefish stocks in the North Sea… we have added to that list hake and whiting in Area IV and cod, haddock and saithe in Area VI… [they] seem likely to be reduced by the application of lower TACs."
[396] TNA (1987) MAF 452/86. Note 'European Community Fisheries Structures Regulation- Proposed New Schemes for the UK', Fisheries Division 1, 17 June 1987, para.2.
[397] Holden (1994), p.27.

reduce the capacity of the fleet while promoting modernisation and rejuvenation to "enable the available fish catch to be taken economically and efficiently."[398]

Table 6.1 Member State MAGP objectives and actual situations 1986-91.

Member State	Unit	Objective 31 Dec 1986*	Objective 31 Dec 1991*	Situation 31 Dec 1991*	% difference 1991 objective and actual
Belgium	GRT	22,000	21,340	27,089	+ 21%
	kW	70,656	69,242	79,816	+13%
Denmark	GRT	122,879	119,188	114,926	-4%
	kW	525,214	514,716	488,278	-5%
Germany	GRT	78,479	85,336	78,341	-8%
	kW	161,494	206,465	190,273	-8%
Greece	GRT	134,659	130,946	162,395	+17%
	kW	502,467	493,776	710,899	+31%
Spain	GRT	-	673,303	644,989	-4%
	kW	-	1,955,372	1,910,145	-2%
France	GRT	207,560	201,604	195,969	-3%
	kW	1,158,576	1,055,050	1,072,428	+2%
Italy	GRT	275,255	268,198	267,471	=
	kW	1,568,288	1,541,664	1,536,518	=
Ireland	GRT	45,300	48,750	50,693	+4%
	kW	181,200	197,011	176,075	+11%
Netherlands	GRT	66,800	-	-	NA
	kW	390,080	382,878	414,953	+6%
Portugal	GRT	-	186,449	164,447	-11%
	kW	-	461,143	433,549	-6%
UK	GRT	146,000	193,027	214,733	+10%
	kW	763,515	1,095,206	1,228,922	+11%

*Source: Holden (1994), 27.

Capacity reduction was to be delivered through the MAGPs and modernization through a capital-enhancement grant programme that would reduce the costs of fishing by making the fleet more efficient. Capital replacement grants were offered to existing operators and new entrants to regenerate labour. The 1984 UK Fishing Vessels (Acquisition and Improvement) Grants Scheme

[398] TNA (1987) MAF 452/86. 'Review of the First Year's Operation of Restrictive Licensing Scheme for pressure stocks,' p.2, para.5.

provided £35 million over 1984-86 for the construction and modernisation of vessels.[399] The UK Government chose to contribute 25% to the cost of new vessels despite only being obliged to contribute 5%.[400] FEGOA contributed a further 25% therefore leaving 50% to come from the beneficiary.[401]

While the capacity reduction component of the CFP's structural policy was new policy, the Community had offered financial assistance for boat building throughout the 1970s. From 1970-1983, the size of the fleet (GRT) increased by 64 per cent and engine power had increased three-fold. Up until the mid-1980s, increasing fishing capacity was supported by a stock fluctuation that saw a much larger number of young fish than normal coming into the fisheries. This biological boom burst around 1983-84 with Holden (1994) identifying this as driving the dramatic change in direction for European structural policy.[402]

A central problem of the government's capacity reduction policy was that it understood fishing capacity to be an expression of the number of vessels in the fleet. In the 1986 Review of the RLS, MAFF evaluated the success of its capacity reduction policies over 1984 to 1st January 1986 based on a reduction in the number of 40ft- and over-registered vessels from 2,207 to 2,052 – a 7 per cent reduction in the number of vessels in this category.

The reduction in the number of vessels did not produce a linear reduction in actual fishing capacity or fishing effort. Government data (Tables 6.2 and 6.3) show that the failure to consider the physical characteristics of fishing vessels led to a numerically smaller but more powerful fleet. Table 6.2 highlights that over 1984-87 the length (tonnage) and horse power (engine size) of Scottish vessels increased. Table 6.3. shows that over 1981-86 an increasing proportion of Scottish landings were taken by larger vessels (vessels 80ft and over).

A numerically smaller but more powerful fleet was influenced by several factors. Firstly, the decommissioning scheme removed older, less efficient vessels. In response to the government's 1985 'Review of the Restrictive Licensing Scheme', a compliance official commented that "the paltry decommissioning grant has resulted in the removal of older, inefficient vessels, which caught few fish, from the fleet, whilst those with the real catching captures the influence of the grant scheme's price mechanism: the fixed per tonne grant rate

[399] Holden (1994), p.22.
[400] TNA (1984) MAF 452/68. Industry Consultation Paper, p.2, para.4.
[401] Op. cit.
[402] Holden (1994), p.23.

represented a greater return relative to fishing for vessels with lower marginal profitability and earnings. The flat-rate price signal encouraged the removal of older, inefficient vessels.

Table 6.2. Scottish Fishing Fleet Trends in Tonnage and Horse Power 1984-1987 (1984 = 100)

Size Group	1984	1985	1986	1987
Under 40				
Tonnage	100	102	103	105
Horse Power	100	106	108	113
40 – 59.9				
Tonnage	100	101	103	105
Horse Power	100	102	106	109
60 – 79.9				
Tonnage	100	102	103	103
Horse Power	100	103	106	106
80 – 109.9				
Tonnage	100	102	102	98
Horse Power	100	101	102	103
110 and over				
Tonnage	100	104	108	113
Horse Power	100	105	106	113
Total				
Tonnage	100	102	106	110
Horse Power	100	103	107	111

*Source: TNA (1988) MAF 452/70/1, Quota M*anagement – Restrictive licensing for pressure stocks, 'The further development of licensing and the capacity of the UK fishing fleet,' Annex *B, Table 4.*

Secondly, the expansion in capacity was driven by the creation of perverse incentives in the government's licensing scheme which allowed fishers to trade in smaller, less powerful vessels for larger, more powerful vessels. The government allowed the trading of licences to allow for fleet rejuvenation. MAFF was of the view that "a certain amount of selling of licensed vessels must occur to allow the movement of vessels around the fleet and in particular to allow

Table 6.3. Landings in Scotland by Scottish vessels catch per vessel 1981-86 (tonnes)

Vessel length	1981	1985	1986	Percentage increase 1981-1986
Under 40ft	15	18	17	+ 13
40 – 59.9ft	158	173	145	-8
60 – 79.9ft	466	505	485	+ 4
80 – 109.9ft	1,202	2,723	2,485	+ 107
110ft and over	1,713	4,908	4,050	+ 136

Source: TNA (1988) MAF 452/70/1, Quota Management – Restrictive licensing for pressure stocks, 'The further development of licensing and the capacity of the UK fishing fleet', Annex B, Table 1.

new construction".[403] Design of the trading scheme was influenced by the aim of reducing the size of the fleet (vessels numbers) while simultaneously enabling fleet modernization and new entrants.[404] A PSL was attached to a vessel as opposed to a vessel-owner or skipper for administrative ease as historical data on fishing patterns only existed for vessels.[405] A licence transfer was then permitted, subject to conditions. Firstly, the owner of a vessel with a PSL could sell the vessel and the attached PSL to a new owner. Secondly, the owner of a vessel with a PSL could sell the vessel, retain the PSL and attach it to a new vessel, with the sold vessel able only able to fish for non-pressure stocks.[406] The fundamental rule of the scheme, and the mechanism through which RLS supported decommissioning in reducing the number of vessels, was that a licence could not be transferred from a vessel that was decommissioned.[407]

[403] TNA (1986) MAF 452/69. Note 'Trading in Pressure Stock Licenses', 3 September 1984.

[404] A MAFF documented entitled 'Restrictive Licensing for Pressure Socks – Instructions for District Inspectors' outlined: "to facilitate mobility and fleet rejuvenation, the present system has made it possible to transfer a PSL from one vessel to another with a large measure of automaticity… These arrangements do not permit the trading of licences as such since transfers between individuals are allowed only when a vessel changes hands" and "the purchase of a vessel which is already licenced to fish will enable a newcomer to enter the fisheries provided the former owner does not wish to transfer the licence to another vessel in his ownership." (TNA (1984) MAF 452/68., p2.)

[406] TNA (1984) MAF 452/68. Telex from J. Burns, DAFS 12 March 1984, para.5.

[407] When a decommissioning grant was paid on a vessel, the PSL was withdrawn so it could not be re-issued to another vessel. TNA (1984) MAF 452/68, Quota Management – Restrictive Licensing for Pressure Stocks. Telex from J. Burns, DAFS 12 March 1984, para.7.

The availability of capital-replacement grants and the PSL trading mechanism allowed fishers to purchase a small vessel with a PSL and use financial assistance to transfer the licence to a larger, more powerful vessel. An extract from the 1986 RLS Review indicates that this practice was endemic across all length categories: "owners of smaller vessels, including those under 10 meters have been able to acquire larger vessels up to a maximum of 40ft… owners in the other category of over 40ft have been able to move up the ladder in a similar fashion."[408]

By 1986, both the government and the industry acknowledged this perverse practice. A Ministerial Submission in March 1984 referred to "the greatest abuse of the system" as "people buying up small vessels purely for the purpose of getting a licence to transfer to a much larger vessel".[409] In November 1986, the Scottish Fishermen's Organisation (SFO) reflected that "the major problem in trying to restrict capacity is that new vessels are almost certainty more efficient than those they replace."[410]

The ability for vessels-owners to trade PSLs also led to licences gaining a financial value. This created a new financial barrier to industry entry and ended the unrestricted and free nature of fishing rights. Government discussions indicate that this outcome was unintentional. This was first discussed by the government as part of a reaction to a *Fishing News* article, 'Price of stock licence: £30,000!', which reported that "the government's seven-week old licensing programme has sent the price of old licenced boats rocketing and some crafts are even being offered for sale at two prices – with and without a licence. The going rate has been up to £30,000."[411] In a MAFF note on the *Fishing News* article, officials wrote:

"It is perhaps inevitable that restrictions on the supply of licences will result in an initial increase in demand with an associated increase in value. However, we can only assume that this will be a temporary phenomenon and that price will return to normal once the scheme has been running for a while. The fact remains that the stocks to which these licences apply are by definition

[408] TNA (1987) MAF 452/86. Note 'Restrictive Licensing Scheme: Background', p.9, para.21.
[409] TNA (1987) MAF 452/86. Ministerial Submission 'Restrictive Licensing: Transitional Cases', Fisheries Division IV, March 1984, p.9, para.19.
[410] TNA (1986) MAF 452/84/1, Review of the Restrictive Licensing Scheme for Pressure Stocks. Review of structural Measures and the Restrictive Licensing Scheme: Consultation Paper, Scottish Fishermen's Organisation, Iain MacSween, 17 November 1986, p.2.
[411] TNA (1987) MAF 452/86. Clipping of Fishing News article, 'Price of stock licence: £30,000!"

"under pressure" and reduced supplies ought to result in lower demand in the medium to longer term."[412]

In this extract, MAFF officials acknowledge that a restriction in supply will lead to an increase in demand and value. Yet, the assertion that this would constitute a temporary price spike confuses demand for licences in the medium- to long-run as being determined by the supply of another good – fish. An explanation is that MAFF officials predicted that declining fishing opportunities would lead to a contraction in the industry with fewer number of fishers working to reduce demand for licences.

A lack of awareness within MAFF that allowing restricted licences to be traded would lead to the licences gaining a value is couched in a note 'Restrictive Licensing and Pressure Stocks' of February 1984. In the note, MAFF considered that "there will be no trade in licenses as such, since transfer between individuals are allowed only where a vessel changes hands."[413] MAFF not only failed to foresee the creation of a new barrier to entry but that incumbent fishermen freely allocated a PSL based on historical rights enjoyed a considerable wind-fall. A conclusion of the 1987 NAO Report was that "the present arrangements under which licences are provided free of charge but then traded for large sums of money within the industry are unacceptable."[414] Though the PAC recommended that "consideration be given to the possibility of licences reverting to the state for reallocation…rather than their being sold for windfall profit" this was not taken forward.

MAGP II 1987-1991: The 1987 Policy Response

The period 1987-91 is identified as a one of stagnation for UK fishing structural policy. In November 1986, the SFO criticized the government's approach to capacity reduction. It argued that there was a "paradox" in seeking to both devise ways to restrict capacity while also

[412] TNA (1987) MAF 452/86. Note on 'Price of Stock Licensing: £30,000 – Fishing News', A. Wilson, Fisheries Division IVA, 26 March 1984, para.3.
[413] TNA (1984) MAF 452/68. Question and Answer Brief on 'Restrictive Licensing and Pressure Stocks', February 1984, p.4, para.14.
[414] NAS (1991) AF62/5545. Committee of Public Accounts Report on 'Financial Support for the Fishing Industry in Great Britain', Summary of Conclusions, p.2, para. ix.

encouraging new build through grant schemes".[415] The SFO suggested that restrictions on economic forces could be more effective than a licensing system. Despite this, in 1987 UK structural policy avoided any reference to market mechanisms and opted to introduce "a more rigorous licensing system".[416] A process of rule tightening occurred to "ensure that the system imposes greater restrictions than hitherto on the growth of effective fishing capacity".[417]

A key policy success in this period was the development of a more accurate and robust definition of fishing capacity though the application and use of statistical analysis. The UK undertook this work following pressure from the Commission. The UK's strategy for MAGP II, to plug loop-holes in the existing RLS scheme, had failed to impress the EC. Commission officials pressed the UK to adopt a more active approach.[418] The Commission displayed a tougher stance on national MAGP plans in a meeting in which UK officials tried to justify a FEOGA application for 43 new vessels. A minute of the meeting outlines that the UK Government was taken aback by the EC's attitude:

"Mr Tilgenkamp [Commission] said that the number of new constructions on which FEOGA assistance was sought was completely out of step with our MAGP. He threatened... the project could not be approved. I reminded Mr Tilgenkamp of our Restrictive Licensing Scheme… Mr Tilgenkamp conveyed the impression that he was bored with these frequently repeated arguments and pointed out that the removal of deep water trawlers did not provide justification for the expansion of near and middle water fleet. Any vessel removed from the fleet should only be replaced by a vessel of a similar size and tonnage…I must confess to being somewhat uneasy

[415] TNA (1984) MAF 452/84/1. Review of structural Measures and the Restrictive Licensing Scheme: Consultation Paper, Scottish Fishermen's Organisation, Iain MacSween, 17 November 1986, p.2.
[416] TNA (1987) MAF 452/86. Ministerial Submission 'European Community Fisheries Structures Regulation – Proposed new Scheme for the United Kingdom', Fisheries Division 1, 12 June 1987, para.5.
[417] TNA (1987) MAF 452/86. MAFF Press Release, 'Restrictive Licensing Review – John Gummer Announces Ministers' Conclusions', 30 April 1987. Changes included an additional band width for vessel license transfers to "retain flexibility while limiting potential expansions", adjustments to the eligibility criteria (a PSL licence was revoked for a vessel that had not fished for at least 100 days since 1986) and the number of stocks defined as pressure stocks increased.
[418] TNA (1986) MAF 452/69. 'Review of the First Year's Operation of Restrictive Licensing Scheme for Pressure Stocks', note by D. Stoker, 26 April 1985, para.3. Another option suggested by the Commission was for the UK "to accept that the size of replacement vessels should be tightly restricted to the size of vessels replaced" with the UK privately stating this would be "too restrictive and too complicated to administer." TNA (1987) MAF 452/86. Ministerial Submission 'Restrictive Licensing: Transitional Cases', Fisheries Division IV, March 1984, p.9, para.19.

about the seemingly tough stance the Commission are taking on matters connected with our MAGP."[419]

The stick held by the EC to influence the direction of UK policy was a financial one: "they [the Commission] can to a certain extent hold us to ransom over FEOGA grants."[420]

To avoid adopting a more active and restrictive MAGP II strategy for 1987-91, the UK Government agreed to undertake a review of policy measures to inform future MAGP policies. At the Commission's request, this included a re-evaluation of the concept of fishing capacity with a view to including engine power as a variable.[421] The movement to include engine power as a parameter of fishing capacity was also influenced by international practice. In 1987, a delegation of MAFF and DAFS officials visited Canada to learn about Canadian fisheries policy. The visit led to the UK Government reflecting on the limitations of its own approach with a Ministerial Submission commenting that "the MAFF and DAFS Fisheries Secretaries were strongly impressed during their visit to Canada earlier this month by the difficulties which the Canadians had got themselves into by relying too heavily on vessel length as a yardstick for a strict licensing system."[422] The visit led to MAFF officials reflecting that "our visit to Canada established that an approach based on restricting length of vessels alone was probably too crude".[423]

In April 1987, UK Fisheries Ministers announced that "studies would be put in hand on the measurement of capacity of fishing vessels" through a programme of work to "explore the scope for more accurate measures (other than vessel length) of effective fishing capacity".[424] The

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[419] TNA (1986) MAF 452/69. 'Review of the First Year's Operation of Restrictive Licensing Scheme for Pressure Stocks,' note by D. Stoker, 26 April 1985.

[420] ibid., para.4. The UK Government viewed the Commission's suggestions as requiring the UK to move against its own philosophy for structural policy: Stoker's note commented: "It is not Ministerial policy to determine the size and structure of the UK fleet but it seems to me that we are being inexorably drawn into doing just that... If we comply with the Commission's wishes we go against government philosophy, whilst if we do not we endanger applications for FEOGA." TNA (1986) MAF 452/69. Note 'UK Multi Annual Guidance Programme, Meeting with Commission Officials,' D. Stoker, 14 March 1985.

[421] TNA (1986) MAF 452/69. Note from the Vice-president, Frans Andriesse, 'The Commission of the European Communities,' Annex B 24 April 1985, para.1.

[422] TNA (1987) MAF 452/86. Ministerial Submission 'Fisheries Structures and Licensing', para. 5.

[423] TNA (1987) MAF 452/86. Letter to Griffiths, MAFF from Weatherston, DAFS, 14 April 1987.

[424] TNA (1987) MAF 452/86. Ministerial Submission 'European Community Fisheries Structures Regulation-Proposed New Schemes for the UK', Fisheries Division 1, 12 June 1987, para.7 and NAS (1989) AF62/5711, Fisheries Management Strategy Group. 'Proposals for Amendments to the United Kingdom's Licensing System for Fishing Vessels', Fisheries Departments July 1988, para.1.

work concluded with the publication '*Restrictive Licensing Review: Announcement of Conclusions'* in July 1988.[425] The traditional association between vessel length in size and catch was confirmed.[426] However, it was noted that length was not related to capacity in a directly proportional manner.[427] Capacity was identified as being "related most meaningfully to a combination of the physical dimensions of the vessel and the power of its engine".[428] Physical variables identified were tonnage, horsepower, crewing numbers, size of fish hold and range of gear. Age of a vessel – which was associated with horsepower – was highlighted as an important factor: "a connection between increased catches and younger vessels as well as its converse of declining catches associated with increasing age."[429] The outcome for policy-makers was a formula for calculating the capacity of a fishing vessel, a product of the application of the statistical methods of regression and correlation: length (l) x breadth (b) + 0.45 engine power (hp). The formula explained between 70 and 80% of the difference in catching capacity.[430]

The dedicated study on the measurement of fishing capacity represented a step-change in the use of statistical analysis in UK fisheries policy. Prior to 1987-88, statistical analysis of fishing data had predominantly been used as a mechanism for policy delivery. Statistical analysis was used to determined quota allocations once an allocation criterion had been defined by policy-makers. It was also used to monitor landings and calculate quota uptake relative to holdings to inform the closure of a fishery. The application and use of the capacity formula in UK fisheries policy – despite resistance from some officials that it was too complicated for the industry to understand – represented statistical analysis and advice actively participating in and shaping the design of policy levers. It represented evidence-based policy making.

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[425]NAS (1989) AF62/5711, Fisheries Management Strategy Group. Restrictive Licensing Review: Announcement of Conclusions, July 1988, Annex A.

[426] ibid., Annex B, p.1, para.2. The Review concluded: "simple statistical analysis in terms of length bands showed larger landings per year and per fishing day by big vessels than by small vessels."

[427] Op. cit.

[428] NAS (1989) AF62/5711. 'Measuring the Catching Capacity of Fishing Vessels', Fisheries Department, July 1988, p.1, para.1.

[429] ibid., p.1, para.3.

[430] NAS (1989) AF62/5711. 'Measuring the Catching Capacity of Fishing Vessels', Fisheries Department, July 1988, p.3, para.10. The lack of a complete explanation was attributed to non-physical and often unmeasurable variable such as fishing opportunities– species and waters exploited –and casual influences such as luck, weather and skill (ibid., p.2, para.6).

6.2 UK Structural Policy from 1989: Letting the Market In

Analysis of UK fisheries policy from 1989 indicates that an attempt to adopt an economic approach to fisheries management in the UK was frustrated and diluted by national and local political pressures. This section argues that the Scottish Office and Scottish Fisheries Department used their political leverage to obstruct the application of policies that aimed to deliver significant reductions in fishing effort and capacity to meet international commitments.

Individual Transferable Quotas

The idea or regulatory tool that had the most discernible and enduring influence on UK fisheries policy from 1989 was Individual Transferable Quotas (ITQs). The influence of ITQs in the history of UK fisheries policy is interesting given that the UK Government has never officially implemented an ITQ system.[431] An ITQ is a catch-share approach to fisheries management designed to give quota holders an exclusive and transferable right to a given proportion of a stock's TAC. In an ITQ system, fishers can buy and sell quota shares in an open market, hence the individual and transferable nature of the quota holdings.

ITQs are recognised as an economic approach to fisheries management as a market price signal is used to allocate quota shares. Overtime, quota becomes concentrated in the hands of the most efficient operators resulting in an efficient distribution of resource rights. The concept of using quotas or permits to control environmental externalities and the creation of a market for "transferable property rights" originated with the Canadian economist John Dales (1968).[432] Dales drew upon Coase (1960) to argue that the ability of firms to trade 'pollution rights' would lead to the most efficient firms making the largest pollution reduction and then selling their remaining rights to the less efficient firms – thus reducing pollution at lowest social cost.[433] In 1992, a DAFS official described ITQs as a "system which is much loved by fisheries economists."[434]

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[431] In 2015, an explicit decision was taken by the Scottish Government not to consider ITQs as an option in the 2015 Quota Management Consultation (p.12, para.2.). This alludes to the continued political resistance to ITQs as a concept by the fishing industry.
[432] John Dales, *Pollution, Property and Prices – An Essay in Policy-making and Economics*, (Toronto: University of Toronto Press, 1968), p.*85*.
[433] R. H. Coase, R. H, "The Problem of Social Cost," *Journal of Law Economics* 3 (1960), pp.1-44.
[434] NAS (1993) AF62/5716, Fisheries Management Arrangements – Strategy Group. Note 'Dinner with the New Zealand High Commissioner', Peter Collins, 16 April 1992, para.3.

The UK Government's revived interest in ITQs from 1989 was shaped by external international experience and a domestic shift in the government's approach to fisheries management. The government had first considered ITQs in 1980. Over the following decade, ITQs had develop from a theoretical concept to a legitimate tool of international fisheries management. In 1984, the Icelandic Government applied ITQs to Icelandic demersal fisheries and in 1986 an ITQ system was introduced in New Zealand.[435] This shift from theory to practice was manifested in the new focus in the academic literature on ITQs which moved to analyse real-world experience, notably Dewees (1989), Boyd and Dewees (1992), Arnason (1993), Clark (1993), Grafton (1996) and Weninger (1998).

ITQs represented the quintessential expression of a new economic and capital-favouring approach to fisheries management. This new approach is evident in the UK Government's 1989 Fisheries Review and inter-departmental discussions of ITQs. From 1989, the government intended for market forces to play a greater role in fisheries policy. The 1989 Review referred to this approach as representative of wider political-economic changes within government and described ITQs as being "in line with government's overall industrial and deregulation policies".[436]

In the 1989 Fisheries Review, the government made greater use of economic language when considering its role in relation to the industry. Government intervention was justified through the definition of overfishing as a product of market failure and the value of government intervention was evidenced by cost-benefit analysis.[437] Using data from the 1988-89 financial year, the cost of intervention was estimated to be £36 million.[438] The total value of UK landings was estimated at £400 million and the gross value added of the UK sea fishing industry at around £200 million per annum.[439] The Review argued that "the cost of intervention to protect the

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[435] Ragnar Arnason, "The Icelandic Individual Transferable Quota System: A Descriptive Account," *Marine Resource Economics* 8 (1993), pp. 201-18.

[436] NAS (1989) AF62/5709, Fisheries Management Strategy Group. Report of the Sea Fisheries Review, MAFF, Chapter 2, p.5, para.2 and Annex G: Individual Transferable Quotas, p.82, para.10. A market-based approach was said to reflect "the wider aspects of government economic policy and the belief in the efficacy of market forces as a means of allocating resources and encouraging efficiency.

[437] ibid, The Sea Fisheries Review, Chapter 2, p.6, para. 4. The Review commented that: "experience has shown that where market forces have been allowed to operate without government intervention, valuable commercial fisheries have tended to be overfished and the renewable resources destroyed."

[438] In this year, £29 million was spent on scientific research and enforcement in UK waters and an additional £5million on licensing and quota management.

[439] ibid, The Sea Fisheries Review, Chapter 2, Objective C, pp.6-7, para.5.

renewable resources" was justified as without it "the fish resources would be at risk".[440] The government set the cost of intervention against the value of UK fishing and commented that government spending on fisheries management was "a modest figure in relation to the waste of capital which would be likely to occur without such intervention."

UK officials were interested in ITQs for both economic and administrative gains. ITQs represented a tool to deliver a reduction in capacity combined with an improvement in efficiency. This rationalisation was a product of ITQs transferability. In theory, a fisher would expand their operations if it was economically sensible to do so. This was achieved by the purchase or lease of quota from other fishers. Fishing firms with lower costs and higher marginal profitability would be willing and able to pay a higher price for a unit of quota than a less efficient firm. The allocation of quota through a price mechanism facilitated the concentration of quota ownership amongst a smaller number of efficient firms. Echoing government discussions in 1984, ITQs also retained decision-making as to the structure of the fleet with the industry. The 1989 Review commented that "over time, a fleet structure could evolve which would be appropriate to the available fishing opportunities, but the decisions on the shape of the fishing fleet will have been taken by the vessel owners themselves."[441]

The government also recognised the value of ITQs as a tool to improve the capital performance of the fleet. The Review acknowledged that the incumbent quota management system actively encouraged over-investment.[442] Measures adopted had "had the effects of limiting the scope for more efficient fishermen to expand their share of fisheries by displacing the less efficient…they have impeded the owners of bigger and more powerful vessels expanding their shares of fisheries."[443] The Review argued that by awarding individual operators a fixed percentage share of the TAC (expressed as a tonnage) vessel owners would be encouraged to "use a vessel appropriate to his quota and which would catch the quota at a minimum cost".[444] Rationalisation could therefore improve net profitability at an individual and fleet level.

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[440] ibid, The Sea Fisheries Review, Chapter 2, Section E 'The remaining Treasury criteria', p.8, para.8.
[441] ibid., Annex G, p.80, para.4.
[442] ibid., Annex G, p.80, para.5.
[443] ibid., Section F 'The Social Objective', p.10, para.12.
[444] NAS (1989) AF62/ 5709, The Sea Fisheries Review, Annex G, p.80, para.5.

The principal political benefit of ITQs was that "Ministers would be able to detach themselves from the day-to-day involvement of fisheries management".[445] In 1984, PO management was to substitute for government involvement in key elements of fisheries management. In 1989, responsibilities were to be devolved to the market. This prospect was attractive to the government and eagerly supported by the Treasury. The Review referred to the government's "losing battle against fishermen's ploys to get around or exploit government quota management and capacity control measures"[446] and a Scottish Office memorandum stated that: "the Treasury's objective is to reduce government involvement in the operation of the market and this leads them to favour either the option of substantial withdrawal from fisheries management or ITQs".[447]

Nonetheless, in 1989 the UK Government rejected ITQs as a tool for quota management and capacity reduction due to socio-political considerations and constraints. This was based on three key issues: compliance and enforcement under an ITQ regime; ITQs in a mixed fishery; and the socio-economic effects of ITQs on fleet ownership. ITQs were seen to require a politically and financially unpalatable level of government involvement in the day-to-day management of the industry and there was concern that ITQs would rationalise fleet ownership in a socially and politically unacceptable way.

Compliance and Enforcement The government concluded that its role in the management of the industry at an individual vessel level would have to increase if the potential economic benefits of a UK ITQ system were to be realised. This undermined the potential political benefit of enabling Minister to "detach themselves" from fisheries management.[448] While the allocation of ITQs via the market would release the government from quota allocation responsibilities, this would be offset by the need for a substantial increase in enforcement activities.

The 1989 Review acknowledged that the economic benefits of an ITQ system would be realised "only if fishermen believed that buying up other fishermen's ITQs was a more efficient

[445] ibid., p.82, para.10.
[446] Op. cit.
[447] NAS (1989) NAS AF62/5708, Fisheries Management Strategy Group. Letter 'Fisheries Review', to Minister of State, 5 May 1989, p.1, para.2.
[448] NAS (1989) AF62/ 5709. The Sea Fisheries Review. Annex G, p.82, para.10.

and economical way of expanding their potential production than relying on cheating".[449] Fishers had to be "confident in the enforcement of quotas, so as to make it worthwhile to expand by purchasing additional quota rather than under-declaring the catch."[450] Low or no confidence in the enforcement of quota restrictions would incentivise illegal, over-quota landings and reduce the present and future value of a fisher's investment in ITQs. Inadequate confidence in enforcement undermined the present value of an ITQ as a purchased entitlement was not exclusive, secure or the most cost-effective way to increase operations. The future value of an ITQ unit was undermined as unsustainable fishing levels from illegal landings would result in eventual TAC decrease, thereby reducing the future tonnage associated with each ITQ unit.

The issue was that "there was a fair amount of evasion and cheating under the present system".[451] In the 1989 Review, the UK Government argued that incentives to illegally over-fish would increase in an ITQ system. The rationale behind this was spurious. The primary economic inventive to cheat in an ITQ system comes from the ability to increase revenue relative to fixed quota holdings by under-declaring landings. Yet, this incentive was the same for the incumbent quota management system. Moreover, it can be argued that incentives to cheat could decrease under an ITQ system as, unlike the incumbent system, it offered a route to increase landings legally through the purchase of additional quota.

The government identified social and cultural factors as a potential driver for an increasing level of non-compliance under an ITQ system. The 1989 Review referred to the current management system giving fishermen "some sense of imposing equality of misery".[452] By allowing some operators to increase their share of fishing opportunities by buying out others, the "sense of equality of misery" would be weakened and "some fishermen would try to maximize their earnings by evading our controls".[453]

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[449] ibid., p.83, para.16. The ability of ITQs to reduce fleet size in line with fishing opportunities was based upon the process of efficient operators expanding their operations by buying out the inefficient. However, if vessels could under-declare landings and expand their operations by landing in excess of current owned or leased TAC shares, the incentive for further investment and the buying-out of the inefficient was undermined.

[450] NAS (1989) NAS AF62/5708. 'Sea Fisheries Review', note of a Meeting held in HM Treasury, 20 April 1989, p.3, para.6.

[451] Op. cit.

[452] NAS (1989) AF62/ 5709. The Sea Fisheries Review. Annex G, p.83, para.16.

[453] ibid. In addition to regulatory problems, other potential practical problems were identified by the Scottish Office. The ability of a market for quota to work efficiently given low levels of up-to-date information on the potential market for quota (who held quota, who wanted to sell and at what price) was identified as a key barrier.

Despite the specious logic used by officials, a real regulatory problem existed. The UK's enforcement of quota restrictions was insufficient to deliver a level of confidence that would drive investment in an ITQ system. The government's concern was not the existence of this problem *per se* but the financial and administrative cost of fixing it. The 1989 Review was "unable to recommend this system for the management of UK fishing largely because of the substantial cost of enforcement and serious doubts about whether even with such costs sufficient enforcement could be achieved."[454]

The issue was that financial and administrative responsibility for creating an "acceptable level of compliance" would fall to the government.[455] Officials were conscious that as ITQs represented a quasi-property right, the defence of an access right would fall to the state. To achieve effective enforcement, the government was advised that its strategy of inspecting a minimum proportion of landings would have to change to inspecting each vessel at sea a minimum number of times per year.[456] Using a probability analysis, it was gauged that five inspections per year per vessel would produce the desire level of effective enforcement.[457] To operate this scheme across Areas IV and VI for over 10 meters vessels only (approximately 2,100 vessels) it was calculated that 43 additional inspectors were required at an additional cost of £1.6m.[458] ITQs would require the Fisheries Departments to monitor individual vessels.[459] ITQs were also described by the Scottish Office as making the PO's redundant (in terms of their role in allocating quota, monitoring uptake and enforcing restrictions). The introduction of ITQs representing a policy reversal away from the recent attempt to foster a system of industry self-regulation and self-policing through PO management.[460]

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[454] NAS (1989) AF62/ 5709. The Sea Fisheries Review, Annex G, p.84, para.23.
[455] ibid., p,84, para.18.
[456] ibid., p.85, para.19.
[457] ibid: The Review concluded: "Even allowing for the fact that one in two detections might fail to lead to a successful prosecution, 15 inspections over a three-year period ought to lead to a high probability of persistent offenders being detected and suspended during this time."
[458] ibid., p.85, para.19.
[459] NAS (1989) AF62/5708. Note to Minister of State, 5 May 1989, Annex B 'Future Management Arrangements', p.3, para.15.
[460] NAS (1989) AF62/5715. 'Eliminating Overcapacity Using Licensing and Market Forces', Annex 3, p.2. It appears the government was not only wary of the financial cost of such a move but that in practical terms a movement to a greater level of monitoring of individual vessels moves the industry and government away from the system of PO management that had been introduced 5 years earlier. The government felt that an ITQ system would make the role of PO's almost redundant at a time when its importance in quota management was growing, and that a

ITQs in mixed fisheries The Scottish Office drew heavily on the work of the Canadian fisheries economist Parzival Copes to argue that the economics benefits of ITQs would not materialise in the North Sea due to the mixed nature of the fisheries. In a letter to the Minister of State, the Scottish Office referred to Copes as the "major external expert on ITQs". It cited his 1986 article in *Land* Economics, 'A Critical Review of Individual Quotas as a Device in Fisheries Management', to highlight the limited nature of global experience with ITQs. The Scottish Office argued that while the system has been used in one or two countries it had never been tried in anything like the mixed fisheries of the North Sea: "the major external [Copes] expert on ITQs regards the possible benefits in an area like the North Sea to be more theoretical than real, and we regard that as a sound judgment.[461]

The practice of discarding, specifically the impact of ITQs on discarding behaviour, was at the heart of this argument. The government acknowledged that a significant draw-back of ITQs was that it was likely to increase post-capture high-grading - the practice of discarding lower-value fish in order to maximize the revenue potential of quota holdings with landings of a higher-value species.[462] This was influenced by Copes' 1986 paper which argued that high-grading "might be worse under ITQs".[463] The Scottish Office used this academic insight to argue that as ITQs would provide fishers with relatively small bundles of quota that would not reflect catch compositions, discarding could be worse under an ITQ system.[464]

Discussions on the regulatory issues of enforcement and discarding indicate that the influence of incentives on fisher behaviour was considered by policy-makers. This chapter previously argued that policy failure during MAGP I and II was partly driven by a lack of consideration given as to how fishers would respond to new rules and for the potential of perverse economic incentives to be created and exploited. By 1989, the government had learnt from its experience with licensing and quota management that rules and regulations did not guarantee that fishers would behave in the way desired by said rules.

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key attraction of the scheme for the government had been the devolution of responsibility vis-a-vis policing and monitoring of individual vessels to the industry in the form of greater self-regulation.

[461] NAS (1989) NAS AF62/5708. Annex B 'Fisheries Management Arrangements', 5 May 1989, p.2, para.10.

[462] High-grading within a species class is the discarding of smaller fish for larger fish, and/or the discarding of lower value species for higher value species.

[463] NAS (1989) AF62/5709. The Sea Fisheries Review, Annex G, p.88, para.29.

[464] NAS (1989) AF62/5715. 'Eliminating Overcapacity Using Licensing and Market Forces', Annex 3.

The issue was that the objectives of government and industry actors were not aligned. The government was attempting to restrict and reducing fishing pressure to fulfil its legal requirements through the CFP to support stock conservation and sustainable fishing. Fishers' behaviour represented the pursuit of maximum economic profit in the short-run. This created perverse incentives for fishers to illegally over-fish, discard and behave in ways that contravened the government's objectives if the costs of non-compliance were perceived to be lower than the costs of compliance. Given the government's assessment of its control and enforcement activities, it can be assumed that the perceived cost of non-compliance was low. The costs of compliance would have been specific to each vessel and ranged from a reduction in net profitability to bankruptcy. As the government was unwilling to increase the associated costs of non-compliance due to the financial and administrative costs of this for the government, the need to design rules that created incentives for fishers to act in alignment with government policy was intensified. The dilemma for fisheries policy at this juncture was that any effective incentive regime was unlikely to be realised without an initial investment by the government in increasing the associated costs of rule-breaking.

The socio-economics of fleet ownership ITQs were also rejected due to the perceived socio-political costs of the industry contraction they would likely bring. From 1989, the Scottish Office lobbied central government that market-based mechanisms would produce "a concentration of capacity in undesirable ways."[465] The Scottish Office argued that ITQs would affect fleet ownership in two negative ways: ownership patterns in Scotland would be threatened as small, independent firms would gradually be replaced by a corporate ownership model employing fewer and larger vessels and UK quota holdings would become increasingly located "in the main North East ports at the expense of smaller west coast or island ports" due to the "transfer of quota entitlements away from Scotland through purchases by the large English fishing companies."[466]

The threat to the Scottish industry was the competitive advantage of larger companies to access finance and achieve economies of scale. The Scottish Office wrote to the Minister of State, 3 April 1990, arguing that: "in this market, trawler companies would have an edge over

[465] NAS (1990) AF62/5713. Fisheries Management Strategy. Letter 'Entitlement Aggregation', to Minister of State from Godfrey Robson, Scottish Office, 10 May 1990, p.2.
[466] Op. cit.

individual fishermen because of their greater financial resources…with the cost of £500 per tonne for demersal quota and the cost of a new 100ft trawler around £1 million… financial constraints would quickly limit the operations of even the most successful of the existing trawler companies."[467]

The potential impact of ITQs on the ownership and structure of the Scottish fleet was also at the forefront of MAFF's considerations, with an official writing: "from a purely Scottish point of view perhaps the major objection to ITQs is that their introduction would lead to a shift in the pattern of ownership since large companies would have the financial muscle and incentive to buy quotas. There are therefore potentially serious implications for the ownership of the Scottish fleet and the fishing communities dependent on fishing".[468] MAFF set out the potential social problems to the Minister. A submission highlighted that: "the social problems are potentially the most serious; there would be consequent effects on economic activity in communities dependent on the fishing industry".[469]

The concern for industry structure in terms of the number, composition and location of fishing businesses was shaped by an understanding that "in some areas where fishing communities are concentrated, there are few, if any, alternative employment opportunities."[470] The 1989 Review argued that concern for "the needs of remote communities with few alternative employment opportunities" had led "Ministers [to] recognise a social need – to ensure that local fisheries, especially in remote areas, should not be made non-viable."[471] A note to the Secretary of State, May 5, 1992 outlined that the government "regard[ed] the introduction of ITQs as wholly at variance with the Secretary of State's social objectives."[472]

Overview

This section examined the UK Government's assessment of ITQs to argue that the potential socio-economic impacts of quota management influenced the government's assessment

[467] NAS (1990) AF62/5713. 'ITQs: Effect on Structure of Fishing Industry', letter W.E.F Oakeshott to Godfrey Robson, 3 April 1990, pp.1-2, paras.8-9.
[468] NAS (1989) AF62/5709. Note 'Secretary of State's visit to Australia, New Zealand and Japan: Fisheries – Individual Transferable Quotas', p.2.
[469] NAS (1989) AF62/ 5709. Report of the Sea Fisheries Review, MAFF, Annex G, p.82, para.11.
[470] Op. cit.
[471] NAS (1989) AF62/ 5709. Report of the Sea Fisheries Review, 'The Social Objective,' p.9, para.10.
[472] NAS (1989) AF62/5708. 'Fisheries Review', note to Secretary of State from W.A.P Weatherston, 5 May 1992, p.3, para.15.

of the feasibility of policy options. It also indicated a discrepancy between the government's ideological attachment to the use of market forces to deliver international commitments and its willingness to bear the associated administrative and political costs.

The 1992 Fisheries Package

This section argues that local and national political tensions worked to constrain the application of economic and scientific approaches to capacity reduction in the design of the 1992 Fisheries Package. The Package intended to reduce fishing pressure to deliver the UK's 1992-96 MAGP targets.[473] It represented a mix of old and new approaches to capacity management and centred on three key elements: a quota trading mechanism; new restrictions on fishing effort through a tradable Days at Sea (DAS) programme; and a further round of decommissioning. UK structural policy-making in this period represented a process of appeasement in which local and national political pressures trumped international, legally-binding commitments to conservation.

The Scottish Proposal - Producer Organisation ITQs

The 1992 Fisheries Package introduced new quota trading arrangements. This built upon MAFF's determination from 1989 to use market forces and industry-funded capacity reduction to meet MAGP targets. The extent to which the market was brought to bear to fishing pressure was intentionally restricted by the design of the trading arrangements. Like Producer Organisation management, the policy (known in government as the 'Scottish Proposal) was a product of collaboration between the Scottish Office's Agriculture and Fisheries Department (SOAFD) and Scottish fishing industry. It aimed to appease MAFF's preference for market forces while protecting the role of the POs in fisheries policy.

The Scottish Proposal represented a SOAFD strategy to provide MAFF with an alternative to ITQs.[474] Pressure to develop an 'ITQ-like' mechanism was triggered in 1990 by a

[473] The 1992-1996 MAGP called for an initial total overall reduction in the UK fleet of 19% in total kw and 19.2% in GRT. For the first time, the Commission set fleet reductions objectives on a sectoral basis. UK demersal trawls and seines GRT was to reduce by 28.1% kw and 28.7% of GRT, while the *Nephrops* trawl and inshore fleets reductions were less stark at around 10%.

[474] NAS (1991) AF62/5714. Note 'Meeting with the Secretary of State – Alternatives to ITQs and Entitlement Aggregation', J. Polley, 30 November 1990. The Scottish Office's opposition to ITQs had been fed by the "universal opposition by the industry", fears over the concentration of quota in the hands of big business ("a more realistic concern is perhaps that quota would be bought up from some of the smaller, more remote communities"), and the potential for ITQs to exacerbating discarding - "splitting up quotas into smaller packages belonging to individual fishermen could increase the discarding of dead fish in the mixed fisheries of the North Sea" (NAS (1991) NAS

Ministerial request for a team of MAFF and SOAFD officials to "investigate further the possibility of introducing an ITQ system in UK fisheries".[475] The 1989 Fisheries Review's rejection of ITQs had not dissuaded MAFF officials and Ministers of the potential long-term benefits of a market mechanism.[476] The role for trading to create a downward pressure on capacity had continued to influence government thinking. Over 1989-1991, aggregation schemes that used a "newly created market [to] finance a slimming down of the industry" were designed.[477]

New 'licence aggregation' rules allowed fishers to purchase licences from multiple vessels exiting the industry and aggregate the capacity of the vessels into one vessel. Similarly, 'entitlement aggregation' enabled fishers to buy the track-records of vessels exiting the industry and aggregate them into one vessel. This approach to capacity reduction aimed to rationalise capital through industry-funded means. MAFF explained to the Cabinet that the mechanisms would allow fishers to "buy up quotas and market share" and allow other to "sell quotas and leave the business".[478] A MAFF policy paper outlined that the basic aim of introducing the idea

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AF62/5814. 'Increasing the Role of Market Forces in Fisheries Management: Producer Organisations', SOAFD, 31 July 1991). The intention was that by applying ITQ conditions at PO-level, the problems highlighted during the ITQ debate could be circumvented. The paper noted: "arrangements outline would only apply to the POs since permitting individuals would result in the problems already highlighted during the ITQ debate…by operating on a communal or aggregate basis, they [PO-ITQs] would offer some protection from quota hoppers, from concentration of quota in a few hands, and from the problem of discarding which arises when individual fishermen have small packages of quota" (NAS (1992) AF62/5715. 'Eliminating Overcapacity Using Licensing and Market Forces', para.5) and that an "enhanced role of the POs should help to protect local interest" (NAS (1992) AF62/5715. 'Effort Control and Decommissioning: Press Briefing, Annex A, 'Q &A Brief', 24 February 1992, p.6).

[475] NAS (1991) AF62/5714. Note 'Meeting with the Secretary of State – Alternatives to ITQs and Entitlement Aggregation', J. Polley, 30 November 1990.

[476] NAS (1989) AF62/5708. 'Sea Fisheries Review', note of meeting held in HM Treasury, 20April 1989, p.3, para.6.

[477] NAS (1989) AF62/5712. Letter to Cabinet office 'Control of Fishing Capacity', from DAFS Godfrey Robson, 21 November 1989, p.2, para.7. The letter outlined MAFF's position as: "Their theory is that market forces can be brought to bear more effectively on the size of the fishing fleet by the introduction of ITQs…fishermen can buy up quotas and hence market share and by the same token other fishermen can sell quotas and leave the business. The newly created market would itself finance a slimming down of the industry."

[478] NAS (1989) AF62/5712. 'Control of Fishing Capacity', letter to J Mogg Esq Cabinet Office from Godfrey Robson, DAFS, 20 November 1989, para.1. The key difference between the aggregation schemes and ITQs was the legal status of the purchased fishing entitlements – purchasing track-records did not represent a legal right to a fixed percentage of UK quota but an entitlement that a fisher could expect from government. MAFF discussions indicate the intention over time was to change the legality of purchased entitlements to cement an ITQ system, with one official describing Entitlement Aggregation as a "precursor to ITQs": "fishermen would be given a fixed percentage of the UK quotas in which he had a historical track record… it would become his property and he would be able to sell and trade, permanently or temporarily". (NAS (1990) Af62/5713, Fisheries Management Strategy Group, 'Control of Fishing Capacity: MAFF's "Less Radical" Idea for Improving Fisheries Management', DAFS note, p.2.

of aggregation into our licensing management would be to enable fishermen to buy each other out."[479]

The Scottish Office wanted "MAFF to realise that ITQs and variations of that system would involve greater intervention by government than at present."[480] SOAFD's strategy was "to press MAFF to consider an alternative that strengthens the PO sector." The aim was to set the market in motion within the confines of the PO system by using "the POs as a means of increasing the role of market forces in fisheries management."[481] The idea was for ITQs to operate in the UK at PO-level, as opposed to individual vessel-level, by allowing POs to trade quota with one another. Individual vessels would retain their track records, a PO would continue to manage its membership's aggregated allocation but it would be able to buy, sell and trade its members' quota with other POs.[482]

The POs were to be encouraged to purchase the track-records, vessels and licenses of members wanting to exit the industry.[483] This would allow a PO's total fishing opportunities to remain the same but be fished by the fewer vessels in its membership. This idea was derived from "clear indications from the POs that they are prepared to buy up their own members' vessels" and SOAFD's perceptions of the financial status of the PO: "we could be fairly confident that the POs would invest in buying up quota, or at least the SFO and the Shetlanders…POs are reputed to have fair amounts of money in their reserve".[484]

PO-ITQ paid lip-service to MAFF's preference for the use of market instruments but created no real downwards pressure upon capacity. Firstly, the mechanism shifted responsibility

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[478] NAS (1990) AF62/5713. 'Entitlement Aggregation,' W. Moyes, Division J, 16 January 1990. NAS (1991) AF62/5714. Note 'Meeting with the Secretary of State – Alternatives to ITQs and Entitlement Aggregation', J. Polley, 30 November 1990.
[479] NAS (1989) AF62/5708. 'Decommissioning and Fisheries Management', Section IV, p.4, para.13.
[480] NAS (1990) AF62/5713. 'Entitlement Aggregation', W. Moyes, Division J, 16 January 1990. NAS (1991) AF62/5714. Note 'Meeting with the Secretary of State – Alternatives to ITQs and Entitlement Aggregation', J. Polley, 30 November 1990.
[481] NAS (1991) NAS AF62/5914. 'Increasing the Role of Market Forces in Fisheries Management: Producer Organisations, SOAFD', 31 July 1990.
[482] POs could swap quota with one another but SOAFD argues that this created "no incentives for POs to reduce the number of vessel fishing each quota". NAS (1989) AF62/5715. 'Eliminating overcapacity using licensing and market forces', Annex 3, p.2.
[483] NAS (1992) AF62/5715. Draft paper 'Fishing Fleet Overcapacity', Memorandum by the Secretary of State for Scotland, 18 September 1991, pp.3-4. The vessels would be scrapped, the licence surrendered under the RLS and the POs would retain the track record for use by the remaining members.
[484] NAS (1992) AF62/5715. 'Paper for EA', Peter Collins to Mr Robson, 9 October 1991, p.1.

for industry-funded decommissioning from an individual to a collective level. Arguably, the incentives for the POs to purchase fishing entitlements would have been weaker than individuals operating in an ITQ system as the latter would have benefited directly and exclusively from such purchases. Secondly, PO trades took place through private agreements so no open market was created. Overall, the incentives for individuals to sell up and exit the industry were not strengthened. Scottish Office officials noted in February 1992 that "the use of POs would hopefully act as something of a break on full market forces, which if left uncontrolled might have consequences unacceptable for Ministers."[485] The Scottish Office intended for PO-ITQs to have limited impact on fleet contraction. It was designed to obstruct and tame the introduction and operation of market forces.

The Scottish Proposal was instead built upon the objective of industry acceptability with fundamental components of PO-ITQs designed with some Scottish POs. This is indicated in a SOAFD reference to "clear indications from the POs that they are prepared to buy up their own members' vessels".[486] Moreover, the SFPO initiated the case for inter-PO purchases. A letter from the Chief Executive of the SFPO, John Goodlad, wrote that the idea of PO-ITQs had "much to commend it" and that strengthening the role of POs in introducing an element of market forces would "lead to a much more efficient catching sector". As he explained: "to limit the new system to internal PO purchases will only freeze the 1992 geographical fleet distribution as a snap shot in time, something that must be contrary to the objectives of introducing market forces. It is therefore essential to permit inter-PO purchases…without this the system would be unworkable and cumbersome".[487]

PO support for the Scottish Proposal is unsurprising given that it allowed them to continue to exert power and influence which would have diminished under ITQs. As well as being "acceptable to many in the industry", SOAFD saw PO-ITQs as a means of retaining PO management.[488] By 1991, the POs were responsible for managing around 85 per cent of total key

[485] ibid., p.2.
[486] ibid.
[487] NAS (1992) AF62/5715. 'Possible Changes to Licensing Scheme', John Goodlad, Chief Executive of Shetland Fish Producers Organisation to Godfrey Robson, Fisheries Secretary SOAFD, 21 January 1992.
[488] NAS (1992) AF62/5715. 'Eliminating Overcapacity Using Licensing and Market Forces', p.4, para.12. The Scottish Office argued that PO-ITQs created better security and by-passed certain legal issues associated with the CFP: "one argument against individual ITQs was that due to uncertainty caused by the CFP- the legal perpetuity of quotas- fishermen would be unwilling to rely on the long-term security of their quota when taking decisions to

UK whitefish quota and 80-90 per cent of pelagic quota." SOAFD saw PO management as "reliev[ing] fisheries departments of a substantial burden"[489] and that abandoning PO management, which would occur under an ITQ system, would return responsibility for monitoring and enforcing individual vessel activity to the government.[490]

The Scottish Proposal borrowed from and played up concepts that were a part of new wave of thinking in an economic approach to fisheries management. Yet, in promoting the idea to MAFF, the Scottish Office argued that success was to be found not in new, revolutionary ways of thinking but by building upon existing mechanisms. The Scottish Office argued that the government had "wasted a lot of time in the last few years pursuing new ideas which we would either be unable to sell to the industry or that were in other ways impractical".[491] Policy should instead "build on existing and well understood management mechanisms… going with the grain or the industry rather than asking them to sign on for a completely new and untried mechanism". SOAFD argued that: "it seems sensible to examine whether other steps can be taken to bring market forces to bear and to reduce government intervention but in ways that build on rather than destroy present arrangements, and which therefore follow better the train of industry thinking".[492]

Creating a system that fishers accepted was a clear priority for SOAFD. Though there was a clear intention with PO-ITQs to shield the industry from economic pressures and protect the POs, the department did recognise the important role of industry buy-in and support for policy success. The Scottish Office argued that "ad hoc measures taken so far have put most parts of the industry against us; we will not make progress without their consent and cooperation

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rationalise their capacity… but large organisations [POs] would be less risk adverse than individual fishermen." (NAS (1992) AF62/5715. 'Paper for EA', J. Polley to Mr Robson, 24 September 1991, p.2).

[489] NAS (1991) NAS AF62/5814. 'Increasing the Role of Market Forces in Fisheries Management: Producer Organisations', SOAFD, 31 July 199.

[490] NAS (1990) AF62/5713. 'Entitlement Aggregation', W. Moyes, Division J, 16 January 1990. Another SOAFD paper outlined: "our aim is to minimise the cost of enforcement and reduce the levels of government links with individual fishermen, we want to ensure most of the buying up is done by groups of fishermen, i.e. POs (NAS (1992) AF62/5715. 'Paper for EA', J. Polley to Mr Robson, 24 September 1991, p.2).

[491] NAS (1992) AF62/5715. Memorandum by the Secretary of State for Scotland, 18 September 1992, para.7: "We have spent a lot of time and effort in the past couple of years examining alternative management arrangements which have seemed theoretically attractive but which have turned out not to be practical. What we need now is a package deal which offers something the industry wants to balance the new restrictions that will also be needed."

[492] ibid.

and we need to regain this".[493] With the industry able to easily flout quota management rules, policy built with industry consent may not deliver required contraction but could support better compliance.

Decommissioning

This section argues that the inclusion of a £25 million decommissioning scheme in the 1992 Fisheries Package represented a political concession by the UK Government. From 1989-91, MAFF was firmly against the use of decommissioning to achieve MAGP targets. This was influenced by both economic and conservation concerns. In December 1989, MAFF "decided against decommissioning because it would not provide value for money nor contribute to effective conservation" and concluded that "[there is] no economic case for using £25m of taxpayers' money in this way."[494]

The economic case against decommissioning was shaped by the legacy of past policy failure. MAFF was preoccupied with its experienced with the 1987 PAC inquiry into the 1984-86 scheme. A paper, 'Decommissioning and Fisheries Management', July 18, 1989 outlined that a decommissioning scheme could be seen as using "substantial expenditure to undo the recent expansion in the UK fleet which has been encouraged by grant aid and permitted by insufficient licensing policy" and "avoid[ed] the spectacle of substantial sums of money being paid to individual fishermen and enterprises to pay them to stop fishing."[495] The paper concluded that "paying large amounts of public money on buying out fishing capacity cannot be justified".[496]

MAFF was also concerned that a decommissioning scheme would represent the use of public funds to unwind an expansion in capacity that had been financed by fleet profitability. Over January 1987-89, 313 vessels had been brought into the UK fishing fleet adding an additional 27,264 GRT.[497] This exacerbated the UK's 1991 MAGP targets – 33,000 tonnes would have to be removed from the UK fleet, a 19% reduction in tonnage and a 16 per cent

[493] NAS (1992) AF62/5715. 'Fishing Fleet Overcapacity', Memorandum by the Secretary of State for Scotland, 18 September 1991, para.3.
[494] NAS (1991) AF62/5714. letter to the Prime Minister from the Minister of Agriculture, Fisheries and Food, 7 May 1991, p.1, para.1.
[495] NAS (1989) NAS AF62/5710. 'Decommissioning and Fisheries Management', Fisheries Departments, 18 July 1989, p.19, para.49.
[496] ibid.
[497] NAS (1989) AF62/5710. Note for Fisheries Minister 'Fishing Fleet Structure Policy – Measures Necessary to Achieve the Multi-Annual Guidance Target by 1991', Fisheries Department September 1989, p.2, para.3.

reduction in horsepower.[498] This expansion had been facilitated by loop holes in the licensing system but financed by fleet profitability resulting from higher fish prices and lower oil prices.[499] MAFF viewed decommissioning as "subsidising the restructuring [of] an industry following over-expansion induced by high profits"[500] and "subsiding the unwinding of this over-investment so as to assist the profitability of those who remain in the industry."[501]

MAFF's aversion to decommissioning was strengthened by central government fiscal and budget pressures. At a meeting with the Fisheries Minister, the Treasury stressed that "public expenditure was becoming increasingly tight"[502], with the Prime Minister conveying a need to find "significant savings" in line with the 1989 Public Sector Expenditure Programme. The Treasury concluded that it "did not see the case for such a scheme, given the likely cost and the PAC criticisms of the previous decommissioning scheme."[503] MAFF used support from key central government departments to resist political pressure from the Scottish Office to fund a decommissioning scheme. Recalling a meeting on November 30, 1989 between the Cabinet Office, MAFF, DAFS, FCO, No.10, DTI, DANI and the Welsh Government, a DAFS official wrote: "[we] won the argument decisively but lost the vote. MAFF had no arguments, FCO offered strong support and the Cabinet Office were sympathetic and finally influenced by the weight of other departments' opinion. The Treasury did not want to spend money. DTI and No.10 gave greater weight to the market forces arguments."[504]

Contrary to the position of central UK Government, the use of a decommissioning scheme to meet the UK's 1991 MAGP targets was supported by the UK industry, the European Commission, the Scottish Office and DANI.[505] Opposing views between MAFF and SOAFD

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[498] NAS (1989) AF62/5708. Letter to Minister of State, 'Fisheries Review', W.A.P Weatherston, Annex B 'Decommissioning', 3 July 1989, p.1, para.1.
[499] NAS (1989) AF62/5709. Report of the Sea Fisheries Review, pp.15-16, paras.23 and 25.
[500] NAS (1989) NAS AF62/5710. Decommissioning and Fisheries Management', Fisheries Departments, 18 July 1989, p.19, para. 49.
[501] NAS (1989) AF62/5708. 'Decommissioning and Fisheries Management', p.3. The aggregation policies were "less expensive and less regulatory but by being less directly interventionist would achieve a smaller reduction in the UK fleet."
[502]ibid., p.2.
[503] NAS (1989) AF62/5711. '1989 Public Expenditure Survey: Agriculture', letter to John Gummer, Minister of Agriculture, Fisheries and Food from Norman Lamont, Treasury, 31 October 1989.
[504] NAS (1989) AF62/5712. 'Decommissioning', note by Godfrey Robson, 30 November 1989, p.2.
[505] A note sent to MAFF from DANI outlined that the Northern Irish administration sided with the Scottish approach to decommissioning: "having seen and considered Lord Sanderson's latest letter and the attached note by the Scottish Office on decommissioning and licensing aggregation, DANI is becoming increasingly convinced of the

became apparent in September 1989 when the two departments published "very different papers" on the options for UK structural policy.[506] SOAFD argued for a decommissioning scheme targeting small and medium sized vessels as a means of removing 10,000 tonnes of the 33,000 tonnes required by the 1991 MAGP target.[507] SOAFD viewed £10 million per annum over 3 years as good value for money. This assertion was made by the Scottish Office even though the scheme would have been considerably more expensive than the 1984-86 decommissioning scheme, paying out average £1,720 per tonne compared to £400 per tonne in 1984-96.[508]

SOAFD and MAFF's respective views on decommissioning were shaped by different perceptions of the financial state of the industry. While MAFF saw evidence of fleet profitability as justification for industry-funded capacity reduction, SOAFD was reacting to political pressure from the Scottish industry for financial help: "Pressures are growing, in particular amongst the Scottish industry, for financial help… (the) ability to resist the pressure for subsidies will be much greater if we can point to a willingness to help the industry undergo structural change."[509] In meetings between SOAFD officials and the Scottish industry, industry representatives "re-emphasise[d] the importance they attached to a decommissioning scheme."[510] Pressure on the industry came from TAC reductions as the CFP attempted to reduce pressure upon stocks, with SOAFD commenting that "pressures will grow further if the scientists are proved correct and cod and haddock stocks decline later this year."[511]

To deliver local political gains, SOAFD attempted to exploit knowledge of international diplomatic and political sensitivities to pressure MAFF into agreeing to a decommissioning scheme. To MAFF's acknowledgement, SOAFD argued that aggregation policies "might work

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need for the UK to introduce a decommissioning scheme." NAS (1989) AF62/5709, Fisheries Management Strategy Group, 'Fishing Capacity', letter to Charles Cann, MAFF from J. Chalmers, DANI, 9 August 1989.

[506] NAS (1989) AF62/5709. Letter to Minister of State, 'Controlling Fishing Capacity', 30 August 1989, p.1, para.2. SOAFD argued that a decommissioning scheme would be "complementary to the aggregation of licenses rather than as an alternative to it."

[507] NAS (1989) AF62/5708. Draft note 'Decommissioning', no date. DAFS outlined "the likely impact of such a scheme is hard to predict – a reduction of perhaps 10,000 tonnes is probably a realistic target."

[508] NAS (1991) AF62/5545. Committee of Public Accounts, 'Financial Support for the Fishing Industry in Great Britain', Session 1987-88. (London: HMSO).

[509] NAS (1989) AF62/5708. Note 'Fisheries Review', W.A.P Weatherston, 3 July 1989, Annex A 'Draft Opening Remarks', para.3.

[510] NAS (1989) AF62/5710. Note 'Licensing, Decommissioning etc.', W, Moyes, 28 September 1989, p.1.

[511] ibid. As a likely result, the scheme proposed by SOAFD was designed to target the Scottish industry, specifically the small and medium sized whitefish vessels dominant in the Scottish fleet that had largely missed out in the 1984-86 round of decommissioning.

well in the long run but not in time to satisfy the EC Commission", in essence they would not remove enough capacity in time for the 1991 MAGP target.[512] Lord Sanderson, the Minister of State for Scotland, wrote to the UK Fisheries Minister to argue that "it is wrong in principle and potentially damaging to our wider relations with the EC and with other Member States that we should take on such obligations and then do nothing to fulfil them".[513] The SO drew upon political intelligence that the Fisheries Commissioner Manuel Marin was expected to use an upcoming review of the CFP to "seriously disadvantage the UK and to advance the interests of Spain and Portugal".[514] The Scottish Office understood this to mean that Marin would attempt to undermine the principle of Relative Stability and award greater shares in the EU TACs to Spain and Portugal at the expense of net beneficiaries like the UK. Lord Sanderson wrote: "there is a disposition in MAFF to disregard the MAGP targets, or at best, not take them too seriously. I regard that as very dangerous."[515]

SOAFD's tactics failed as MAFF's political appetite for the MAGP had waned to the point that it favoured a policy of non-compliance with MAGP targets rather than the use of a decommissioning scheme. In Summer 1989, John MacGregor, the Minister of State for Agriculture, Fisheries and Food, issued a paper that set out two courses of action: "the first, favoured at an official level, involved essentially ignoring the MAGP targets and accepting the consequences" and "the second involved decommissioning on a scale large enough to remove the fishing capacity required in order to meet our EC targets."[516]

MAFF was of the view that "EC capacity targets are not sacrosanct and the consequence of ignoring them are likely to be less serious or extensive than we believed."[517] It's position was that there was "no link between meeting our MAGP targets and negotiations on the CFP." The issue was instead whether "we (MAFF) had a moral or legal responsibility to reduce capacity and whether it was in our interests to do so".[518] MAFF policy-makers saw the cost of non-

[512] NAS (1989) AF62/5708, 'Decommissioning Grants: Meeting with MAFF Ministers on Wednesday 26 July', William Moyes, DAFS, 20 July 1989, p.1, para.1.
[513] NAS (1989) AF62/5708, 'Fishing Capacity', letter to John MacGregor, Minister of Agriculture and Fisheries and Food from Sanderson of Bowden, July 1989.
[514] NAS (1989) AF62/5708, Note 'Fishing Capacity', from Sanderson of Bowden to Secretary of State, no date.
[515] ibid.
[516] NAS (1989) AF62/5709. Letter to Minister of State, 'Controlling Fishing Capacity', W.A.P Weatherston, 30 August 1989, p.1, para.2.
[517] NAS (1989) AF62/5709. 'Controlling Fishing Capacity', 31 August 1989, p.1, para.4.
[518] NAS (1989) AF62/5710. 'Control of Fishing Capacity', 6 September 1989, p.1.

compliance with MAGP targets as the loss of structural aid, with MAFF and DAFS disagreeing over whether infraction proceedings were a likely outcome.[519] In November 1989, Charles Cann commented that: "if we reconcile ourselves to the loss of aid, there is nothing more the Commission or the Court of Justice could do."[520]

With MAFF failing to respond to international pressure, in 1991 the Scottish Office changed tactic and applied pressure to national political tensions. The tenet of the Scottish Office's argument was that a further round of decommissioning was required to repair industry-government relations with a letter to the UK Minister referencing "concern over the present state of relations between the government and the fishing industry".[521] MAFF Ministers were accused of being "out of touch with the industry" over decommissioning.[522] The Scottish Office place this within a wider political context by arguing that decommissioning could deliver political and electoral benefits for the Conservative Government: "fishing interests are important to a number of Scottish seats not currently held by the government… Scottish Nationalists are making a great play with the need for a decommissioning scheme… they are ready to seek electrical popularity by sponsoring narrow short-term sectional interest."[523]

MAFF attempted to push back against the political pressure exerted by the Scottish Office. In a letter to the Prime Minister on May 7, 1991 the Minister for Agriculture, Fisheries and Food attempted to focus on the policy and political ramifications from giving in to Scottish political pressure: "if we unashamedly seek to buy off specific and particular groups of fishermen with a decommissioning proposal we will expose ourselves to the ridicule of being pushed by the SNP to adopt a policy which we know to be wrong. Decommissioning seems notably economically indefensible but also politically inexpedient, we will have been seen to have bowed to nationalist pressure against our better judgment."[524]

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[519] NAS (1989) AF62/5712. 'Decommissioning', note of meeting by Godfrey Robson, 30 November 1989, p.1 para.3.
[520] Op. cit.
[521] NAS (1991) AF62/5714. 'A Decommissioning Scheme for Fishing Vessels – Note by Officials', Godfrey Robson, 1 May 1991, para.8.
[522] NAS (1991) AF62/5714. 'Decommissioning', Peter Collins, 29 April 1991, p.1.
[523] NAS (1991) AF62 5714. Letter from John Gummer, Minister of Agriculture, Fisheries and Food to Ian Land, Secretary of State for Scotland, 25 April 1991, p.1.
[524] ibid., p.2.

Fishing Effort

This section argues that over 1989-91 the political value of a decommissioning scheme to MAFF increased. The inclusion of a publically-funded decommissioning scheme in the 1992 Fisheries Package represented a political concession used by MAFF to introduce a controversial new mechanism that would directly control and reduce fishing effort.

By 1991, MAFF's focus had shifted from fishing capacity to effort reduction. The OECD defined fishing effort as the 'amount of fishing' – it reflects a combination of fishing inputs such as time spent fishing (hours or days) or the type and amount of gear used (number of hooks on a long-line or composition of a net and mesh).[525] Fishing effort represented the actual use of the fleet while capacity represented its potential. In a letter to the Prime Minister, May 7, 1991 the Fisheries Minister referred to decommissioning as a "short term and expensive decision which will not tackle the real conservation problem…[we] must deal with the real issue of fishing effort."[526] MAFF officials had come to realise that reducing capacity did not produce a linear reduction in fishing effort and that fishing effort was what mattered for stock conservation.

The new focus on fishing effort was influenced by scientific concern with excessive fishing mortality. In 1990-91, the Advisory Committee on Fisheries Management (ACFM) recommended "immediate reductions" in fishing effort.[527] A SOAFD note, 'Fish Conservation and Effort Control,' January 18, 1994 discussed the most recent scientific advice that "almost all fish stocks" were under pressure with "demersal species at greatest risk".[528] Scientific advice "consistently" proposed a "30 per cent reduction in effort from a 1989 baseline."[529]

Mechanisms to limit fishing effort and control fishing mortality were in place. TACs, licence limitation and mesh regulations all attempted to limit the amount of fishing. In practice,

[525] OECD, Glossary of Statistical Terms – 'Fishing Effort'. Available: https://stats.oecd.org/glossary/detail.asp?ID=994
[526] NAS (1991) AF62/5714. Letter John Gummer, Minister of Agriculture, Fisheries and Food, to John Major, 7 May 1991, p.2.
[527] NAS (1992) AF62/5715. 'MAGP 1992-96: Effort Reduction Factors', letter from J.G. Shepherd to Charles Cann, 22 March 1991. The ACFM was a body of ICES scientific advisors responsible for providing the Council, Fisheries Commission and Council Member Government's with scientific advice and information for fisheries policy.
[528] NAS (1994) AF62/5565, Fisheries Licences: Days at Sea. 'Fish Conservation and Effort Control', SOAFD, 18 January 1994, p.1, para.4. Cod, haddock, whiting and saithe stocks were understood to be the key species at risk.
[529] Op. cit.

the effectiveness of these mechanisms was undermined by several factors including: the political inflation of quota, discarding, illegal and over-quota landings and non-compliance with technical conservation measures. UK officials acknowledged that "there is no doubt that significant quantities of over-quota whitefish are being landed."[530]

The European Commission accepted ACFM's advice and outlined a 40% reduction in EU fishing effort.[531] MAFF officials referred to the Commission "making clear [it would] devise MAGPs which address the problem of fishing effort and not just fishing capacity".[532] In 1991, the European Commission attempted to reduce fishing effort through an instrument that limited the amount of time vessels could spend at sea.[533] This was translated into UK law via the Sea Fishing (Days in Port) Regulation in 1992. The EU legislation (SI 1991/93) outlined that certain vessels were to remain in port for 8 days per calendar month.[534] This policy tied-up capital assets to prevent their use.

The EC's focus on controlling fishing effort filtered into UK policy. The purpose of the 1992 Fisheries Package was described as being "to reduce excessive fishing pressure which has contributed to the decline of many stocks".[535] It was MAFF's new focus on fishing effort that led to the Department's interest in ITQs waning, with officials commenting that while "[ITQs] might

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[530] ibid., para.17. The UK Government acknowledged the link between poor economic performance and illegal fishing: "The SFPA have taken a number of steps to address the growing problem, but. financial pressure [on the fleet] is unlikely to check this illegal trade." 'Black landings' have remained a pervasive problem in UK fisheries policy. In 2012, a blackfish scandal was uncovered in Shetland whereby up to £47.5m of herring and mackerel was illegally landed.

[531] NAS (1991) AF62/5714. 'Effort Control', para.11: "The Commission's opening bid is for a 40% cut on current levels [of fishing effort] and our scientific advice confirms that this would indeed be appropriate for some stocks". Over 1987-1991, the ACFM became increasing concern with the state of stocks. This was reflected in TAC reductions for North Sea and West Coast of Scotland haddock and cod stocks (Holden 1994, 26). In 1990, the EC commissioned an independent group of experts to set the basis for 1992-96 MAGP targets. The concept of F_{max} was used - the fishing mortality rate at which the maximum long terms sustainable yield is obtained. It was concluded that the majority of fish stocks were over-exploited and at least a 40% reduction in fishing capacity was required to balanced capacity with resources. For North Sea haddock and cod stocks, a reduction of 70% was required.

[532] NAS (1992) AF62/5715. '1992-96 MAGP – Note by MAFF', p.1, para.1.

[533] Article 13 of the 1991 EU TAC and Quota Regulations

[534] NAS (1992) AF62/5715. 'Instructions to the SFI on the Enforcement of the Eight Day Rule'. An exemption to the tie-up rule secured by the UK Government – for UK vessels carrying long lines or using a mesh size equal to or greater than 110mm - illustrates the complicated nature of fishing effort as a concept. Though the UK Government referred to the 8-day tie-up rule as a crude mechanism, broad support for it is found in the archives: it was simple for skippers to understand, was easy to enforce, and the only criticism was that on reflection an alternative gear option negotiated by the government on behalf of the UK fleet should not have been made available as it offered vessels a way to game the system. NAS (1992) AF62/5715. 'Effort Control', letter Peter Collins, SOAFD to Ian Redfern MAFF, 7 August 1998.

[535] NAS (1992) AF62/5715. Press Release '£25million Decommissioning Scheme Part of Government Conservation Package', 27 Feb 1991, p.2, para.1.

reduce the size of the fleet further, there is no guarantee they would reduce its fishing effort".[536] MAFF's shift away from ITQs was also influenced by a change in Prime Minister with DAFS officials commenting: "Steve Hunter (ex ITQ team)…offered the view that this may partly reflected the demise of Mrs Thatcher. Apparently, there was a feeling within MAFF that something had to be done as a promise had been given to the Prime Minister".[537]

In May 1991, MAFF began to consider new a "comprehensive system of days at sea controls" to address the "fundamental overfishing problem."[538] A tradeable Days at Sea (DAS) instrument was designed that aimed to freeze fishing effort (time spent at sea) at 1991 levels. MAFF acknowledged that while time spent fishing was what mattered, time spent at sea was easier to enforce. In 1993, provisional DAS allocations were given to individual vessels based on levels of fishing activity in 1991. The DAS allocations were based on half-days and used data provided by individual vessel logbooks and landings declarations submitted to the Fisheries Departments. For vessels that had no data, 160 half days were awarded. The industry would be allowed to trade DAS allocations, thereby facilitating industry-financed rationalisation.[539]

The DAS effort control regime was extremely unpopular with the industry and generated little enthusiasm within SOAFD.[540] MAFF's strategy to circumvent this opposition was multifaceted. With the Scottish Office, MAFF argued that decommissioning would not support

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[536] NAS (1992) AF62/5715. 'Fisheries: Effort Control and Decommissioning', Fisheries Department, 12 December 1991, para.20. Other Member States were also interested in controlling fishing activity by effort controls. In a bilateral with the Danish Government, it was commented the Dutch wanted Member States to be able to manage their TACs through quota limits on vessels or limits on days at sea. The issue of discarding was raised with it commented that "vessels subject to days at sea would be allowed to catch and land without further restrictions and would not need to discard". NAS (1989) AF62/5714. Ministerial Submission 'Effort Control', Annex A, July 1991 para.2.

[537] NAS (1991) Af62/5714. 'Meeting with the Secretary of State – Alternatives to ITQs and Entitlement Aggregation', J Polley, 30 November 1990.

[538] NAS (1991) AF62/5714. 'Decommissioning Scheme for Fishing Vessels', 3 May 1991, p.2, para.6.

[539] NAS (1994) AF62/5564. Fisheries Licenses: Days at Sea. 'How days at sea allocations were calculated,' SOAFD, December 1993.

[540] SOAFD spoke of having "no great enthusiasm" for MAFF's interest in controlling fishing effort and referred to the days at sea programme "superficially attractive…[but] pose major problem given the nature of our fisheries and the community context in which they operate" (NAS (1991) AF62/5714, 'Effort Control: MAFF Paper', J Polley, 24 July 1992, p.1. and 'Effort Control for Fisheries Management', 16 July 1991, p.2, para.3). The DAS programme was strongly opposed by the UK fishing industry. This was reflected in the House of Commons debate that led to the approval of the Sea Fishing Licencing (Time at Sea) (Principles) Order 1993. Both Scottish and English industry representatives offered an alternative package of conservation measures to avoid the DAS programme (. Proposed conservation measures were dismissed by both Fisheries Departments as not offering a realistic alternative. Conservation measures were described by the SFPA as a "complete dead end" due to the "very wide scope for evasion and cheating" (NAS (1994) AF62/5564. 'Days at Sea,' SFPA, 23 December 1983, p.1, para.3).

stock conservation, arguing that "the EC Commission knows as well as we that a decommissioning scheme would have practically no conservation effect."[541] MAFF outlined that decommissioning without supplementary restrictions on effort would deliver no benefits for conservation as while vessels would be removed from the fleet, the opportunity remained for remaining vessels to increase their effort as others exited. MAFF's position was that a decommissioning scheme could only be used if it was packaged with an effort control scheme to promote conservation and secure maximum value from public funds.[542]

For the public, MAFF broadened the concepts of time (future generations) and space (fishing communities) to build support for the policy objective of stock conservation. The financial costs to be carried by the industry were to be balanced against the benefits to be realised by future generations. In the press release for the 1992 Fisheries Package the UK Government stated that "our key objective must be to reduce fishing effort if we are to protect the stocks for fishermen today and their children tomorrow".[543] This narrative was employed frequently, with the Fisheries Minster writing to the Prime Minister John Major to argue: "if we are to preserve fishing communities we must conserve fish… [with] the objective that there should continue to be fish stocks for the next generations of fishermen and the next generation in the fishing communities. That precludes policies which attempt to buy temporary peace at the expense of the conservation measures". [544]

Internally, MAFF attempted to dilute the potential political impact of the industry's resistance to direct effort controls by arguing that unpopular regulations were necessary and bound to be unpopular due to the nature of the UK industry: "The industry itself is fragmented and separated and has generated a vast and not uncommonly contradictory set of views. It has

[541] NAS (1991) AF62/5714. Letter John Gummer, Minister of Agriculture, Fisheries and Food, to John Major, Prime Minister, 7 May 1991, p.2.
[542] NAS (1994) AF62/5564. 'Fisheries Conservation: Judicial Review', letter Ian Lang to Secretary of State for Foreign and Commonwealth Affairs, December 1993.
[543] NAS (1994) AF62/5564. Press Release 'Minister announced major fisheries conservation package', 27 February 1992.
[544] NAS (1991) AF62/5714. Letter John Gummer, Minister of Agriculture, Fisheries and Food, to John Major, Prime Minister, 7 May 1991, p.5.

failed to act collectively or responsibility to conserve fish stocks and failed to respond to normal market signals and economic imperatives. There are no signs that this will change."[545]

The result was the 1992 Fisheries Package which introduced: new quota trading arrangements for the POs (the Scottish Proposal), a £25 million decommissioning scheme, the new Days at Sea controls, refinement to licence aggregation rules and the extension of licencing to vessels below 10 meters. However, MAFF's attempt to push through radical change with the DAS controls by appeasing the Scottish Office and industry with a decommissioning scheme back-fired. In the Summer of 1993, the NFFO launched a Judicial Review (JR) against the DAS Scheme (the 1993 Order). The JR considered whether the UK was entitled under Community Law to introduce the DAS restrictions and argued that the Order was contrary to European Law.[546] The JR argued that the "Order retrospectively imposes on the fishing industry in the third MAGP the cost of the failure of the UK to comply with the terms of the second MAGP".[547] The case was heard in the High Court from November 1-5 and a Judgment which deferred the case to the European Court was delivered on December 2, 1993.[548]

The government suspended the DAS scheme. With a decision from the European Court excepted to take at least 18 months, the government was concerned with policy legitimacy.[549] There was an intention within government to return to effort control, with the Minister of State writing that "in the interests of conservation and enhancing biodiversity and the sustainable use of the marine environment, I should like these measures introduced as soon as possible.

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[545] NAS (1993) AF62/5562. Fisheries Licences: Days at sea. 'Extracts from draft report on Minister of State's consultations', Annex A. MAFF argued that fishing industry regulation difficult due to the short-sighted nature of fishers: "a very short-sighted economic timespan which regards cash in the bank now as more important than cash in the ban later, combine with a lack of entrepreneurial initiative."

[546] Specifically, Council Regulation (EEC) No 3759/92 on the common organisation of the market in fishery and aquaculture products. The JR argued that the POs would be unable to carry out their lawful activities under the Regulation and a question of discrimination in line with Article 7 and 40(3) of the EEC Treaty.

[547] NAS (1994) AF62/5564. 'Schedule: Request for Preliminarily Ruling of the Court of Justice of the European Communities', January 1994.

[548] ibid., para.9. The High Court judgement deferred the case to the European Court as "there were various points in Community law that it felt it was unable to resolve without reference to the European Court of Justice".

[549] The government expected that the European Court would rule in early 1995 and for the High Court to require a further 2-3 months to deliver its own final judgment. The UK Government outlined to the European Commission that this created a legal uncertainty as to whether the UK could legally enforce DAS restrictions NAS (1994) AF62/5564. 'Days at Sea and Decommissioning – Note to Ministers', Fisheries Departments, January 1994, p.1, para.2. NAS (1994) AF62/5564. 'UK Implementation of Fisheries Conservation Measures', letter from Michael Jack, MAFF to Yannis Paleokrasses, Commissioner for Fisheries and the Environment, 14 December 1993.

However, it would not serve our purpose if they were introduced in a way that encourage non-compliance and brought the policy into disrepute".[550]

The 1992 Fisheries Package aimed to "develop a self-sustaining, economic and profitable sea fishing area, reduce fishing effort to conserve stocks, allow market forces to operate and minimise public expenditure".[551] Yet, following the suspension of the DAS, the package consisted of a series of policy mechanisms that obstructed the introduction of market forces and created no active pressure on vessels to reduce their fishing effort. In 1994 and again in 1996, decommissioning "was the UK's primary means for trying to meet MAGP targets for reducing fishing effort"[552] – an instrument the UK Government believed to be inadequate to meet economic or conservation objectives. Over 1992-1996, decommissioning failed to reduce overall UK fishing capacity. While the £25 million scheme removed 6.8 per cent of UK capacity, this was offset by vessels coming into the fleet and using existing licencing rights. Opting again for a further round of decommissioning in 1996, the UK Government commented: "the relatively small contribution which the UK decommissioning scheme is making to the underlying needs [of the MAGP] is likely to need fundamental reappraisal." [553] The UK Government was forced to reduce capacity through a decommissioning scheme over 1992-1996 due to a failed political gamble. Its decision to continue with decommissioning post-1996 represented an attempt to use public finance to alleviate economic pressures being experienced by the industry.[554]

In 1994, the UK Fisheries Department stated: "the industry appears to be in a "deeply troubled" state and a significant number of vessels in all sectors are close to bankruptcy. Another two years of current quota levels could see a serious decline in the UK fleet."[555] In this situation, decommissioning was chosen over a 'do-nothing' approach to capacity reduction in which the financial pressures facing the industry from declining fish prices and quotas would work to naturally drive out marginal operators. The government was aware that "an opposite, cheaper but

[550] NAS (1994) AF62/5564. 'Fisheries Conservation: Judicial Review', letter from John Gummer to Rt. Hon Gilliam Shephard, 7 December 1993.
[551] NAS (1993) AF62/5562. 'Days at Sea – The Way Forward', Paper for UK Fisheries Ministers, UK Fisheries Departments, October 1993, p.2.
[552] NAS (1996) AF62/5824, Decommissioning. 'Consulting the industry on possible improvements to the decommissioning scheme', Submission to the Minister of State, February 1996, p.1, para.1.
[553] ibid., p.2, para.4.
[554] Following the £55.5 million spent on decommissioning vessels over 1992-1997, a further £25 million scheme operating in Scotland in 2001-2002.
[555] ibid., p.3.

controversial approach would be to allow the growing difficulties in the industry to deteriorate further thus bringing pressure to bear on the marginal fishermen to leave the industry."[556] The financial crisis facing the industry in the mid-1990s was to be alleviated with publicly-funded decommissioning to help those marginal operators exit the industry.

Two progressive policy outcomes did materialise from this period. Firstly, the central ideas of using markets to allocate resources and of directly controlling fishing effort through time at sea controls did not disappear. In 1996, the UK Government consulted on the idea of the vessel owners of decommissioned vessels retaining their quota allocations to sell. While this was rejected by the industry in 1996, in 1999 quota allocations attached to fishing licences were awarded on a fixed basis – on landings recorded between 1994-96 as opposed to a rolling track-record – and transfers of allocated units between licences (trading) became permitted. This led to large movements of quota between vessels from 1999.[557] Secondly, in 2003 the Scottish Government introduced a DAS effort control regime.

The second progressive development was that the government began to consider improvements to control and enforcement to conserve stocks and reduce capacity. The government was aware that non-compliance with quota restrictions had become institutionalised with younger generations of skippers showing increasing disregard for the rules. In 1994, SOAFD considered how an improvement in enforcement would affect the economic pressure on marginal operators.[558] A new control mechanism suggested by the SFO was for vessels to be given designated ports to land into so as to reduce the opportunities for over-quota landings.[559] In 2005, the Scottish Government introduced the Registration of Buyers and Sellers Scheme in Scotland which required all landings to be weighed before transportation. Enforcement was also aided by technology such as the introduction of the Vessel Monitoring System which uses satellite-tracking technology placed on board fishing vessels and electronic reporting systems to allow the real-time transfer of catch data.

Conclusion

[556] NAS (1994) AF62/5565. 'Fish Conservation and Effort Control', p.4.
[557] http://www.gov.scot/Resource/0045/00455367.pdf p.4.
[558] NAS (1994) AF62/5564. 'Days at Sea and Decommissioning', Submission to Ministers,13 January 1994, para.19.
[559] NAS (1994) AF62/5565. 'Fish Conservation and Effort Control', SOAFD, 18 January 1994, para.21.

A significant shift in the UK Government's approach to fisheries management is evident over the period 1983-96. Quota management remained a central focus of fisheries management with the need to reduce fishing capacity and effort increasingly influencing quota management decisions. Over this period, the instruments for delivering policy objectives broadened as the acceptability of market mechanisms in distributing fishing entitlements increased from 1989. The UK's focus on labour-saving approaches to fisheries management in the 1970s and early 1980s was gradually replaced by policies focused on the use of capital. The enduring influence of the ITQ mechanism on UK fisheries policy from 1989 is evidence of this shift. In 1989 and again in 1991, ITQs were rejected for regulatory and political reasons. Yet, the concept of mechanisms that "enable[d] fishermen to buy each other out" remained and was used to design more politically acceptable capacity and quota management mechanisms.[560]

Political support for the use of the market was reflective of the Thatcher administration's approach to public policy, with this increasingly legitimized in fisheries management by the failure of previous administrative mechanisms. The period 1983-91 has been identified as one of policy failure due to the government's relative inexperience with capacity management and a lack of consideration given to how fishers would respond to new rules in the design of policy instruments. The shift to a more economic and conservation-focused approach to fisheries management from 1989 was influenced by the increased use of economic and scientific advice in policy-making, policy learning and UK commitments to reduce fishing pressure through the CFP.

This chapter has argued that despite the UK Government's aim to adopt a more economic approach to fisheries management, the application of this in practice was obstructed and diluted by political gambles and negotiations between central government and sub-national and industry interests. This directly contributed to the UK's failure to deliver against its commitment under the CFP. The influential role played by the Scottish Office and Scottish Fisheries Department in the formation of UK fisheries policy from the late 1980s is evident. The result of all these changes was that in comparison to the 1970s and 1980s, the fisheries policy-making tension was no longer between government economists and politicians but between the UK and Scottish Fisheries Departments.

[560] NAS (1989) AF62/5712, Fisheries Management Strategy Group. Letter to Cabinet office 'Control of Fishing Capacity', from DAFS Godfrey Robson, 21 November 1989, p.2, para.7.

UK policy became increasingly formed through a process of political-trade-offs and bargaining between SOAFD and MAFF officials and senior political representatives. The close relationship between SOAFD and the Scottish Office and the dexterity of the Scottish institutions in moving between the use of different European, UK and local political pressures were key to the successful representation of Scottish fishing interests. The ability of the Scottish Office to delay the introduction of market forces and its triumph in the battle over decommissioning did, however, come at a cost. While public funding was used to protect and prop up the industry as it entered the economic turmoil of the mid-1990s, the resulting package of weak policy measures meant that the stocks they were fishing were not managed sustainably.

The importance of industry acceptance and buy-in to conservation regimes in a situation of lax control and enforcement was also brought to the surface in this chapter. SOAFD can be criticised as appearing to be captured by Scottish industry representatives. However, a working government-industry relationship and industry agreement to restrictive measures was required to foster compliance in an industry rife with cheating and illegal activity. MAFF's ill-judged attempt to push through new effort control restrictions against significant industry opposition delayed the introduction of effort controls into UK fisheries policy. The result was that UK structural policy in the early and mid-1990s was left depended on a mechanism the UK Government knew to have minimal economic and conservation benefits.

7. Conclusion

This analysis of the development of UK fisheries policy between 1945 and 1996 has emphasised the shifting economic and political considerations shaping government policy. It has considered the impact of local interests on policy-making and implementation, in what is often discussed as a global problem of fisheries management.

Global concern for fisheries conservation increased over the period with super-national approaches to fisheries management, such as the UN LOS Conferences and the 1982 Convention, of clear importance. Yet issues of national interest shaped the policy debates behind negotiation positions. The UK Government's support for the EEZ concept represented a means to secure access to the hydrocarbon resources in the seabed. Over the period, UK negotiation positions for the LOS Conferences and international fishing limits were influenced by national defence and later oil interests with fishing interests only of secondary importance.

In then seeking to implement controls on fishing activity, the involvement and assistance of local actors was essential. The early years of UK fisheries management between 1974 and 1981 allocated new fishing rights in a manner that supported transitional concerns with unemployment. The conferring of the right to fish through a licence and to land catch through quota was significant change for the industry. The political decision to grandfather rights and place no limitation on licences was a pragmatic decision even if it did protect rather than restrain pre-TAC fishing patterns.

From the early 1980s, regulation and policy was increasingly designed to create incentives that would alter fishers' behaviour and bring it in line with the global conservation agenda. As the government gained practical experience in managing fishing activity, the endemic problems of illegal over-quota landings and discarding became clear, indicating the importance of individual fisher behaviour in conserving fish stocks. Policy failure, in particular with capacity reduction, was often the result of a lack of consideration given to how fishers would respond to new rules and restrictions. This drove the government towards the use of ITQs, or at least the individualisation and trading of rights. With sections of the industry and the Scottish Office remaining fiercely resistant to ITQs, this was realised through gradual adjustments to licence and

quota aggregation rules. The use of more effective enforcement of fisheries regulation was only considered in 1996 with the government acknowledging that more effort to enforce basic regulations would have the desired effect of reducing capacity in line with fishing opportunities.

Throughout this whole process, much use was made of economic and scientific advice with the movement towards the individualisation of fishing rights following the economic literature on fisheries management. The political use of economic advice increased notably from 1989, with the government coming to define overfishing as a product of market failure. This advice continued to be used in a in a selective and politically convenient manner. Sea fisheries policy, in particular on the issue of ITQs, demonstrated a discrepancy between the Thatcher and Major administration's ideological attachment to the use of market forces to deliver policy objectives and a willingness to bear the associated administrative and political costs.

The objectives of UK fisheries management

This thesis built upon the work of Symes who argued for an inevitable conflict between equity and efficiency in distributing fishing quota.[561] He identified the objectives of UK quota management as the maximisation of allowable catches, equitable distribution, efficiency in the use of resources and continuity of supplies to market. These objectives were reoccurring themes within the policy-making environment. Yet the overriding objective of UK fisheries policy was often not clear, with the policy intention of governments changing markedly throughout the period.

A conclusion of this thesis is that the friction and perpetual motion inherent in the policy-making environment was driven by the continuous interaction and competition between long- and short-term ambitions for fisheries policy. The long-term goal was to gain control of fishing levels to facilitate stock conservation and sustainable resource exploitation. Constant technology-induced economic pressure drove the need for fleet rationalisation if biologically and economically sustainable fisheries were to be achieved.

Conversely, the short-term objectives for fisheries policy continually evolved as they represented a process of change management. Initially, the government attempted to gain control of labour to address transitional concerns with unemployment. The introduction of global EEZs

[561] Symes (1992), p. 335.

brought the open-access regime to an end and triggered huge structural change for the UK fishing industry. It accelerated the decline of the economically and politically dominant distant-water fleet. This triggered national tensions as the large deep-sea vessels were forced to fish in the waters of the offshore fleet. When allocating NEAFC quota over 1974-76, the government was exposed to industry pressure to adopt an interventionist approach to quota management to protect the physically smaller and less-mobile fleets from direct competition with the displaced deep-sea trawlers. Newly created fishing rights were grandfathered and quota was allocated on a labour-basis to assist the transition from the old world of open-access and *Mare Liberum* to one of restricted economic activity.

This transition period drew to a close as the new Conservative administration of 1979 came to power. Fisheries policy became increasingly influenced by the concerns of the civil service and industry for the impact of policies on the economic performance of the fleet. Tightening fishing opportunities accentuated the need for rationalisation but technological advances and a shift from favouring labour to capital offered the opportunity to reduce fishing costs. The introduction of PO management relieved the UK Government of a significant administrative burden but, importantly, it awarded the industry greater freedom over the time of use of capital. Vessels could seek economies of scale, react to market prices and improve profit margins in the face of declining opportunities.

The greater freedom and flexibility awarded to vessels gave way to a need to control capital as the government attempted to reduce fishing capacity and effort in line with EU MAGP targets. This process drew from the increased prominence of conservation-based concerns as evidence of serious stock depletion threatened the long-term future of the fishing industry. The focus on controlling capital gave way to increased support for the allocation of local property rights to individuals. With the behaviour of individual fishers acknowledged to be essential in delivering the global agenda, connecting access to stocks to individual fishers was understood to be more effective in delivering both economic and conservation objectives.

The shifting focus of the short-term objectives defined the policy-making environment, as too did their ability to trump the application of management mechanisms designed to facilitate fleet contraction. The result was the choice and use of policy mechanisms that, more often than not, worked to inhibit and act as a drag on fleet rationalisation.

Nevertheless, the sheer constancy of the economic pressures driving the need for rationalisation worked to anchor this as the direction for fisheries policy over the period. Capital-enhancing technological development was a constant feature of this period. It created the initial opportunities for overfishing, with early local and global regulations an attempt to reconcile the technology-induced increasing efficiency of fishing practices with the biologically determined supply of fish. As the efficiency of individual vessels increased, fewer vessels were required and those remaining could employ lower labour to capital ratios. The pace of contraction was intensified by the steady decline in stock sizes and associated TACs.

The long-term approach to fisheries management was embedded in the environmentally-focused principles of the global agenda. At a national level, it was present in the advice given to policy-makers by government economists and scientists. This advice drew from the property rights and economic literature to promote the creation of *de facto* rights at individual fisher and/or vessel level and the use of market mechanisms. This advice was increasingly used by politicians and policy-makers with this demonstrated by the prominence of economic ideas in the 1989 Fisheries Review compared to the 1980 Review of Quota Management.

A reoccurring theme within this thesis is that, in practice, economic ideas and advice were rejected in favour of short-term political aspirations. Though this can be viewed as a key criticism of fisheries policy in this period, the policy choices were often pragmatic and, when considered as a pattern across the period, represented a sustained process of change management. At the time, the decision to value oil resources over fish resources was pragmatic for both UK economic and energy interests, as was the decision to grandfather newly created fishing rights and adopt an administrative approach.

National policy ultimately acted as a buffer to the continual economic pressure by attempting to punctuate and deliver the inevitable contraction at a pace that would not cause dramatic upheaval across an industry and a country. The slow pace of change wired into the UK's approach to fisheries policy undermined its ability to meet successive capacity reduction targets. It did, however, give the industry more time to adapt to changing economic circumstances. The long-term benefits of a slower pace of change can be seen in the government's attempt to push through DAS effort controls without industry support. The government moved too fast and without industry consent, with the resulting legal challenge

causing the mechanism to be abandoned. This delayed the introduction of direct effort controls for almost a decade.

There were several junctures at which the distance between the long- and short-term objectives for fisheries policy narrowed. The most prominent occurred in 1983 with the introduction of the CFP's conservation regime. This created a legal framework the UK Government had to comply with. More importantly, however, it created a time-shift in the UK Government's understanding of fisheries management. This is demonstrated in chapter four's analysis of the 1980 review of quota management and chapter five's evaluation on the introduction of PO management. The pressure and direction set by the new TAC and quota regime forced the UK Government to accept that if sustainable levels of fishing were to be achieved, fishing opportunities would decline for the foreseeable future. Aligned with this, excess effort relative to opportunities created severe economic pressure within the industry. In response, the UK Government moved from viewing quota management as an in-year administrative process of matching annual quota to fishing activity to the need to align present capacity and effort with anticipated future opportunities. Action, or more precisely the failure to act, in the present would undermine the future.

Another constancy that worked to align short- and long-term policy objectives was continual policy-learning through practical experience. This occurred at two-levels. There was an evolution in the global scientific community's understanding of the elements of fishing activity to control and reduce. Initial attempts to control fishing mortality through technical inputs such as the 1946 Mesh Regulation Convention were gradually supplanted by the introduction of controls on access (licences) and outputs (quota). From 1992, direct controls on effort were introduced with days in port regulations and the attempt in 1996 to introduce the days at sea restrictions.

At a national level, the UK Government's experiments with different quota allocation mechanisms provided invaluable learning that helped converge the long- and short-run approaches to fisheries management. Allocating fishing rights to protect labour through equal per-man allocations had initial political and economic appeal. Once the administrative and economic costs of a 'fair and equal' distribution of fishing opportunities were experienced, a capital- and markets-based approach became increasingly favourable. Increased Treasury

involvement in fisheries policy from 1989 also worked to align policy objectives. Public-sector spending constraints and the Treasury and central UK Government's belief in the efficacy of market forces worked to increase the political use of economic advice, in particular the role for economic incentives in influencing fisher behaviour.

The role of local interests in national and international environmental policy

A central research question concerned the role and influence of local interests in the delivery of international agendas. In this thesis, the term 'local interests' has been used to represent both sub-national, geo-political interests and sectional industry interests that were often representative of regions and local communities within the UK. As discussed in the literature review, the tendency for international fisheries management agreements to fail to deliver sustainable levels of fishing is often attributed to inadequacies and failures of the international machinery such as the CFP. This thesis has demonstrated that the success of these agreements was dependent on negotiations between local interests and central government. Within these negotiations, local concerns were of more influence than the global conservation agenda and the economic theory of fisheries management.

This thesis has sought to provide a bridge between analysis of the CFP and UK fisheries policy by examining the development and organisation of UK policy designed to deliver the objectives of the CFP's conservation regime. It has demonstrated the importance of local negotiations and interests in the construction of national and international approaches to environmental and natural resource problems. It has shown local and sectional industry interests to have had a significant bearing on the development of policy and the design of mechanisms to deliver international commitments. The exception to this was the development of UK policy on the international distribution of fisheries resources at the United Nations Law of the Sea Conferences (1958, 1960 and 1973-82). Economic considerations drove early environmental policy with sectional fishing industry interests of secondary importance to the potential economic benefits associated with the more valuable energy resources.

The influence awarded to local interests was shaped by the government's use of national fisheries policy as a tool to accommodate local tensions within the global agenda. Global agreements were a reaction to overfishing. They therefore sought to reduce fishing pressure with

the costs of this to be carried by fishers, fisheries-related industries and national economies. Local political conflicts arose from the uneven way in which the economic costs of reducing fishing activity were experienced across the UK. Local fishing activity was often defined by the prosecution of specific stocks, such as the Scottish fleet's traditional dependence upon haddock and whiting and the English fleet on cod. Costs borne by different local actors depended upon their location, the nature of their fishing operations and the relative health of the stocks they targeted. At the centre of early policy choices was an attempt to spread these costs more evenly across the UK. This resulted in the choice and design of policy to protect groups of fishers as opposed to fish. Social policy may not have been an explicit component of UK fisheries policy until 1989 but it is evident from 1974.

Of importance to UK fisheries policy-making was the changing relative ability of different sectional industry interests to influence central policy-making. A recurring theme in this thesis is the growing influence and representation of the Scottish industry. While this thesis has shown the local geo-politics of UK fisheries policy to be complex, the Scottish Office and Scottish political institutions were able to effectively influence UK-wide policy-making in this period. In the 1960s, the UK Government was mindful of the increasingly nationalistic tone of the Scottish lobby and sought to appease this force with the first extension of UK fishing limits in 1964. By the 1990s, UK policy formation was the direct result of political trade-offs between the UK and Scottish Fisheries Departments. By this time, the Scottish fishing interests had a superior and more focused form of representation than non-Scottish interests.

Accounting for the political influence of UK fishing interests

The influence enjoyed by UK fishing interests in the formation and implementation of UK national policy-making and, in turn EEC/EU fisheries policy-making, is notable given the relatively low economic contribution of the industry. Drawing upon Wise (1984), this can partly be explained by the geographical concentration of the industry in key marginal political constituencies. In 1978, fishers represented 0.1 per cent of the British labour force and contributed 1 per cent of UK GDP.[562] However the concentration of fishing activity around key

[562] Wise (1984): p. 200-201.

ports enabled it to provide a much higher direct economic impact for certain areas across the UK. This economic and political concentrated created what Brookfield et al., (2005) described as 'fisheries-dependent communities" or what Wise (1984) referred to as constituency 'fishing seats'.[563] Wise (1984) identified British fishing communities as having been located in electorally marginal constituencies. He provided evidence of the responsiveness of UK Government's to the wants of these constituencies during key elections. For example, of the main 22 'fishing seats' during the 1974-79 Labour Governments, 9 were held with majorities of less than 6 per cent of the total vote.[564] In Aberdeen, it was 0.7 per cent and Grimsby 1.2 per cent. Wise concludes that in this period of miniscule parliamentary majorities, these seats were important. Examining the influence of the 1979 UK General Election on the formation of the CFP, Wise concludes that it was the UK MAFF Minister John Silkin's "vigorous defence of British objectives in Brussels [that] helped produce a 3 per cent swing to Labour in such constituencies", allowing the Party to gain an extra 5 seats.[565]

While this thesis maintains a strict focus on fisheries policy to allow for an in-depth examination of policy development over time, a short comparison with other extractive industries provides context for understanding the disproportionate political influence of the fishing industry. A key example is British farming. Flynn et al., (1996) argue that while the economically central role of agriculture diminished over the 20th century, political relations and representations have been slow to register this change.[566]

Cox et al. (1991) argued that competition for the farming vote between the Labour and Conservative Parties increased with the establishment of the National Farmers Union (NFU) as a powerful pressure group in the interwar years.[567] In competing for votes, politicians offered subsidies and market distortions – with farmers dependent on public financial support, they were more likely to vote for the Party which promised them the most security. Flynn et al., (1996) argued that while economically irrational, this behaviour was politically rationale. In the 1950s,

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[563] Katherine Brookfield, Tim Gray and Jenny Hatchard, "The concept of fisheries-dependent communities: A comparative analysis of four UK case studies: Shetland, Peterhead, North Shields and Lowestoft", in *Fisheries Research* 72 (2005): pp 55-69.
[564] Wise (1984): 201.
[565] Ibid.
[566] Andrew Flynn, Philip Lowe and Michael Winter, 'The Political Power of Farmers: An English Perspective', *Rural History* 7 (1996): 15-32.
[567] G. Cox, P. Lowe and M. Winter, 'The origins and historical development of the National Famers' Union', *Agricultural History Review* 39 (1991): 30-47. While the Conservative Party had long-standing traditional ties to rural areas and the land-owning classes, Labour also identified with class-based rural workers.

110 out of 630 British constituencies had a significant agricultural presence: 80 in England, 9 in Wales and 21 in Scotland.[568] While the number of agricultural constituencies declined with the number of agricultural workers– from 100 constituencies to 74 over the course of 1950 to 1964 – Flynn et al. argued that the ability of the farming vote to affect the outcome of an election remained roughly constant as the major parties were fairly evenly balanced over the period with an increasing number of seats won by small majorities.[569]

Literature on the political influence of British farming not only highlights the interest of British political parties in gaining votes from geographically concentrated extractive industries but Grant (1990) also identifies the important influence of close connections between industry interests and government departments.[570] The link between the NFU and central government (MAFF) is strikingly similar to that identified in this thesis between fishing organisations and MAFF. As with Pemberton's study of British economic policy in the 1960s, government department's reliance on industry bodies to implement policy allowed these interests a significant degree of influence on policy development as well as implementation.

Alongside the political parties' desire to capture marginal fishing seats during key elections, major political changes in this period are likely to have contributed to the disproportionate political weight given to fishing interests. With the UK fishing industry increasingly concentrated in Scotland from the end of the 1970s, the transformation of Scottish politics will have heightened the influence of this lobby group. The increasing presence of the SNP from the 1960s, the prominence of Home Rule and devolution issues in UK politics during the 1970s and the Labour Party's increasing dependence on Scottish and Welsh votes are all key features of this transformation.

This thesis has provided evidence of 'nationalist pressure' from the SNP party influencing the hand of the UK Government at several key stages. This was identified in Chapter 4's analysis of UK national fishing limits and the decision to implement a 12-mile fishing zone in 1964, and Chapter 6's consideration of capacity reduction, and the pressure exerted by DAFS and the Scottish Office for the UK Government to continue funding decommissioning schemes over 1991-96. Devine (2016) argues that from the late 1960s, all Parties, including the

[568] Flynn et al., (1996): 23.
[569] Ibid.,
[570] W. Grant. 'Rural politics in Britain', in P. Lowe and M. Bodiguel (eds.) *Rural Studies in Britain and France* (1990).

Conservatives, began to take the 'nationalist threat' more seriously. He argues that at a political and policy level, frequent nationalist appeasement was used to stave off the threat of separatism.[571] While Devine argued that this threat waned following the 1979 Independence Referendum, the increasing unpopularity of the Conservative Party in Scotland throughout the 1980s fuelled the need for policies to appease the Scottish electorate for the 1992 General Election. With much of rural Scotland voting against devolution, and the collapse of the traditional textile, shipbuilding and mining industries in Scotland during the 1980s, Scottish fishing and farming seats would have been a more natural ally for the Conservative Party to target.[572]

Limitations of the study

This thesis is not a history of the UK fishing industry. It is a study of policy-making processes and the decisions taken by central government. While it provides insight into the development of industry-government relations and evidence of industry influence on policy choices, this has been informed by the archives. It therefore considers the industry from the perspective of government. It does not provide insight into how the industry understood, adapted and evolved in line with the policy development and the challenges it faced.

The scope of this thesis was intentionally limited to focus on policy for one sector in the UK industry, the whitefish fleet. No consideration or comparison has been made to the pelagic and inshore fleets. Both are important components of the UK industry and have distinct geographical and political-economic characteristics. Initial consideration was given to a thesis with a chapter dedicated to each sector. Given the complexities of fisheries regulation and the heterogeneous nature of the competing local interests within the whitefish fleet, this was rejected in favour of a narrower focus that would support a sustained, in-depth analysis of the policy-making process over the time period. This thesis has created an initial framework that would support further analysis of the other sectors and a comparative analysis with other areas of government policy that used quotas, such as milk, or the fisheries policy of other countries.

[571] T.M. Devine, *Independence of Union: Scotland's past and Scotland's present,* (Allen Lane; London, 2016): 131.
[572] Ibid., p.131 and 158.

Implications for academia

This thesis provides evidence of the explanatory power of examining the intersections where different policies meet and overlap. In this instance, UK policy on international fisheries conservation was determined by defence and energy policy. This research supports and reinforces the work carried out by scholars like Carmel Finley (2011) who examined the interdependencies between policies.

This thesis will make disappointing reading for academics interested in the use of economic ideas in the policy-making process. Barnes argued that the scholarship of eminent fisheries economists played an important role in advocating for the enclosure movement embedded in the EEZ concept.[573] Property rights theory clearly influenced the global approaches to fisheries conservation and the tools for fisheries regulation. However, it had marginal impact on the UK Government's acceptance of the EEZ concept. In domestic policy-making, academic ideas were at best cherry-picked to deliver predetermined political and distributive agendas.

The essence of the ITQ concept was captured in management mechanisms designed by the UK Government notably licence and capacity aggregation schemes and the Scottish Proposal. Yet it was diluted and modified to accommodate the objectives of administrative ease and industry acceptability. The issue was that economic theory and advice provided by government economists gave little consideration to the short-term objectives of government or the political and social costs associated with the transition from one property rights regime to another. As the political and policy-making environment was highly sensitive to these costs, the application of economic-based mechanisms was often disregarded as impractical or as requiring adaptation.

Implications for policy-making

At several key junctures, the UK Government actively excluded the UK Fisheries Department and industry from the development of UK negotiation positions and concessions. This includes acceptance of the EEZ concept and the equal access principle within the CFP. The

[573] Barnes (2009), p.5.

marginalisation of domestic fishing interests was required to secure international agreement. This thesis has demonstrated that this approach created the need to accommodate local interests within national policy-making. It heightened the political requirement for national policy to act as a tool for arbitration between global and local tensions and conflicting sectional interests. This created a policy-making environment that incentivised policy choices that undermined the implementation and delivery of the international commitments. There is therefore an inherent question to be asked – what is more important, whether an agreement is struck or whether it can be delivered? This thesis indicates that the latter was given priority in this period.

An interesting point for further study would be to consider how this process has changed since 1996. Since this time, both UK and EU fisheries policy-making have attempted to include local interests in the formation of international policy-making. In 2010, the European Commission established stakeholder-led Advisory Councils to provide the EC and Member States with advice on fisheries management matters. The extent to which the new space and responsibility given to local interests has influenced international decision-making and the effectiveness of policy delivery would be of value.

This thesis also offers insight for industry sectors caught up in complex international negotiations. Throughout this period, UK policy on international fishing limits was driven by the UK Governments' prioritisation of non-fishing interests. As a result, the detail of global fishing agreements was used as a concession or trade-off to protect and further discrete national priorities. International fishing agreements – such as the UK promoting the concept of equal access in the CFP – did often not make a lot of sense for the UK fishing industry.

As mentioned, the decision in 1971 to value oil resources over fish resources was pragmatic for both economic and energy interests. Since the outcome of the UK's referendum on membership of the EU, the political value of restricting access to the UK's EEZ has increased markedly. The importance of UK fishing rights in the Brexit negotiations remains to be seen. However, a likelihood is that fishing interests will now trump energy interests in the guise of UK exit from the Internal Energy Market.[574] It may now be the UK's energy sector that is exposed to

[574] Several major energy actors have argued for continued UK participation in the EU Internal Energy Market (IEM). This includes National Grid, the GB electricity system operator, and several large-scale utilities including Centrica and SSE. In a report for National Grid, Vivid Economics concluded that the potential impact of exclusion from the IEM could be up to £500m per year by the early 2020s. Vivid Economics, *The impact of Brexit on the UK*

a package deal which makes little sense for energy interests and the impact of which may take years to be fully realised.

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