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## **Expert Meeting on the Human Side of Fisheries Adjustment**

### **STRUCTURAL ADJUSTMENT IN THE AUSTRALIAN SOUTH EAST TRAWL FISHERY**

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**Union de l'Europe occidentale, 43 avenue Président Wilson, 75116 Paris**

*This paper has been prepared by Frank Meere of FRM Consulting Pty Ltd of Calwell, Australia.*

*It is submitted for discussion under Session 2 of the Programme.*

For further information, please contact:

Anthony COX (Email: [anthony.cox@oecd.org](mailto:anthony.cox@oecd.org))

Carl-Christian SCHMIDT (Email: [carl-christian.schmidt@oecd.org](mailto:carl-christian.schmidt@oecd.org))

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### Acronyms

AAT	Administrative Appeals Tribunal
ABARE	Australian Bureau of Agricultural and resource Economics
Administration Act	The Fisheries Administration Act 1991 (Commonwealth)
AFMA	Australian Fisheries Management Authority
AFS	Australian Fisheries Service (part of the Department of Primary Industries and Energy – managed Commonwealth fisheries prior to AFMA’s establishment in 1992)
AFZ	Australian Fishing Zone
CFBLs	Commonwealth Fishing Boat Licences
EPBC Act	The Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)
GVP	Gross Value of Production
ITQs	Individually Transferable Quotas
ITEs	Individually Transferable Effort (units)
Management Act	The Fisheries Management Act 1991 (Commonwealth)
MPAs	Marine protected areas
NT	Northern Territory
OCS	Offshore Constitutional Settlement
SEFAP	South East Fishery Adjustment Program
SEFAWG	South East Fishery Adjustment Working Group
SESSF	Southern and Eastern Scalefish and Shark fishery
SETF	South East Trawl Fishery
SFRs	Statutory Fishing Rights
TAC	Total Allowable Catch
UNCLOS	United Nations Convention on the Law of the Sea

## STRUCTURAL ADJUSTMENT IN THE AUSTRALIAN SOUTH EAST TRAWL FISHERY<sup>1 2</sup>

### Background

#### *Scope and value of Australian fisheries*

1. Australia's overall maritime jurisdiction which includes the Australian Fishing Zone (AFZ) and continental shelf extensions onto adjacent high seas, is the third largest in the world covering almost 14 million square kilometres. It is in fact larger than the Australian land mass (Commonwealth of Australia 2003). The productivity of these waters is however low compared with other parts of the world, and Australia ranks only about 50<sup>th</sup> in terms of volume of fish landed.

2. The fishing industry ranks fifth among Australia's primary industries with a Gross Value of Production (GVP) in 2004-05 of AUD 2.05 billion<sup>3</sup> on total production of 287 000 tonnes (ABARE 2006). Australian fisheries produce a range of high value exports including rock lobster (AUD 440 million), pearls (AUD 291 million), abalone (AUD 263 million), prawns (AUD 163 million) and tuna (AUD 162 million). In 2004-05 Australia exported AUD 1.54 billion of fisheries products. In the same year Australia imported AUD 1.17 billion of fish products with major components comprising prawns (AUD 201 million), canned fish (AUD 189 million), frozen fillets (AUD 187) and pearls (AUD 146 million). In 2005 direct employment in the catching and aquaculture but not the processing sector is estimated by (ABARE 2006) at approximately 19 000.

#### *Jurisdictional arrangements*

3. In Australia's federal system, jurisdictional and fisheries management responsibility is shared by the Commonwealth, state and territory governments. There are six states and two territories<sup>4</sup>. State/territory jurisdiction extends from the low water mark to 3 nautical miles and Commonwealth jurisdiction from 3 to 200 nautical miles. In order to enable a rational approach to natural resource management, an Offshore Constitutional Settlement (OCS) arrangement is in place which allows the Commonwealth, States and the Northern Territory (NT) to develop fisheries management arrangements based on the range of the stock to be managed, rather than the artificial boundaries established by lines on the water. There are four types of fisheries management arrangements established by these OCS arrangements.

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<sup>1</sup> Written by Frank Meere, FRM Consulting Pty Ltd., of Calwell, Australia.

<sup>2</sup> I would like to acknowledge the helpful comments of my Australian colleagues Martin Exel, Mary Lack and Gail and Stuart Richey in preparing this paper. The conclusions reached and opinions provided are of course my own and I take full responsibility for any errors or omissions in the paper.

<sup>3</sup> As at 19 September 2006 one AUD is equal to approximately USD 0.755c

<sup>4</sup> The states are Queensland, New South Wales, Victoria, Tasmania, South Australia and Western Australia and the territories – the Northern Territory and the Australian Capital Territory.

- Commonwealth management of the entire fishery;
- State or Territory management of the entire fishery;
- Status quo management with responsibility split between the State(s)/NT and the Commonwealth at the 3 nautical mile boundary; and
- Joint Authority management with the Commonwealth, States/NT forming a single legal entity.

4. This has resulted in the Commonwealth and States/NT sharing responsibility for managing fishery resources with the States/NT usually managing sedentary species or those which occur solely off their coasts and the Commonwealth managing offshore fisheries or fisheries which extend over two or more state/territory jurisdictions. The Commonwealth also has a leading role in managing straddling and highly migratory fish stocks. The South East Trawl Fishery (SETF), the focus of this paper, is a Commonwealth managed fishery.

### ***Commonwealth fisheries policies***

#### *New Directions for Commonwealth Fisheries Management in the 1990's – the 1989 Fisheries Policy Statement*

5. For many years now the Commonwealth Government has adopted progressive fisheries management policies. In 1989 a major policy statement which still underpins Commonwealth fisheries management was unveiled. The document, *New Directions for Commonwealth Fisheries Management in the 1990s – a Government Policy Statement* (Commonwealth of Australia, 1989) provided the management principles and structures still used today to manage Commonwealth fisheries.

6. The fundamental objective of the statement was to set up efficient and effective fisheries management arrangements. The Policy examined the role of governments in fisheries management and concluded that as a result of the nature of common property (fisheries resources are publicly owned, being at once everybody's and nobody's) "when resources belong to nobody, nobody will look after them; when resources belong to everybody, everybody must look after them" (Commonwealth of Australia 1989). In addition to a major role for government, it concluded that it needed to strengthen industry involvement in fisheries management decision making and long term custodianship of the resource.

7. The three overriding objectives of management controls outlined in the policy were:

- To ensure the conservation of fisheries resources and the environment which sustains those resources;
- To maximise economic efficiency in the exploitation of those resources; and
- To collect an appropriate charge from individual fishers exploiting a community owned resource.

8. The policy concluded that achieving these objectives will create a stable economic and biological environment in which fishers can operate with greater confidence and economic security.

9. Underpinning these broad objectives were the following key policy principles:

- Economic efficiency – management controls should not distort the way economic resources are allocated;
- Fair treatment of all involved – similar people in similar circumstances should receive similar treatment;
- Efficient management – management controls should contain clear objectives which should be tested periodically; and
- Efficient administration – management controls should be straightforward.

10. The objectives and policy principles would be achieved via the restructuring of industry to improve economic efficiency and conservation of fish stocks using government assistance to reduce over capacity. In addition there would be a range of new administrative arrangements including the passage of new legislation and the establishment of the Australian Fisheries Management Authority (AFMA), a new Commonwealth statutory authority. Importantly, AFMA was designed to enable the government to effect its responsibilities in a flexible, open and less bureaucratic way (Commonwealth of Australia, 1989). It also meant that day to day fisheries management would be removed from the direct control of the Minister for Fisheries and be vested in the Authority, which would have an expertise based Board to oversight and direct its operations, consistent with its governing legislation.

11. Importantly to achieve these outcomes the Statement concluded that output controls in the form of individually transferable quotas (ITQs) were the preferred management control. This would ideally allow efficient fishermen to expand their activity at the expense of the less efficient and would allow market forces to operate. It went on to state that before other management controls could be used, fishery managers would have to demonstrate that these other management controls are superior to individually transferable quota for a particular fishery.

12. Another important policy principle developed in the Statement and subsequently implemented was that “those who benefit from management should pay the cost of management” (Commonwealth of Australia, 1989). Over the years since the release of the Statement there have been a number of reviews to determine the appropriate level of cost recovery. The commercial fishing industry now pays all the attributable management costs in their fisheries. Importantly however, a clear distinction was made between who pays the management costs and who owns the resource. The resource belongs to the Australian community and just because the commercial fishing industry pays necessary management costs does not give them ownership of the resource.

13. A vital part of the new policy was the desire to strengthen the access rights provided to fishermen and provide greater ownership and involvement in ongoing decision making. The Statement concluded that “the Government will formally recognise the ongoing nature of rights in existing developed fisheries” (Commonwealth of Australia, 1989). New legislation provided the tools to implement formal management plans (strong subordinate legislation) with the provision to provide “Statutory Fishing Rights” (SFRs) which exist for the life of the management plan. These rights have been subsequently recognised as a form of property and are now frequently referred to as “property rights”.

14. The Statement also specifically addressed the need for enhanced restructuring and concluded that for those fisheries already overcapitalised the management solution to address economic and biological objectives invariably involves reducing fishing capacity. It foreshadowed significant restructuring and concluded that where restructuring is unacceptably slow the government should assist and commit financial resources.

*Looking to the Future - A Review of Commonwealth Fisheries Policy June 2003*

15. Some 10 years after this initial policy statement the government initiated a review of Commonwealth fisheries policy which concluded “the fundamentals of the policy and management framework set out in the 1989 policy statement remain relevant today” (Commonwealth of Australia, 2003). This new statement built on and further developed the 1989 statement and outlined a series of strategies and recommendations aimed at further integrating Commonwealth fisheries policy with a range of broader emerging environmental issues and policies. Importantly, its focus continued to be primarily on the fisheries and aquaculture sectors.

*Fisheries management is not to implement social or regional development policies*

16. An important point to note in relation to Commonwealth fisheries policy is that it has and continues to have a specific natural resource management focus and does not seek to achieve other government policy objectives. The emphasis of Commonwealth fisheries policy is very much on ecologically sustainable development and economic efficiency (and a range of associated issues) and it does not seek to achieve social or regional community or development outcomes. In fact as far as possible it aims to treat the fishing industry and the use of a community owned resource as just another economic activity within the broader economy.

17. The 1989 Policy Statement (Commonwealth of Australia, 1989) provides the following broad aims with respect to equity and the social effects of managing fisheries resources:

- i. to ensure that the controls determining access to fisheries resources are not subject to manipulation;
- ii. to ensure that fishermen contribute to the cost of managing fisheries in proportion to the benefits they receive from that management and pay an appropriate amount for the right to exploit a community resource for private gain<sup>5</sup>; and
- iii. to take appropriate actions to relieve social impacts of adjustment in the fishing industry.

The Policy goes on to say that the Government believes it should take responsibility for the development of policies for i) and ii) but that the fishing industry could play a larger role with respect to iii).

18. There is a strong view within policy circles that to seek to achieve multiple and competing objectives will result in at best, sub optimal outcomes and in respect to managing a scarce community owned resource, failure. In this regard anyone who has worked in fisheries management or broader natural resource management knows just how difficult it is to achieve stated fisheries management objectives let alone to also produce desirable outcomes in other policy areas. Kaufmann *et al.*, (1999) conclude “Whether it is prudent to ask a management agency, to manage fisheries in order to attain social objectives is an open question. Arguably, it would be better for government to further such social objectives directly, as opposed to using the fishing industry as a vehicle for wealth redistribution.”

19. In this sense the focus in Commonwealth fisheries is very much on the use of fisheries management tools to achieve desired fisheries management outcomes and not seek to achieve other non fisheries outcomes using these tools.

*The Fisheries Management Act 1991*

20. In 1991 as part of the implementation of the Governments 1989 policy statement, the Australian Parliament passed a suite of new fisheries legislation. The two key pieces of legislation in this suite were the *Fisheries Administration Act 1991* (the Administration Act) and the *Fisheries Management Act 1991* (the Management Act). The Administration Act established AFMA and provided all the necessary powers to allow it to undertake fisheries management on behalf of the government. The Management Act provided

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<sup>5</sup> While the 1989 Policy Statement proposed that fishermen should pay a resource rent tax for the use of a community owned resource, it acknowledged that this should only occur once the fisheries were operating efficiently. Government policy changes over the years now provide that this should only be in “new” fisheries and this is currently being pursued by auctioning a portion of SFRs issued under new management plans for such fisheries.

all the necessary fisheries management “tools” and established a legislative framework to provide ongoing secure access rights to fishers.

21. The access rights created by the Management Act are in the form of Statutory Fishing Rights that is rights created under statute – in this case the Management Act and subordinate legislation. SFRs are established in formal statutory management plans which set out all the necessary management arrangements and are subordinate to the Management Act. Management plans are “disallowable instruments” which means they need to sit before both houses of the Australian Parliament for a specified period and can be disallowed if they are considered inappropriate. By virtue of this process once they have been endorsed by Parliament they are very strong legal instruments. Importantly, the Management Act sets out a very detailed process, which must be followed in making a management plan and detailed arrangements for the grant of SFRs. Exactly the same process needs to be followed to amend a Management Plan or to revoke it, which provides a high level of security to the community, fishing industry and the finance sector.

22. The above explanation of what is a fairly complex process is provided to emphasise the long term nature of Management Plans and SFRs created under them. While initially governments and government agencies used the term “access rights” to describe SFRs, increasing it is being acknowledged (including by the courts) that they are a form of property. So much so that the Management Act, following an amendment, now has a section dealing with “Compensation for acquisition of property” (Section 167A) which provides that if a section of the Act results in the acquisition of property other than on “just terms”<sup>6</sup> the Commonwealth is liable to pay reasonable compensation.

23. The legislation creates long term secure access rights and together with government policy encourages the use of management tools which provide for market forces to operate and autonomous adjustment to occur, hence the preference for ITQs. In fact the policy is such that ITQs are the preferred management method and proponents of some other form of management need to demonstrate why it is better and why ITQs are not preferred. Some Commonwealth fisheries are managed using individually transferable effort (ITEs) units, but where these are used it requires regular intervention by AFMA to determine and set the appropriate number of effort units. This means AFMA must regularly assess the level of effort in the fishery and how this correlates with biological sustainability of target species and the impact of this effort on the broader marine environment. This requires a detailed assessment of effort creep and regular adjustment of effort units. Due to the complexities involved and the processes which must be pursued this can cause delays to necessary adjustments and damage to stocks and the broader environment. The emphasis of government policy is therefore very much on management tools which, by allowing market forces to operate, let operators make commercial decisions and as far as possible encourage autonomous adjustment within the fishery, without the need for direct management intervention.

### **Structural adjustment within the broader fisheries management context**

24. Against the background of the fisheries policy outlined above, structural adjustment in Commonwealth fisheries was considered to be something which might need to be undertaken in order to initially redress overcapacity and reduce pressure on overfished stocks. This would be followed by the introduction of management arrangements which facilitated autonomous adjustment with minimal government involvement, such as ITQs. If ITEs were used there was a clear understanding that the fishing industry would bear the cost of future reductions in units<sup>7</sup>. While the outcome is not dissimilar under both

<sup>6</sup> *acquisition of property* and *just terms* have the same meaning as in paragraph 51(xxxi) of the Australian Constitution.

<sup>7</sup> Since the early 1990’s this has been the case in the Northern Prawn Fishery which was managed under a system of underdeck volume and engine horsepower units but is now managed using net units. With each

management regimes ITQs remain the preferred management tool as they facilitate autonomous adjustment without the need for the government to regularly review and set effort levels.

25. The other important change foreshadowed in the *New Directions* statement (Commonwealth of Australia, 1989) and implemented under the Management Act was the creation of long term SFRs. These rights are very different to the rights which existed under previous Commonwealth legislation. Under previous legislation fishermen were issued with Commonwealth Fishing Boat Licences (CFBLs), which were essentially a one year licence to fish, with no guarantee that they would be renewed – although there was a clear expectation on the part of fishers that they would be renewed each year. The uncertainty created by such arrangements did not help establish a stable long term management environment as future access was not secure and there was little incentive to work, plan and invest for the longer term.

26. CFBLs allowed fishers to operate with relative freedom and complete flexibility, although as more formal arrangements (including limiting entry) were introduced for individual fisheries, CFBLs had to be “endorsed” to allow fishers to operate in those fisheries. Many fishermen both Commonwealth and State held multiple CFBLs on the basis that it didn’t cost much and they might come in handy at some time in the future (and in many cases they did). When the Management Act came into effect in 1992 there were some 5,800 CFBLs, by the mid to late 90s this had been reduced to 1 500 fishing permits, with further reductions occurring as fisheries were brought under Statutory Management Plans and SFRs issued. Over time, quota amalgamations also lead to unused boat SFRs being surrendered.

27. Under the Management Act there is a clear recognition that the fishing concession (the SFR or fishing permit) is the fishers asset (see the earlier discussion on the long term nature, legal status etc) and the concession is viewed as his/her financial security. When adjustment occurs in a fishery, the fisher has a choice to remain in the fishery and purchase additional rights to continue operating at their current level, to reduce his/her operations in line with the reduction required for the fishery as a whole, or to exit from the fishery and sell the right provided under the management arrangements, thus providing a source of exit funding. The value of these rights can be significant, for example in the Northern Prawn Fishery the entitlement for an “average” vessel is worth in excess of AUD 1.5million. In the SETF average quota and licence values per boat are greater than physical capital values, representing 50-60 per cent of total business capital (Aslin *et al.*, 2001).

### **A brief history of the South East Trawl Fishery<sup>8</sup>**

28. The SETF is located in the Australian Fishing Zone and stretches over a very large area from Barrenjoey Point just north of Sydney to cover all the waters around the NSW, Victorian and Tasmanian coastlines to Cape Jervis in South Australia encompass all waters off the coasts of Victoria and Tasmania until just beyond the eastern border of South Australia (see map below). The fishery has some 100 or so fishing vessels producing 25 000 tonnes with an estimated GVP of approximately AUD 59million in 2004-05. Overall, the fishery accounted for nearly thirty percent of the landed value of Commonwealth fisheries in that year. The Fishery is now managed as one sector of the Southern and Eastern Scalefish and Shark Fishery (SESSF) under the Southern and Eastern Scalefish and Shark (SESS) Management Plan<sup>9</sup> and

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subsequent reduction in total fishery units individual operators have had to purchase additional units to remain at their existing level of operation or alternatively downsize their operation accordingly. It is interesting to note however that the NPF is included in the current structural adjustment program (see Section 7 below) and operators are eligible for assistance.

<sup>8</sup> This section draws heavily on the comprehensive management history outlined in Grieve *et al.*, 2001.

<sup>9</sup> *Southern and Eastern Scalefish and Shark Fishery Management Plan 2003* (SESS Management Plan)



comprises fishing by otter board trawl, midwater trawl and Danish seine. For completeness I provide a very brief outline of arrangements in the non trawl sector of the fishery in Appendix 1.

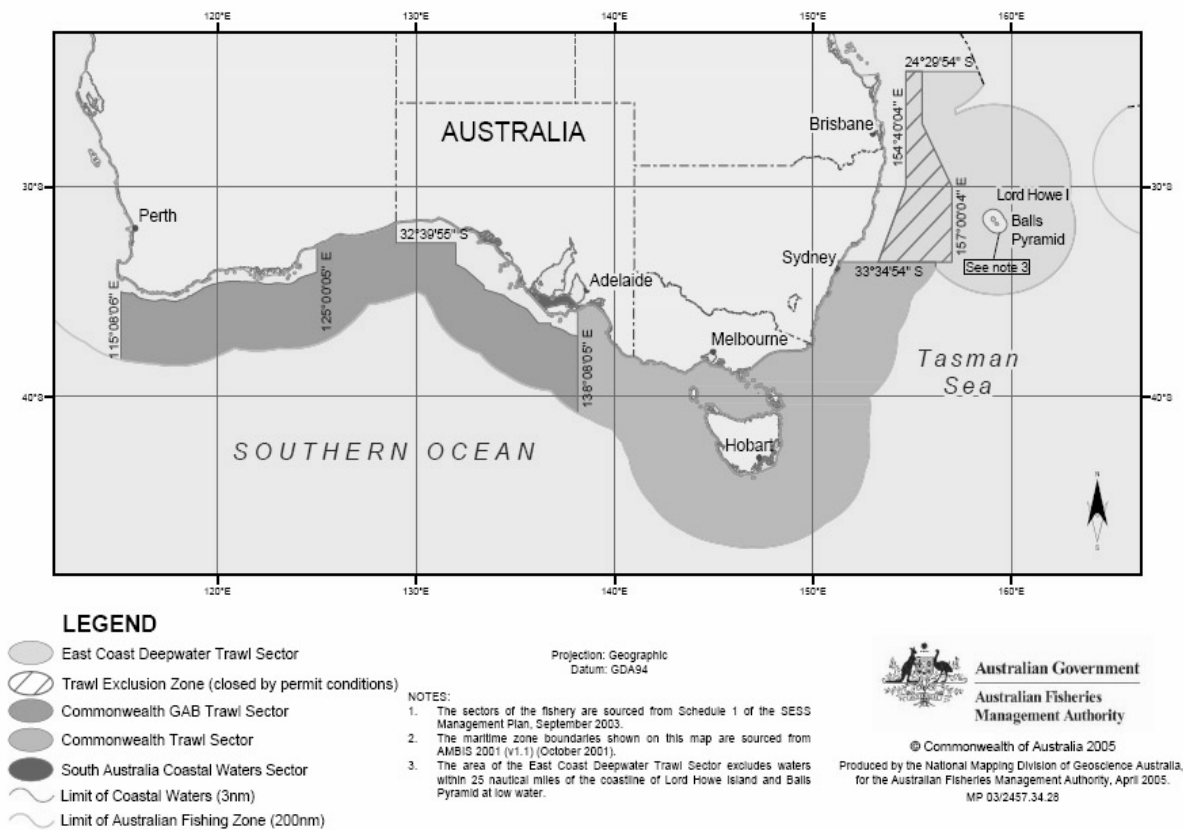
29. The SETF is a complicated fishery characterised by a wide geographical area, multiple species, multiple methods, operating in a variety of habitats from shallow coastal waters to depths over 1000 metres with over 100 species of fish and invertebrates sold commercially (Tilzey 1994).

30. Successive governments encouraged the development of the trawl fishery. The New South Wales government imported three steam trawlers from the United Kingdom in 1915, built four more in 1920 and then sold the fleet to private concerns in 1923. This was the beginning of the SETF as we know it today (Grieve *et al.* 2001).

31. The day to day management of the fishery was left to State governments for the first 80 or so years. By 1952 the Commonwealth government had enacted the *Fisheries Act 1952* and the trawl fishery had expanded from Sydney southwards to other large coastal towns in New South Wales and into Victoria. Despite the enactment of Commonwealth law the States (now NSW, Victoria, Tasmania and South Australia) continued to manage the day to day operations of the fishery until 1985. Minimum trawl net codend mesh size restrictions were brought in by the NSW government in the 1950s to limit the catch of juvenile flathead and later extended to the whole SETF. In the 1970s vessel length was limited to 32 metres overall and in 1979 one vessel per State (*i.e.* 4 vessels in total) of between 32 and 45 metres were allowed to fish in the fishery. The management of the fishery for most of the century was open access with minimal management arrangements.

32. In 1979 Australia declared the 200 nm Australia Fishing Zone and the *Fisheries Act 1952* was amended to include management objectives consistent with Australia's signature of the UNCLOS. These required the Minister to ensure 'that the living resources of the AFZ are not endangered by over-exploitation' and to have regard to 'achieving the optimum utilisation of the living resources of the AFZ'. From about 1980, by which time trawl fishing effort had expanded southwards and outwards into the deeper waters of the continental shelf concern started to grow about the increasing fleet size, the level of capital invested in the trawl fishery and the apparent declining economic position of operators (Grieve 2001). A task force consisting of State and Commonwealth fisheries management agencies was convened in 1983 to determine the need for additional management intervention.

**Figure 1. Southern and Eastern Scalefish and Shark Fishery Commonwealth Trawl Sectors**



33. In 1985 the Commonwealth government defined the area of the South East Trawl Fishery (Barrenjoey Point, NSW to Cape Jervis, South Australia - see Figure 1) and limited entry to the fishery. Vessel length restrictions and the trawl net mesh size restrictions were retained. Three management areas were created (Eastern Sectors A and B, and the South Western Sector) and vessels were granted Commonwealth Fishing Boat Licences (CFBLs) endorsed to fish in one or more of these regions. In October 1985 a scientific logbook was introduced and operators were required to complete shot by shot catch records. By the end of 1986, 151 vessels had recorded catches in the fishery, employing approximately 84 000 hours of trawl effort.

34. A boat replacement policy which introduced units of capacity to the fishery was implemented in 1986. The stated aim of the policy was to reduce fleet capacity over time and ultimately control fishing effort. Units were based on hull dimensions and propulsion engine power and when introduced there were approximately 22 000 units. When operators replaced or upgraded a vessel they had to obtain additional units from another operator to cover any increased capacity in the vessel as well as enough to account for the forfeiture of a proportion of those units to the government. By 1989 the number of units of capacity in the fishery had *increased* to 24,086 with about ten percent of these units not attached to operating vessels. Successful litigation which challenged the limited entry policy was largely responsible for the increase rather than the expected decrease in units of capacity in the fishery.

35. The input control regime came under increasing pressure during the late 1980s due to two unrelated events in the fishery. At the same time as the eastern gemfish (an important specie for inshore NSW fishers) began to show signs of recruitment failure, large aggregations of orange roughy were discovered off Victoria and western, southern and eastern Tasmania. This precipitated a shift of trawl licences and units from the traditional NSW east coast operators who typically used small vessels (< 20 metres in length) to larger steel hulled vessels working in the south western sector. Concern over increasing catches resulted in the setting of competitive TACs for orange roughy in 1987 and eastern gemfish in 1988. ITQs were introduced for eastern gemfish in 1989 (Kaufmann *et al* 1999).

36. It is now widely recognised that the objectives of the input control management regime in the trawl fishery were not being achieved and that management of the fishery had to change. In the 1989 Australian Fisheries Council Sub-Committee Report on Management of the South East Trawl Fishery, the task force summarised the fishery as being characterised by:

- a persistent and worsening economic situation while management continues to be based on control of inputs which relies on reducing economic efficiency;
- a number of species under severe biological stress .... while existing arrangements do not appear to be able to contain aggregate effort;
- the need for an increasing number of management measures; and
- a reliance on quantity of product rather than attempting to increase returns from smaller quantities by improving quality<sup>10</sup>.

37. There was a definite need for a change in the management of the fishery and the timing of this crisis coincided with the release by the Commonwealth of its policy statement *New Directions for Commonwealth Fisheries Management* in the 1990s (Commonwealth of Australia, 1989). In that Statement there was a clear preference for the use of ITQs as the preferred management method, although it is fair to say there was some concern about the use of ITQs in a multispecies trawl fishery. Initially seven target species were to be placed under quota, but despite this, on 1 January 1992, ITQs were introduced for 16 trawl species or species groups. This occurred via the new and highly controversial management plan for the fishery, the *South East Fishery (Individual Transferable Quota) Management Plan, 1991* which had been determined by the Minister for Primary Industries and Energy under section 7B of the subsequently repealed *Fisheries Act 1952*. Shortly thereafter in February 1992 the Australian Fisheries Management Authority (AFMA) was created under the *Fisheries Administration Act 1991*. AFMA inherited the controversy surrounding the implementation of the Plan which became known by many, including the inaugural AFMA Chairman, as “the poisoned chalice”.

38. The ITQ management regime in the SETF got off to a disastrous start. There was widespread dissatisfaction with the results of quota allocations and in March 1992 the newly formed AFMA Board put a moratorium on permanent transferability of quota while an independent review was conducted. Seasonal transferability was permitted. In the meantime court action had been initiated by a fishing company against the allocation formula in the case *Austral Fisheries Pty Ltd v Minister for Primary Industries and Energy* and a majority of quota holders had appealed to AFMA for internal reviews of their quota allocations.

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In the preparation of the Australian Fisheries Council Sub Committee Report, the Australian Bureau of Agricultural and Resource Economics was asked to do a benefit cost analysis of a number of buy-back options and the findings of the sub-committee noted the need for the urgent removal of capacity, recommending adjustment via a buy-back scheme and the introduction of ITQs.

39. In the court case, the judge found that the allocation formula contained a statistical fallacy which produced an irrational result and the formula was found to be void in law. The offending allocation formula was a combination of catch history and units of fishing capacity, which averaged averages.

40. The allocation formula was changed by AFMA to the “averaging method”, considered to be more rational and statistically valid, in October 1992. The averaging still used the same combination of catch history and units of fishing capacity, but the catch history component was based on the sum of each operator’s best five years of catch history for a species as a percentage of the total of all operators best five years of that species. Full (ie, seasonal as well as permanent) transferability of quota was reintroduced in 1994.

41. Despite these changes many operators were extremely dissatisfied with the introduction of the Plan and their quota allocations.

42. Some input controls were retained after the introduction of ITQs including a limit on the number of vessels and minimum mesh sizes. To operate in the fishery operators needed both a fishing permit to use a vessel as well as quota units to catch quota species. The fishing permit also enabled the take of non quota species. Until 1997, the maximum vessel length of 32 metres (with the exception of the four vessels up to 45.7 metres), was also retained. This regulation was successfully challenged in a court case (*Bannister Quest Pty Ltd v Australian Fisheries Management Authority*) on the basis that restricting vessel length was contrary to AFMA’s objective of seeking to maximise economic efficiency in the exploitation of the resource.

43. Despite government expectations, autonomous adjustment did not occur upon introduction of ITQs. Grieve *et al.* (2001) concluded this was for two reasons i) the initial freeze on permanent transferability of quota; and ii) the resistance of disgruntled operators who continued to appeal against their quota allocations and resist the new management arrangements. Is it possible that there was also an expectation that if they held on long enough a government funded structural adjustment program would be forthcoming and they were right – see below.

44. Despite attempts to limit effort over many years the results had been ineffective – during management under input controls despite increasing constraints, the total number of boat units remained more or less constant, while effort increased. Likewise, after ITQs were introduced, a series of legal decision relating to imputed catch and the inadequate operation of the quota trading market meant little if any reduction in fishing effort on key species occurred (SEFAWG, 1996).

45. Hand in hand with this failure to reduce effort, profitability in the SETF has declined steadily since the mid 90’s. The report “*ITQs, Ageing Boats and the Price of Fish – profitability and autonomous adjustment in the South East Trawl Fishery*” (FERM, 2004) concluded “Profitability in the SETF has worsened over the last five years. Costs have been increasing, catches have declined and most operators have faced stable or falling real prices for fish”. Increasing fuel prices and repairs and maintenance for an aging fleet<sup>11</sup> are major factors in this decline. There has been little new investment in the fishery.

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<sup>11</sup> 40 per cent of the vessels are over 30 years old (FERM, 2004)

## Details of previous adjustment programmes

### *1996 Report of the South East Fishery Adjustment Working Group(SEFAWG)*

46. In October 1996, the then Minister for Resources and Energy<sup>12</sup> announced the appointment of a working group to look at adjustment options for the South East Fishery (Parer 1996). The Ministers media release stated that "...a number of operators have argued that some aspects of the original quota allocation were unfair and reduced the value of their fishing entitlements" The working group was asked to consider "whether any of the operators in the SEF should receive adjustment assistance" and if appropriate "it will develop options for adjustment" (Parer 1996).

47. The SEFAWG report concluded that the implementation of ITQs management and transition from boat units to quota was "appallingly" handled, that five years on and following some eight reviews (both internal and external) the problems remained and showed little signs of being resolved and the continuing instability and uncertainty was far reaching, imposing additional costs on both industry and government (SEFAWG 1996). The report highlighted the following adjustment pressures:

- Reductions in the value of fishing concessions resulting from the change in the regulatory regime;
- Reductions in the total allowable catches (TACs) as a result of scientific assessment; and
- "normal" economic forces affecting costs or returns.

48. The Working Group came to the conclusion that adjustment assistance was justified to help create a profitable commercial fishery which can survive and prosper in the tough international market-place, while safeguarding the stocks and environment which support the fishery. The Working Group report recommended targeted financial assistance to selected operators, plus more general assistance as part of a restructuring package designed to move the SEF forward and assist quota trading. This restructuring package would have four objectives (SEFAWG 1996):

- To reduce effort (both latent and active);
- To facilitate non viable operators to adjust out of the fishery;
- To stimulate the quota trading market and allow it to encourage autonomous adjustment; and
- To restore confidence in management, provide greater certainty and stability in the rules under which fishermen operate.

49. In reaching its conclusions the Working Group report stated "It is important that all fishermen realise that restructuring is a continuing phenomenon and requirement – within the SEF as it is in all other economic activities. It is not and can never be a one-off matter. For the most part, restructuring should and does occur autonomously, without the need for government intervention. Indeed it is more likely to be effective if this is the case. The need for government intervention and assistance should only arise when there has been a major breakdown in the natural mechanisms. This justification for government intervention is usually described as being needed to correct a "market failure". It should then be designed to overcome the breakdown (or market failure) and ensure a return to autonomous adjustment as soon as possible." (SEFAWG, 1996).

50. The Working group recommended three principal measures at a estimated total cost of AUD 9.24 million:

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<sup>12</sup> At the time the Minister with responsibility for fisheries.

- The dequotaing of three of the sixteen quota species in the SEF which they believed should not have been included in the ITQ scheme originally (estimated cost AUD 1.04 million);
- The provision of financial assistance to those operators whose values of fishing entitlements were reduced in the transition from boat units to quota (a total of 25 operators at an estimated cost of AUD 3.2 million); and
- The introduction of a buy-out scheme with the objective of reducing effort in the fishery by about 30%. This would involve the purchase of up to 50 fishing permits (both active and latent) at a price of AUD 25 000 per permit plus ten per cent of the value of the associated quota allocation, up to a maximum of AUD 75 000. Maximum cost AUD 5.0 million

51. The report was delivered to the Minister on 30 November 1996 and the South East Trawl Management Advisory Committee, AFMA Board and the fishing industry were then asked to provide advice on its recommendations to the Minister. The report was sent to all SEF operators and the Working Group held follow up port meetings to discuss the report.

### ***1998 SEF Adjustment Program***

52. In early September 1997, the Government announced an AUD 6.9 million adjustment program to “provide a new deal” for SEF operators (Parer, 1997). In announcing the program the Minister said he had considered the SEFAWG Report, advice from government agencies and submissions made by fishing operators. The package comprised two key elements consistent with the SEFAWG Report:

- Financial assistance to 18 operators who were disadvantaged in the move from boat units to quota (total AUD 2.35 million); and
- AUD 4.4 million fund to buy out SEF fishing permits.

53. The program did not proceed with the dequotaing of the three species as recommended by the SEFAWG, it provided financial assistance to 18 and not 25 operators and provided slightly less (by AUD 0.6 million) than recommended (AUD 5.0 million) for the permit buy-out.

54. Offer letters were sent to operators in September 1997 and the program closed on 21 October 1997. The program was implemented in 1998.

55. A total of 18 operators accepted the targeted financial assistance totalling AUD 2.35 million, while permit buyouts fell well short of the target of up to 50 fishing permits, buying out 27 permits only. The program removed less than 5 per cent of effort as 13 of the 27 permits were inactive and the remaining 14 comprised only 1 per cent of the effort in the fishery in 1997 (AMC Search, 2000). However, one of the major objectives of the program had been to put an end to the ongoing litigation which was preventing the implementation of a management plan. In this respect, it was successful.

### **Was the adjustment program a success?**

56. An evaluation of the SEF Adjustment Program was commissioned by the Department of Agriculture, Fisheries and Forestry in 1999 as part of the overall adjustment program. The report *An economic assessment of the South East Fisheries Adjustment Program* (AMC Search 2000) assesses the impact and effectiveness of the program on the fishery and the quota trading market using a survey of recipients of the South East Fishery Adjustment Program (SEFAP) funds and an economic model to review of catch and effort data.

***Permit buyout and targeted financial assistance***

57. The AMC Search report provides the following useful information on the buyout and targeted financial assistance.

58. Permit buyout payments totalled AUD 1.7 million with seven fishermen receiving both targeted financial assistance and funds from the buyout. The vessels associated with the permits bought out by the program were all trawlers ranging in size from just under 10 meters to 24 meters with an estimated market value of AUD 7.3 million, although seven vessels remained in the SEF using different permits. The buyout removed latent effort<sup>13</sup> with the operators of only 7 permits receiving their full annual income from the SEF, however buying these permits did not remove real effort as many held more than one permit. Ninety per cent of the permits bought out were attached to other licence packages which provided access to other Commonwealth and State managed fisheries.

59. The report concluded that the impact of the SEFAP on total permits and hence vessel crews were less than expected due to a range of previous business adjustments resulting from the move to ITQ management in 1992. Permits were surrendered from 21 vessels potentially impacting 20-30 crew. At least 11 continued to work in the SEF on different permits. The most noted impact on crew was in small ports with limited vessels resulting in crew having to move to another port to find work.

60. The majority (80%) of operators who participated in the permit buyout were owner operators who directed individual or family based fishing operations. These operators were generally small scale with a turnover of less than AUD 1.0 million. Most had at least 20 years fishing experience. The average age of the buyout participants was 57 years (range 35-71 years) (AMC Search 2000).

61. Targeted financial assistance was paid to 17 operators. The payments ranged from AUD 5,000 to AUD 350 000. This assistance was paid against a background of continuing legal action following the introduction of ITQs and the strong view by some operators that they had been disadvantaged in the move. It had also created discontent and uncertainty and meant that many fishermen were reluctant to actively participate in the quota market and support the new management arrangements. The funds provided for targeted financial assistance were not tied and it was thought they would be used to purchase quota, which would further free up the quota market. In fact operators did not use the funds in this way applying the funds instead to rebuild engines and refit vessels, pay off debt and invest for retirement. The operators indicated that the payments were insufficient to regain their loss in quota value, some commenting it was "too little too late" (AMC Search, 2000).

62. The AMC Search assessment concluded that despite shortcomings in design the program was responsible for clearing the logjam which developed following the introduction of ITQs in the SETF. It achieved this by curtailing litigation<sup>14</sup> and demonstrating a willingness by government to assist in the adjustment process. The report stated that the use of public funds may have been justified in these circumstances given the background to the allocation of quota and the need to stabilise the ITQ management system and restore confidence in the management agency (AMC Search, 2000).

***Autonomous adjustment since the introduction of ITQs***

63. There have been a number of studies which have sought to examine the success or otherwise of ITQ management in the SETF and whether or not this has facilitated adjustment. There is no doubt that

<sup>13</sup> 13 of the 27 permits purchased were either latent or part time effort.

<sup>14</sup> Those who received targeted financial assistance had to sign a declaration indicating that they would cease existing litigation and not commence any new litigation.

change was required in the late 80's to deal with what was increasingly a serious decline in many of the key target species. It is very difficult if not impossible to definitively conclude whether or not ITQ management has been more or less effective compared to an alternative management scheme in securing the biological resources which underpin the fishery. I would argue that ITQ management has provided important associated economic signals and benefits which would not have occurred under alternative management arrangements. What we do know is that by the late 80s there was already too much effort in the fishery and significant additional input controls would have been necessary to safeguard the resource if ITQs had not been introduced. Indeed, there was broad agreement at the time that further manipulation of the existing range of input controls could not deal with the issue facing the fishery and acceptance of output controls, which had already been introduced for two species.

64. Under either type of management arrangement effort had to be reduced. In my view, given the circumstances that existed in the fishery it was clearly preferable to use a management system which allowed for adjustment to occur autonomously over time. This was in contrast to imposing ever increasing input controls every few years with the associated difficulties in their implementation (resistance by sectors of industry to the change and delaying tactics) and the resulting decreasing economic efficiency.

65. The study *Economic efficiency in the South east Trawl Fishery*, by (Elliston et al., 2004) concludes that the rate of adjustment in the fishery has been slow, but cautions against a further decommissioning scheme noting that the costs may well outweigh the benefits. It states that "The ITQ based management system currently in place is likely to result in autonomous adjustment over the longer term...."

66. The study *Structural Adjustment in Australian Fisheries*, (Newby et al., 2004) concludes that buyback programs have no impact on fish stocks or the sustainability of the fishery in an output controlled fishery with individually assigned rights. It notes "The program will encourage resources to move to more efficient operators improving the financial returns of those who remain in the fishery; however, stock improvements will only result from changes to the TAC." Nevertheless, it concludes that despite the amount of latent effort surrendered in the SETF adjustment program there is evidence to suggest that the combination of the move to ITQs and the buyout has reduced effort in the fishery and increased returns to remaining operators.

67. (Fox *et al.*, 2003) examined the ex-post profitability and productivity of vessels following the adjustment program. They conclude in the three years following the program all vessels benefited from a rise in output prices but do not believe this is associated with the program. Their results do indicate a substantial increase in vessel productivity immediately following the buy out despite a decline in catch per unit of effort. They note smaller vessels benefited more than larger vessels. They state "The findings suggest that the buyout, coupled with individual tradeable harvesting rights, have been successful at improving economic performance. Such a desirable outcome is in direct contrast to the long term outcomes associated with vessel and licence buyback in fisheries managed exclusively by input controls."

68. The report *ITQs, ageing boats and the price of fish - profitability and autonomous adjustment in the South East Trawl Fishery*, (FERM, 2004) conclude that autonomous adjustment is occurring in the SETF – however the rate of adjustment is slow. They note that there is an active quota market, the number of vessels in the fishery is declining and vessels are being used more intensively. Fishing practices and marketing have changed also, focusing more on maximising the value of the catch and not the quantity. They state that the economic costs of this slow adjustment may not be significant as there is very limited scope to use the excess resources (in particular old wooden vessels and relatively non mobile labour) elsewhere in the economy. The study found there were a number of factors which have impeded adjustment and investment in the SETF including:



- *Lack of market for SETF vessels* – noting many operators are reluctant to sell quota and fishing permits without a buyer for their vessel. There is an extremely limited market for these vessels. Unable to find a buyer, but still covering direct costs fishermen continue to operate in the fishery.
- *Expectations of future profitability* – with declining quota values and little new investment, operators have chosen to invest in lower risk shore based activities rather than modernise vessels and purchase additional quota. This is symptomatic of falling fishery profits and a lack of future confidence. This suggests many operators are simply running down their business and will eventually retire from the fishery.
- *Future TAC levels* – anticipated future TAC levels are a key factor in operators expectations for profitability and hence investment. The report suggests there are a number of uncertainties which are affecting operators medium term planning.
- *Confidence in management arrangements* – potential changes with new and expanding environmental requirements, including new marine protected areas, are contributing to uncertainty about future management arrangements.

69. Interestingly the study found “...that other factors considered likely to be potential impediments to adjustment or barriers to investment such as the availability of alternative employment, the functioning of the quota market, the legal framework, the availability of bank financing and transaction costs, were not significant”.

70. In conclusion, most if not all studies conclude that adjustment is occurring in the SETF but at a slow pace, no doubt slower than anticipated when ITQ management was introduced in early 1992 (see Table 1). Generally they conclude that the economic case for speeding up this adjustment process is weak as there is little or no alternative use for the excess resources in the fishery. However, it is suggested that there may be significant ecological benefit in speeding up the rate of adjustment (FERM, 2004)<sup>15</sup>. FERM state that such a decision would need to be carefully considered and costed and note that as most of the economic benefits resulting from accelerated adjustment would accrue to the operators who remain in the fishery they should contribute to the costs of such a program.

**Table 1 Number of vessels in the SETF**

Year	Vessel numbers
1986	151
1991	138
1992	122
1998	102
2003	102

Source: FERM 2004

### **Some other observations/issues**

#### ***Should adjustment have taken place prior to the introduction of ITQs?***

71. In reflecting on the conclusions reached in a number of the studies above and more generally I can't help but think that adjustment should have been undertaken prior to the introduction of the new

<sup>15</sup> This may be more important for environmental outcomes than for fisheries sustainability, relating to such things as reducing the frequency of trawling and the quantity of bycatch taken.

management arrangements. Newby *et al.* 2004 in their paper on *Structural Adjustment in Australian Fisheries* comment that "...if the fishery requires urgent adjustment to avoid serious or irreversible damage, it may be desirable for the government to become more actively involved in the process to ensure that sustainability objectives are not postponed". There was obviously a view at the time that if ITQ management were introduced in the SETF, adjustment would take place with little or no need for government intervention and at no cost to the taxpayer - although this was not universally the view. It does seem at odds with the *New Directions* policy statement (Commonwealth of Australia, 1989), which clearly foreshadowed a role for government in restoring the balance between effort and sustainability where there was a significant imbalance. This did in fact occur in another Commonwealth fishery at this time, the Northern Prawn Fishery. Arguably the SETF was a candidate for such a program also and, had this occurred and more attention been paid to the introduction of the new arrangements (in particular the transition from boat units to quota), the last 15 years in the SETF may have been very different.

### ***Acceptance of ITQ management by industry, managers and the scientific community***

72. One of the serious side effects of what was a very poorly managed move to ITQs in the SETF was a view particularly among industry but also in the scientific community and to a lesser extent in some fishery managers, that ITQs were not a particularly good or useful fisheries management tool. Until fairly recently when ITQs were discussed for managing other fisheries, industry would point to the SETF and say that they had not worked in that fishery why would they work in their fishery? Some in the scientific community also implied that management by ITQs was far more difficult (from a scientific assessment point of view) than more traditional input controls, citing different, more demanding and more costly data and scientific requirements. In effect, I would argue that if a fishery is being managed effectively under any management regime the data and scientific assessments will be significant and costly. Obviously they differ depending on the management arrangements, but setting a TAC is no more or less demanding than understanding and measuring movements in effort and controlling the impact of fishing operations on target species.

### ***The role of non fisheries income in helping or hindering adjustment***

73. There is no doubt for a range of reasons (some discussed below) fishermen in the SETF have not responded to many of the economic signals being generated by management arrangements, and changes in the economy more generally. Two factors which have had a direct influence on their behaviour are the investment in and returns from non fisheries (ie. on shore) income and the additional income earned by some during the years of the orange roughy boom.

74. Many fishermen have invested in non fisheries related on shore activities (in particular commercial and residential property) over the years, and have used income from this source to supplement poor or negative returns from fishing operations. Likewise, in the years preceding ITQ management and for a period after 1992, large catches of orange roughy enabled some operators to amass significant additional income which was either applied to their fishing business, or invested elsewhere.

75. It is worth noting that there was substantial new investment in the fishery in the late 80's based on the expectation of large orange roughy resources. These expectations were not realised and this in fact increased the pressure on the rest of the fishery to deliver returns against that investment. This environment was not conducive to reductions in TACs on these other species nor for autonomous adjustment more generally, as few of even the most efficient fishers were in a position to commit resources to buy out others.

76. In more recent years with further reductions in TACs, increases in fixed costs and an increasing range of other pressures, returns from the SETF have continued to decline. In many cases even with

additional non fisheries income, this may not have been sufficient to support fishing operations - resulting in increasing pressure to leave the fishery.

### ***Cultural factors***

77. The Australian fishing industry comprises a diverse mix of people from all over the world. Many in the SETF are of Mediterranean background and come from families who have fished for generations. Fishing is a significant part of their history, identity and culture. In many cases this history and identity has shaped their responses to management arrangements and economic conditions. This “history” has a number of potential effects including i) a reluctance to leave what is a traditional family pursuit – “my family have been fishermen for generations and I don’t know what else I could do”; ii) an identity impact – “we have always been good (the best) fishermen” and to leave the industry would be to lose that identity and superior recognition in the local community, even if this means subsidising fishing operations from other pursuits; and iii) “traditional fishers (the core of the fishery), many of whom are from Italian families, have been slow to move and are very conservative, and as a result may have been selectively disadvantaged” (Aslin *et al.*, 2001).

78. As a final comment on cultural factors the view has been expressed that the move to ITQs forced fishers to approach fishing as a business, ITQs forced “people from a hunter-gather framework to being business people whether they liked it or not” (Aslin *et al.*, 2001). This, and the co-management framework which involved the fishing industry directly in the management of the fishery, has seen a huge change in fishermen’s understanding and approach to fisheries management.

### ***Perceptions about the value of fishing vessels and permits and the future productivity of the fishery***

79. The SETF fleet is an old fleet, with an estimated 40 % of vessels over 30 years old and just over 80% 20 years or older (FERM, 2004). FERM conclude “There are extremely few opportunities to use the old inshore wooden trawlers elsewhere. Compounding this, many operators appear to have unrealistic expectations as to what their sometimes poorly maintained vessel is worth and are reluctant to sell their permit or quota until they have a buyer for their vessel, .....”.

80. Against the backdrop of a world where there is overfished and declining fish stocks, substantial overcapacity in the form of vessel and labour and in a country which has had few vessel decommissioning schemes (of limited success) it is curious that perceptions about the value of assets and, in particular, fishing vessels is often far removed from reality. I can only suggest that it stems from a lack of awareness of what is happening in general across Australian fisheries (including the broader marine environment pressures) and the world fisheries scene, and this results in an overly optimistic view of the future. Although the fact that many fishers may have little or no alternative employment options and are approaching retirement may also influence this thinking.

### ***“Non binding” nature of the SETF TACs***

81. The initial TACs for most species in the SETF were set based somewhere between the average and maximum historical catch levels, and most subsequently increased in the initial years of 1992-97. In the period 1999-2004 there has been a 20% fall in total SETF TACs. Despite claims by industry that a catch rate of 70-80% should be considered fully utilised, in 2003 the TACs for 14 of the now 20 ITQ stocks were not fully utilised (FERM 2004). FERM concludes that “In the main, the TAC levels set since 1992 have not restricted many SETF operators from continuing to operate as they did previously”. Indeed the “non binding” nature of these TACs until more recent years may of itself acted to slow the adjustment processes sought in this fishery.

82. It is interesting to reflect on why the TACs have not more effectively assisted the adjustment process. It has been suggested that this is in part because of the huge economic pressure that the fishery was under when ITQs were introduced and the consequent significant political pressure that would have resulted from attempts to further reduce the TACs in the early 1990's. This to me further supports the argument that a structural adjustment package should have been made available in 1991 prior to the introduction of ITQ management. While involving industry in the TAC setting process is an important part of the co-management model, I believe they actively sought to maintain TACs during this difficult period to ease the financial situation many of them were facing. This unfortunately just put off the inevitable day of reckoning and resulted in a slower rate of adjustment.

83. Elliston *et al.*, conclude that "One of the most significant improvements which could be made to the economic efficiency of the fishery involves the setting of TACs for key species". Their analysis suggests that economic (cost of production and price received) as well as biological information should be used in setting TACs. They point out that current TACs are not set in this way and believe that inappropriate TACs are dissipating potential economic returns in the fishery. This suggests a further lowering of TACs for key species would further improve the economic efficiency of the fishery.

#### ***Impact on fisheries dependent communities***

84. There appears to be mixed views on the likely impact of fisheries management changes on fisheries dependent communities. Under any management regime effort needs to be reduced over time as fishers become more efficient. This results in fewer vessels operating from fewer ports with possibly greater regionalisation. There can be little doubt that the poorly handled introduction of ITQs in the SETF, and the long period of destabilisation which followed, had an impact on individuals and their communities. On the other hand the greater security afforded by ITQs and subsequently SFRs issued under the SESS Management Plan have provided increased retirement security.

85. The *New Directions* policy statement (Commonwealth of Australia, 1989) recognised a variety of possible social impacts stemming from vessel reductions including:

- Inability of owners to sell fishing boats and realise on capital assets;
- Reductions in the number of people employed in the industry;
- Flow on effects of loss of employment to regional communities; and
- Impact on other fisheries where boats were permitted to operate in several fisheries.

86. It concludes that while care must be taken to minimise the impact of restructuring, it should nevertheless be undertaken, with the likely outcome to be of overall benefit to both local communities and more generally the Australian community. It notes that few, if any, regional communities are solely dependent on fishing, and any adverse impacts will be minimised if the restructuring is gradual.

87. These conclusions are supported by a study undertaken prior to the introduction of ITQs in the SETF (Powell *et al.*, 1989) which concluded:

- for the four towns considered, economic flow-on effects of trawl fishing income were modest because of the few linkages between fishing and other economic activities, and the small overall contribution of trawl fishing to town economies;
- total contribution in employment terms from trawl fishing was 4% of the Ulladulla economy; 12% for Eden; 13% for Lakes Entrance, and 5% for Portland;

- the introduction of ITQs was expected to lead to fewer boats in the SETF, and increased effort and efficiency among remaining boats – reduced employment on boats overall, possibly resulting in boat relocations;
- economic effects of changes resulting from ITQs were likely to be modest – total fishing industry employment would be reduced 15-25% (only 2-3% of the total economy of towns considered);
- because of better infrastructure and processing facilities, Eden was likely to benefit slightly while other ports would lose slightly;
- higher output from orange roughy catches in 1989 was expected to produce substantial economic gains swamping any negative effects of the policy change; and
- while overall effects were likely to be small, there may be a need for measures to aid adjustment and help disadvantaged individuals.

***Other external factors – new environmental legislation and the introduction of marine protected areas***

88. This paper would not be complete without acknowledging the significant changes which have occurred since the release by the Australian Government of its Oceans Policy in 1998. Flowing from this was a program of regional marine planning (establishing marine protected areas - MPAs) and extensive and updated environmental legislation<sup>16</sup>. The implementation of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) means that the Commonwealth Department of Environment and Heritage now plays a significant role in promoting ecologically sustainable management of fisheries and assessing their environmental performance.

89. The Department is responsible for assessing fisheries managed under Commonwealth legislation and state export fisheries in accordance with the EPBC Act. This includes:

- the strategic assessment of fisheries under Part 10 of the EPBC Act;
- assessments relating to impacts on protected marine species under Part 13; and
- assessments for the purpose of export approval under Part 13A.

90. More generally, Australia's governments are working together to set up a national system of protected areas throughout the entire marine zone. The primary goal of the National Representative System of Marine Protected Areas (NRSMPA) is to establish and manage a comprehensive, adequate and representative system of marine protected areas to contribute to the long-term ecological viability of marine and estuarine systems, to maintain ecological processes and systems, and to protect Australia's biological diversity at all levels. Within this framework the Commonwealth government manages an estate of marine protected areas that are Commonwealth reserves under EPBC Act. Strategic assessment and development and implementation of MPAs have had a major impact on the SETF.

***Fuel prices, repairs and maintenance and the price of fish***

91. Fuel prices, the cost of other major inputs and static or declining returns for fish have had a major impact on the SETF over the last five years. Key costs have increased steadily with a major increase in fuel costs in the last two years. Repairs and maintenance on an ageing fleet are unavoidable and costly. FERM, 2004 study concludes “Adapting to changes in external factors is an unavoidable part of the business world”.

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<sup>16</sup> The Environment Protection and Biodiversity Conservation Act 1999

92. As these costs have increased, catches have declined and the real price of fish has in general remained stable, or fallen, due to increased competition from domestic and international producers (FERM 2004). This trend is likely to continue and given current Australian government trade policies, there is unlikely to be any relief using trade measures. This calls for a new approach to maximise the value of each fish caught – for example increasing mesh sizes and different approaches to marketing of product. This may involve further short term losses in catches and revenues with the benefits flowing in the medium term.

### **Lessons learnt and future programs**

#### ***Some comments on structural adjustment in fisheries***

93. Structural adjustment in fisheries is no different to adjustment elsewhere in the economy. Structural adjustment is the ongoing shift in the distribution of activities and resources within and between individuals and firms, in an attempt to improve efficiency, contribute to economic growth and raise living standards<sup>17</sup> (Newby *et al.*, 2004). However, unlike other sectors of the economy, fishermen do not have control of all the inputs in their “production” processes - specifically the level of fisheries resources that they can access.

94. In the fisheries context, because of the market failure which occurs if fisheries are not regulated, a primary role for governments is to establish management regimes that remove incentives that lead to overcapacity, and to facilitate autonomous adjustment in response to changing economic and biological conditions. This is very much the philosophy which underpins the *New Directions* policy statement and current Commonwealth fisheries policy.

95. Fishing and fishermen should be treated in the same way as other sectors of the economy and should be exposed to the risks of the market, make investment decisions and adjust accordingly. That said, there is also a strong case that where previous government actions have led to overcapacity and management changes have not adequately addressed this, then there is a role for governments in facilitating necessary adjustment *prior* to implementing new management arrangements. This did not happen in the case of the SETF.

96. Newby *et al.* conclude in relation to their Australian case studies that “...capacity problems originally exist in fisheries due to the historical management regimes and the associated economic incentives they created. Unless these underlying incentives to create overcapacity are addressed, any benefits of structural adjustment schemes, on both fish stocks and economic rents, will be short lived. The primary role of governments is to design and implement a management regime that addresses the incentives that lead to capacity problems and facilitates autonomous adjustment.”

97. So in a new fishery, the role of government is to implement sound market-based management arrangements which do not encourage overcapacity to develop and which facilitate autonomous adjustment. In established fisheries where overcapacity is already a problem they need to assess the nature and extent of this, develop and implement a structural adjustment scheme if considered appropriate, and then establish market-based management arrangements. There is no substitute for sound long term management arrangements.

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<sup>17</sup> Productivity Commission 1999, *Structural Adjustment – Exploring the Policy Issues*, Workshop Proceedings, AusInfo, Canberra.

***The 2005 Commonwealth Fisheries - Securing our Fishing Future initiative.***

98. The *Securing our Fishing Future* package announced by the Minister for Fisheries in November 2005 is aimed at addressing the profitability and the sustainable future of the fishing industry in Commonwealth managed fisheries. The centerpiece of the package is AUD 150 million for a one-off, capped, fishing concession buyout focused on reducing overcapacity in those Commonwealth fisheries that are subject to over-fishing - or at significant risk of over-fishing in the future. The following fisheries are being targeted in this process:

- the Southern and Eastern Scalefish and Shark Fishery (excluding the Great Australian Bight Fishery, which is not subject to overfishing);
- the Eastern Tuna and Billfish Fishery;
- the Bass Strait Central Zone Scallop Fishery, and
- the Northern Prawn Fishery.

99. The package will also assist in reducing the impact of the displaced fishing effort arising from the creation of Marine Protected Areas in the south east marine region.

100. In a significant departure from previous Commonwealth fisheries adjustment programs a further AUD 70 million in complementary assistance will be available for other activities including:

- AUD 30 million to offset the impacts of reduced fishing activity on onshore businesses most directly linked to the fishing industry (e.g. fish processors, ships chandlers) as well as other targeted assistance including:
  - grants of AUD 5 000 and AUD 3 000 respectively to skippers and crew who lose employment as a result of the catch cuts to offset the costs of job seeking, relocation and retraining;
  - AUD 1 500 per fishing or directly related business to offset the costs of obtaining professional business advice on their best options under the package;
- AUD 20 million to establish a Fishing Communities Programme aimed at generating new economic and employment opportunities in vulnerable regional ports affected by reduced fishing activity;
- AUD 21 million to offset the cost of AFMA management levies and for improved science, compliance and data collection.

101. In announcing the package the Government said it was “responding to industry pleas and stepping in as a circuit-breaker so as to ensure all Commonwealth fisheries are sustainable and those remaining in the industry are able to earn a decent living.” Importantly the Minister emphasized that the Government has not changed its policy of preferring management arrangements which facilitate autonomous adjustment in Commonwealth fisheries.

102. Tenders for Business Exit Assistance were called in March 2006 and closed in early June 2006. The results were announced by the Minister for Fisheries on 15 September 2006:

- Around AUD 90 million will be used to purchase over 400 fishing concessions (permits and SFRs) in the SESS fishery and the Eastern Tuna and Billfish fishery
  - 140 Boat SFRs from the scalefish and shark fishery (close to 50 percent of all Trawl Boat SFRs); and

- 100 longline fishing permits;
- The tenders offered in the Bass Strait Central Zone Scallop Fishery and the Northern Prawn Fishery were generally not considered to be value for money and very few offers were accepted in these fisheries.

103. As a result, the Government will open a second round of the Business Exit Assistance from Thursday, 19 October 2006 to give operators in these fisheries another opportunity to tender their concessions. Fishers will have five weeks to tender. Implementation of the other elements of the *Securing our Fishing Future* package will follow this process.

### **Concluding remarks**

104. Adjusting to change is difficult in any sector, but change is inevitable. Structural adjustment is a continuous process and any industry or sector which believes it can be isolated from it, is misguided. This is particularly the case when accessing a scarce community owned natural resource for which we have limited knowledge. Fisheries management arrangements which facilitate autonomous adjustment should be implemented whenever possible and governments should allow market forces to operate within this framework rather than seeking to achieve other social or regional development objectives at the expense of the resource. Transparent, stable management arrangements and secure on-going access rights will help facilitate desired fisheries management outcomes.

105. I do however believe there is a case for adjustment assistance to be more forthcoming rather than less in some circumstances; specifically where previous government action, or inaction, has led to a blow out in effort and resulted in an “unsustainable” fishery. In these circumstances a well-targeted adjustment program at the right time can create an environment which facilitates better ecological and economic outcomes.

106. Structural adjustment has and is occurring in the SETF. The process is slow, it has been painful (death by a thousand cuts!) and has caused additional pressure on target and non target species and the marine environment. There does not appear to be a strong economic case for government intervention to speed up this process. There may however be environmental grounds for such action but the costs and benefits would need to be carefully assessed.

107. So with hindsight what would I have done differently? I strongly believe that an adjustment package should have been implemented in 1991 prior to the introduction of the ITQ management. The package should have dealt with the already identified problem and given operators a clear indication of the environment (both resource and economic) they would be facing after the package. Ideally, the package would have been reasonably generous and combined with targeted, focussed consultation, would have reduced or eliminated many of the problems seen in the SETF during the 90's. Once new arrangements were implemented, binding TACs on key target species should have been set and enforced, leaving operators to work in this new environment. I believe this would have given the operators remaining in the fishery the best chance of dealing with the other external pressures which have appeared over time.

108. Any move to new management arrangements and reallocation of access rights is fraught with danger. This is borne out by experience in many Australian Commonwealth fisheries as we have moved over the last 15 years to implement new management arrangements. Particular care must be taken in developing the new management package and consulting as widely as possible. Arrangements must withstand legal scrutiny and be as transparent as possible. An independent process to determine the transition from one form of access rights to another is essential as most litigation is about new allocations and not new management arrangements. Be thorough, be careful, be open in your processes and consultation but be aware it is not going to be easy!



## ANNEX

*Non-trawl sector*

Prior to 1985, the non-trawl sector was a series of small, open access fisheries. In July 1985, a freeze was placed on issuing new Commonwealth Fishing Boat Licences (CFBLs), but by this time thousands of such licences were in existence providing access to scalefish by gillnet, demersal line and trap methods, in Commonwealth waters. Many of these licences were not used to any great extent, creating a large pool of latent effort. In 1988, gillnet operators were brought under input controls which restricted fishing effort by a system of gear units designed to limit the take of school and gummy shark. This also had the effect of reducing the gillnet effort which could be directed at scalefish.

In 1992, with the establishment of AFMA, approximately 550 Fishing Permits were granted to previous holders of CFBLs allowing for the take of demersal scalefish using non-trawl fishing methods. At the same time a trip limit for eastern gemfish was introduced, in response to concerns about the stock and in line with the limits which already applied to the trawl sector.

In 1994, AFMA commenced developing more specific access criteria and long-term management arrangements for the non-trawl fishery. Specific concerns had been raised regarding the non-trawl catch of three trawl quota species; blue eye trevalla (*Hyperoglyphe antarctica*), blue warehou (*Serirolella brama*) and ling (*Genypterus blacodes*). After a lengthy consultative process, the access criteria were finalised and applied in October 1996, further limiting the number of operators with access to the fishery to around 160.

Following further consultations, TACs were set for the non-trawl sector and individual quotas were allocated to non-trawl operators for the three key species; blue eye trevalla, blue warehou and ling on 1 January 1998. In contrast to the trawl sector, the transition to ITQ management and the allocation of quota in the non-trawl (scalefish) sector was relatively free of litigation.

The SESS Management Plan covering the trawl, non trawl, the Great Australian Bight Trawl and shark fishery was introduced in September 2003 and brought all fisheries under a single management plan and complementary management arrangements.

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