

**BSAI Crab Rationalization Program
Trailing Amendments**

**Community Protection
Binding Arbitration**

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NOTE - Only the following pages have new analysis:

**Community Protection: pp 1-12
B Share Discussion: pp 17-20
Arbitration Amendments: pp 31-34**

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3.6.3 Right of First Refusal and Community Purchases for CDQ Groups and Community Organizations

The Council's preferred alternative permits transfers of PQS within a region subject only to limits on ownership. An additional option originally proposed by the Council and modified by the Community Protection Committee would provide CDQ groups or community groups with a first right of refusal on any processing shares sold. Additional options advanced by the Council would permit CDQ groups and communities to purchase shares. The Community Protection Committee reached a consensus supporting three different community purchase options. The first option would grant a right of first refusal to crab dependent communities on the sale of PQS for transfer out of the community. The second option would grant a first right of refusal to crab dependent communities in the North Gulf of Alaska¹ on the transfer of PQS from communities in the North Gulf that are not crab dependent. The third provision would waive the sea time requirements for the purchase of harvest shares for any crab dependent communities. This waiver would not grant preferences to communities for the purchase of shares but would simply allow communities to purchase the shares. The last provision would define the rules that would govern the oversight and management of shares

The General Right of First Refusal

The provision that would create a general right of first refusal for communities on processing shares sold for transfer out of the community provides:

1. General Right of First Refusal

For communities with at least three percent of the initial PQS allocation in any BSAI crab fishery based on history in the community except for those communities that receive a direct allocation of any crab species (currently only Adak), allow CDQ groups or community groups representing qualified communities a first right of refusal to purchase processing shares that are based on history from the community which are being proposed to be sold for processing outside the boundaries of the community of original processing history in accordance with the provisions below.

Entity Granted the Right of First Refusal

The right of refusal shall be established by a contract entered into prior to the initial allocation of PQS which will contain all of the terms specified in paragraphs A through I below. The contract will be between the recipient of the initial allocation of the PQS and:

- 1) the CDQ group in CDQ communities
- 2) the entity identified by the community in non-CDQ communities.

In non-CDQ communities, the community must designate the entity that will represent the community at least 90 days prior to the deadline for submission of applications for initial allocations of PQS.

Under this proposed option, in communities with processor history that accounts for over 3 percent of the initial allocation of PQS in a fishery, a community based right of first refusal would exist. The three percent

¹ The North Gulf of Alaska is defined as all communities in the Gulf of Alaska north of 56°20'N latitude.

threshold is intended to limit the right to communities with historic dependence on the crab fisheries. Eight communities are estimated to have the historical dependence necessary to qualify for the right of first refusal under this provision. Specific communities cannot be identified because of confidentiality restrictions. In CDQ communities, the CDQ group would receive the right. In non-CDQ communities, the right would be granted to an entity identified by the community.² Eligible communities would be required to designate the group that would be granted the right of first refusal at least 90 days before the initial issuance of PQS. Requiring the designation of the community entity is necessary to prevent delays in making allocations and to provide processors with time to enter a contract that would establish the right.

The Committee included in this option a provision that would exclude any community that receives a direct allocation of crab. Adak is currently the only community to which a direct allocation would be made. The apparent rationale for this provision is that the direct allocation to Adak is sufficient to support the community's dependence on the crab fisheries and that further protection to the community's interests in the fisheries is unnecessary.

The analysis points out several issues with the right of first refusal. In general, the more effective a right of first refusal is in protecting a community's interests, the more that right will reduce efficiency in the fisheries. In recognition of this trade off, the Community Protection Committee has attempted to develop the option in a manner that strikes a reasonable balance of community and industry interests.

A right of first refusal generally provides an entity with the right to purchase an item from a seller for the same price and subject to the same terms and conditions as offered by the seller in an open market. The first right of refusal would operate by the seller notifying the holder of the right of the terms of the pending sale. The holder of the right exercises the right by notifying the seller of acceptance those terms within a specified time period. If the terms are not accepted within the predetermined time period, the open market sale may proceed.

In assessing whether to establish the right of first refusal, the Council should consider the consequences for communities that might exercise the right. In any case where the right might be exercised, it is likely that the community would need to work with processors, both the seller of the shares and an intended user of the shares who might purchase or lease the shares from the community. The consequences of involving the community in these transactions needs to be assessed.

To simplify administration the right of first refusal would be created by a contract between the community group and the processor receiving the initial allocation of PQS. The contract would be required to contain the following provisions:

² The option as originally proposed contained a provision that would grant the right of first refusal to other processors in the community. This provision was rejected by the Council because according the right to competing local processors could have the unintended consequence of providing processors with a strategic tool unrelated to (and possibly even used contrary to) community interests. For example, if one processor is able to use the threat of the right to reduce the profitability of another local processor, the overall welfare of the community may be hurt. In addition, the exercise of the right by a competing processor could result in that processor gaining access to proprietary information, which could harm the processor selling the shares.

Contract Terms

- A. The right of first refusal will apply to sales of the following processing shares:
1. PQS and
 2. IPQs, if more than 20 percent of a PQS holder's community based IPQs (on a fishery by fishery basis) has been processed outside the community of origin by another company in 3 of the preceding 5 years.
- B. Any right of first refusal must be on the same terms and conditions of the underlying agreement and will include all processing shares and other goods included in that agreement.
- C. Intra-company transfers within a region are exempt from this provision. To be exempt from the first right of refusal, IPQs must be used by the same company. In the event that a company uses IPQs outside of the community of origin for a period of (two options):
1. 3 consecutive years
 2. 5 consecutive years
- the right of first refusal on those processing shares (the IPQs and the underlying PQS) shall lapse. With respect to those processing shares, the right of first refusal will not exist in any community thereafter.
- D. Any sale of PQS for continued use in the community of origin will be exempt from the right of first refusal. A sale will be considered to be for use in the community of origin if the purchaser contracts with the community to:
1. use at least 80 percent of the annual IPQ allocation in the community for 2 of the following 5 years (on a fishery by fishery basis), and
 2. grant the community a right of first refusal on the PQS subject to the same terms and conditions required of the processor receiving the initial allocation of the PQS.
- E. All terms of any right of first refusal and contract entered into related to the right of first refusal will be enforced through civil contract law.
- F. A community group or CDQ group can waive any right of first refusal.
- G. The right of first refusal will be exercised by the CDQ group or community group by providing the seller within 60 days of receipt of a copy of the contract for sale of the processing shares:
1. notice of the intent to exercise and
 2. earnest money in the amount of 10 percent of the contract amount or (two options)
 - a. \$250,000 or
 - b. \$500,000whichever is less.
- The CDQ group or community group must perform all of the terms of the contract of sale within the longer of:
1. 120 days of receipt of the contract or
 2. in the time specified in the contract.
- H. The right of first refusal applies only to the community within which the processing history was earned. If the community of origin chooses not to exercise the right of first refusal on the sale of PQS that is not exempt under paragraph D, that PQS will no longer be subject to a right of first refusal.
- I. Any due diligence review conducted related to the exercise of a right of first refusal will be undertaken by a third party bound by a confidentiality agreement that protects any proprietary information from being released or made public.

Under paragraph A, the right of first refusal would apply to sales of PQS and (in certain circumstances) IPQ. The right would apply to IPQ only if the processor had sold more than 20 percent of the IPQ from the community in 3 of the preceding 5 years. The intention of the provision is to allow some flexibility leasing shares (i.e., sale of IPQs) but to disallow long term leasing of a substantial portion of a processor's holdings. The provision is intended to balance the interest of a community in maintaining activity in the community against the processor's interest in being able to realize efficiencies from share transfers.

Paragraph B provides that the right of first refusal would apply to the transaction involving processing shares as a whole and would require the community group exercising that right to agree to all the terms of the agreement. This provision would be intended both to make the right of first refusal workable and to limit the disruption to a processor's transaction that might be caused by the exercise of the right of first refusal. The right would be made workable since the terms of the right will be clear once an offer is received to which the right would apply. Exercise of the right would require the community group to perform the contract in its entirety. The requirements of the contract should be clear to the community. The provision is thought to protect the selling processor's interests by requiring that the transaction that is acceptable to the processor be adopted.

Permitting a community to intercede in a transaction only by accepting all of the terms of the transaction could limit the effectiveness of the right. For example, a processor may sell all of its operations in a community, including its processing shares. A community may have little interest or ability to intercede in such a broad transaction. The ability of a community to perform could also be limited if a contract involves the exchange of specific goods and properties by the buyer and seller of the shares. The community might be unable to perform under a contract that requires the exchange of unique properties. The alternative to requiring the community to accept all terms of the contract would be to require separation of the processing shares from any other goods involved in the transaction. This alternative approach could complicate use of the right by the community group particularly if a processor has managed to sell a variety of assets, including the processing shares. The share value may not be easily severable from the value of the other goods and could be interdependent. For example, if a processor sells both processing equipment and shares, the value of the equipment could be based in part on the common ownership of the processing allocation. As a result, the establishment of a price for the shares that accurately reflect the market transaction could be very difficult.

Paragraph C would exempt intra-company transfers of IPQs from a community. These transfers are exempt only if the shares are used by the same company that owns the underlying PQS. The provision also provides that the right of first refusal will lapse if the shares are used outside the community for a period of 3 or 5 years. The rationale behind these provisions is that companies with shares in more than one community should be permitted to consolidate shares to realize efficiencies in their operations. Allowing the community designation to lapse is intended to recognize that the use of the shares outside a community lessens the dependency of the community on the activity represented by those shares. At some stage, this loss of dependence should be acknowledged by allowing the right of first refusal to lapse.

While this provision makes a balance between the need to allow efficiency through consolidation and the dependence of a community on the activity of a processor, the provision treats different processors differently. Processors with multiple facilities in a region could have the ability serially remove the community designations from their shares by processing those shares outside the community of origin. Although the consolidation of shares in this manner would be limited by the need of a processor to efficiently conduct its processing, the provision has a clear bias in favor of the larger processors.

Processors with shares in multiple communities are most likely to utilize the intra-company transfer exemption to transfer shares to a single location. Table 3.6-1 below shows the number of processors in each fishery with shares in multiple communities. Since shares cannot be transferred across regions, separate numbers are shown for each region in those fisheries that have processors in multiple regions. The table

cannot fully capture the potential of processors to consolidate shares through intra-company transfers since share transfers exempt from the right of first refusal could be followed by later consolidation permitted by the provision. The table does show that few companies would be able to consolidate shares as 6 companies hold shares in multiple communities in the fisheries that are regionalized based on historical landings.

Table 3.6-1. Processors with shares allocations in multiple communities by fishery.

Fishery	Region	Processors with allocations in		
		One community	Two communities	Three communities
Bristol Bay Red King Crab	North	2	-	-
	South	13	1	1
Bering Sea C. Opilio	North	6	1	-
	South	16	1	1
Eastern Aleutian Islands (Dutch Harbor) Golden King Crab	-	8	-	-
Pribilof Red and Blue King Crab	North	4	-	-
	South	11	-	-
St. Matthew Blue King Crab	North	3	1	-
	South	9	-	-

Source: NPFMC Crab Rationalization Database, Version 1, 2001

Paragraph D would provide for the exemption of a sale of PQS from the right of first refusal if the purchaser met certain conditions. The first requirement is that the purchaser must agree to use at least 80 percent of the resulting IPQ in the community during at least 2 of the first 5 years after the transaction. This provision is intended to prevent the purchaser from immediately consolidating its processing outside the community under the exemption for intra-company transfers. The second requirement is that the purchaser grant the community group a right of first refusal on the shares, subject to the same terms and conditions as the original right of first refusal. So, the exemption would only apply if the community retained its right of first refusal in the future.

Paragraph E provides that the right of first refusal would be enforce by civil contract law. The objective of this provision is to avoid overburdening the NOAA Fisheries with adjudicating cases involving the right of first refusal and to recognize the contractual nature of the right. NOAA Fisheries could enforce some of the provisions (for instance prohibiting a transaction in which the community was not provided with adequate notice). Other requirements, however, such as the requirement that the community earnest money requirement and the confidentiality requirements related to due diligence are more typically enforced through contract law. **Alternatively, the Council could request NOAA Fisheries to explore methods to assist communities, to the extent reasonable, in administration and enforcement of the right of first refusal. In addition, communities could enforce the right through contract law.** Under such an approach, NOAA Fisheries could consider the following two actions to assist communities in making the right effective. First, NOAA Fisheries could require that processors transferring processing shares could be required to attest to compliance with notice requirements of any right of first refusal. Although this will not, in and of itself, ensure that the seller has met the requirements of the right, the attestation would bring attention to the need to meet the requirements of the right prior to a transfer. In addition, the consequences of an intentional misrepresentation in the attestation may be sufficient to deter a seller from attempting to bypass its obligations under the right. Second, NOAA Fisheries could annually notify each crab dependent community of the location where IPQs from the community were used and of any transfers of shares that are linked to the community. This notification could assist the community in tracking transfers and use of shares, thereby assisting community efforts to enforce the right of first refusal.

Paragraph F makes explicit that a community group can waive the right of first refusal. Waiver of the right by a community would free parties to a transaction from the possibility that the community might exercise the right. From the standpoint of the community, the waiver is equivalent to not exercising the right and

removing itself from the private transaction. In some instances, the CDQ or community group could make a reasonable decision that waiving the right is in the best interest of the community.

The Council should clarify whether the right of first refusal is assignable by a community. Allowing assignment of the right may not be appropriate unless the Council intends the right to be exercised by private parties, including other processors. The structure of right of first refusal provision would provide the right to a CDQ or community group that is required to act for the benefit of the community. Allowing assignment of the right could result in the right being held by a private entity facing incentives and having objectives that are very different from those of the community.

Paragraph G provides that the right must be exercised within 60 days of receipt of the contract to which the right of first refusal applies. The 60 day period is intended to provide the community group with adequate time to assess the offer and to provide time to coordinate payment of any earnest money required. The right is exercised by providing notice to the seller of the shares along with earnest money in the amount of the lesser of 10 percent of the contract amount or a specific amount of money, either \$250,000 or \$500,000. If the Council adopts this provision, the amount of money will need to be specified. The percentage and dollar amounts should be selected such that a community group would demonstrate its intention to follow through with the contract and provide a representation of the ability to perform. Although contracts could be for substantially larger amounts, the earnest money payment should demonstrate the groups intention to proceed with the contract.

Paragraph G also provides that the community group would be required to perform all terms of the contract in the time specified by the contract or in 120 days of receipt of notice of the contract, which ever is longer. This provision is intended to provide the community with at least 120 days to perform. This period of time is likely to be necessary for community to arrange payment of a high valued contract for which the community group might exercise its right.

Paragraph H provides that the right of first refusal would apply only to the community in which the processing took place that led to the allocation of processing shares. The sale of PQS in which the community chooses not to exercise its right (and which is not exempt from the right) would result in a permanent waiver of the right. These provisions are intended to limit the right to the community of origin and limit the ability of the community to a perpetual right even though the community has elected not to act to retain the shares in the community.

Paragraph I is intended to protect any confidential data that might be disclosed during due diligence related to the exercise of the right. This end would be accomplished by requiring the due diligence to be conducted by a third party bound by a confidentiality agreement preventing the disclosure of proprietary information.

The Committee recommendations do not exempt any fisheries from the right of first refusal. The Western Aleutian Islands (Adak) red king crab, the Western Aleutian Islands golden king crab, and the Bering Sea *C. bairdi* fisheries are all exempt from the cooling off period (which is the other provision in the program that establishes specific community links to processing shares). A similar exemption might be appropriate from the requirements of the right of first refusal. The Western Aleutian Islands (Adak) red king crab is exempt from the cooling off period requirements because the fishery was closed for several years limiting the community dependence on that fishery. The Western Aleutian Islands golden king crab fishery is exempt from the cooling off period requirements because that fishery is regionalized in a manner inconsistent with the cooling off period requirements. The Bering Sea *C. bairdi* fishery is exempt from the cooling off period requirements because that fishery is likely to be conducted as a bycatch fishery to the Bristol Bay red king crab fishery and the Bering Sea *C. opilio* fishery in the future. Imposing the landing requirements of the cooling off period is thought to be unworkable. The right of first refusal establishes community links similar in some ways to those of the cooling off period. Exemption of

these fisheries from the right of first refusal might be appropriate if the establishment of the community linkage of the right of first refusal is believed to inappropriate for these fisheries.

The efforts of the Community Protection Committee have contributed to the effectiveness of the first right of refusal provision. Balancing the interest in protecting communities from the transfer of shares against the need for efficiencies in the fisheries raise several issues in whether the right will serve its intended purpose. These issues include:

- A few methods exist by which processors may subvert the right. The right applies only to sales that would transfer processing out of a community. Processors are permitted to relocate processing through intra-company transfers, which if undertaken for a period of years will result in the right lapsing. In addition, sales are exempt, if the purchaser agrees to process a portion of the shares in the community in two of the subsequent five years and extends the right to future sales. The purchaser can subsequently use the shares outside the community causing the right to lapse. The provisions that allow a processor to avoid the right of first refusal are thought by the Committee to reasonably balance the need to permit processors to develop efficiencies against the interests of communities in preserving historic processing.
- The protection that a community is provided by the right will depend on the community's circumstances. A community with one processor and few revenues may be provided little or no protection by a right of first refusal since it may have few resources with which to exercise its right. A community with substantial revenues and processors will be in a very different position, if a local processor attempts to sell shares out of the community. These communities likely have greater resources and might be able to work with local processors in exercising the right.
- Communities with multiple processors could be put into a precarious position with respect to the industry. Communities that exercise the right could partner with a processor the community and the pass shares on to the processor after the purchase. Exercising the right in this manner has the potential to interject the community into business transactions. Whether a processor could work with a community to use the right to engage in strategic behavior with respect to a competitor cannot be predicted.
- Processing shares could be devalued by the right of first refusal. The existence of the right of first refusal could dampen the market for processing shares, if communities are perceived to actively assert the right. In addition, the value of processing shares could differ substantially between communities of origin. For example, the shares of a processor in a community with a single processor that is short revenues to utilize the right could be valued very differently from the shares of a processor in a community with substantial revenues that is able to exercise the right on any sale. This disparity could be subject to criticism for its inequity.
- If the right of first refusal is exercised frequently, it could contribute to the concentration of shares among CDQ groups, community groups, and processors (particularly those in communities that have substantial share allocations at the outset). This could limit entry opportunities for new processors wishing to purchase PQS to enter into the crab fisheries. If PQS becomes more concentrated than it would in an open market, the market available for harvesters' crab deliveries would contract. The extent of any consolidation cannot be predicted but would depend on the extent to which holders of the first right of refusal exercise that right.
- The value of harvest shares could be diminished by the geographic landing requirements. Harvesters are likely to be disparately impacted. If the right of first refusal maintains a wide geographical distribution of processing shares, the relationship between Class A harvest shares and processing shares dictates the same distribution for harvest shares. If processing revenues are dependent on

location of processing, a portion of this difference is likely to be passed on to harvesters. The extent and distribution of this impact cannot be predicted.

In conclusion, the consequences of a first right of refusal provision are very difficult to predict. The uncertainty of how the right will be exercised and the consequences of community groups holding processing shares raise the question of whether the right may work to the detriment of some communities. The potential of detrimental consequences to communities cannot be predicted. The development of the first right of refusal could provide an avenue for CDQ and community group participation in the BSAI crab processing. If the first right of refusal is exercised by CDQ and community groups, it could disrupt private transactions for processing shares. To effectively transact in processing shares, it is possible that purchasers will partner with CDQ or community groups. This could benefit some participants that wish to enter the processing sector, since they would not have to negotiate prices, but could rely on the first right of refusal for share purchases. Other participants could be harmed by the provision, if their transactions are prevented by exercise of the first right of refusal by CDQ and community groups.

Right of First Refusal in the North Gulf of Alaska

The provision that would provide a right of first refusal to crab dependent communities in the North Gulf of Alaska provides:

2. GOA First Right of Refusal

For communities with at least three percent of the initial PQS allocation of any BSAI crab fishery based on history in the community that are in the area on the Gulf of Alaska north of 56°20'N latitude, groups representing qualified communities will have a first right of refusal to purchase processing quota shares which are being proposed to be transferred from unqualified communities in the identified Gulf of Alaska area.

The entity granted the right of first refusal and terms and method of establishing the right of first refusal will be the same as specified in the general right of first refusal.

This provision would grant North Gulf of Alaska communities³ with at least 3 percent of the history of any crab fishery (crab dependent communities) a right of first refusal on any processing shares being sold for transfer from the communities not dependent on the crab fisheries in the North Gulf of Alaska area.

Unlike the previous right of first refusal provision, this provision is intended to provide crab dependent Gulf of Alaska communities with a right that will enable the consolidation of processing shares of non-dependent communities in that area. Many of the same issues arise under this provision as under the general first right of refusal provision.

- Communities with multiple processors could be used for strategic business purposes if its resident processors compete for processing the shares subject to the right.
- Exempting intra-company transfers could provide a means to avoid the right.
- The value of processing shares subject to the right could be diminished by the right.
- Harvest shares could be affected indirectly by the distortion in the distribution of processing activity as a result of the right.

³ North Gulf of Alaska communities re defined as those communities on the Gulf of Alaska north of 56°20'N latitude.

- Complex contracts that involve more than the shares on which the right would exist could prevent a community from exercising the right.⁴

The interaction of the different factors causing these different effects complicate any predictions concerning the specific effects of this right of first refusal.

The number of North Gulf of Alaska communities that would qualify for this provision and the number of North Gulf of Alaska communities that would not qualify, but have crab qualified history cannot be released because of confidentiality restrictions.

Community Share Purchases

The Council also proposed the following option that would waive sea time requirements for communities that wished to purchase harvest shares:

Section 3.4 of the Council motion contains the following alternative concerning the purchase of harvest shares by communities:

3. Community Purchase Option

Allow for a community organization in those communities that have at least 3 percent of the initial PQS allocation of any BSAI crab fishery based on history in the community to be exempted from the restriction for the 150 days of sea time requirement under 1.6 Transferability and Restrictions on Ownership of QS.

A consensus of the Community Protection Committee supports this option.

The Council-preferred alternative permits any entity with a 20 percent owner with at least 150 days of sea time to purchase harvester shares. By itself, this provision would preclude community groups and non-profits from purchasing shares since the sea time requirement for an owner would not be satisfied. To address this shortcoming, the Council has proposed waiving the sea time requirement for community and CDQ groups based in communities with at least 1 percent of the initial distribution of processing shares in any BSAI crab fishery.⁵ Although this provision would allow the purchase of harvest shares by eligible communities, the protection to communities by this provision is likely to depend on its interaction with other provisions.

The provision allows the purchase of harvest shares by communities based on whether the community has historically participated in processing. Under the preferred alternative, 9 communities would qualify for the waiver of the sea time requirement based on processor allocations of over 3 percent of a fishery. The appropriateness of the processing history requirement might be questioned, since communities that participate in the harvest sector but not the processing sector would be unable to purchase harvest shares. Many communities have processing that shows dependence on the fisheries. This option would allow those communities to expand their interests into the harvest sector. If the Council is concerned that communities

⁴ The inclusion of goods other than shares in a transaction could have a greater impact under the Gulf of Alaska right of first refusal since the community of origin is not the community that will have the right of first refusal. If a contract is for shares and some other equipment that is located in the community origin, a community might have less interest in exercising the right. In addition, share values of those with history in these non-dependent communities are likely to be decreased by the right.

⁵ No similar participation requirement exists for the purchase of processing shares, so an exemption is unnecessary for the purchase of processing shares.

with a harvest dependence on the fisheries might be excluded, the provision could be modified to exempt communities with at least 3 percent of the harvest history in a BSAI crab fishery from the sea time requirement.

The provision is unlikely to protect communities with historic processing history from departure of processing from the community. If a substantial share of the fishery is required to be delivered to a processor holding IPQs, ownership of harvest shares might have little effect on whether harvests from those shares are landed in a community. In addition, the provision provides communities with no preferential in the market for harvest shares. Instead they receive the opportunity to participate in that market. Whether communities can effectively participate in the market cannot be predicted. The absence of preferential treatment, however, would not bias the market in favor of public sector, community participants over private sector participants.

Identification of Community Entities and Rule Governing Oversight and Management

The Community Protection Committee developed the following provision, which would define the entity that could purchase shares and exercise the right of first refusal of on behalf of a community:

4. Identification of Community Groups and Oversight

For CDQ communities, CDQ groups would be the entity eligible to exercise any right of first refusal or purchase shares on behalf of the community. Ownership and management of harvest and processing shares by CDQ groups will be subject to rules similar to CDQ regulations.

For non-CDQ communities, the entity eligible to exercise the right of first refusal or purchase shares on behalf of a community will be identified by the qualified city or borough, except if a qualified city is in a borough, in which case the qualified city and borough must agree on the entity. If no entity is identified and approved by the date of presentation of an offer over which the entity would have a right of first refusal, no community entity will have the right. Ownership and management of harvest and processing shares by community entities in non-CDQ communities will be subject to rules similar to those of the halibut and sablefish community purchase program.

For CDQ communities, CDQ groups would be eligible to purchase shares and exercise the right of first refusal. **The Committee has proposed removing the words “rules similar to” from the second sentence of the first paragraph to clarify that CDQ groups would be governed by CDQ rules.** Ownership and management of share holdings for CDQ groups would be subject to CDQ rules. In non-CDQ communities, the community would designate the entity that could purchase shares and exercise the right of first refusal. Under this provision, a qualified community would be a qualified borough or first or second class city. If a qualified city is in a borough, the city and borough would need to agree on the entity. If the borough and city cannot agree on an entity at the time an offer is presented under the right of first refusal, that right will be waived. Requiring agreement for the right to exist was proposed as a means to pressure the borough and city to agree on an entity and avoid the need for the State or NOAA Fisheries to mediate a dispute. The entity could be the community government. Although no particular structure is required for the groups, the oversight and management of share purchases and holdings by non-CDQ groups would be governed by the rules of the halibut and sablefish community purchase program. **The Committee has proposed removing the words “rules similar to” from the last sentence of the second paragraph to clarify that community groups would be governed by halibut and sablefish community purchase program rules.** Discussion of CDQ communities is separated from the discussion of other communities for clarity.

CDQ Community Purchases

Allowing CDQ groups to act on behalf of communities would simplify the development of corporate entities to act on behalf of those communities. In addition, the current CDQ management and oversight regulations should be adequate to ensure that the benefits of purchased harvest shares are responsibly held and managed. A more complete description of those requirements appears in Section 3.9.1. The only potential shortcoming of this option is that the interests represented by a CDQ group are likely broader than the communities on which eligibility is based (i.e., most CDQ groups represent communities that have processing history of at least 1 percent of a BSAI crab fishery). If the Council intends for the benefits to flow only to those communities with a minimum processing history, an additional management obligation could be placed on any CDQ group that purchases harvest shares under the provision. It should also be noted that CDQ groups could have a significant advantage over share purchasing entities in non-CDQ communities that might not have the institutional knowledge, reputation, or wherewithal to participate effectively in these markets.

The CDQ program was implemented in 1992 to provide fishermen who reside in western Alaska communities a fair and reasonable opportunity to participate in the Bering Sea/Aleutian groundfish fisheries, to expand their participation in salmon, herring, and other nearshore fisheries, and to help alleviate the growing social economic crisis within these communities. Six CDQ groups were developed under the program: Aleutian Pribilof Island Community Development Association (APICDA), Bristol Bay Economic Development Corporation (BBEDC), Central Bering Sea Fisherman's Association (CBSFA), Coastal Villages Region Fund (CVRF), Norton Sound Economic Development Corporation (NSEDC), and Yukon Delta Fisheries Development Association (YDFDA). These six groups serve the interests of approximately 65 communities with a combined population of 27,000. The communities are located within 50 nautical miles of the Bering Sea Coast and on islands in the Bering Sea and are predominantly populated by Alaska Natives. All CDQ groups are non-profit organizations that serve as the managing organizations for implementation of the Community Development Plans. They have created for-profit corporations, non-profit organizations, and limited liability companies. The CDQ groups have become active participants in the BSAI groundfish and crab fisheries. In 2000, seventy-one percent of the CDQ groups' revenue was attributed to royalties received for the right to harvest the allocations granted under the CDQ program. The second largest source of revenue for the CDQ groups, 16 percent of the total, was sale of harvests and processing of their allocations. The majority of the remaining revenues was from the CDQ groups' equity earnings in businesses they have entered with harvesters and processors and from other fishing-related businesses and investments. The total net asset value of the combined CDQ groups as of the year 2000 was \$129 million.

Non-CDQ Community Purchases

For non-CDQ communities, each qualified community could identify the entity that would be permitted to purchase shares on its behalf. These holdings would be subject to rules similar to the halibut and sablefish community purchase program. That program requires that the entity be non-profit. In addition, the entity would need to submit: (1) a certificate of incorporation (2) verification of its qualification (3) documentation demonstrating accountability to the community and (4) an explanation of how the community entity intends to implement performance standards for management of its shares. Similar rules could be used to establish eligibility for a community group to purchase shares in the crab fisheries.

The requirements of the halibut and sablefish community QS program are less stringent than the oversight and management of the CDQ program. The community purchase rules require less detail than the CDQ community development plans.⁶ CDQ requirements could be cost prohibitive, especially for new non-profit community groups interested in purchasing interests in fisheries. Under the halibut and sablefish community purchase rules, the entity would be required to (1) submit an annual report and (2) meet performance

⁶ Community development plans must include descriptions of projects; community development information; business information; project schedules; employment, vocational, and educational programs; a description of existing infrastructure; a description of capital uses; and a description of short and long term benefits.

standards. The annual report include (1) a summary of business, employment, and fishing activities under the program, (2) a discussion of any corporate changes that alter the representational structure of the entity, (3) specific steps taken to meet the performance standards, and (4) discussion of known impacts to resources in the area. The performance standards would require the group to (1) maximize benefit from use of community shares for community residents, (2) ensure that benefits are equitably distributed throughout the community (3) ensure that community shares would be fished. Communities purchasing shares would be subject to performance standards, with voluntary compliance monitored through the annual reporting mechanism and evaluated when the program is reviewed. Since these groups receive no direct allocation, these less stringent measures are likely more appropriate for non-CDQ community groups purchasing shares.

Given the success of some CDQ groups in partnering with private fishery participants it is likely that additional partnerships will develop as both CDQ groups and community groups develop their interests in the crab fisheries. Partnership opportunities under the community purchase and right of first refusal provisions could provide an effective inroad for harvest share owners to enter the processing sector. CDQ and community group partnership arrangements, however, could become prevalent in the processing sector, if this option is adopted and future purchasers of processing shares believe it is necessary to partner with CDQ or community groups to ensure that share purchases are completed. The CDQ groups development as effective participants in non-CDQ fisheries suggest that community groups are capable of developing into effective participants in BSAI crab harvesting and processing.

3.7 Analysis of Binding Arbitration

Members of the BSAI crab fleet requested that the Council consider binding arbitration as a mechanism to resolve ex-vessel price disputes between harvesters and processors. In the current crab fisheries, harvesters often negotiate prices collectively at the beginning of each season. Harvesters have used two strategies for leverage during these price negotiations. In some seasons, harvesters have delayed the beginning of fishing after the opening of the season to pressure processors to pay a higher price for harvests. At other times harvesters have promised additional deliveries to the processor that offered an acceptable price to induce higher offers. The ability of harvesters to use these collective inducements could be limited in a fishery with an extended season and processor share allocations. In addition, neither harvesters nor processors believe that delaying fishing is in the best interest of either sector. Binding arbitration is intended to provide a method of determining a fair price for sales of crab in the rationalized fishery, subject to the limited harvesting and processing markets that will be available under a system that allocates both harvest and processing privileges.

The task of the Council is to identify an arbitration program. The specificity with which the Council must identify the program is dependent in large part on the extent of Council and NOAA Fisheries management and oversight. At a minimum, the Council must identify the standard to be applied by the arbitrator in making decisions, the general structure of the program, and the general principles that will guide oversight and management. The extent to which other details are specified by the Council decision is in the discretion of the Council. In any case, the development of the arbitration program is likely to require substantial work by industry after the Council's decision at this meeting. Administrative details and specific timelines for procedures will need to be developed. These activities could continue in committee with periodic reports to the Council.

The working group on binding arbitration met several times, developing five general arbitration structures. These alternatives range from a system that provides single preseason arbitration involving all harvesters and processors to a system that provides each harvester with the right to pursue binding arbitration with a single processor at any time before or during the season. During meetings, the Committee developed a preference for two of the arbitration alternatives: the "fleet-wide model," which results in a single baseline price that can be applied to all deliveries, and a "last best offer model," under which arbitration is conducted preseason on a processor-by-processor basis. These two alternatives were developed in greater detail than the other alternatives.

A brief discussion of arbitration and the different types of arbitration under consideration is presented first. The idea of using binding arbitration for resolving ex vessel pricing disputes is taken from the Newfoundland snow crab fishery. Because that system is the basis for consideration, a brief review of that system is presented.

The analysis of alternatives begins with a discussion of the problem statement developed by the Committee. Since the arbitration is part of the larger rationalization program, the role of the arbitration system in that rationalization program is discussed. Fundamental to the arbitration program is the standard applied by the arbitrator in making a decision. Since this standard will have a large influence on arbitration outcomes and could be superimposed on any of the underlying arbitration systems, the options for the arbitration standard developed by the Committee are examined first in the analysis. After the arbitration standard, all of the different structures developed by the Committee are analyzed. The analysis concentrates on the two alternatives advanced by the Committee because of the Committee's preference for those structures and the greater detail of those two alternatives. The analysis concludes by examining the several individual elements that are or could be incorporated into the different structures and that could influence the workings and outcomes of the arbitration proceedings.

3.7.1 Arbitration and the Types of Arbitration Under Consideration

Arbitration is the resolution of a dispute by a person selected under law or by the parties to the dispute. Arbitration is often used to resolve disputes that benefit from a quick resolution, including public employee labor disputes, sports contracts, federal contracting disputes, and disputes in the brokerage industry (Young, 1991 at p. 8 and Brams, 1998 at p. 71). In different arbitration systems, different rules govern the arbitrator's method of reaching a decision. In "conventional arbitration" the arbitrator decides the specific arbitration outcome. In a "final offer" or "last best offer" arbitration, each of the two participants submits a final offer.⁷ The arbitrator is restricted to selecting one of the two final offers of the parties. One of the models advanced by the Committee is a conventional arbitration model; the other is a final offer model.

3.7.2 The Newfoundland Binding Arbitration System

A government appointed commission developed the Newfoundland system of binding arbitration in 1997 after a series of harvester strikes delayed fishing in the crab fishery over the course of several years. The commission was appointed after a protracted strike kept the fishery closed for a period of months (Task Force on Fish/Crab Price Settlement Mechanisms, 1998).

The Newfoundland crab fishery is relatively young and developed substantially as North Atlantic groundfish stocks declined in the early and mid 1990s. Growth in crab, however, did not keep pace with declines in groundfish. Pricing disputes arose from several factors, including mistrust between the sectors, a lack of transparency in pricing, weakening markets, product price declines, price differences with other crab fisheries, and the stances of both parties in collective bargaining (Task Force on Fish/Crab Price Settlement Mechanisms, 1998).

In the Newfoundland crab fishery the harvesting and processing sectors each act collectively, achieving an industry wide price for the fishery. Fishers have elected to act collectively across the entire fishery. Broad collective action on the part of fishers has forced processors to work collectively in the arbitration process, as well (Sackton, 2002). The arbitration process begins with a preseason market report produced by an independent analyst selected mutually by the parties. The arbitrator, also selected by the parties in advance, has been a person outside of the industry. A negotiating period follows the market report during which the parties attempt to reach an agreement on price. The arbitrator does not participate in these negotiations. If an agreement is not reached 14 days prior to the season opening, each party submits a final offer to the arbitrator, who chooses from those two offers (Fishing Industry Collective Bargaining Act, 2001). In practice, the parties have relied on a pricing formula, under which prices are adjusted every two weeks based on the first wholesale price of three products, which are the primary products of the fishery. The formula also considers the exchange rate, the market share of each of the products, and the product recovery rate for each of the products. The starting point for the formula is a \$1.00 per pound allocation from the first wholesale price to processors, which was agreed by the parties. After that allocation, all additional first wholesale revenues are split 80 percent to harvesters and 20 percent to processors. The first wholesale prices are determined by ongoing independent market analyses based on private surveys of buyers and sellers. The job of the market analyst is to independently develop these private sources of information (Sackton, 2002).

In the first few years of the program, participants in Newfoundland's fisheries were reportedly satisfied with the resolution of disputes and transparency in pricing that have developed through the arbitration program. Transparency is provided through the preseason market analysis, as well as the biweekly adjustments under the price formula (Panel on Corporate Concentration, 2001). No strikes have occurred in the crab fishery since the system was implemented in 1998. The pricing formula seems to be critical to the success of the

⁷ Several other variations of these arbitration procedures have been developed. For examples see Dickinson, 2001 and Brams, 1990.

program. Processors believe that the system protects them in a falling market, while harvesters enjoy having additional market information (received through the market analysis and the arbitration process) and participation in mid-season price increases (Sackton, 2002). Strong markets for outputs of the fisheries in the first few years of the program likely contributed to the general satisfaction of participants. Recent developments in the fisheries, however, have strained the arbitration system.

Processors participating in the Newfoundland fisheries have been represented in arbitration by the Fisheries Association of Newfoundland and Labrador (FANL). Although FANL has represented processors in the arbitration process, the organization is not currently accredited as the bargaining agent and therefore cannot enforce arbitration findings on processors. Processors can voluntarily pay a price higher than the arbitrated price (FANL, 2002). The Newfoundland fishery is managed with an individual quota system with limited processor entry. Despite the limits on processor entry, rules have permitted new processors to enter the fishery since the implementation of the program. These new entrants, together with stock declines, have stimulated price competition among processors, so that the prices the 2002 season exceeded the formula price (McGovern, 2002). Although fishers have benefitted from this price competition, FANL asserts that its inability to initiate arbitration or enforce the arbitrated price has contributed to instability in the processing industry and communities (FANL, 2002). FANL applied for accreditation as the bargaining agent for all processors in May of 2002. Hearings required for the accreditation process began in November of 2002 and which would not be completed by the December 31, 2002 deadline for FANL's withdrawal from the arbitration process for 2003. As a consequence, FANL contemplated withdrawal from the system of arbitration, which the government countered by introducing legislation to extend the system to 2003 and mandate processor participation (Government of Newfoundland and Labrador, December 2002). In early January 2003, FANL elected to withdraw its application for accreditation and remove its collective bargaining mandate from its bylaws (FANL, 2003A). In late February 2003, FANL re-engaged in the arbitration process after the government scheduled a legislative review of the arbitration process (FANL, 2003B). The outcome of that process is uncertain.

A recent experience in the Newfoundland's shrimp fisheries also has led some people to question the strength of its arbitration system. In the shrimp fisheries a stalemate between the harvesting and processing sectors closed the fishery for approximately two months in the summer of 2001 (Government of Newfoundland and Labrador, September 2001). Government intervention in the dispute reopened the fishery and led to the appointment of a government panel to address issues in the fishery. Pricing disputes in that fishery have arisen from a variety of factors including market declines, seasonality of the fishery, product quality, and access to international markets (Inshore Shrimp Panel, 2002). The inability of price arbitration to stimulate solutions to these problems is not surprising and should not be seen as a shortcoming of the arbitration. Although some of the recent debate has focused on the arbitration system, one must remember that the arbitration program was introduced to address economic problems in the fisheries that predate the arbitration program. In the end, the management program in its entirety, including the arbitration program and laws governing collective bargaining, together with market conditions determine the economic outcomes of the fishery.

The appropriateness of a collective arbitration system (similar to the Newfoundland system) for the BSAI crab fisheries is subject to debate. The use of a collective system could be antithetical to advocates of a free market who believe individual differences drive innovations. A system like that used in Newfoundland, however, may have appeal to free market advocates in that it provides a baseline ex vessel price for all deliveries that can be exceeded by agreement of the parties. Yet, the incentives for a processor to pay in excess of the baseline price in the two-pie system will differ from the incentives for paying a higher price in a system of limited processor entry.

3.7.3 Principles Behind Binding Arbitration

The working group on binding arbitration has proposed the following problem statement to guide the development of the binding arbitration system:

Issuing harvesting and processing quota raised concerns regarding changes in bargaining power between the harvesting and processing sectors in ex-vessel price formation. Binding arbitration is a mechanism intended to address that issue, and to help achieve the goals articulated in the North Pacific Council's Crab Rationalization Problem Statement.

The fundamental issue to be addressed by a system of binding arbitration is the change in bargaining power between the harvest and processing sectors in a rationalized fishery. The Council intends to develop a rationalization program that "maintains healthy harvesting and processing sectors." In addition, "the system should seek to achieve equity between the harvesting and processing sectors, including healthy, stable and competitive markets." The system of binding arbitration should protect all participants in the crab fisheries. Harvesters and processors alike should trust the system of binding arbitration. The system should also provide both parties with effective means of enforcing an arbitrator's decision.

3.7.4 Rationalization and Arbitration

A discussion of the role that arbitration might serve in the rationalization program is useful to frame the analysis and identify potential issues concerning the binding arbitration alternatives. The analysis also considers each alternative structure independently, discussing the merits and shortcomings of each. To some degree the choice of system depends on the character of the industry and whether and how the rationalization program, as a whole, is intended to affect the character of the industry. In evaluating the different alternatives, several different impacts should be considered.

An important part of the rationalization program is the matching of Class A IFQs with IPQs to facilitate deliveries. Depending on the arbitration system selected, IFQ/IPQ share matching (specific shareholders in the different sectors agreeing to specific deliveries in the upcoming season) could occur prior to the arbitrator determining the price or after the arbitrator determines the price. The timing of share matching could affect the development of delivery relationships between IFQ holders and IPQ holders and potentially change the bargaining strength of the different sectors. For example, determining arbitrated price prior to the establishment of delivery relationships might be preferred, if the specifics of the delivery relationship should not affect the arbitrated price. In addition, creating that relationship prior to the arbitration would require parties to commit to a relationship before the terms of the relationship are known. On the other hand, if the delivery timing and terms of delivery are of more importance to one side than the other, establishing the delivery terms after determination of the price will reduce the bargaining strength of the party that is more sensitive to delivery terms. If specific delivery timing and delivery relationships are less important in the fishery, an arbitration system that determines all terms (including price and delivery terms) might be favored over a more general system in which the arbitrated price is not dependent on delivery timing.

In a similar vein, the different arbitration structures could affect the development of efficiencies in the fishery. Efficiencies could be achieved by the coordination of activities between the sectors. Several harvesters and processors participate in fisheries other than the BSAI crab fisheries. Timing of crab activities is important not only to maximizing returns from the crab fisheries but also receiving maximum returns from these other activities. Within the crab fishery, timing of activities is important to receiving the maximum meat fill as well as to scheduling for both harvesters and processors. Scheduling of activities can improve revenues and reduce costs to both sectors, so an arbitration process that facilitates scheduling could be beneficial to both sectors. Although scheduling efficiencies could be achieved under any of the options, the

different arbitration programs could affect the way these efficiencies are achieved and the distribution of benefits from those efficiencies.

Arbitration could also affect the development of efficiencies and improvements within each sector. Most importantly, the arbitration system should preserve the incentives so that each sector gains benefits from improvements in its own control. While in some cases sharing of these benefits with the other sector might be appropriate, improvements will not occur unless the sector with control also will realize a reasonable gain from an improvement. In short, the division of revenues must not transfer all of the improvements of one sector to the other sector.

The arbitration program should also consider the degree of homogeneity in the BSAI crab industry and whether the rationalization program is intended to increase or decrease the differences in the participants. An arbitration program that treats all participants the same could contribute to the homogeneity of the industry. For example, if the industry produces few products for a few known markets using common production technologies, a system of arbitration that treats all participants the same might be suitable. If different participants serve different markets with different products produced with different technologies, an arbitration system that treats all participants the same might be unable to serve the interests of all participants. The different arbitration structures vary in the degree of collective action permitted or compelled and the degree to which the arbitration findings are intended to apply to universally to all participants or to varying circumstances of independent participants. Because of these differences, the choice of arbitration programs could influence the degree to which the industry operates as a collective producer of outputs or as a number of independent producers.

Throughout the discussions of the preferred rationalization program and the arbitration program, the issue of the "last man standing" or the last IFQ holder to contract for delivery of crab has received considerable attention. The concern is that this IFQ holder, whose season could depend on the contract, would have little or no negotiating leverage in dealing with a large IPQ holder, who has already contracted for the majority of its shares. The different arbitration alternatives would treat the "last man standing" differently. Although the protection differs, and in some cases could be minimal, in evaluating the alternatives one should also consider whether the "last man standing" had the opportunity to avoid being put in the circumstance of having minimal protection. The arbitration program should be designed to protect IFQ holder interests, including the interests of the "last man standing". The program, however, might be adequate even though it does not protect the interests of those that do not act to obtain its protections.

An additional set of issues relate to the task of the arbitrator under the different alternatives. All of the structures call for the arbitrator to collect substantial amounts of data. Because IPQs represent a share of the market of landings, arbitration should create an incentive for processors to pay reasonable ex vessel prices. To create this incentive, an arbitrator must have a thorough understanding of the industry. Data must be assimilated in a short period of time to determine appropriate price formulas. If processors are similar to one another this may be a straightforward, manageable task. The data from the different processors would likely be somewhat redundant and could easily be managed by the arbitrator. The arbitrator must take into consideration different product forms and markets, production schedules and plant capacities and locations, and exchange rates. All of this information must then be developed into a single formula to establish a product price for all deliveries in a season. The complexity of this task under the different arbitration structures should be considered in assessing the different structures.

3.7.4.1 The Trading of B Shares in the Rationalized Fisheries

The Council has requested that staff prepare a discussion paper that examines the trading of B shares in the rationalized fisheries. As a part of this discussion, staff was requested to examine the trading of B shares independent from A shares and the purchase of B shares by processors. Understanding the role that B shares will play in the rationalized fishery is critical to understanding the implications of trading of B shares. The

discussion begins by describing the affects of B shares on the rationalized fisheries, then discusses how trading of B shares could alter that role.

Role of B Shares in the Rationalized Fishery

Under the rationalization program, the ex vessel market (including prices for A, B, and C share deliveries) will be influenced by the sale of crab harvested with B shares. Because of the lack of landings restrictions, B share crab will likely sell for a higher price than A share crab and, if traded independent of A shares, B shares will likely trade for a higher price than A shares. Transactions that involve both A and B share crab will likely be for an intermediate price that is between the prices of the crab harvested with shares of a single type.⁸ In addition, the arbitrated price for A shares could be below the B share price because the A share delivery restrictions might establish a different rent distribution than the distribution of rents established by one-pie IFQ shares, such as B shares. The arbitration program could affect the rent distribution for A share landings by affecting the ability of harvesters to leverage a higher price for A share deliveries by pledging B share deliveries.⁹

B shares might also affect the negotiations of all deliveries by providing information to participants and arbitrators for determining prices for A share crab that must be sold into a closed market of IPQ holders. Information that participants and arbitrators can glean from the competition for B share crab landings and production of B share crab is likely to be a critical component to A share crab price determinations. B share crab presents the only opportunity for production by processors without IPQs. If B share crab is going to different markets than A share crab or if the ex vessel prices of A share crab and B share crab are not correlated, participants and arbitrators might examine whether the A share crab prices are creating incentives for IPQ holders to compete in product markets. In developing ex vessel prices, participants and arbitrators should look to the B share crab market as an indicator of the market opportunities for crab generally, including crab harvested with A shares. Likewise, in Council review of the program, differences in production between A share crab and B share crab could be an indicator of whether IPQ holders are actively pursuing market opportunities.

Transfers of B Shares

The 90/10 ratio of A shares to B shares (together with the arbitration program) will establish the distribution of rents in the fishery. Transactions in B share crab are a critical part of the balance of bargaining power in a program in which 90 percent of harvests are subject to A share delivery restrictions. The novelty of the program limits any exact knowledge of the rent distribution, but changes from the 90/10 A share/B share ratio are likely to affect the distribution and bargaining power of the participants. Changes in the 90/10 ratio can occur in two ways. First, if A shares trade separately from B shares, holdings at an individual level could differ from the 90/10 ratio. Second, if processors purchase B shares, the 90/10 ratio across sectors will be offset by processor holdings of B shares.¹⁰

⁸This is likely to occur, if the IPQ holders raise A share crab prices to compete for B share crab deliveries.

⁹ Arbitration, however, could affect harvesters' return on both A and B share crab, since the arbitration system provides a mechanism available to harvesters to affect the separation between the B share price determination and the A share price determination. The degree of separation between price formation of the two share types is likely to be affected by the arbitration structure and the specific provisions of the arbitration program.

¹⁰ Depending on the fishery, processors and their affiliates will receive between 8 and 13 percent of the initial allocation of harvest shares. The initial allocation of B shares to processors and their affiliates results in independent harvesters holding less than 10 percent of the allocated harvest shares as B shares from the outset.

The 90/10 ratio could be altered if B shares trade separate from A shares. This trading could alter the bargaining power of the 90/10 split of A shares and B shares, at least for some participants. For example, if a harvest share holder sells A shares independently from B shares, the new buyers will not have the bargaining power of the 90/10 share split. These new A share purchasers will have limited ability to use B share deliveries to leverage a better price on A share deliveries. At the extreme, a harvest share holder could have only A shares, in which case the share holder would have no ability to leverage A share prices with B share deliveries. If the arbitration outcome is based in part on the B share delivery price, this IFQ holder could benefit from B shares but only indirectly. The ability of this shareholder to bring B share delivery price information to an arbitration proceeding could be limited by the lack of B share holdings. While other share holders are likely to benefit from holding B shares in excess of the 90/10 ratio, the separation of the holdings could result in B shares having a limited impact on prices for those harvesters that hold only A shares. Depending on the arbitration structures, this separation of share holdings could have the effect of separating the shares for purposes of arbitration settlements. The result is that the distribution of rents in the fishery could be altered by strategic share trading (or even the redistribution of A and B shares that is not calculated to affect market power). Allowing independent trading of A and B shares has the potential to cause an unintended and unpredictable redistribution of rents from the fisheries under the program.¹¹

The effect of B share trading on bargaining power is even more pronounced if processors or their affiliates purchase B shares, since the 90/10 ratio of A and B share holdings will be effectively offset. If A and B shares trade separately, as few as two processors could purchase all B shares in the fisheries. All independent harvesters would lose any bargaining leverage from B shares if those shares are purchased by processors. In addition, the loss of information from B share transactions and production from B share crab could affect price findings in the arbitration process further decreasing revenues to independent harvesters. Ex vessel prices from transactions between processors and their affiliates for B share crab might not reflect market ex vessel prices. Processor ownership of B shares could decrease the arbitrator's information concerning market changes that are reflected in the B share crab prices. In addition, since B shares are the only opportunity for the processing of crab by processors that do not hold IPQs, the option of delivering crab to a processor without IPQs would not exist. The loss of the opportunity for non-IPQ holders to process crab could reduce competition and the incentives for processors to aggressively pursue new markets. With B shares representing a relatively small part of the total fishery, the purchase of B shares by the processing sector could offset their utility as a price indicator for the arbitrator or as a source of information concerning market opportunities. Prohibiting independent trading of A and B shares will mitigate the potential for processors to affect the 90/10 ratio through the purchase of B shares. The limitation on harvest share holdings by processors would limit each processor and its affiliates to 5 percent of the B share pool. The likelihood of harvest share purchases by processors to offset the 90/10 ratio of A shares to B shares is unknown. Depending on the magnitude of those purchases, however, the effects on rents realized by remaining independent harvesters could be substantial. Linking trades of A shares to B shares will substantially mitigate this likelihood.

Several issues must be addressed in establishing a prohibition on processor purchases of B shares. If A and B shares do not trade independently, a prohibition on processor purchase of B shares would effectively prohibit processor purchase of all harvest shares. If the A and B shares trade independently, development of an effective prohibition on B share purchases could be problematic. A simple prohibition on processor purchase of B shares is unlikely to serve the goal of a prohibition since affiliates of a processor could buy shares. An alternative prohibition would prevent processor affiliates from purchasing shares. Defining affiliates in a manner that would allow independent harvesters with processor relationships to purchase

¹¹ The rent distribution could be argued to be unchanged, since rents will generally be captured by the recipient of the initial allocation on the first sale of shares. This assumption may not be true, however, if the IPQ holders pay additional amounts for crab purchased with A shares to induce B share crab deliveries. The premium in the A share price received by the holders of both A and B shares will be absent from the A share delivery price to a holder of only A shares.

shares while effectively prohibiting processor share purchases could very difficult. Changes in participation patterns in the fisheries over time make development of an effective provision even more illusive. For example, would a harvester that purchases a substantial amount of B shares and then enters a partnership with a processing facility (or purchases processing shares) be required to divest those B shares.¹² Given these complexities, a prohibition on purchase of B shares by processors could be ineffectual.

In conclusion, independent trading of A and B shares could affect the distribution of bargaining power established by the 90/10 ratio of A shares to B shares. These effects cannot be predicted with any certainty and are likely to depend on the arbitration program and the ability of harvesters to use B shares in negotiations (or arbitration) to leverage a better A share price. Purchase of B shares by processors could exacerbate this affect by limiting the ability of harvesters (and arbitrators) to use B share prices as an indicator of market changes. Prohibiting processor purchase of B shares, however, is likely to be very difficult to enforce as industry adapts to the new management program. Caps on harvest share holdings and requiring A shares to trade with B shares is likely to mitigate changes in rent distributions that could arise from trading after program implementation.

3.7.5 The Arbitration Standard

A primary determinant of whether arbitration serves its intended purpose is the standard applied by the arbitrator. The Committee developed the following four options for the standard of arbitration:

¹² Common ownership of harvest and processing shares could increase by participants in both sectors purchasing shares from the other sector. If the transaction costs of matching harvesting and processing shares prove high, common share ownership could contribute to efficiency in the fisheries. In addition, if harvesters holding only A shares perceive that rents are lost to processors because of limited market power, they may acquire processing shares to recoup that loss of rents.

Standard for Arbitration (All options apply to all alternatives)

Option 1

The arbitration decision will attempt to make an equitable division of rents in the fishery (using the historic division of revenues as a surrogate for the division of rents for existing product forms).

Option 2

The arbitration decision will attempt to set a competitive or fair market price for crab delivered.

Option 3

The arbitrator shall consider relevant factors in making an arbitration decision, including but not limited to:

- a. Historical ex vessel prices and division of revenues
- b. Current ex vessel prices (including prices for Class A, Class B, and Class C shares recognizing the different nature of the different share classes)
- c. Consumer and wholesale product prices for the processing sector and the participants in the arbitration (recognizing the impact of sales to affiliates on wholesale pricing)
- d. Innovations and developments of the different sectors and the participants in the arbitration (including new product forms)
- e. Efficiency and productivity of the different sectors (recognizing the limitations on efficiency and productivity arising out of the management program structure)
- f. Quality (including quality standards of markets served by the fishery and recognizing the influence of harvest strategies on the quality of landings)
- g. The interest of maintaining financially healthy and stable harvesting and processing sectors
- h. Safety
- i. Timing and location of deliveries
- j. Reasonable underages to avoid penalties for overharvesting quota and reasonable deadloss

Option 4

The primary role of the arbitrator shall be to establish a price that preserves the historical division of revenues in the fisheries while considering relevant factors, including the following:

- a. Current ex vessel prices (including prices for Class A, Class B, and Class C shares recognizing the different nature of the different share classes)
- b. Consumer and wholesale product prices for the processing sector and the participants in the arbitration (recognizing the impact of sales to affiliates on wholesale pricing)
- c. Innovations and developments of the different sectors and the participants in the arbitration (including new product forms)
- d. Efficiency and productivity of the different sectors (recognizing the limitations on efficiency and productivity arising out of the management program structure)
- e. Quality (including quality standards of markets served by the fishery and recognizing the influence of harvest strategies on the quality of landings)
- f. The interest of maintaining financially healthy and stable harvesting and processing sectors
- g. Safety
- h. Timing and location of deliveries
- i. Reasonable underages to avoid penalties for overharvesting quota and reasonable deadloss

Options 1 and 2 are two specific standards for establishing the price. Under the first option the arbitrated price should establish "an equitable division of rents". The second option would establish a "competitive price". The question arises as to whether either of these ends can be achieved, particularly without opening the financial books of all participants in the fishery to the arbitrator. Even assuming the arbitrator has access to all financial records of participants in the fishery, several different factors may make the determination of an equitable division of rents or a competitive price elusive since both of these are somewhat abstract concepts. A more precise and well grounded standard may be appropriate for guiding the arbitrator. Options

3 and 4 provide several factors that may be considered by the arbitrator in reaching a decision, including current ex vessel prices for A share, B share, and C share crab, product prices, productivity and efficiencies in the different sectors, innovations and developments, and the financial health and stability of participants. The list of pertinent factors would not constrain the arbitrator from consideration of other relevant factors but would provide a starting point and foundation, which could be extended by other pertinent information. Option 3 gives no standard providing only the factors that may be considered. Under Option 4 the primary role of the arbitrator would be to establish a price that preserves the historical division of revenues in the fishery in consideration of those factors. Although the division of revenues may have fluctuated year to year, this standard provides guidance to the arbitrator concerning the standard that should be applied.

In the first instance, the arbitrator (or an arbitration panel) will need to invest substantial time and effort into development of the historic division of revenues standard. Doing so will require the arbitrator to determine both historic ex vessel prices and first wholesale prices. Historically, substantial portion of the fleet in the larger crab fisheries have used a marketing association to establish a fleet-wide ex vessel price for all landings in a fishery. Although the marketing association's negotiations have guided pricing for much of the fleet, some participants have made deliveries for different prices or received post-season settlements based on individual agreements with processors. Accurately calculating the historic division of revenues will require an accounting of these deviations from the marketing association's settled price. In the smaller fisheries, particularly the Aleutian Islands golden king crab fisheries, prices are more often negotiated on an individual basis and varied over the longer seasons. This lack of uniformity in prices will complicate the determination of the historic division of revenues for these fisheries.

Determining the historic first wholesale prices will also be complicated by the lack of uniformity of processors and the different products those processors sell into different markets. In addition, establishing historic first wholesale prices could also be complicated by vertical integration of the processing sector. Sales to affiliated companies may not be arm's length transactions and may not be made at competitive prices. Implementing standard based on division of revenues will require the arbitrator to establish that first wholesale prices are competitive prices or to develop a system for determining a proxy for the first wholesale price when transactions are not at a competitive price. The magnitude of this problem is not likely to be fully understood until the arbitrator begins the process of calculating the division of revenues. In any case, having a substantial portion of the sales to non-affiliated entities by arm's length transactions will contribute greatly to verification of prices for sales to affiliates under any arbitration standard. To address the problem of sales to affiliates, both structures advanced by the Committee contemplate verification of prices for these sales through a process of "back calculating" first wholesale prices. This process will have to be developed by the arbitrator on a case-by-case basis since sales and accounting practices are likely to differ across IPQ holders.

Determining the historic division of revenues is also likely to be complicated by several other factors. The division of revenues is likely to be sensitive to the production levels of specific products, with harvesters receiving a greater share of revenues from some products than others. Market changes are also likely to have influence the share of revenues. For example, harvesters may have received a different share of the revenues in years of high prices than low prices. In addition, the revenue share received by harvesters is also likely to be sensitive to changes in total harvest. Location of landings are also likely to influence the division of revenues. Prices for landings in different communities have historically varied. The arbitrator will need to accommodate these variations in applying the arbitration standard.

Data issues may also complicate determining the division of revenues for some fisheries. Data from the Commercial Operator Annual Reports (COAR), the best publicly collected source of price information, distinguish species but not fishery. So, a processor's Bristol Bay red king crab production will be combined with its production of Pribilof red king crab and Norton Sound red king crab. In many cases prices from different fisheries will be separable, but separating prices will require some attention to detail and familiarity

with the fisheries and markets.¹³ While COAR data provides first wholesale prices FOB Alaska, aggregation of product forms in COAR reporting could complicate development of the underlying revenue division.

An added problem will arise in the verification of revenues for crab landed in the fishery in the future. In developing the split of revenues, the prices for crab landed with Class A, Class B, and Class C shares are to be considered by the arbitrator. The arbitrator, however, is directed to consider the different nature of the different shares. A system of recording the different prices for crab landed with different shares must be developed to aid the arbitrator in this process. In addition, the weight given to current share price by the arbitrator under this standard could be controversial.

In conclusion, the development of a historic division of revenues standard for the arbitrator is likely to simplify the arbitrator's task significantly in comparison to a division of rents or competitive price standard. The division of revenues standard is also likely to provide more guidance to the arbitrator than a standard that simply advises the arbitrator to consider a list of factors. The historic division of revenues standard, however, is not without complication and will require substantial effort on the part of the arbitrator, particularly in the first instance.

3.7.6 The Alternative Arbitration Structures

This section describes the five different arbitration structures developed by the Committee. The section begins with summary descriptions of all five alternatives, each of which contain several different options. Under all of the arbitration options, parties are free to contract for deliveries at any time under terms agreeable to the parties.

¹³ If public data is to be used by the arbitrator, the Council will need to arrange for provision of this data to the arbitrator. Data could be released only in aggregated form to avoid any confidentiality issues.

Alternative Arbitration Structures

- I. A structure of one arbitration per processing firm, with harvesters using one mandated collective bargaining association that would submit one last and final offer on behalf of all IFQ holders. Sub-options for this structure include
 - a. Can either be pre-season or at any time the processor is first forced to arbitration.
 - b. Instead of mandating a collective bargaining association, the structure could require one last best offer from all IFQ holders (without mandating belonging to the association).
 - c. IFQ holders not participating can either have the protection of the arbitration (last man standing is protected) or not (last man standing does not receive the benefit of the arbitration).
- II. A structure of one arbitration event per processing firm, but with multiple arbitrations allowed. Under this system, arbitration would occur at one time, using one arbitrator, per processor, but any individual IFQ holder or group of IFQ holders could force arbitration of their individual last/best offer. Sub-options for this structure include:
 - a. Can be collective bargaining by harvesters or individual or both. If individuals can arbitrate, there would be a notice and joinder opportunity for all harvesters to join into arbitration.
 - b. Can either be pre-season (only) or at any time the processor is first forced to arbitration.
 - c. If an IFQ holder is not part of the arbitration, it can still get the benefit of the minimum price established. The sub-options are the lowest, mean or highest arbitrated price.
- III. A structure of multiple arbitration events per processing firm only at firm times.
 - a. The sub-options for when arbitration is allowed include temporal (such as every two months, or one event one month before the end of the season) or market related (if the market changes up or down over 5%, for example).
 - b. It is assumed that any IFQ holder may join in the arbitration.
 - c. It is assumed that any IFQ holder has the benefit of the last arbitration. The sub-options are the same as I.c.
- IV. A structure of multiple arbitration events per processing firm. Under this structure, arbitration could occur at the election of any quota holder at any time. Sub-options for this structure include:
 - a. Can be collective bargaining by harvesters or individual or both.
 - b. There may be standards that must be met in order to require arbitration, such as a minimum amount of IFQ to cause arbitration.
- V. A structure establishing a "fleet-wide" single arbitration event.
 - a. The system would not use "last best offer" but rather the arbitrator could pick any final price the arbitrator wanted.
 - b. It would require that the arbitrator develop a formula pricing system
 - c. It would require revenue by processor be given to the arbitrator to use in developing the formula. It could require costs by processor be given to the arbitrator to use in developing the formula.
 - d. The formula could either adjust weekly with changes in market prices or establish a base or minimum price paid at the time of delivery and adjustment after product sales are completed

Structure I

Under Structure I, IFQ holders would be permitted to initiate a single arbitration proceeding with each IPQ holder. IFQ holders would be required to commit the delivery of shares to the IPQ holder to initiate or join proceedings with that IPQ holder. The IPQ holder would submit a single offer and the participating IFQ holders would collectively submit a single offer to the arbitrator in a last best offer (or final offer) format. An option would allow IFQ holders that did not participate in the arbitration to receive the benefits of arbitration by agreeing to deliver to the IPQ holder, accepting all terms of the arbitration decision (assuming that the IPQ holder held adequate shares to accept the delivery).

Structure II - The Last Best Offer Model (advanced by the Committee)

Under Structure II, harvesters would be permitted to initiate a single arbitration proceeding with each IPQ holder in the preseason. Proceedings may be initiated by an IFQ holder (or a group of IFQ holders) prior to the season after committing to deliver shares to the IPQ holder. For a brief period of time prior to the commencement of hearings, other IFQ holders could join the proceeding by unilaterally committing deliveries to the IPQ holder. The arbitration would be in a last best (or final) offer format, which is favored by some participants and is used in the Newfoundland arbitration system. The IPQ holder would submit a single offer. Each IFQ holder could submit an offer or join a group to submit a collective offer. For each IFQ holder or group, the arbitrator would select between the IFQ holder's (or group's) offer and the IPQ holder's offer. IFQ holders that did not participate in the arbitration could receive the benefits of arbitration by agreeing to deliver to the IPQ holder, accepting all terms of the arbitration decision (assuming that the IPQ holder held adequate shares to accept the delivery). **A complete copy of this structure appears as Appendix 1A.**

In addition to the options specified above, two options are proposed to address the balance of negotiating power between the sectors. Under the first of these options (the "highest price option"), at the conclusion of the last arbitration proceeding for each fishery, the arbitrator in that proceeding would select the 'highest' arbitrated price from all arbitration proceedings. If arbitration outcomes are available for both price formulas and straight prices the arbitrator may select one of each type. This 'highest price' outcome would then be applied to all arbitration proceedings. Under the second option (the "non-binding price signal option"), in the pre-season (prior to the share matching and any individual arbitration proceedings) the arbitrator would develop a non-binding price formula. This formula together with the market report are intended to be used by participants to develop a starting point for price negotiations.

Structure III

Structure III is the same as Structure II, except that a second arbitration proceeding with each IPQ holder could be initiated by any IFQ holder after a fixed period of time. The second proceeding would be intended to accommodate changes that occurred during the season. Initiation of the second proceeding could also be conditioned on market changes and requirements that a threshold number of share be subject to the arbitration.

Structure IV

Structure IV is the same as Structure II, except that any IFQ holder could initiate an independent proceeding at any time. Under this structure, numerous arbitration proceedings could be initiated with each IPQ holder during a season. By allowing an unlimited number of proceedings, any change in circumstances could be accommodated and no IFQ holder would be left out of the arbitration system.

Structure V - The Fleet-Wide Model (advanced by the Committee)

Under Structure V, the arbitrator would develop a fleet-wide baseline price formula that could be applied to any deliveries in the fishery. The arbitration proceedings would be a series of consultations with IFQ and IPQ holders. IFQ holders could collectively participate in these consultations. IPQ holders would have independent consultations only to avoid antitrust violations. After the baseline price formula is determined, contracts would be formed by IFQ holders putting shares to IPQ holders, specifying the terms of delivery (including delivery date and location), which would be at the arbitrated price. The processor may form a contract by accepting these terms or negotiate other terms with the harvester. The put would commit the processor's shares until the terms of a contract are agreed, the harvester has withdrawn the put, the harvester has committed to arbitrating the put or until the passage of a set period of time (7 business days for cooperative members or 5 business days for nonmembers of a cooperative). Participants from both sectors

believe that the brief period of time that shares are committed would not pose an operational problem to processors. If the harvester elects to arbitrate the put, the price would not be subject to arbitration since the fleet-wide base price would have been established. Other terms, such as delivery dates and location, would be decided by the arbitrator. In the event the IPQ holder does not agree to the terms of the put, the IFQ holder may arbitrate the terms of delivery. The option to put shares to processors would occur during a window of time determined by the arbitrator. **A complete copy of this structure appears as Appendix 1B.**

Table 3.7-1 shows some of the primary features of the two structures advanced by the Committee.

Table 3.7-1 Primary features of the two arbitration structures advanced by the Committee

Program Feature	Fleet-Wide Model	Last Best Offer Model
structure of proceedings	one proceeding to determine price, second proceeding to determine other terms	one proceeding to determine price and all other terms
scope of price arbitration	one proceeding for the entire fishery	one proceeding per IPQ holder
scope of delivery terms arbitration	separate proceedings initiated by IFQ holder, potentially aggregated for each processor by arbitrator	included in the price arbitration
IFQ holder participation	voluntary collective participation (up to entire fishery fleet)	voluntary collective participation (up to IPQ holder's fleet)
IPQ holder participation	all participate by individual consultations	individual
type of arbitration	conventional	final (or last best) offer
price basis	fleet-wide	individual IFQ holder or voluntary IFQ collective
timing of share matching	after price determination	prior to price determination
timing of contract formation by arbitration	after price determination and at time of put arbitration	at time of price determination
timing of determining of delivery terms	after price determination and at time of put arbitration	at time of price determination
transfer of findings to non-participating IFQ holders	can opt in by accepting all terms of an arbitrated put	can opt in by accepting all terms of an arbitration finding

3.7.7 Comparison and Analysis of Arbitration Structures

This section analyzes the different arbitration structures. The analysis concentrates on differences between the structures. The two structures advanced by the Committee are discussed first and given added attention.

In addition to the analysis presented here, the Council will be provided with an analysis using experimental economic methods, which examines the various structures. That analysis is intended to reveal whether

inherent differences in the structures create any differences in bargaining strength of the participants. The experimental analysis is attached as Appendix C.

Analysis of Structure V - The Fleet-Wide Model

Under Structure V the arbitrator would be tasked with developing a single price formula applicable to all participants in the fishery. The arbitrator would rely on a series of meetings with the different harvesters and processors in which market and price information would be gathered. The workability of the alternative depends on the ability of the arbitrator to establish a universal price formula based on a series of contacts with harvesters and individual processors. Since this system would not be a final offer system, the arbitrator would be called on to develop a formula. If the industry is fairly homogeneous, the arbitrator might quickly gain some perspective of a single, fair price formula by these contacts. The series of contacts would give the arbitrator a perspective of the production technologies and product markets necessary to determine an appropriate price. If participants differ substantially, developing a single price formula from this series of contacts with harvesters and processors could be a very complex and difficult task. All participants are likely to offer suggestions of the appropriate formula. Yet, since the process does not involve direct negotiations among all parties and processors are not permitted to discuss an appropriate formula with each other, it is possible that a wide variety of different formulas could be suggested with the arbitrator given considerable authority to establish the pricing formula. To exercise this authority judiciously, an arbitrator would likely need considerable expertise in the crab fisheries and the marketing of their products. Even then, an arbitrator would be challenged by the task of developing a single, reasonable formula if presented with a variety of very different formulas by participants.

The breadth of information considered by the arbitrator under the fleet-wide option could have a positive effect on the outcome of the arbitration. Committee members agree that the arbitration finding should create incentives for processors to maximize revenues. To do so under any program will require that the arbitrator have comprehensive knowledge of the products and markets served by the fishery. The one-to-one relationship between Class A IFQs and IPQs could leave some harvesters with few choices of where to deliver their harvests. If fleet-wide information is not used to establish a price for deliveries to low revenue processors, the revenue shares of the low revenue processor fleets could be lower than those of high revenue processor fleets through no fault of the harvesters. In the fleet-wide model, the arbitrated price will be an industry wide average of revenues from all products of all processors. An arbitrated price under these criteria should create an incentive for low revenue processors to increase revenues. Creating this incentive universally in a series of processor-by-processor arbitration proceedings would depend breadth of information that the arbitrator has access to and considers in deliberations. That issue is discussed further in the analyses of the processor-by-processor arbitration structures (primarily the “last best offer” structure).

Although this system establishes a single price for crab deliveries in the preseason arbitration, deliveries could be at a different price if negotiated by the parties. In general, whether the parties settle at a price other than the fleet-wide arbitrated price is likely to hinge on the competition among processors for B share deliveries and the sensitivity of the parties to delivery terms other than price. Settlement for another price could occur if use A share price to compete for B share deliveries or if parties preferred different delivery dates and one party was willing to compensate the other for accommodating a preference. Although some participants have suggested accommodating a delivery preference could result in processors paying prices in excess of the arbitrated price, it is possible that a harvester with a strong preference for a certain delivery date could accept a price below the arbitrated price to entice a processor to accommodate that preference. The circumstances of the two parties are likely to determine which party is in a better bargaining position with respect to determining the delivery date. The party that is more sensitive to delivery timing because of competing opportunities or production cost sensitivities will have less leverage and will be more likely provide price accommodations. In this circumstance, the establishment of a fleet-wide price may not resolve the price dispute but instead serve as a precursor to a later price negotiation.

Although the put system would allow the arbitrator to resolve the terms of delivery, the terms of delivery would be established independent of price (which is established in the earlier fleet-wide price arbitration). So, although the specific circumstances of an individual harvester and an individual processor may be subject

to arbitration, this structure isolates the arbitrators consideration of those circumstances from the establishment of the price. Price adjustments at the individual level, however, could be the most equitable method of accommodating individual delivery term preferences and are likely to be the center of any negotiations between harvesters and processors after the establishment of the fleet-wide price.

Developing a fleet-wide price ensures that all participants are subject to the same arbitration finding. The averaging effect of establishing a fleet-wide price, however, could have unintended effects. The first possible complication is that arbitrating a fleet-wide price might inhibit IPQ holders from transacting prior to the arbitration price finding. Since a negotiated price could affect the arbitration outcome, the IPQ holders may be less inclined to settle prices prior to the arbitration unless the price is perceived to be at or below the predicted arbitration outcome. Since these negotiated settlements are likely to provide information to the arbitrator and influence the arbitration finding, discouraging these settlements could reduce the information available to the arbitrator when making a decision. The second effect is that establishing a universal price could discourage IPQ holders from settling for a price higher than the arbitrated price after the arbitration finding is made. The incentive to settle at a higher price could be muted, if an IPQ holder perceives that the settlement could be used against the IPQ holder by other holders of Class A shares or in arbitration in the following year. These effects could be mitigated by processors that wish to use prices for A share deliveries to compete for a harvester's B share deliveries.

Another issue is how the establishment of a fleet-wide price applicable to all arbitrated outcomes will affect the incentive for improvements for IPQ holders. Fleet-wide pricing could have an averaging effect on ex vessel prices. If IPQ holders rely on the fleet-wide pricing, the high revenue IPQ holders may receive a greater return from their production than low revenue IPQ holders. At the same time, IFQ holders delivering to these different IPQ holders will receive the same price for their deliveries as those delivering to low revenue IPQ holders. So, at the fleet-wide price IPQ holders that receive higher than average revenues will share a lower percentage of their revenues with harvesters than low revenue IPQ holders. By allowing a larger share of revenues to be retained by the high revenue IPQ holder, however, the fleet-wide price could create incentives for increased revenues for all participants. The following year's arbitration could consider these improvements with a possible modification of the price formula to accommodate the change, increasing the revenues for all Class A deliveries. While the upward pressure on all ex vessel prices might be desirable, the appropriateness of this price pressure and revenue sharing is likely to depend on the specific circumstances. If the cooperation and action of harvesters contribute to the higher revenues, the fleet-wide averaging might not be appropriate. If the high revenue opportunity is available to all IPQ holders, the incentive of the price pressure would be appropriate. The success of the system in achieving an equitable outcome will depend on the extent to which the arbitrator can sort through the specific circumstances and adjust the pricing formula accordingly.

A particular caveat with this alternative is the potential for antitrust issues to arise with processors all participating in the same arbitration proceeding. The system would rely on the arbitrator to approach each processor independently to avoid antitrust violations. Whether this would effectively avoid antitrust problems without an antitrust exemption.¹⁴ The Committee would like the arbitration program to be governed by existing antitrust laws and does not believe that an antitrust exemption should be granted for the arbitration program. An additional hurdle that must arise in the sharing of market and price data is the level of confidentiality that should be accorded. At some level this data is likely to be proprietary and should be kept confidential.

Lastly, this model contains provisions for the arbitrator to back calculate first wholesale prices for sales to affiliates. The broad, fleet-wide scope of this model should aid the arbitrator in verifying (or developing a

¹⁴ NOAA General Counsel has requested the Department of Justice Antitrust Division to examine this issue and is awaiting a response.

proxy) for the first wholesale price for these sales. Since the arbitrator will have access to sales from all processors, information concerning arm's lengths transactions should be available to verify (or determine appropriate adjustments) to sales to affiliates.

Analysis of Structure II - The Last Best Offer Model

Under this system, each IPQ holder would be subject to a single arbitration proceeding. Proceedings may be initiated by an IFQ holder (or a group of IFQ holders) prior to the season after committing to deliver shares to the IPQ holder. The proceedings would use a final offer arbitration system. In the proceedings, IFQ holders could elect to submit offers collectively. Any IFQ holder that does not elect to join in a collective bid could submit an individual bid. The IPQ holder would submit a single bid. For each IFQ holder bid, the arbitrator would select between that IFQ holder bid and the IPQ holder's bid. This last best offer (or final offer) format limits the discretion of the arbitrator to balance the interests of the parties. Instead the arbitrator is left to accept either the IFQ holder's or IPQ holder's offered terms.¹⁵

The requirement that IFQ holders commit shares to an IPQ holder to initiate the arbitration process is perceived as a benefit of this system by some participants. The matching of IFQs with IPQs in the preseason could streamline that process in the rationalization program, where a one-to-one correspondence of shares provides no alternative but share trading for harvesters that cannot evenly match shares with the processor that they wish to deliver to. The pre-arbitration share matching, however, is perceived by some as a downfall of this system, since it would require a harvester to commit deliveries to a processor prior to knowing the terms of that delivery. Despite the one-to-one relationship between A shares and IPQs, some participants believe negotiating leverage would be altered by requiring harvesters to commit deliveries to a specific processor prior to establishing the price for those deliveries. Arbitration systems typically require both parties to accept the arbitration outcome prior to its determination.

Under this arbitration structure, the price formula (or price) is specific to the IFQ holder and IPQ holder. An advantage of this system is that the price formula and all other delivery terms are determined simultaneously. Consequently, the arbitrator will consider all terms of delivery at the time that price is determined. By considering the specific needs of the different participants, the arbitration outcome might more accurately address the needs of the participants. Similarly, the arbitration system may promote negotiated settlements between IFQ holders and IPQ holders by facilitating the simultaneous discussion of all terms of delivery including price.

The separation of IPQ holders in the process could limit the effectiveness of the system in protecting IFQ holders that deliver to low revenue IPQ holders. To create incentives for each IPQ holder to increase revenues, an arbitrator will need to consider the performance of the IPQ holder with respect to all processors in the fishery (including any that do not hold IPQs). A revenue dividing pricing formula that considers only the revenues of the participating IPQ holder might reduce the incentive for low revenue IPQ holders to improve revenues. On the other hand, a revenue dividing formula that has a component that weights the performance of all processors in a fishery could be used to create an incentive for an IPQ holder to be competitive with others in the industry. The potential of this system to incorporate a fleet-wide component into the arbitrated price depends on the degree to which participants incorporate industry performance into final offers and whether arbitrators have access to information from the industry as a whole that is necessary to validate those offers. Isolating an arbitrator with information from a single IPQ holder could limit the effectiveness of arbitration in protecting the interests of IFQ holders.

¹⁵ The use of final offer arbitration rather than conventional arbitration (in which the arbitrator is given complete discretion in decision-making) can influence positions taken by parties to an arbitration proceeding and arbitration outcomes. A discussion of the relative merits of final offer arbitration and conventional arbitration appears in the following section.

Given the division of revenues standard supported by the Committee, the isolation of an IPQ holder in the proceedings could also be problematic in situations where the IPQ holder makes substantial sales to affiliated companies. If the arbitration outcome awards an IFQ holder a specific portion the processor's revenues, sales to affiliates at below market prices will decrease the IFQ holder's revenues.¹⁶ The last best offer model contemplates a back calculation procedure involving the arbitrator and both parties to determine accurate first wholesale prices. Resolution of this problem may be aided by developing formulas that look at a broader portion of the fleet than the individual processor. Use of this broader scope, together with developed procedures for validating (or adjusting) prices, could mitigate any unfairness arising out of non-competitive prices in sales to affiliates.

The isolation of each IPQ holder in the arbitration process also mitigates (possibly not eliminating) antitrust issues. A potential antitrust problem could arise from the distribution of data across all arbitration proceedings. This distribution of data is necessary to create incentives for processing improvements and aggressive marketing. Sharing of data could raise confidentiality concerns since sensitive proprietary information could be at issue. The access of the arbitrator to pricing and product information from all processors (necessary to establish incentives for improvement) could raise either confidentiality or antitrust concerns, if these data are shared with the IPQ holder in the proceeding. This data is likely to be critical to the arbitrator establishing a price that creates processor incentives for revenue improvements.

The last best offer structure would allow harvesters the flexibility to act either collectively or individually in the arbitration proceeding. The disadvantage of not compelling a collective bargaining unit is that the proceedings could be less organized and possibly disrupted by the independent bidding of several different IFQ holders. The level of disruption likely would depend on the specific rules that govern the proceedings and the arbitrator's ability and willingness to control the proceedings by imposing structure on the arbitration process. IPQ holders in this circumstance could be required to negotiate with several IFQ holders independently, which could complicate the development of a single coherent position in the arbitration process. The potential disruption of participation in the process by individual IFQ holders must be balanced against the objective of IFQ holders in advancing their own interests over a collective interest. Some IFQ holders could object to being required to participate collectively in the arbitration. For example, an IFQ holder may wish to present an isolated price bid to accommodate special circumstances and scheduling requirements. Whether requiring collective participation is appropriate depends on the extent to which the IFQ holder's circumstance is likely to be unique in comparison to other IFQ holders delivering to the IPQ holder.

This structure would also allow an IFQ holder that did not participate in an arbitration proceeding to receive the benefit of the arbitration finding by agreeing to deliver crab harvested with its A shares under the terms of the arbitration decision. A possible problem with this arrangement is that an arbitration decision might be inadequate for all IFQ holders that would make deliveries to an IPQ holder. For example, if the arbitration only involved 40 percent of an IPQ holder's shares, it is possible that the proceedings only concerned deliveries for which the IPQ holder had a specific known but limited market. Application of this decision to all deliveries to the IPQ holder might not be appropriate since other deliveries could be used to satisfy secondary demands. A requirement could be added that final offers be broad enough to cover all of an IPQ holder's shares. Under this scenario, the IPQ holder and the participating IFQ holders would include terms for deliveries from others not present at the arbitration. Although this would provide a price for all deliveries, IFQ holders participating in the arbitration are unlikely to give much consideration to an offer for deliveries of the IFQ holders that do not participate. Whether this situation requires a remedy, depends on whether IFQ holders that do not participate in the process in the first instance merit protection. If options are adopted that provide any IFQ holder with a right to join arbitration proceedings by unilaterally committing shares to an

¹⁶ These below market price sales may be motivated by internal corporate decisions unrelated to the relationship between the processor and its fleet.

IPQ holder, those not participating in the arbitration could be argued to have remained out of the proceedings at their own peril.

An additional feature in this option is that the parties could agree to follow a modified schedule for fisheries with extended seasons. For example, if a fishery were to be several months long, an IFQ holder and IPQ holder might agree that deliveries for their shares would be made late in the season. Rather than arbitrate early in the season, the parties could agree to postpone the establishment of the price formula until late in the season. This procedure could be beneficial to both parties and result in the arbitrator having more complete information concerning the deliveries when making a determination.

Analysis of Structure II - The Last Best Offer Model with the “Highest Price Option”

Under this option, at the conclusion of the last arbitration the arbitrator would select the highest arbitrated price, which would be applied to all arbitrated deliveries. If the different arbitration outcomes include both price formulas and straight prices, the arbitrator will have the discretion to select one of each to be applied at the election of harvesters. To be considered for the highest price finding, an arbitrated price must apply to at least 7 percent of the IPQs in a fishery. This highest price could come from arbitration proceedings with two different processors that collectively account for 7 percent of the fishery’s IPQs. In order to receive the benefits of the ‘highest price,’ the harvester would have to accept all the terms of the arbitration finding, including delivery dates and timing. In determining which arbitrated price is the highest, the arbitrator would consider terms of delivery that will have a significant impact on price, such as delivery location and timing.

This option is intended to mimic price negotiations currently conducted in the largest fisheries. Currently, harvesters negotiate price collectively through the Alaska Marketing Association (AMA). Representatives approach each processor independently for price offers. When representatives believe a processor has made an offer that is acceptable to the fleet, AMA members vote whether to accept the price. Although only the offering processor would be bound by the price, typically all other processors match the offer establishing a single price in the fishery. Although informally applied, to be applicable a price must be from a “major” processor or from more than one minor processor. In general, processing capacity that represents approximately 7 percent of the fishery must agree to the price for the price to be acknowledged by all processors in the fishery.

Proponents of the “highest price” alternative believe that it establishes a structure that allows harvesters to continue to negotiate prices as in the current fishery. If a sufficient number of harvesters agree to join a collective bargaining association, a representative of the association could arbitrate prices with all processors. These different proceedings would all generate separate prices and the arbitrator of the last proceeding could select the highest arbitrated price and apply that price to the entire fleet. To induce high offers from processors, participants in the collective bargaining association could pledge their B shares to the processor that offers the highest price in arbitration. Under this scenario, processors would use arbitration offers to bid for B share deliveries. Each processor would have an incentive to bid for the highest price since all will pay the highest price, but only the processor offering the price would receive any B share deliveries. If harvesters can organize a collective bargaining association to follow this procedure, the A share price would like be a competitive price, with processors earning only normal profits. If all harvesters participate in this collective action, harvesters could capture all rents from the fishery.¹⁷

Use of this arbitration system to develop a single fleet-wide price for all deliveries could pose several problems.

¹⁷ Many harvesters contend that the industry is unlikely to be able to achieve this level of organization. The incentive to organize, however, is clear and could overcome past reluctance of harvesters to work together, if harvesters perceive the price leverage generated by the B shares of the fleet.

1. If the system works as intended, all deliveries in the fishery would be arbitrated. Since only harvesters that arbitrate would receive the arbitrated price, all harvesters will need to arbitrate their deliveries for the system to work as intended. Any harvesters that elect to settle prices with a processor could be subject to rightful criticism from other members of the fleet whose position in arbitration is weakened by removing the harvesters' shares from the arbitration. In addition, if a processor settles all of its price negotiations with its fleet, the removal of that processor from the arbitration altogether weakens the position of the remainder of the fleet in arbitration. In this system, arbitration (not negotiation) is likely to be the norm for price setting.
2. Since all processors would be required to pay the highest arbitrated price, the system could be used by a processor to exert pressure on its competitors. Whether a processor would use the provision in this strategic manner cannot be predicted.
3. A potential benefit of the "last best offer" structure is that the arbitration can be used to address individual circumstances of harvesters and processors attempting to agree to delivery terms. The "highest price" system is contrary to (and could frustrate realizing) that objective. The system could proceed in two very different ways. First, each arbitration proceeding could develop a price that is easily applied to the entire fleet. These arbitrated outcomes could be applied to all deliveries, but much of the delivery specifics (such as location and individual timing preferences) would be left for the parties to negotiate or resolve in some other manner after the high price is announced. Alternatively, arbitration proceedings could result in very specific delivery terms and prices, which account for delivery locations and individual timing preferences. Determining the "highest price" from these specific outcomes could be very difficult for the arbitrator since the prices would vary with delivery specifics. The nature of the final offer format would also prevent arbitrators from adapting an arbitration outcome in a manner that is more applicable to the fleet in its entirety. In addition, some of the outcomes might be inconsistent with delivery requirements of other participants (i.e., regional requirements). In this case, these parties could either rely on the original arbitration finding (which is not the "highest price") or would have to negotiate workable price accommodations for delivery terms that both parties find acceptable. In either case, the benefits of the "highest price" finding could be lost to the harvester.
4. The fleet-wide approach of using a single harvester collective to the arbitration that is likely to drive the arbitration outcome to the highest price is likely to be very confrontational. This confrontational approach could hurt relationships between processors and their fleets complicating the resolution of any disagreements outside of arbitration.
5. One purported benefit of "last best offer" structure is that arbitration can occur relatively close to the season opening. Some participants are concerned that adequate information to decide price is unavailable several months prior to the season.¹⁸ In the opinion of these participants, a system of arbitration that schedules proceedings close to the season opening is preferable to one that decides price several months before the opening. Although the "last best offer" structure is intended to accommodate this interest, the addition of the "highest price" option could frustrate this end. The arbitrator tasked with determining the "highest price" could require a substantial amount of time to determine which price is the highest given the variety of different formulations and delivery specifics. If post arbitration negotiations would be necessary to resolve delivery details, a substantial

¹⁸ The actual benefit of compressing negotiations into a brief period immediately before a season is questioned by some participants. These participants believe that use of price formulas is a better way to accommodate market volatility. Anecdotal evidence from pollock fishery participants suggest that a formula can successfully address future price volatility. In addition, timing the arbitration immediately prior to the season would force the arbitrator to quickly decide which arbitrated price is the "highest price". This decision could be difficult if the arbitration proceedings generated several different price formulations.

period of time may be required after the announcement of the “highest price”(but before the season opening) to resolve delivery details.

Analysis of Structure II - The Last Best Offer Model with the “Non-Binding Price Signal Option”

Under this option, simultaneously with the release of the marketing report, the arbitrator or panel of arbitrators would release an advisory, non-binding price formula. The price formula is intended to provide participants in both sectors with guidance on an appropriate price formula for the upcoming season. After release of this advisory formula, participants would be expected to negotiate deliveries, and if necessary arbitrate any deliveries that could not be agreed under the “last best offer” structure.

The issuance of a non-binding price by the arbitrator could be very helpful to parties making a good faith effort to reach agreement in the rationalized fishery. This arbitrator’s price statement is likely to be a starting point for most negotiations. Participants can be expected to vary prices and terms from the non-binding formula to accommodate their preferences for delivery timing and location and other terms. Given the complexity of issues that are likely to be confronted by participants and arbitrators, the non-binding formula is likely to be very useful to participants attempting to determine reasonable positions to take in negotiations and arbitration proceedings. Without the guidance of the price statement, in the first few years of the program, some participants may have great difficulty constructing a workable price formula.

The arbitrator’s development of a non-binding price formula should also mitigate a problem introduced by the final offer format of the last best offer model. In the final offer format, the arbitrator is also prevented from developing a reasonable compromise formula, if the parties make very different offers. The advisory price formula should increase the probability that an arbitrator receives price formulas of a common structure that lend themselves to comparison. Without a starting point for developing a formula, arbitrators could receive price offers with substantially different structures. Although both parties may have a rationale for their offers, the arbitrator’s task of selecting from these different offers could be very challenging. Since the announced price formula is a reflection of an unbiased arbitrator’s opinion of a reasonable price, parties should be wary of attempts to deviate substantially from that price. While providing the advisory price formula as a starting point does not ensure that offers will not differ in structure, the parties will be on notice that variation from the structure of the advisory formula will need to be justified.

The basis for negotiations formed by the advisory price also has the character of not undermining individuals’ preferences. The use of individual arbitration proceedings provides the parties flexibility to accommodate individual preferences and allows for modifications from the advisory formula to reflect these changes. So, while providing a starting point for negotiations, this option would allow the parties to make justifiable modifications from the formula to address individual needs.

The arbitration Committee has proposed three changes to the provision in the Council motion intended to make the option more consistent with the arbitration structure adopted by the Council and more workable. **Those changes are described in the following three paragraphs.**

The arbitrator should apply the arbitration standard to determining the non-binding price formula.

The option provides that the arbitrator determine the price based on the historical (1991-2000) distribution of first wholesale revenues between harvesters and processors with adjustments for developments that occur in the fisheries after rationalization. If the non-binding formula is based on the arbitration standard, that formula is likely to be more useful in guiding negotiations and would be a more reliable signal of the possible future arbitration findings.

The non-binding arbitration should be conducted by a different arbitrator than the “last best offer” arbitration proceedings. The use of a different arbitrator for the non-binding arbitration will ensure that an objective, unbiased arbiter issues the finding in the binding “last best offer” arbitration. If a party is

challenges the initial non-binding arbitration finding in the “last best offer” proceeding, that party is unlikely to receive an unbiased assessment of the finding by the same arbitrator. Using different arbitrators for the two proceedings will provide a neutral, unbiased arbiter for the binding “last best offer” proceeding.

The non-binding price formula should be a benchmark price, identifying product forms, delivery times and locations on which it depends. To effectively guide individual negotiations, the non-binding price should be specific as to the terms under which it is established. By identifying the product forms, delivery locations and times on which the price formula relies, the formula will provide a better guide to parties who are negotiating deliveries in the fisheries.

Analysis of Structure I - Single arbitration proceeding for each IPQ holder, with IFQ holders required to participate collectively

This structure is the same as the last best offer model, except that IFQ holders would be required to act collectively in the arbitration proceeding. Generally, the benefits and detriments of the last best offer model would be retained in this structure. The only exception is that the interests of the individual IFQ holders would be subordinated to the collective interests of all IFQ holders participating in the arbitration proceeding with an IFQ holder. Most participants believe that individuals should be free to assert their own position in the arbitration proceeding, if they desire.

Multiple (but a limited number of) arbitration proceedings for each IPQ holder, with IFQ holders permitted to participate independently or collectively (Structure III)

This structure is similar to Structure II, however, a second arbitration would be permitted for IFQ holders that have shares that are not included in the first arbitration proceeding. The second arbitration would be available to IFQ holders that chose not to engage in the first arbitration or that did not commit all shares at the time of the initial arbitration proceeding. This structure is intended to avoid the need to apply an arbitration finding to IFQ holders that did not participate in an arbitration proceeding. Conditions could be imposed which would limit the availability of the second proceeding to situations where both the IFQ and IPQ holders have substantial shares uncommitted. The arbitration decisions could still be made available to IFQ holders that do not participate in the arbitration to avoid leaving out IFQ holders with minimal holdings.

The need for permitting a second arbitration could be questioned, since under Structure III an IFQ holder would have a unilateral right to commit shares and join arbitration proceedings with any IPQ holder with unsubscribed shares. In addition, defining the circumstances under which an IFQ holder can initiate a second arbitration is likely to be either under inclusive or over inclusive, prohibiting initiating arbitration by an IFQ holder that had a reasonable excuse for not joining a first arbitration or permitting arbitration in some instances where the IFQ holder had reasonable opportunity to join a first arbitration proceeding. Establishing specific criteria for when arbitration is or is not permitted could also lead to some manipulation by those intending to either avoid or qualify for multiple arbitration proceedings.

Multiple (and an unlimited number of) arbitration proceedings for each IPQ holder, with IFQ holders permitted to participate independently or collectively (Structure IV)

This structure would be similar to Structure IV above, but would extend the right to arbitrate to any IFQ holder at any time. This structure would avoid need to apply arbitration findings to nonparticipating IFQ holders, since his option would provide an open option to arbitrate. While the option avoids the problem of applying an arbitration finding to those that did not participate, the cost of this option could be excessive. Unlimited multiple proceedings could be disruptive to planning by IPQ holders to the detriment of many IFQ holders. In addition, unlimited proceedings could be costly to all participants, who would share the costs of the arbitrator.

3.7.8 The Relative Merits of Conventional Arbitration and Final Offer Arbitration

In conventional arbitration, the two parties each present their arguments to the arbitrator and the arbitrator has unlimited discretion in choosing the appropriate decision. The fleet-wide model advanced by the Committee uses conventional arbitration. In final offer arbitration, each party submits to the arbitrator a final offer. The arbitrator's decision making is limited to choosing one of those two final offers. In the Newfoundland fisheries, final offer arbitration is used. The last best offer model advanced by the Committee would also use final offer arbitration. Comparisons of these two systems suggest that the different rules can affect the positions taken by the two parties and the outcome of the arbitration process.

In conventional arbitration, parties present their arguments and the arbitrator is given the latitude to decide any appropriate outcome. Although the arbitrator will resolve the dispute, conventional arbitration is perceived by some to create no incentive for parties to settle disputes.¹⁹ Instead, critics believe that conventional arbitration leads parties to exaggerate demands, expecting an arbitrator to make a decision between the two parties positions, in some cases simply splitting the difference (Young, 1991 at 8). In addition, the unbounded submission of dispute to the arbitrator is argued to give the parties less control over the outcome of the dispute (Brams, 1989 at 66).

To address these problems, alternative forms of arbitration have been developed, the most widespread of which is final offer arbitration. The requirement of the arbitrator to select from the parties' final offers is intended to limit the discretion of the arbitrator to develop a solution outside those proposed by the parties, maintaining more control of the outcome in the participants (Brams, 1998 at 66). Final offer arbitration is also intended to discourage the parties from taking unreasonable positions, instead creating an incentive for each party to submit an offer that is more reasonable than the other party's offer (Young, 1991 at 8). Several analyses have examined whether final offer arbitration does in fact drive parties toward settlement or less extreme positions and whether outcomes under final offer arbitration differ from those under conventional arbitration.²⁰ In general, a participant in a final offer arbitration will attempt to make an offer that is relatively close to the arbitrator's preferred settlement and is also relatively favorable to its side (Brams, Kilgour, and Merrill, 1991). The potential for an extreme outcome is argued to reduce posturing under final offer arbitration and contribute to the positions of the two parties converging to a settlement (Brams, Kilgour, and Merrill, 1991; Dept. of Industrial Relations, 1999).

A few general predictions can be made concerning how different types of participants fair under final offer arbitration. If one party values winning the arbitration, that party will tend to offer greater compromises achieving a less desirable result for the party. Parties that represent a group of constituents (such as union representatives) are likely to be more sensitive to the need to win (Brams, Kilgour, and Merrill, 1991).

Another factor that is likely to affect the position taken by a party in arbitration and the arbitration outcome is the willingness of a party to take risks, commonly referred to as a party's risk aversion. The principle underlying final offer arbitration is that the risk of an unsatisfactory arbitration finding will induce parties to make more reasonable offers.²¹ Risk averse parties are thought to concede more in an offer to minimize the risk of losing the arbitration. As a result, the risk averse party is more likely to win the arbitration, but

¹⁹ In evaluating arbitration systems, one should keep in mind that negotiations are likely to be colored by the outside prospect of arbitration. So, even if parties reach a settlement that outcome is likely to be biased by the prospect of arbitration and the potential impacts of arbitration (see Dept. of Industrial Relations, 1999).

²⁰ Other types of arbitration have been developed, many of which have not been fully tested (Brams, 1991). Recent studies have tested aspects of some of these new systems (for example, see Dickensen, 2001). Many of these tests rely on experimental methods (Brams, 1989).

²¹ This result is not well established and is contradicted by some results (see Dickensen, 2001).

will win less on average. These two competing effects pose a challenge in predicting the effects of final offer arbitration on outcomes. Although not well established, at least one theoretical evaluation of these effects has concluded that the when participating in final offer arbitration concessions of the risk averse party outweigh the benefits to risk averse parties of winning more often (Dept. of Industrial Relations, 1999). In general, the party with more at stake in an outcome is likely to be more risk averse. For example, a participant in the crab fisheries with few interests outside of crab is likely to be more risk averse than a participant that is diversified with interests in several different fisheries.²²

One rationale for advanced for supporting final offer arbitration is that the complex price negotiations likely to arise in the crab fishery require that the arbitrator's discretion be limited. Most participants believe that formula pricing is the most equitable resolution of pricing in the fishery. Formulas are likely to include several parameters, possibly time of delivery, quality of crab, product market prices, product market shares, and exchange rates. Although persons familiar with the crab industry might be capable of developing such a formula given an extended period of time, arbitration will likely be conducted in a tight time frame, allowing the parties a limited amount of time to educate the arbitrator on crab markets. A final offer system is therefor argued to be more effective in both compelling the parties to develop pricing formulas and to reduce the amount of information necessary for an arbitrator's decision. This argument, however, assumes the arbitrator or arbitration panel will disregard formulas suggested by the parties and substitute its own discretion concerning an appropriate formula for the suggestions of the parties. Although the arbitrator may exercise some of the wide discretion granted in making a decision, the potential for abuse of that discretion by a carefully selected arbitrator is small. In addition, the final offer arbitration could prevent an arbitrator from fashioning a reasonable middle ground resolution to a dispute between two uncompromising parties.

3.7.9 Analysis of Additional Provisions

The five structures developed by the Committee overlap with each other substantially, with each containing options that could be applied to any of the structures.²³ To assist the Council in evaluating the alternatives, each option is briefly described and analyzed independently. The different program alternatives to which the option can be applied are noted.

3.7.9.1 Market Report

One feature of the Newfoundland crab fishery system of binding arbitration is a preseason market analysis prepared by an independent market analyst. Both of the advanced structures contain provisions for the development of a third party market analysis, which would be presented to all participants in the fishery prior to the season. The Committee also has reached a consensus on the following provision:

Market Report

An independent market analyst selected by the mutual agreement of the sectors will present to both sectors and all designated arbitrators an analysis of the market for products of that fishery.

²²Uncertainty also contributes to the tendency of parties to settle a dispute to avoid arbitration. The more certain the parties are of the potential arbitration decision, the more likely the parties are to settle a dispute (see Dept. of Industrial Relations, 1999). This influence of uncertainty argues for the selection of an arbitrator with a well grounded understanding of the issue subject to arbitration.

²³ Although many of the options could be applied to any of the structures, including the fleet-wide structure, proponents of the fleet-wide structure have requested that the fleet-wide structure be evaluated and considered in its entirety. Proponents believe that the structure including all of its identified elements are critical to that structure meeting its objectives.

The market analysis is intended to provide transparency of markets and form the basis for negotiations. The market analysis should reduce posturing by the parties and provide an arbitrator with needed background on market conditions. The report should cover ex vessel prices for deliveries of Class A and Class B crab harvests, as well as both first wholesale and consumer prices for crab and crab products, so that it comprehensively describes the market for crab and its products. Crab price volatility is likely to limit the utility of the market report for setting fixed ex vessel prices for the season. The report, however, could provide valuable information to participants on the overall conditions of the market preceding the season and information concerning the key factors that may affect prices. With extended seasons peak harvests may not be at the season opening, however, to be useful for negotiations the marketing report must be prepared prior to completion of most delivery contracts. If contracts are based on a formula that adjusts prices with changes in market conditions, general market information may be adequate to provide the needed transparency.

3.7.9.2 Selection of the Arbitrator and Market Analyst

Both alternative models advanced by the Committee provide for the selection of the arbitrators and market analyst by mutual agreement of the parties. In addition, the Committee has reached consensus on the following provision:

Selection of the Arbitrator(s) and Market Analyst

The market analyst and arbitrator(s) will be selected by mutual agreement of the PQS holders and the QS holders. PQS holders collectively must agree and QS holders collectively must agree. Processors may participate collectively in the selection process. The details of the selection will be decided at a later time.

Various procedures could be used for this process, including the selection of individuals by each sector to serve on panels and the selection of additional persons by this panel. Most importantly, the process should be by agreement of both sectors. The development of the specific selection process is not imperative at this time.

3.7.9.3 Shares Subject to Binding Arbitration

Both structures advanced by the Committee contemplate that the arbitration would apply to only Class A shares (and Class C shares, when those shares are not subject to IPQ delivery requirements). In addition, the Committee has reached a consensus on the following provision:

Shares subject to binding arbitration

This binding arbitration system shall address price disputes between holders of delivery restricted IFQ (including Class A IFQ and Class C IFQ when subject to delivery restrictions) and holders of IPQ. Binding arbitration does not apply to the negotiation of price for deliveries under the class B IFQ and Class C IFQ when not subject to delivery restrictions. C share holders, however, may elect to participate in the arbitration process prior to delivery restrictions taking effect.

Because of the allocation of both harvesting and processing shares for crab harvested with Class A shares, it is thought that transactions for delivery of Class A crab is most in need of arbitration to establish a fair, equitable, or competitive price.

An additional consequence of applying arbitration to only delivery restricted shares is that it provides greater market freedom for users of Class B shares. The arbitration system is the outside alternative for establishing a price for A share crab deliveries. Some participants have suggested that IPQ holders may demand the delivery of B share crab in price negotiations for A share crab. In the absence of an arbitration system for establishing A share prices, harvesters holding only A shares would have little negotiating leverage with IPQ holders, since A share crab can be delivered only to IPQ holders. The arbitration system, however, creates an institutional structure for establishing a price for A share crab independent of B share crab deliveries. So, a harvester trying to negotiate an A share price who is faced with a demand for B share crab deliveries can effectively respond that the negotiation only concerns A share crab using arbitration as a fall back to establish the A share price. This structure will clearly aid harvesters in negotiating higher prices for B share crab and will improve the opportunity of processors without IPQs to enter the market through B share crab purchases. This does not suggest that processors without IPQ will not be disadvantaged in the market for crab relative to IPQ holders. Processors without IPQs will be disadvantaged since the dedication of a large share of landings to IPQ holders will limit their ability to compete for a large share of the market and limit their ability to realize economies of scale (without purchasing IPQs).²⁴

3.7.9.4 Shares of Processor Affiliates

Since some harvesters and processors have affiliations, the arbitration system should consider that participation of processor affiliated IFQ holders in the binding arbitration process could influence the outcome of that process. The Committee developed the following options for addressing shares of processor affiliates and has reached a consensus in support of option 3:

Shares of processor affiliates

Option 1

Holders of IFQs that are affiliated with processors are not eligible to participate in the arbitration process. Processor affiliation will be determined using the threshold rule with percent thresholds of 10, 25, and 50 percent.

Option 2

Entities that are partially owned by processor affiliates will be permitted to participate in arbitration, however, the participation will apply only to a share of IFQs equal to the ownership share of owners not affiliated with a processor (e.g., if an entity owning any part of a processor owns a 75 percent interest in 100 IFQs, the nonaffiliated owner of those IFQs may participate in arbitration with 25 shares).

Option 3

Participation of processor affiliates in binding arbitration as IFQ holders will be determined by any applicable rules governing anti-trust. Any parties eligible for collective bargaining under the Fishermen's Marketing Act of 1934 will be eligible to participate in binding arbitration. No antitrust exemption should be made to enable processor affiliated IFQ holders to participate in arbitration.

To reduce that influence, the Committee has identified a preferred option, which would be to rely on current general anti-trust rules (without any special exemption) for determining whether a processor affiliate could participate in arbitration. The separation of interests in the binding arbitration program could be

²⁴ The separation of markets for crab harvested with Class A shares and crab harvested with Class B shares should also contribute information to the arbitration process. If transactions for crab harvested with Class B shares are in a competitive market prices for those landings should provide additional information to industry, market analysts, and arbitrators concerning market trends.

compromised by participation of processor affiliates as IFQ holders. Because of the sensitivity of ex vessel price negotiations under the new program, a conservative approach to participation of processor affiliates in price negotiations might be appropriate. To accomplish this end, the Committee proposes that general antitrust rules govern the participation of processor affiliates in the process.

3.7.9.5 Transferability of Benefits of Arbitration to Other IFQ Holders (Opting in to an arbitration finding)

Both of the arbitration structures advance by the Committee allow non-participants in an arbitration proceeding to “opt in” to the results of the proceeding by agreeing to accept all of the terms of the arbitration finding. Allowing non-participants (who hold Class A IFQs) the benefit of the arbitrator’s decision has the effect of dispersing the benefits of arbitration across a broader portion of the fleet. In general, an arbitration decision binds only the participating IFQ holders and IPQ holder. If an IPQ holder has additional uncommitted shares an IFQ holder would have a unilateral right to commit deliveries to IPQ holder subject to all of the terms of the arbitration finding.

In the fleet-wide model, this ability to opt in to an arbitration finding would apply only after the arbitration of a put. An IFQ holder would then be permitted to opt in to all of the terms defined by the arbitration of the put. Since the last best offer model permits different IFQ holders to submit different offers, several different arbitrated prices could exist. The choice of which offer an IFQ holder accepts the terms of would be left to the IFQ holder. If the arbitration finding limited the time of delivery or the quantity of crab that could be delivered under its terms, the IFQ holder would be limited by those terms. These limitations could be critical to an IPQ holder purchasing crab for a particular customer who demands a limited quantity of crab at a specific time.

3.7.9.6 Payment of the Arbitration and Market Analysis

The Committee developed the following two options concerning the payment for the costs of arbitration, developing a consensus in support of option 1:

Payment for the Arbitration and Market Analysis

The payment for the market analysis and the arbitrators will be shared by the two sectors. Cost shall be shared by all participants in all fisheries.

Option 1

For shared costs, the payment of those costs shall be advanced by IPQ holders. The IPQ holders will collect the IFQ holders’ portion of the shared costs by adding a pro rated surcharge to all deliveries of Class A crab.

Option 2

Administration of payments will be accomplished by allocation of a share of the cost recovery funds to the binding arbitration program.

Both options contemplate that cost of the market analysis and the arbitrators will be shared equally by the two sectors. Within each sector, payment for the arbitration costs would be based on shareholdings. Option 1 would provide for administration by the industry without direct involvement of NOAA Fisheries. This option could simplify agency administration of the program and avoid disputes between industry and the agency concerning the fund disbursements. Option 2 would allocate a portion of the cost recovery funds to support binding arbitration. The second option might be supported, if industry seemed incapable of smoothly administering the funding mechanism.

3.7.9.7 In-Season Performance Disputes and Quality Disputes

Both of the alternatives advanced by the Committee contain provisions for the settlement of in-season performance disputes. In addition, the Committee has advanced a more limited option for the settlement of quality disputes at the dock. The options for the settlement of disputes are:

Performance-Related Dispute Resolution.

Disputes arising out of any IFQ/IPQ transactions (including but not limited to disputes concerning product quality, delivery, payment or other harvester and processor performance obligations) will initially be addressed through standard commercial contract procedures (i.e., notice of breach, opportunity to cure for a commercially reasonable period, etc.). Disputes that are not resolved through such procedures will be submitted to binding arbitration before the arbitrator(s). To reduce the risk that disparate resources could affect the outcome, the costs of arbitration will be paid out of the pool of funds collected (as taxes or industry assessments) to support the price arbitration process. On the other hand, to discourage frivolous or strategic (as opposed to substantive) complaints, the arbitrator(s) may deny access to arbitration or assess arbitration costs and fees in cases where a party asserts a non-substantive claim. (This option appears as 13. in the Fleet-Wide Model)

Quality Dispute Resolution.

In cases where the fisherman and the processor cannot come to agreement on quality and thus price for crab, two mechanisms are suggested for resolving the price dispute-after the processor has processed the crab (to avoid waste from the dumping the load at sea): (1) In cases where fishermen and processors have agreed to a formula based price, the two parties would take their normal shares of the price, after the disputed load is sold. (2) This type of dispute would most likely apply in cases where fishermen desire to stay with fixed dockside prices and there is disagreement on quality and therefore price. These cases could be referred to an independent quality specialist firm. The two parties in dispute would decide which firm to hire.

In both provisions, would use third party experts to resolve disputes. The first, broader, provision would rely on the arbitrator for dispute resolutions, while the second, more limited, provision provides for the dispute to be resolved by an independent quality specialist firm. The use of the arbitrator may be favored, since the arbitrator may have some familiarity with the parties and the contract under which the deliveries are being made. The use of a third party quality specialist could be more appropriate for quality disputes, if the arbitrator does not have expertise in that area. The first option also provides for the payment of costs from general funds, which may be desirable to prevent costs from discouraging parties to assert their rights. The option also includes a provision for the payment of costs by any party bringing a non-substantive claim to discourage frivolous claims.

3.7.9.8 Data Used in Arbitration Proceedings

The Committee developed a series of provisions concerning the data to be used in the arbitration proceedings. the following provisions are supported by a consensus of the Committee:

Under any arbitration structure, the arbitrator must have access to comprehensive product information from the fishery (including first wholesale prices and any information necessary to verify those prices).

Processors may participate in common discussions concerning historical prices in the fisheries.

Subject to limitations of antitrust laws and the need for proprietary confidentiality, all parties to an arbitration proceeding shall have access to all information provided to the arbitrator(s) in that proceeding.

Data collected in the data collection program may be used to verify the accuracy of data provided to the arbitrator(s) in an arbitration proceeding. Any data verification will be undertaken only if the confidentiality protections of the data collection program will not be compromised.

The first provision is intended to ensure that the arbitrator has comprehensive market information that can be used for arbitration decisions. Comprehensive market knowledge is critical to fair arbitration findings. The second paragraph is intended to allow processors to collectively discuss historic prices to facilitate the development of the historic division of revenues, the Committee's favored standard. Antitrust concerns may be raised by price discussion among processors. Fair proceedings require that all parties have access to the same information. The third paragraph is intended to require data considered by the arbitrator to be shared with all participants in a proceeding, except to the extent that such sharing would result in a violation of antitrust laws or divulge confidential data.

The last paragraph would provide for the use of data collected in the data collection program for the verification of data used in the arbitration process. Verification using the data collection program would be undertaken only if and to the extent that confidentiality protections can be maintained. Use of data for verification in some circumstances could result in the data becoming public. The Committee position is that use of the data in a manner that could compromise confidentiality would not be permitted.

3.7.9.9 Payment of the Arbitration and Market Analysis

The Committee developed the following two options concerning the payment for the costs of arbitration, developing a consensus in support of option 1:

Payment for the Arbitration and Market Analysis

The payment for the market analysis and the arbitrators will be shared by the two sectors. Cost shall be shared by all participants in all fisheries.

Option 1

For shared costs, the payment of those costs shall be advanced by IPQ holders. The IPQ holders will collect the IFQ holders' portion of the shared costs by adding a pro rated surcharge to all deliveries of Class A crab.

Option 2

Administration of payments will be accomplished by allocation of a share of the cost recovery funds to the binding arbitration program.

Both options contemplate that cost of the market analysis and the arbitrators will be shared equally by the two sectors. Within each sector, payment for the arbitration costs would be based on shareholdings. Option 1 would provide for administration by the industry without direct involvement of NOAA Fisheries. This option could simplify agency administration of the program and avoid disputes between industry and the agency concerning the fund disbursements. Option 2 would allocate a portion of the cost recovery funds to support binding arbitration. The second option might be supported, if industry seemed incapable of smoothly administering the funding mechanism.

3.7.9.10 Enforcement of the Arbitration Decision

An effective system of arbitration will require effective enforcement of decisions. Both harvesters and processors could benefit from the certainty that arbitrated findings may provide, if enforcement is adequate and available to both sides. The following options are proposed for enforcement of arbitration decisions:

Enforcement of the Arbitration Decision

The decision of the arbitrator will be enforced by:

1. civil damages
2. specific performance
3. forfeiture of unused IFQs or IPQs in the fishery for the following season (1 year use-it-or-lose-it) subject to hardship exceptions.

The first option for enforcement of arbitration decisions is civil law. Although enforcement would require court action, civil action might be predictable than the other remedies. Under civil law damages would be based on harm and therefore would be determined based on the specific circumstances. In addition, civil damages would require parties to take reasonable steps to mitigate damages, so participants could not take advantage of a breach by another party. Option 2 would enforce arbitration decisions by specific performance (i.e., requiring parties to perform in accordance with the arbitration decision). While fulfilling the findings of the arbitrator, forcing a harvester to fish or a processor to process could be infeasible and viewed as draconian. The third option would impose a "use-it-or-lose-it" that would forfeit unused IFQs and IPQs for a single season. Such a provision could be implemented in two ways. First, a "no fault" provision would result in both parties losing their shares for a year. The loss of shares, however, could impact the two parties differently, offsetting the bargaining positions and balance of market power. Alternatively, a system could forfeit the shares of the breaching party for a year. A fault based system, however, could be difficult to administer since adjudication and appeals processes could be time consuming. In addition, adjudications could overly complicate administration of annual share allocations for RAM Division.

3.7.10 Oversight and Administration of the Binding Arbitration Program

An effective binding arbitration program will require careful oversight and administration. A system of rules will define the program. The realization of the program's goals will depend in large part on whether these rules function effectively and have their intended effects. To mitigate unintended effects, the program will need to be adaptable. Adaptation is particularly important given the novelty of the program. Two general approaches to administration of the program are possible.

Oversight and Administration

Oversight and administration of the binding arbitration should be conducted in a manner similar to the AFA cooperative administration and oversight. System reporting requirements and administrative rules should be developed in conjunction with the Council and NOAA Fisheries after selection of the preferred program.

Under the first approach, NMFS and the Council would have a very active role in administering and monitoring the details of the program. Under the second approach, industry would be required to comply with reporting requirements providing NMFS and the Council with the information necessary to assess the success of the program and to rectify fundamental shortcomings in the program. Administration would be undertaken primarily by industry, avoiding government involvement in pricing setting process and providing greater flexibility to adopt agreed to modifications without government action.

Under the first administration alternative, NMFS would oversee the details of the program. Administration under this approach presents several problems. First, the Council and NMFS would be required to develop detailed rules governing the binding arbitration process, using the standard APA regulatory process. Once

the program is implemented, NMFS would oversee the day-to-day operation of the program, attending to the details of any required notices and possibly overseeing hearings. The agency would be required to follow the public process requirements of the APA, resulting in very long response times. This level of oversight is likely to be expensive for the agency and could result in significant agency involvement in the details of price negotiations. Extensive government involvement in private contracts could be viewed as overly intrusive. This approach would also require the Council and NMFS to fine tune the rules of the program. Some of these changes could be fundamental to the program and therefore are the province of the Council and are best decided through the Council process. Other provisions, however, are likely to be less controversial and pertain to the general operation of the program. For example, the parties may decide that a notice period is either too long or short, interfering with the parties' ability to reach a negotiated agreement. Altering such a provision through the Council process or through some other procedure administered through NMFS would likely be costly, cumbersome, and time consuming and could be an obstacle to the program achieving its objectives.

The second alternative for administration and oversight would be patterned after NMFS administration of the AFA cooperatives. NMFS oversight of the cooperatives focuses on elements of that program that are important to public management of the fisheries. Cooperatives are required to report harvests, bycatch, discards, monitoring procedures, and penalties in an annual report to the Council and NMFS. On a more general level operations of the cooperatives are overseen by requiring cooperatives to file a copy of the cooperative's contract 30 days prior to beginning fishing under the contract. These reporting requirements provide NMFS and the Council with information necessary for determining whether the program is functioning effectively. In the case of binding arbitration, requirements could be developed for the filing of signed arbitration agreements and price contracts, best offers, identifying the agreed upon arbitrator and independent market analyst, and similar general requirements of the program. General reporting requirements and a general oversight role for NMFS should provide both NMFS and the Council with the information necessary to determine whether the program is serving its stated purpose without creating cumbersome requirements for modification and operation of the program. Under this model, minor modifications could be adopted by the parties without direct involvement of NMFS or the Council. The scope of these permitted changes could be defined by the Council and NMFS and could be limited to aspects of the program that are less appropriate for government involvement. Limiting government involvement will remove some of the restrictive requirements of public decision making. The parties could petition the Council for changes in the program, if they believed that it was not serving its purpose or needed modification.

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APPENDIX 3-4A

Last Best Offer Binding Arbitration Model

GENERAL

The Last Best Offer Model provides efficiency by resolving all price and delivery disputes pre-season, while also providing a later opportunity for an IFQ holder, who did not arbitrate or conclude a contract, to opt in on the same terms to a contract resulting from any of the completed arbitrations. The Last Best Offer Model allows voluntary agreements between IFQ and IPQ Quota Holders at any time, and provides a pre-season "matching" period for IFQ Holders to match with an IPQ Holder. The arbitration would occur close to the beginning of the season.

Specific characteristics include:

1. Processor-by-processor. Processors will participate individually and not collectively, except in the choice of the market analyst and the arbitrator/arbitration panel.
2. Processor-affiliated shares. Participation of processor-affiliated shares will be limited by the current rules governing antitrust matters.
3. Arbitration standard. The standard for the arbitrator is the historic division of revenues between harvesters and processors in the aggregate (across the entire sectors), based on arm's-length first wholesale prices and ex-vessel prices (Option 4 under "Standard for Arbitration" in the staff analysis). The arbitrator shall consider several factors including those specified in the staff analysis, such as current ex vessel prices for A, B, and C Shares, innovations, efficiency, safety, etc.
4. Opt-in. An IFQ holder may opt in to any contract resulting from a completed arbitration for an IPQ holder with available IPQ by giving notice to the IPQ holder of the intent to opt in, specifying the amount of IFQ shares involved, and acceptance of all terms of the contract. Once exercised, an Opt-in is binding on both the IPQ holder and the IFQ holder.
5. Performance Disputes. Performance and enforcement disputes (e.g. quality, delivery time, etc.) initially will be settled through normal commercial contract dispute remedies. If those procedures are unsuccessful and in cases where time is of the essence, the dispute will be submitted for arbitration before the arbitrator(s). The costs of arbitration shall be paid from the fees collected, although the arbitrator(s) will have the right to assign fees to any party for frivolous or strategic complaints.
6. Lengthy Season Approach. For a lengthy season, an IPQ holder and an IFQ holder (or group of IFQ holders) may agree to revise the entire time schedule below and could agree to an arbitration(s) during the season. That approach may also be arbitrated pre-season if the holders cannot agree.

PROCESS

1. Negotiations and Voluntary Share Matching.

At any time prior to the season opening date, any IFQ holders may negotiate with any IPQ holder on price and delivery terms for that season (price/price formula; time of delivery; place of delivery, etc.). If agreement is reached, a binding contract will result for those IFQ and IPQ shares. IPQ holders will always act individually and never collectively, except in the choice of the market analyst(which may occur at any time pre-season) and the arbitrator/arbitration panel for which all IFQ and IPQ holders will consult and agree.

2. Required Share-Matching and Arbitration.

Beginning at the 25-day pre-season point, IFQ holders may match up IFQ shares not already subject to contracts with any IPQ shares not under contract, either as collective groups of IFQ holders or as individual IFQ holders (the offered IFQ Shares must be a substantial amount of the IFQ Holder(s)' uncontracted shares). The IPQ holder must accept all proposed matches up to its non-contracted IPQ share amount. All IFQ holders "matched" with an IPQ holder will jointly choose an arbitrator with that IPQ holder. The matched share holders are committed to the arbitration once the arbitrator is chosen (if the parties wish, the arbitrator may initially act as a mediator to reach an agreement quickly). Arbitration must begin no later than 15 days before the season opening date.

3. Data.

The Arbitrator will gather relevant data independently and from the parties to determine the historical distribution of first wholesale crab product revenues (at FOB point of production in Alaska) between harvesters and processors in the aggregate (across the entire sectors). For a vertically integrated IPQ holder (and in other situations in which a back-calculation is needed), the arbitrator will work with that IPQ holder and the IFQ holders to determine a method for back-calculating an accurate first wholesale price for that processor. The Arbitrator will receive a pre-season market report from the market analyst, and may gather additional data on the market and on completed arbitrations. The Arbitrator will also receive and consider all data submitted by the IFQ holders and the IPQ holder. The Arbitrator will not have subpoena power.

All data obtained by the Arbitrator will be shared with the parties, subject only to antitrust limitations. The Arbitrator may consult with the third party data collector (e.g., the Pacific States Marine Fisheries Commission) for purposes of verifying data.

4. Arbitration Decisions.

Arbitration will be based on a "last best offer" system, with the Arbitrator choosing one of the last best offers made by the parties. The Arbitrator will work with the IPQ and IFQ holders to determine the matters that must be included in the offer (e.g. price, delivery time & place, etc.) and will set the date on which "last best offers" must be submitted. The last best offers may also include a price over a specified time period, a method for smoothing prices over a season, and an advance price paid at the time of delivery.

If several groups or individual IFQ Holders have "matched" with that IPQ Holder, each of them may make a last best offer. Prior to submission of the last-best offers, the Arbitrator may meet with parties, schedule joint meetings, or take any actions aimed at reaching agreement. The Arbitrator will notify the IPQ holder and the IFQ holders of the Arbitration Decision no later than 10 days before the season opening date. The Arbitration Decision may be on a formula or ex-vessel price basis. The Arbitration Decision will result in a contract for the IPQ holder and the IFQ holders who participated in arbitration with that IPQ holder.

5. Post-Arbitration Opt-In.

Any IFQ holder with shares not under contract may opt in to any contract resulting from an Arbitration Decision for an IPQ holder with IPQ that is not under contract, on all of the same contract conditions (price, time of delivery, etc.). If there is a dispute regarding whether the "opt in" offer is consistent with the contract, that dispute may be decided by the arbitrator who will decide only whether the Opt-in is consistent with the contract.

6. Formula and Prices.

Throughout the year, the market analyst will survey the crab product market and publish periodically a composite price. That price will be a single price per species, based on the weighted average of the arm's length transactions in products from that species.

7. Additional Modifications.

The Committee is requested to consider the following modifications to this preferred alternative and to report back to the Council at the April meeting:

- a. The arbitrator who makes the last pre-season arbitration decision will review all of the arbitration decisions for that season and select the highest arbitrated prices(s), which is representative of 7% of the market share of the PQ. That price shall become the price for all arbitrated prices of that season, inclusive of the opt-in provision, and, independent of delivery terms at the harvester option. If the arbitration decisions include both formula and straight price decisions, the arbitrator shall have the discretion to select and apply one of each type. The decision on which price is the 'highest arbitrated price' shall take into consideration terms of delivery that may have a significant impact on price, including time and place of delivery.
- b. A single annual fleet-wide arbitration will be used to establish a non-binding formula under which a fraction of the weighted average first wholesale prices for the crab products from each fishery may be used to set an ex-vessel price. The formula is to be based on the historical (1990-2000) distribution of first wholesale revenues between fishermen and processors. The formula may be adjusted by the arbitrator(s) to take into account post-rationalization developments as the arbitrator(s) deem appropriate, subject to certain general guidelines.

APPENDIX 3-4B
Fleet-Wide Binding Arbitration Model

GENERAL:

A single annual fleet-wide arbitration will be used to establish a formula under which a fraction of the weighted average first wholesale prices for the crab products from each fishery is used to set a default ex-vessel price. This price will apply in cases where a delivery is made in the absence of contract between a harvester and a processor. The formula is to be based on the historical (1990-2000) distribution of first wholesale revenues between fishermen and processors.²⁵ The formula may be adjusted by the arbitrator(s) to take into account post-rationalization developments as the arbitrator(s) deem appropriate, subject to certain general guidelines.

On certain terms and conditions, harvesters holding individual fishing quotas ("IFQs") for which they do not have a contract with a processor may "put" such IFQs to any processor with available individual processing quota ("IPQs") for the arbitrated default price, by providing a notice of intent to deliver, which specifies the date, place, quantity, etc. of the proposed delivery. If a processor to whom a harvester puts IFQ does not agree with the delivery terms, the terms will be subject to expeditious negotiation, and, if the harvester elects, binding arbitration before the arbitrator(s) that establish the default price formula. Under no circumstances will a processor have the ability to "call" IFQ.

To address differences in timing between when deliveries are made and when the related product is sold, and the potential that processors will exclusively reserve delivery periods when product has higher value to harvesters with whom they are affiliated, the arbitrator(s) will have the authority to "smooth" first wholesale prices over a period that the arbitrator(s) determine is appropriate.

Because there will be some time lag between deliveries to which the default price applies and the determination of that price, the arbitrator(s) will establish a method for projecting the default price, and will establish a formula for determining the percentage of the default price to be paid at delivery (as an advance), and the balance to paid when the default price has actually been calculated (as a settlement).

PROCEDURE

1. Arbitrator.

Representatives of the harvesting and processing sectors select an arbitrator. If the two sectors are not able to agree, each sector will choose an arbitrator, and the two so chosen will choose a third arbitrator.

2. Market Analyst.

The arbitrator(s) select a market analyst, in consultation with representatives of the harvesting and processing sectors.

²⁵ The reference first wholesale price for purposes of constructing and applying the formula is to be determined in the course of the pre-season arbitration of the price formula. It could be, for example, the FOB point of production.

3. Data Gathering.

The arbitrator(s) and the market analyst (the "Team") meet with each processor individually as necessary (to address antitrust issues) and harvesters individually and/or collectively (subject to the vertical integration standards of generally applicable antitrust laws²⁶) to:

- a. gather data relevant to determining the historical distribution of first wholesale crab product revenues between harvesters and processors;
- b. determine a method for constructing a composite first wholesale price from the IPQ holders' crab product transactions;
- c. determine composite price adjustment factors for each crab delivery port, to reflect the differential costs associated with delivering to, processing at and shipping from each port;
- d. determine the percentage of the default price to be paid at delivery (as an advance), and the balance to paid when the default price has actually been calculated (as a settlement);
- e. determine the start date and duration of the period during which harvesters may "put" their IFQ to an IPQ holder with available IPQs, on a fishery by fishery basis;
- f. determine the level of "upward" vertical integration of each IPQ holder, and to determine, in cases where a processor does not sell product on an arm's length basis at the first wholesale level, the value accrued by the processor at each transaction level up to and including the first point at which it sells on an arm's length basis to a third party (which will be used to back-calculate a proxy first wholesale price for any such processor); and
- g. the variety of crab product forms projected to be produced and the likely markets for such products.

4. Initial Discussions/Mediation.

Not less than 120 days before the opening of the first crab fishery of the upcoming year, the Team meets with each processor individually and with harvesters collectively (subject to the vertical integration standards set forth above) to present their preliminary conclusions regarding the items listed in section 3., above. The arbitrator(s) seek consensus among representatives of the harvesting and processing sectors regarding these issues.

5. Contract Negotiation Period.

The Team encourages harvesters and processors to negotiate voluntary contracts concerning IFQ/IPQ transactions prior to the opening of the period during which put options may be exercised. The arbitrator(s) allow adequate time between the initial discussions and mediation referenced in Section 4., above, and the opening of the put option period(s) to facilitate contract negotiation and formation.

6. Arbitration.

Not less than 30 days before the first crab fishery opens, the arbitrator(s) stipulate the revenue distribution formulas, method for constructing composite first wholesale prices, advance and settlement percentages and the put option periods for each fishery, if they have not been agreed upon by all IPQ and IFQ holders.

²⁶ Currently, the standards to be applied are the general standards promulgated in the Hinote case, and not the more permissive standards applicable to processor affiliates participating in AFA cooperatives.

7. Composite Price Calculation.

Throughout the year, the market analyst surveys the crab product market, and publishes a weekly composite price based on the survey structure and price construction methodology developed by the Team. The weekly composite price is a single price per species, based on the weighted average of the arm's length transactions in products produced from that species.

8. Price Smoothing Function.

The weekly composite prices may be used, at the arbitrators' discretion, to establish a single season or multi-week price, to "smooth" differences between prices at delivery and prices at the time of product sales, and to address optimal delivery times being reserved to processor-affiliated vessels. In addition, for purposes of determining appropriate seasonal advance payments at delivery, the Team will produce a weekly projection of the smoothed price that would apply to deliveries made during a given week.

9. Delivery Mechanics.

In the absence of a contract, a fisher would have the option to put his IFQs to a processor with available IPQs²⁷ at the default price, during the put exercise period. A harvester may exercise its put option by providing a notice of intent to deliver, proposing place, time, quantity, etc. The amount of IFQ involved must be substantial, relative to the harvester's uncommitted IFQ. Upon a harvester putting IFQ to a processor with available IPQ, the put IFQ and the equivalent amount of IPQ are reserved until: (i) terms of delivery are agreed upon (in which case the IFQ and IPQ are committed), (ii) the harvester withdraws the IFQ put (which may be any time through the harvester electing to undertake binding arbitration with respect to the put), or (iii) expiration of the negotiation period, if the harvester does not elect to enter binding arbitration. The negotiation period is 5 business days for harvesters that are not members of a cooperative, and 7 business days for harvesters that are. In cases where a processor objects to any term of the IFQ put, the matter is not resolved through negotiation during the negotiation period, and the harvester elects to undertake binding arbitration, the dispute will be arbitrated by the arbitrator(s) selected to determine the formula. To reduce the administrative burden associated with such dispute resolution, the arbitrator(s) are expected to use reasonable efforts to consolidate such disputes on a processor by processor basis, such that each processor is subjected to no more dispute resolution sessions than necessary, and to conduct the related arbitration(s) expeditiously.

10. Opt-In.

After the put option period has closed, a harvester with uncommitted IFQ may deliver to a processor with uncommitted IPQ by either (i) accepting the delivery terms established under put option arbitration(s) with that processor, or (ii) by negotiating mutually agreeable delivery terms with the processor.

11. Payment.

Because the price smoothing function may introduce some lag between delivery and price determination, payments will be made on an advance and settlement basis. The advance percentage is intended to be that which typically applied pre-rationalization in transactions where a harvester was not sharing market risk, and is expected to be a reasonably high percentage (i.e., 80%) of the projected composite price. The settlement will be calculated promptly following the close of the price smoothing period, and paid promptly thereafter.

12. Performance-Related Dispute Resolution.

Disputes arising out of any IFQ/IPQ transactions (including but not limited to disputes concerning product quality, delivery, payment or other harvester and processor performance obligations) will initially be addressed through standard commercial contract procedures (i.e., notice of breach, opportunity to cure for a commercially reasonable period, etc.). Disputes that are not resolved through such procedures will be

²⁷A regularly updated report of processors holding uncommitted IPQs will be issued during the "put" exercise period and thereafter.

submitted to binding arbitration before the arbitrator(s). To reduce the risk that disparate resources could affect the outcome, the costs of arbitration will be paid out of the pool of funds collected (as taxes or industry assessments) to support the price arbitration process. On the other hand, to discourage frivolous or strategic (as opposed to substantive) complaints, the arbitrator(s) may deny access to arbitration or assess arbitration costs and fees in cases where a party asserts a non-substantive claim.

SUMMARY COMMENTS

The arbitrator(s) pre-season functions (other than determining the historical distribution of first wholesale revenues) are repeated annually. The arbitrator(s) are expected to take into account changes in fishery and market characteristics, such as changes in season duration and product forms each successive season, and to adapt the structure and function of the model accordingly, while preserving its general parameters.

In addition to developing a composite base price formula, the arbitrator(s) and the market analyst will be expected to develop individual port price adjustment factors, to reflect the differential costs of delivering to, processing in and shipping from each community.

The arbitrator(s) may exclude high value products from the composite price calculation in cases where processors and/or harvesters have incurred extraordinary expenses or made capital investments to produce such products, or in cases where the arbitrator determines exclusion of such products is appropriate to provide an incentive to improve efficiency or product quality. The arbitrator(s) would not be expected to exclude high value products in cases where the higher value relates to market timing.

Price smoothing is intended to eliminate the need to track product from delivery to first arm's length sale, reducing administrative burden to processors. Further, price smoothing is intended to address the disparity in value related to delivery timing, where delivery periods associated with peak values are reserved to a processor's affiliated fleet, and/or in cases where a processor chooses to process products other than crab during such periods. On the other hand, it may be appropriate in some circumstances to allow the composite price to float with the market price, to reflect differences in value associated with harvest timing, such as in-fill percentages, and generally applicable market cycles. The arbitrator(s) will have substantial discretion in balancing relevant factors, and determining the appropriate duration and scope of the price smoothing function.

The arbitrator(s) will have the authority to address market timing and processor operational or logistical considerations in put option arbitrations. On the other hand, the arbitrator(s) will be expected to address the opportunity costs incurred by harvesters as the result of addressing those considerations.

Because the historical distribution of first wholesale revenues was based on an ex-vessel cash sales and not on profit/loss sharing, it did not include risk compensation for fishermen. Therefore, in cases where the ultimate composite price is less than the advance, fishermen would not be expected to refund the difference.

APPENDIX 3-4C
Experimental Analysis of Arbitration Structures
Preliminary Results

At its June 2002 meeting the North Pacific Fishery Management Council selected a preferred alternative for the rationalization of the Bering Sea/Aleutian Islands crab fisheries. As a part of its decision, the Council formed an industry committee to develop an arbitration program to resolve ex vessel price disputes between harvesters and processors. The committee developed two alternative structures for the arbitration program for consideration by the Council. To help the Council understand of the implications of the different arbitration structures, Council staff contracted Charles Plott, Ph.D. of California Institute of Technology to conduct an experimental analysis of the two arbitration structures preferred by the committee.¹ The analysis is to determine whether differences in the bargaining strength of sectors are inherent in the different arbitration structures.

Experimental economic analysis is the use of a controlled institutional environment with real money incentives to examine economic outcomes. Experimental methods are particularly useful for testing theories that are applied in an uncontrolled environment. Experimental methods are also useful for examining a complex institutional system too rich for comprehensive theoretical analysis. The application of experimental methods to the arbitration system in the crab fishery is intended to isolate the influence of the different arbitration structures to facilitate the analysis of those structures.

Dr. Plott has applied experimental methods to a variety of complex allocation problems, including allocation of resources on Space Station Freedom, the markets for emissions permits in southern California (RECLAIM), and mechanisms for pricing the use of natural gas pipelines, the auctioning of the right to use railroad tracks, markets for electric power in California and the design and implementation of the auction used by the Federal Communications Commission for the sale Personal Communications Systems licenses.

Following is a description of the experiment and its results. This report concludes with a discussion of some caveats concerning the interpretation of the results.

Environment

Three experiments were conducted, two using the fleet-wide model and one using the last best offer model. Different players participated in the different experiments, so all participants entered the experiment with no experience.

A three to one ratio of harvesters to processors was maintained in each experiment. The first fleet-wide experiment used three processors and nine harvesters, the second fleet-wide experiment and the last best offer experiment used two processors and six harvesters.

The first fleet-wide experiment consisted of 3 periods. The second fleet-wide experiment and the last best offer experiment used 4 periods each.

Each harvester is allocated 20 shares each period. 18 of these shares are A shares (requiring delivery to a processor holding processing shares) and 2 are B shares deliverable to any processor. Each processor is allocated 54 shares.

Harvesters had a per share operating cost of 50 francs in the fleet-wide experiments. In the last best offer experiment harvesters had a per share operating cost of 75 francs per unit. Processors have no operating

¹ A copy of Dr. Plott's vita is attached.

costs. This assumption does not affect the results. Operating costs of each sector are unknown to the other sector. Harvesters can convey a slight benefit on processors by timing of deliveries. Making a delivery in a manner that favors a processor increases the processor's return by 10 francs. Harvester's bear a minor cost (of 5 francs) for making a timely delivery. This factor is within a harvester's control but is outside negotiations. The harvester can use delivery timing to build a reputation with the processor.²

Revenues generated for delivery of a share by processors are 200 francs in the fleet-wide model. In the last best offer model these revenues were 225 francs per share.³ The historic division of revenues in the fishery is 0.7 to harvesters and 0.3 to processors.

Prior to commencing negotiations all parties are informed of the historic division of revenues (i.e., 70/30). They also are informed of the arbitrator's decision rule, which differs slightly between the two models. During the experiment, on the completion of any contract all participants were informed of the negotiated price in the contract. Harvesters did not collude in negotiating prices for any deliveries.⁴

Fleet-wide Model

Prior to negotiations, the fleet gathers and adopts a initial proposed price for A share deliveries, which is announced to the processing sector.⁵ A negotiation period follows during which contracts can be formed for any deliveries on a voluntary basis between any harvesters and processors that come to terms. At the end of this negotiating period, each processor submits a price proposal, each harvester submits an arbitration price proposal, and an arbitrated price is announced based on the arbitration rule.

The arbitration rule uses four numbers:

1. The average negotiated price in the A share delivery market in the period
2. The historical division of revenues (70/30) fixed in all periods
3. The average harvester arbitration proposal in the period
4. The average of the processor proposals in the period

The two of these that are closest to the average negotiated price and the average negotiated price are retained (i.e., three of the four are retained, always including the average price), then one of those three is selected at random. The arbitration determines that A share delivery price only. Proposals apply only to A share deliveries. B share prices are negotiated independent of the arbitration process.

After the arbitrated price is announced, a second negotiating period begins. At the expiration of the negotiation period, harvesters can put deliveries to processors at the negotiated price. A harvester can elect not to make a put.

This completes a period (or season). The procedure is repeated in each following period.

Last Best Offer Model

This process begins with a negotiation period (with no harvester price proposal). During this period contracts can be formed for any deliveries on a voluntary basis between any harvesters and processors that come to terms. At the end of this term, an announcement is made of the number of shares held by each processor that

² Having timing in as a negotiated term would make the experiment overly complex. Four products would need to be included in the market; deliveries of A shares and deliveries of B shares, both with good and bad timing.

³ Revenues are akin to first wholesale prices.

⁴ In the fisheries, harvesters might work together, using B share deliveries to elicit a higher price from a processor.

⁵ Prices here refer to ex vessel prices.

are not under contract. Each harvester with available A shares then submits its preferences for processor associations, ranking each processor. Harvesters are then assigned to processors using a “draft choice” procedure, under which harvesters are randomly selected and assigned to processors with available shares in accordance with their preferences. A harvester is constrained to negotiations for A share deliveries with the identified processor for the remainder of the period.

A second negotiation commences, at the end of which any unresolved A share deliveries are subject to arbitration at the election of the harvester. The arbitration is between the processor and the harvesters assigned to the processor. The arbitration is final offer with each processor submitting a single proposal applicable to all of its shares and each harvester submitting a proposal. For each harvester, the arbitrator selects between the harvester offer and the offer of the assigned processor. A harvester may elect not to arbitrate. Proposals to the arbitrator apply only to A share deliveries.

The arbitration rule uses four numbers:

1. The average negotiated price in the A share delivery market in the period
2. The historical division of revenues (70/30) fixed in all periods
3. The harvester proposal in the period
4. The average of the processor proposals in the period

The two of these that are closest to the average price and the average price are retained (i.e., three of the four are retained, always including the average price), then one of those three is selected at random. The proposal that is closest to this number is the arbitrated price. The arbitration determines that A share delivery price only. Harvesters are unconstrained in their B share deliveries (so they may make those deliveries to a different processor than their A share deliveries without added cost.)

This completes a period (or season). The procedure is repeated in each following period.

Results of the Fleet-Wide Experiments

The results of the two fleet-wide experiments are shown in Figures 1 and 2. The figures show increasing prices from period to period for both A share and B share deliveries. Different prices for A and B share deliveries can be observed. In the experiment, A share delivery prices appear to drift upward with the B share delivery price. Prices for deliveries of both share types appear to tend toward a competitive market outcome in which processors would earn normal profits. This outcome could take several periods to transpire. The cause of this outcome is not readily apparent. Delivery timing may contribute. Whether this outcome is inevitable is not determined.

The initial harvester proposal has no influence on the outcome. That proposal is only remotely connected to the arbitrator's decision. Since the initial harvester proposal is made prior to any contracting, it is disregarded by processors in fashioning their proposals. In this experiment, in most instances deliveries were timed in a manner favorable to the processor.

Results of the Last Best Offer Experiment

The results of the last best offer experiment are shown in Figure 3. Two distinct markets develop for deliveries of the different types of shares. Prices for A share deliveries are relatively stable in this experiment. In this model processors use negotiated A share delivery prices to drive the arbitration result, which keeps that price relatively stable. A separate market develops for B share deliveries with substantially greater competition and higher prices. This price appears to be the competitive price. In this experiment, in many instances deliveries were timed in a manner unfavorable to processors.

Caveats

The experiments are designed to elicit the impacts of the different arbitration structures on outcomes of price negotiations. Developing a workable experiment always requires reasonable assumptions with respect to the environment, the institutional setting, and policies. Interpretation of the results requires accommodation of those assumptions. Several factors likely to impact the outcome from the application of the arbitration structures in the fisheries could not be included in the experiment. The influence of these factors on outcomes is lost to the experiment results. For example, the proposed standard to be applied by the arbitrator is a historic division of revenues considering a list of enumerated factors (such as current delivery prices and market developments). Although derived from the arbitration standard, the somewhat mechanical rule applied in the experiments does impact the experiment outcomes. The exact impact cannot be determined without a complete understanding of the arbitrator's application of the standard, which is unknowable.

Another factor likely to have an impact on the outcome is share trading. In the experiments 90 percent of each harvester's allocation was A shares and 10 percent was B shares. Altering this ratio of holdings for different harvesters might affect outcome for not only those individuals, but also for all others (through the impact on the arbitrator's decision).

Several other factors are not incorporated into the experiment including:

- annual changes in TACs
- product market changes
- prior experience and knowledge of other participants
- differences in participants (including share holdings, non-crab revenues, cost structures)
- geographic locations of processors and regional landing requirements (including their affect on production costs and transaction costs)
- any influence of or on captain's shares is omitted

These factors all could influence price settlements in the fisheries. In assessing the results of the experiment, the potential influence of these various factors should be borne in mind.

Figure 1

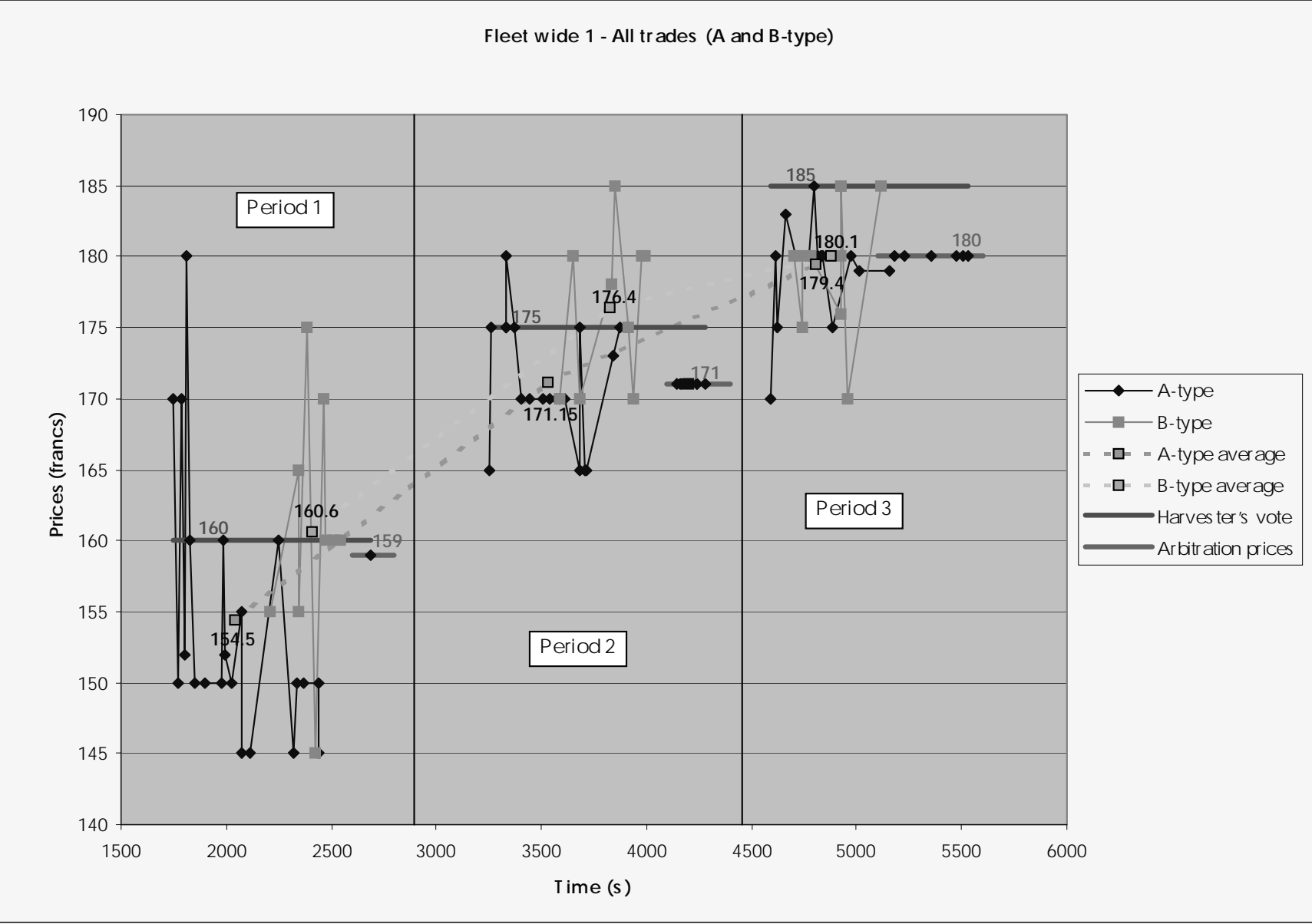


Figure 2

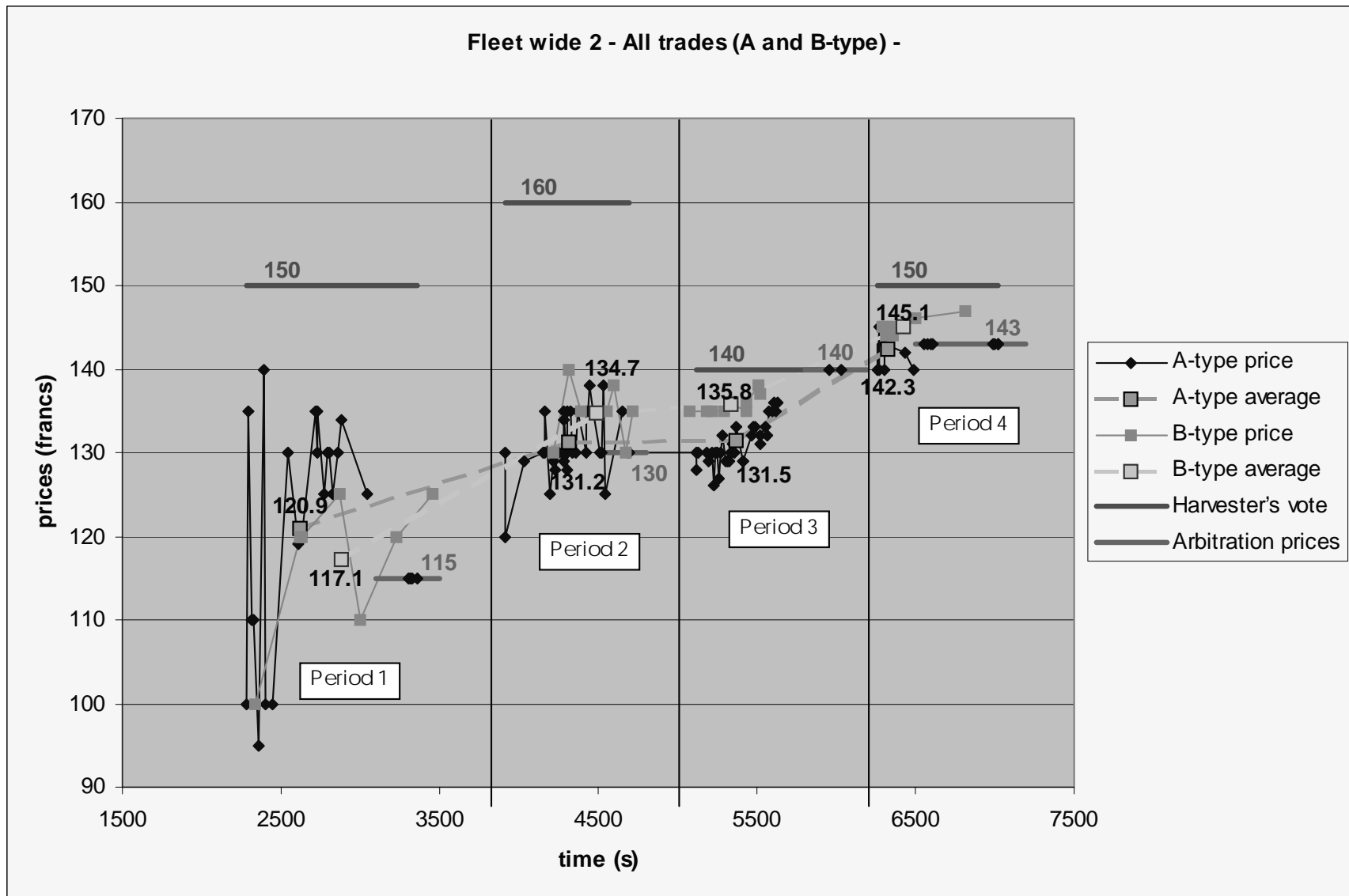


Figure 3

