ENVIRONMENTAL ASSESSMENT and REGULATORY IMPACT REVIEW FOR A REGULATORY AMENDMENT TO IMPLEMENT REQUIREMENTS FOR ELECTRONIC REPORTING OF ALASKA GROUNDFISH FISHERIES DATA

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EXECUTIVE SUMMARY

Communication between the fishing industry and NMFS is a critical element of successful fisheries management. Industry submits various reports to NMFS for fisheries management. Observers also submit reports of catch to the NMFS Observer Program for use by in-season management. These reports are crucial to effective in-season management of the groundfish quotas and bycatch allowances. At present, most industry and many observer reports are submitted by fax. As a result transmission and processing of reports is costly, time-consuming, and can be inefficient both for NMFS and the industry. Because of the method by which reports are currently submitted and the burden of data entry, information available for management is often not current with the real-time status of the fishery. Electronic communication of reports would greatly improve efficiency and reduce the costs associated with report submission and processing. Implementation of requirements for hardware and software that would support electronic transmission of in-season data in a more timely and efficient way would benefit both NMFS and the industry.

The objective of this amendment is to implement requirements for all processors that process groundfish to obtain electronic communication equipment that will facilitate electronic reporting of fisheries data. Use of this equipment by observers should reduce both the time and expense of collecting fishery information by providing real-time data, reducing the workload of the Observer Program.

This regulatory amendment presents two alternatives:

Alternative 1: Status quo. Maintain the current methods and equipment for transmission of data from processors.

The status quo imposes costs to processors for data submission via conventional methods such as the fax and telex. It also imposes indirect costs to processors through less efficient groundfish management due to time delays in processing data submitted conventionally.

Alternative 2: **(THE PREFERRED ALTERNATIVE)** Require all processor vessels that are subject to observer coverage and that process groundfish to have on board either an INMARSAT Standard C unit, capable of transmitting binary files or a communication device that provides point-to-point modem connection to the NMFS host computer and that meets specified performance standards as well as the computer hardware and software that would enable observer reports to be sent electronically. This alternative would also require shoreside processors to have the necessary computer hardware and software which the observers would use to submit

data electronically using a computer modem. This equipment would be used initially by observers to enter and transmit data electronically. However, it could also eventually allow industry to submit processor reports electronically.

Under alternative 2, time spent to process data received at the NMFS Observer Program would be reduced. This would mean more efficient and timely transmission of these data to the in-season fisheries managers, thus allowing for better real-time management of groundfish quotas and prohibited species catch (PSC) limits. Data transmission costs for processors could also be reduced through electronic communications.

Equipment costs can vary depending on which satellite communication unit is purchased. Standard A units range from $30,000-$40,000 and Standard C units range from $4,000-$6,000. Data transmission costs for Standard A units are based on cost per minute of transmission time; whereas, transmission costs for Standard C units are based on a cost per character of information. Costs for computer hardware and software could range from $1,000-$2,500. In view of the rapidity with which technological innovation takes place in the electronics field, the performance-based specifications in the rule leave open the opportunity for as yet unknown equipment to meet those standards. Obviously, the cost of that equipment, as well as the hardware itself, is unknown at the present time.

1.0 INTRODUCTION

The groundfish fisheries in the Exclusive Economic Zone (EEZ) (3 to 200 miles offshore) of the Gulf of Alaska (GOA) and Bering sea Aleutian Islands area (BSAI) are managed under the Fishery Management Plan (FMP) for Groundfish of the GOA and the FMP for the Groundfish Fishery of the BSAI. Both FMPs were developed by the Council under the Magnuson Fishery Conservation and Management Act (Magnuson Act). The GOA FMP was approved by the Secretary of Commerce and became effective in 1978 and the BSAI FMP became effective in 1982.

Actions taken to amend FMPs or implement amendments to regulations governing the groundfish fisheries must meet the requirements of Federal laws and regulations. Among the most important of these are the National Environmental Policy Act (NEPA), the Endangered Species Act (ESA), the Marine Mammal Protection Act (MMPA), Executive Order (E.O.) 12866, and the Regulatory Flexibility Act (RFA).

NEPA, E.O. 12866, and the RFA require a description of the purpose of and need for the proposed action as well as a description of alternative actions which may address the problem. This information is included in Section 1 of this document. Section 2 contains information on the biological and environmental impacts of the alternatives as required by NEPA. Impacts on endangered species and marine mammals are also addressed in this section. Section 3 contains a Regulatory Impact Review (RIR) which addresses the requirements of both E.O. 12866 and the RFA that economic impacts of the alternatives be considered.

This Environmental Assessment/Regulatory Impact Review (EA/RIR) examines implementation of electronic communication equipment, for all processors that process groundfish, that would be needed for electronic reporting of observer data and eventually industry reports.

1.1 Purpose of and Need for the Action

This document provides background information and assessments necessary for the Secretary of Commerce (Secretary) to determine if the amendment is consistent with the Magnuson Act and other applicable laws. It also provides the public with information to assess the alternatives that are being considered and to comment on the alternatives.

Communication between the fishing industry and NMFS is a critical element of successful fisheries management. Industry submits various reports to NMFS for fisheries management. Observers also submit reports of catch to the NMFS Observer Program Office for use by in-season management of the groundfish quotas and fishery

bycatch allowances of prohibited species. At present, most industry and many observer reports are submitted by fax. As a result, transmission and processing of reports is costly, time-consuming, and can be inefficient both for NMFS and the industry. Because of the method by which reports are currently submitted and the burden of data entry, information needed for management is often not current with the real-time status of the fishery. Electronic communication of reports would greatly improve efficiency and reduce the costs associated with report submission and processing. Implementation of requirements for hardware and software that would support electronic transmission of in-season data in a more timely and efficient way would benefit both NMFS and the industry.

The purpose of the proposed action is to implement requirements for electronic communication equipment that would support the transmission of observer data from processors (motherships, catcher/processors and shoreside plants) to the NMFS Observer Program office in Seattle. This equipment could also eventually be used by industry to submit processor reports.

1.2 Background

Catch and bycatch data collected by observers are used for in-season management of groundfish quotas and prohibited species catch limits. This information is provided on a weekly or daily basis by the observers. Data received from observers are typically verified and keypunched into electronic data files. The time delays and expense of the current methods used to finalize observer data create a burden on the resources of the NMFS Observer Program Office. Data transmission is also costly to processors (eg. approx. $144/week).

Keypunching of observer data is an expensive and time-consuming process. Delays in processing in-season data detract from the ability of NMFS to keep pace with the real-time activities of the fisheries fleet. This results in less efficient management.

NMFS has had success with the introduction of electronic data transmission from some vessels at sea that use shipboard-based computers, communications software, and communications satellites. The burden on the Observer Program Office is greatly reduced, which ultimately results in information being transmitted to in-season managers in a more timely manner. Industry benefits through reduced transmission costs and overall increased efficiency of fisheries management.

The objective of this regulatory amendment is to implement requirements for all groundfish processors that are subject to observer coverage to obtain electronic communication equipment that will facilitate electronic reporting of fisheries data. Use

of this equipment by observers should reduce both the time and expense of collecting fishery information by providing real-time data, reducing the workload of the Observer Program. Electronic reporting would also improve the accuracy of fisheries data and reduce the amount of errors in those data.

1.3 Alternatives Considered

Two alternatives are developed for consideration:

1.3.1 Alternative 1: Status quo.

Processors would not be required to have satellite communication equipment for electronic transmission of observer data. Data collected by observers for in-season management would continue to be sent via conventional means i.e. fax or telex.

1.3.2. Alternative 2: **(THE PREFERRED ALTERNATIVE)** Require all processor vessels that are subject to observer coverage and that process groundfish to have satellite communication equipment and the necessary hardware and software for electronic transmission of observer data. Require all shoreside processors that are subject to observer coverage and that process groundfish to have the necessary computer hardware and software to send data electronically via a modem.

Each processor vessel would be required provide for use by the observer on board a computer in working condition. The computer would have to contain a Pentium 586 100 Mhz or greater capacity processing chip, at least 16 megabytes of RAM, at least 75 megabytes of free hard disk storage, DOS version 6.0 (or successor), Windows 3.1, 3.11, or Windows95, a mouse, and a 3.5-inch floppy disk drive. This computer would have to be connected to either an INMARSAT Standard C unit capable of transmitting binary files or a communication device that provides a point-to-point modem connection to the NMFS host computer and supports the following protocols:

Data transmission speed: 1200 bps - 28,800 bps
Modulation protocols: ITU V.32, ITU V.32bis, and ITU V.34
Error-correction Protocols: ITU V.42 and MNP-4
Data-compression Protocols: ITU V.42bis

Processor vessels that use other than an INMARSAT Standard C unit must have at least a 28.8kbs Hayes-compatible modem.

Each on-shore processor would be required provide for use by the observer on board a personal computer in working condition. The computer would have to contain a Pentium 586 100 Mhz or greater capacity processing chip, at least 16 megabytes of RAM, at least 75 megabytes of free hard disk storage, DOS version 6.0 (or successor), Windows 3.1, 3.11, or Windows95, a mouse, a 3.5-inch

floppy disk drive, and a 28.8kbs Hayes-compatible modem. This computer would have to be connected to a communication device that provides a point-to-point modem connection to the NMFS host computer and supports the following protocols:

Data transmission speed: 1200 bps - 28,800 bps
Modulation protocols: ITU V.32, ITU V.32bis, and ITU V.34
Error-correction Protocols: ITU V.42 and MNP-4
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These specifications are not model specific but are performance based. The reason is that technological innovation is so rapid in the electronics field that these performance-based specifications provide an opportunity for new, better, and/or less expensive systems to meet the standards and be used by vessels choosing to do so.

With electronic satellite communication NMFS could also send informational messages to the fishing fleet. The fleet could also receive other information, such as weather reports, sent via satellites.

Other considerations

NMFS will be developing software for the observers to use on board catcher vessels. Observers on board catcher vessels will carry a portable computer for data entry. These data would be retained on disk for submission via modem once the observers have landed. This procedure will improve efficiency of data entry obtained from observers on board catcher vessels. NMFS may implement, at a future date, electronic reporting requirements for industry reports such as the Weekly Production Reports, check in/out reports and vessel activity reports. These requirements would be proposed under another amendment but would utilize the same satellite communication equipment and the computer hardware that would be required for processors under this amendment. NMFS would also develop the software needed for electronic submission of industry reports.

2.0 NEPA REQUIREMENTS: ENVIRONMENTAL IMPACTS OF THE ALTERNATIVES

An environmental assessment (EA) is required by the National Environmental Policy Act of 1969 (NEPA) to determine whether the action considered will result in a significant impact on the human environment. The environmental analysis in the EA provides the basis for this determination and must analyze the intensity or severity of the impact of an action and the significance of an action with respect to society as a whole, the affected region and interests, and the locality. If the action is determined not to be significant based on an analysis of relevant considerations, the EA and resulting finding of no significant

impact (FONSI) would be the final environmental documents required by NEPA. An environmental impact study (EIS) must be prepared if the proposed action may cause a significant impact on the quality of the human environment.

An EA must include a brief discussion of the need for the proposal, the alternatives considered, the environmental impacts of the proposed action and the alternatives, and a list of document preparers. The purpose and alternatives were discussed in Sections 1.1 and 1.3, and the list of preparers is in Section 7. This section contains the discussion of the environmental impacts of the alternatives including impacts on species listed as threatened and endangered under the Endangered Species Act (ESA).

The environmental impacts generally associated with fishery management actions are effects resulting from 1) overharvest of fish stocks which might involve changes in predator-prey relationships among invertebrates and vertebrates, including marine mammals and birds, 2) physical changes as a direct result of fishing practices affecting the sea bed, and 3) nutrient changes due to fish processing and discarding fish wastes into the sea. A summary of the effects of the 1996 groundfish total allowable catch amounts on the biological environment and associated impacts on marine mammals, seabirds, and other threatened or endangered species are discussed in the final environmental assessment for the 1996 groundfish total allowable catch specifications (NMFS, 1996a).

The proposed regulatory amendment is intended to improve efficiency of data transmission which will allow NMFS to monitor groundfish total allowable catch (TAC) amounts and prohibited species catch (PSC) limits in a more timely manner.

2.1 Impacts of the alternatives on groundfish and prohibited species resources

None of the proposed alternatives would change the distribution of fishing effort or the TAC amounts. The proposed amendment would improve NMFS' ability to track the groundfish quotas helping to ensure that these quotas and PSC limits are not exceeded.

2.2 Impacts on Endangered, Threatened or Candidate Species Under the ESA

Species that are listed as threatened or endangered, or are candidates or proposed for listing under the Endangered Species Act (ESA), may be present in the BSAI and GOA. Additionally, nonlisted species, particularly seabirds, also occur in those

areas and may be impacted by fishing operations. A list of species and a detailed discussion regarding life history and potential impacts of the 1996 groundfish fisheries of the BSAI and GOA on marine species can be found in an EA for the 1996 TAC specifications for the GOA and BSAI (NMFS 1996a). Insofar as this proposed regulatory amendment would help prevent groundfish harvests in excess of TACs and PSC mortality in excess of designated limits, fishing activities under any of the alternatives would not be expected to cause any adverse effects additional to those noted in the EA for the BSAI and GOA groundfish specifications.

2.2.1 Salmon

Listed species of salmon, including the Snake River sockeye salmon (O. nerka), fall chinook and spring/summer chinook salmon (both Oncorhynchus tschawytscha) may be present in the BSAI or GOA. These areas are believed to be outside the range of another listed species, the Sacramento River winter-run chinook salmon. A Biological Opinion conducted on effects of the BSAI and GOA groundfish fisheries concluded that these fisheries are not likely to jeopardize the continued existence of endangered or threatened Snake River salmon species (NMFS 1994; amended, 1995a). A determination was made that fishing activities under the 1996 BSAI and GOA groundfish catch specifications are not likely to affect listed salmon species in a manner or to an extent that has not already been considered in Section 7 consultations on this fishery (NMFS 1996b).

2.2.2 Seabirds

Listed or candidate species of seabirds include the endangered short-tailed albatross (Diomedea albatrus), the threatened spectacled eider (Somateria fischeri), and the candidate (category 1) Steller's eider (Polysticta stelleri), or (category 2) marbled murrelet (Brachyramphus marmoratus), red-legged kittiwake (Rissa brevirostris) or Kittlitz's murrelet (Brachyramphus brevirostris). A formal and informal consultation conducted by the U.S. Fish and Wildlife Service (USFWS) on the potential impacts of groundfish fisheries and a subsequent amendment to the formal consultation on impacts of 1995 groundfish fisheries on these species concluded that groundfish fisheries adversely affect, but do not jeopardize, the existence of the short-tailed albatross (USFWS 1989, 1994, 1995) if the incidental take allowance of up to two short-tailed albatrosses per year is not exceeded. The previous informal consultations also concluded that groundfish fisheries were not likely to adversely affect the spectacled eider, Steller's eider, or marbled murrelet. The USFWS did not comment on remaining candidate species at that time. Alternative 2 **(THE PREFERRED ALTERNATIVE)** is not expected to adversely affect any listed or candidate seabirds in a manner not already considered in previous

consultations.

2.2.3 Marine Mammals

As with salmon and seabirds listed under the ESA, fishing activities under this proposed action are not likely to impact the threatened Steller sea lion (Eumetopias jubatus), in a manner, or to an extent, not previously considered in informal section 7 consultations for 1995 groundfish fisheries (NMFS, 1995b). The 10-nm annual trawl exclusion areas around Steller sea lion rookeries would be in place regardless of which alternative is chosen. These create refuges where no trawling can occur in areas important for sea lion breeding and foraging.

Other listed marine mammals include the endangered fin whale (Balaenoptera physalus), sei whale (Balaenoptera borealis), humpback whale (Megaptera novaeangliae), and sperm whale (Physeter catodon). None of these species are anticipated to be adversely affected by this proposed amendment because total harvests and overall fishing effort would not change. Alternative 2 **(THE PREFERRED ALTERNATIVE)** is not expected to adversely affect any listed or candidate marine mammals in a manner not already considered in previous consultations.

2.3 Impacts on Marine Mammals not listed under the ESA

Marine mammals not listed under the ESA that may be present in the BSAI or GOA include cetaceans, [minke whale (Balaenoptera acutorostrata), killer whale (Orcinus orca), Dall's porpoise (Phocoenoides dalli), harbor porpoise (Phocoena phocoena), Pacific white-sided dolphin (Lagenorhynchus obliquidens), and the beaked whales (e.g., Berardius bairdii and Mesoplodon spp.)] as well as pinnipeds [northern fur seals (Callorhinus ursinus), and Pacific harbor seals (Phoca vitulina)] and the sea otter (Enhydra lutris). As previously mentioned, a list of species and detailed discussion regarding life history and potential impacts of the 1996 groundfish fisheries of the BSAI and GOA on those species can be found in an EA conducted on the 1996 Total Allowable Catch Specifications for the GOA and BSAI (NMFS 1996). Alternative 2 **(THE PREFERRED ALTERNATIVE)** is not expected to adversely affect any listed or candidate marine mammals in a manner not already considered in previous consultations.

2.4 Coastal Zone Management Act

Each of the alternatives would be conducted in a manner consistent, to the maximum extent practicable, with the Alaska Coastal Zone Management Program within the meaning of Section 307(c)(1) of the Coastal Zone Management Act of 1972 and its implementing regulations.

2.5 Conclusions

Species that are listed, or proposed to be listed, under the ESA that may occur in the BSAI or GOA include the endangered fin whale (Balaenoptera physalus); sei whale (Balaenoptera borealis); humpback whale (Megaptera noveangliae); sperm whale (Physeter catodon); Snake River sockeye salmon (O. nerka) and short-tailed albatross (Diomedea albatrus); the threatened Steller sea lion (Eumetopias jubatus); Snake River fall and spring-summer chinook salmon (Oncorhynchus tshawytscha); and spectacled eider (Somateria fischeri). In summary, listed species of whales are not expected to be affected by the proposed alternative. Other listed species are not anticipated to be adversely affected in a manner, or to an extent not considered in previous consultations.

Each of the alternatives discussed above would be conducted in a manner consistent, to the maximum extent practicable, with the Alaska Coastal Zone Management Program within the meaning of section 307(c)(1) of the Coastal Zone Management Act of 1972 and its implementing regulations.

None of the alternatives are likely to significantly affect the quality of the human environment; preparation of an environmental impact statement for selection of any of the alternatives as the proposed action would not be required by Section 102(2)(C) of the National Environmental Policy Act or its implementing regulations.

2.6 FINDING OF NO SIGNIFICANT IMPACT

For the reasons discussed above, implementation of any one of the alternatives to the status quo would not significantly affect the quality of the human environment, and the preparation of an environmental impact statement on the final action is not required under Section 102(2)(c) of the National Environmental Policy Act or its implementing regulations.

Assistant Administrator
for Fisheries, NOAA

OCT 25 1996
Date

3.0 REGULATORY IMPACT REVIEW: ECONOMIC AND SOCIOECONOMIC IMPACTS OF THE ALTERNATIVES

This section provides information about the socioeconomic impacts of the alternatives including identification of the individuals or groups that may be affected by the action, the nature of these impacts, quantification of the economic impacts if possible, and discussion of the trade-offs between qualitative and quantitative benefits and costs.

The requirements for all regulatory actions specified in E.O. 12866 are summarized in the following statement from the Order:

> In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nevertheless essential to consider. Further, in choosing among alternative regulatory approaches, agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.

This section also addresses the requirements of both E.O. 12866 and the Regulatory Flexibility Act to provide adequate information to determine whether an action is "significant" under E.O. 12866 or will result in "significant" impacts on small entities under the RFA. E.O 12866 defines a "significant regulatory action" as likely to result in (1) an annual effect on the economy of $100 million or more; (2) an adverse effect in a material way on the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or State, local or tribal governments or communities; or (3) a novel legal or policy issue. Requirements of the RFA are addressed in Section 4.

3.0.1 Alternative 1: Status Quo. This alternative imposes costs to processors for data submission via conventional methods such as the fax and telex. The status quo also imposes an undue data processing burden on the NMFS Observer program which results in indirect costs to processors through less efficient groundfish management.

3.0.2 Alternative 2: Implementation of Electronic Communication Equipment. **(THE PREFERRED ALTERNATIVE)** Under this alternative, time spent to process data received at the NMFS Observer Program would be reduced. This would mean more efficient and timely transmission of these data to the in-season

fisheries managers which would allow for better management of groundfish quotas and PSC limits. Costs to the industry for data transmission could also be reduced.

3.1 Reporting Costs

Under the status quo alternative, observers typically submit weekly reports by fax. Most faxed reports from at-sea processors are 8-12 pages in length. The estimated cost of fax transmission per page is $18-22; therefore, a weekly observer report submitted by fax could cost an at-sea processor a minimum of approximately $144. The number of fax pages from shoreside processors depends on the number of observed catcher vessels delivering to the shoreside processing plants. Each observer on board a catcher vessel would submit 5-10 pages per week.

Alternative 2 **(THE PREFERRED ALTERNATIVE)** would allow observers to submit weekly reports electronically, via either satellite communications from processor vessels or via a modem from shoreside processors. For those vessels sending with INMARSAT Standard A communication units, the costs are based on per minute phone line costs which can vary according to carrier. Approximate costs range between $6.94/minute to $9.30/minute as a base rate. These rates can be discounted based on volume of information sent. A 30-second minimum exists for direct dial calls, and a 3-minute minimum exists for operator-assisted calls. Some vessels currently have Standard A units which observers have used to send data. The cost of a weekly observer report from those vessels with Standard A is approximately $10-12.

For those vessels that use INMARSAT Standard C units, costs are based on a per character charge. Transmission cost via COMSAT is 1 cent/character. Currently most observer messages range from 5,000 to 10,000 characters for a weekly observer report which would result in a cost of $50-$100/week. Industry information suggests that typical costs range from $39-$64 for weekly observer report transmission via Standard C.

INMARSAT Standard B units, which use a digital system, would also be appropriate for these data transmission functions. The costs are similar to Standard A and are based on a per minute charge of approximately $5.95. Volume based discounts would also apply to Standard B transmissions.

3.2 Administrative, Enforcement and Information Costs

Alternative 1, the status quo, involves a significant cost and burden to the NMFS Observer program in time spent editing, inputing and processing observer data sent by fax. Alternative 2 **(THE PREFERRED ALTERNATIVE)** would reduce the time and expense

burden of processing faxed observer reports. The burden on NMFS for data entry would be reduced as all data would be downloaded by computer into files accessible to Observer Program staff.

3.3 Equipment Costs

A 1995 list of processor vessels indicates that 105 out of 190 processors greater than 60 feet length overall (LOA) have Standard A satellite communication units. An additional 41 processor vessels greater than 60 feet LOA have Standard C units, for a total of approximately 76 percent of the processor fleet with either a Standard A or C unit. No processors under 60 feet LOA have either Standard A or C units.

Each processor vessel would be required to provide for use by the observer on board a personal computer in working condition. (See pages 5 and 6 above for the computer specifications.) The cost of a computer with software would cost approximately $1,000 - $2,500. No information is available regarding the number of vessels that would have to purchase computers.

Standard A units are a phone-like system capable of transmitting data, faxes, and voice messages as well as having video capabilities. The units are larger than a Standard C unit and are more appropriate on vessels over 100 feet. These units cost approximately $30,000-$40,000 and consist of an antenna and a below-deck unit. The vessel must be large enough to support the size and weight of these units. Data transmission costs are typically less expensive with a Standard A unit, compared to a Standard C unit.

The Standard B unit is a digital unit capable of performing similar functions as the Standard A units and is similar in purchase price, approximately $32,000.

The Standard C units are more appropriate on smaller vessels as they are smaller in size and weigh less than the Standard A units. Currently both units are capable of performing the same data transmission functions. Older versions of the Standard C unit do not support transmission of binary files; however, the older units can be upgraded. The cost of the upgrade will vary from vessel to vessel depending upon the existing equipment, but it could be large compared with the cost of a new system. Standard C is not capable of voice transmission. Most Standard C units have an integrated Global Positioning System (GPS) and emergency distress signal capabilities. The Standard C units do not require as much power to operate and are less expensive than the Standard A units, ranging in price from approximately $4,000-$6,000 for the transceiver and the antenna. Data transmission costs via a Standard C unit are based on file size and for large files can be more expensive than Standard A transmission. There

are a number of companies that manufacture both types of units.

3.4 Summary of Economic Impacts

Maintaining the status quo would be costly in terms of time and burden expenses for data processing by the NMFS Observer Program staff. The time involved in processing data received by fax or telex detracts from NMFS ability to keep real-time pace with the fishing fleet. This results in less efficient management of the groundfish fisheries. Industry also incurs significant costs for data transmission via fax.

Alternative 2 **(THE PREFERRED ALTERNATIVE)** would reduce the cost and burden of processing observer data and would result in more efficient management of groundfish quotas and PSC limits. Industry could also benefit from some reduced transmission costs. Initial purchase costs of satellite communication equipment for processor vessels would range from approximately $4,000 for a Standard C unit to $30,000 for a Standard A unit. These units have different capabilities, and Standard A units are too large and heavy for vessels under 100 feet. Data transmission costs for observer reports are typically lower for Standard A units compared to Standard C units. Standard C units have the added feature of an integrated GPS and some emergency distress devices but are not capable of voice transmission. This alternative would also involve some costs for the purchase of computer hardware and software, approximately $1,000-$2,500. Greater costs would be incurred by processor vessels that would have to purchase the satellite communication equipment. Costs would be minimal for shoreside processors that would only be required to purchase the computer equipment and could send information electronically by modem and phone line.

Approximately 75 percent of the fleet already has Standard A or C units. The remaining 25 percent will have to acquire new equipment in order to meet the requirements.

This action is not expected to have an annual effect on the economy of $100 million or more; cause a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions; or have significant adverse effects on competition, employment, investment, productivity, or innovation. Therefore, this action is not expected to result in a "significant regulatory action" as defined under EO 12866.

3.5 Economic Impact on Small Entities

NMFS has defined all fish harvesting or hatchery businesses that are independently owned and operated, not dominant in their field

of operation, with annual receipts not in excess of $2,000,000 as small businesses. In addition, seafood processors with 500 employees or less, wholesale industry members with 100 employees or less, not-for-profit enterprises, and government jurisdictions with a population of 50,000 or less are considered small entities. A "substantial number" of small entities would generally be 20% of the total universe of small entities affected by the regulation. A regulation would have a "significant impact" on these small entities if it resulted in a reduction in annual gross revenues by more than 5 percent, annual compliance costs that increased total costs of production by more than 5 percent, or compliance costs for small entities that are at least 10 percent higher than compliance costs as a percent of sales for large entities.

Alternative 2 **(THE PREFERRED ALTERNATIVE)** would affect all processing vessels and shoreside processing plants that are subject to observer coverage and that process groundfish.

Although this proposed regulatory amendment would, as a result, affect a substantial number of shoreside processors, which, according to the definition above, are considered small entities, the effects on those processors are not anticipated to cause a reduction in annual gross revenues by more than 5 percent, have annual compliance costs that increase total costs of production by more than 5 percent, or impose compliance costs for small entities that are at least 10 percent higher than compliance costs as a percent of sales for large entities. Therefore, this action would not be "significant" under the RFA.

4.0 SUMMARY AND CONCLUSIONS

4.1 Effects on Listed Species and on the Alaska Coastal Zone

Consultations pursuant to Section 7 of the ESA on the impacts of 1995 fishing activities under the FMPs concluded that those activities are not likely to adversely affect endangered or threatened species, or their habitat, under the jurisdiction of NMFS or the USFWS, in a manner, or to an extent, not already considered in prior consultations. None of the alternatives considered for the proposed regulatory amendment are expected to have any additional adverse impacts.

Each of the alternatives discussed above would be conducted in a manner consistent, to the maximum extent practicable, with the Alaska Coastal Zone Management Program within the meaning of section 307(c)(1) of the Coastal Zone Management Act of 1972 and its implementing regulations.

4.2 Executive Order 12866 Requirements

Executive Order 12866 requires that the Office of Management and Budget review proposed regulatory programs that are considered to be "significant". A "significant regulatory action" is one that is likely to result in a rule that may

1. have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, productivity, competition, jobs, the environment, public health or safety, or State, local, or tribal governments or communities;

2. create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;

3. materially alter the budgetary impacts of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or

4. raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in Executive Order 12866.

A regulatory program is "economically significant" if it is likely to result in effects described in item (1) above. The RIR is designed to provide information to determine whether the proposed regulation is likely to be "economically significant".

None of the proposed alternatives is expected to result in a "significant" regulatory action as defined in E.O. 12866. None of the alternatives would alter groundfish TACs, fishery participation, or total fishing effort.

The proposed regulatory amendment would not create a serious inconsistency or otherwise interfere with an action taken or planned by another agency.

The proposed regulatory amendment would not materially alter the budgetary impacts of entitlements, grants, user fees, or loan programs or the rights and obligations of the recipients thereof.

The proposed regulatory amendment would not raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in Executive Order 12866.

The proposed regulatory amendment would not have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, productivity, competition, jobs, the environment, the public health or safety, or governments.

5.0 REFERENCES

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