REPORT OF FISHERY SCIENCE COMMITTEE

The meeting was opened by the Chairman, Prof. Qi-Sheng Tang. Those in attendance were Drs. Dick Beamish, Jim Boutillier, Mary Downton, Steven Hare, Anne B. Hollowed, John R. Hunter, Glen Jamieson, Suam Kim, Patricia Livingston, Gordon McFarlane, Robert S. Otto, Cha-Soo Park, Deok-Bae Park, Vladimir I. Radchenko, Bill Shaw, Tokio Wada and Chang-Ik Zhang.

The Committee's response to the agenda items were as follows:

1. Election of new Chairman of FIS.
   1.1. Dr. Chang-Ik Zhang (Korea) was elected Chairman, beginning November 1, 1996.

2. The Committee agenda items 3 - 8 were approved.

3. Review of the Implementation of PICES IV Decisions:
   3.1. Review of implementation of Vladivostok Workshop Recommendations.
      3.1.1. Committee reviewed the document and recommen-dations, and complements the Working Group for an excellent job.
   3.2. Review and comment on three recommendations in WG 9 Report:
      3.2.1. Recommendation #1: PICES recommends member nations to establish ecological monitoring moorings in the Alaska Gyre and Western Subarctic.

      Recommendation #2: PICES/FIS recommends member nations to investigate the possibility of installing a conduction cable across Kamchatka Strait as specified by the Working Group.

      Recommendation #3: PICES/FIS supports the idea of a "State of the subarctic Pacific" session at the next PICES Annual Meeting, and sees this activity as part of the REX and BASS activities already planned for the meeting.
   3.3. Russian and Korean member of FIS should provide names of scientists working on pelagic species in order to complete WG 3 inventory:
      3.3.1. Russian and Korean members agreed to provide these data one month after the meeting.
   3.4. Discussion of how to increase participation in Scientific Committees:
      3.4.1. Issues discussed under this topic are listed under new business.

4. Discussion of Scientific Items of Interest.
   4.1. Discussion of FIS role in the CCCC-GLOBEC Program and identify the main scientific activity.
   4.2. Response to SCOR-WG 105:
      4.2.1. The FIS Committee wishes to point out to SCOR that the North Pacific is poorly represented in WG 105. The Committee recommends that the Secretariat contacts SCOR, indicating the lack of represen-tation, and provide names of some potential participants. The Committee recommended Drs. Tang and Wakabayashi as PICES representatives to SCOR-WG 105.
   4.3. Review of PICES WG 12 on Crabs and Shrimps:
      4.3.1. The Committee approved the minutes of WG 12 and the October 16, 1996, addendum

which indicate that an inter-sessional meeting would be held for about 4-5 days sometime between PICES V and PICES VI meetings.

4.4. Co-sponsorship of ICES Symposium on recruitment dynamics:

4.4.1. FIS Committee noted that the symposium was already sponsored by PICES so no action by Committee was required.

4.5. Discussion of holding a joint PICES/NPAFC Symposium:

4.5.1. FIS Committee deferred any recommendations on item 4.5 until PICES and NPAFC have their joint meeting to discuss cooperation and integration of Science Plans in early 1997.

5. Proposal for session topics for PICES VI and PICES VII Annual Meetings:

5.1. FIS Committee approved the FIS topic for PICES VI to be "Models for linking climate and fish". Dr. Patricia Livingston has agreed to co-convene the meeting.

6. Best Presentation Award for the FIS Session at PICES V:

6.1. Several papers were nominated, a vote held, and the paper by Dr. Richard D. Brodeur et al. "The distribution of juvenile pollock relative to frontal structure near the Pribilof Islands, Bering Sea" was selected.

7. Review of PICES Perspectives:

7.1. FIS Committee reviewed the document and agreed with the views expressed.

7.2. FIS made recommendations concerning PICES representation in SCOR-WG 105 (see 4.2 above). In connection with the scientific program, PICES should further develop close relationships with PICES regional fisheries committees, e.g., tuna and pollock.

8. New Business:

8.1. Schedule of PICES VI: the FIS Committee strongly recommends that all scientific presentations be given in one block of time uninterrupted by Working Group and Committee meetings. The Committee felt that the interspersion of such meetings with the scientific transactions was a disservice to those attending the meetings for their scientific content (which we wish to encourage) and discourages attendance.

8.2. Albacore and Bluefin: It was suggested to the Committee that including the ecology and movements of temperate tunas (albacore and bluefin) would broaden the PICES perspective by providing another group that is keenly interested in fish ecology and ocean dynamics and provide a service to tuna-oceanographers because of the strong representation of physical oceanography in PICES. A suggestion was made that the FIS topic for 1998 might be something like basin scale changes on ocean dynamics and fish migration, which would appeal to those interested in temperate tunas as well as salmon.

Endnote 1

Report of Working Group 12
Crabs and Shrimps

Introduction

Working Group 12 was established by the Governing Council in October 1995. Interest in a working group was prompted by recent changes in the abundance of crabs and shrimps and economic consequences of these changes in the PICES region (generally north of 33^{o} North Latitude). Working Group members were named in May and there has been limited time for organization. The primary purposes of activating the working group are to organize the Working Group and to begin implementation of the terms of reference.

Participants

Members of the working group as submitted by national delegations are as follows:

Canada
- Jim Boutillier
- Glen Jamieson (Rapporteur)

China
- Ren Shengmin*

Japan
- Yasuki Ogawa*
- Hideo Sekiguchi[a]
- Ikuko Yosho*

Korea
- Sung Yun Hong*
- In Ja Yeon*
- Chang Ik Zhang*

Russia
- B. Ivanov[a]
- V. Rodin (Co-Chairman)*
- Yu Zaitseva[a]

U.S.A.
- David A. Armstrong
- Louis W. Botsford[a]
- Robert S. Otto (Co-Chairman)

[a] = absent with regrets; Drs. Ivanov and Sekiguchi sent written comments for consideration by the WG ; * = absent

Attendance at this first WG meeting was low (Otto, Armstrong, Boutillier and Jamieson), primarily because the WG meeting date and location were only announced about a month prior to the meeting. This problem should be resolved by announcement of the next meeting date and location well ahead of time.

Terms of Reference

The establishment of a working group on crabs and shrimps was considered by the Governing Council upon the recommendation of the Fishery Science Committee. The Governing Council used the following language in establishing Working group 12:

"Because of recent changes in the abundance of crabs and shrimps and their economic consequences in the PICES region, the Working Group is established to:

a. Identify the persons performing scientific work on the distribution, recruitment, larval transport, migration, population dynamics, and influences of environmental conditions for crabs and shrimp in the PICES region.
b. Identify data that are available that would assist in the analyses of factors affecting abundance trends.
c. Review current knowledge of factors affecting abundance and survival of crabs and shrimps and identify the key scientific questions relating to the understanding of the reasons for abundance fluctuations.
d. Exchange data on the abundance of crab and shrimp stocks in the PICES region."

The WG discussed the Terms of Reference and **proposes the following revisions.** The WG will:

a. consider only those crab and shrimp species important to human utilization in a commercial, subsistance or recreational sense; this can include introduced species if they are directly important or impact human utilization of any other marine species,

b. identify organizations and key contacts from each that are performing scientific work on the distribution, recruitment, larval transport, migration, population dynamics, and influences of environmental conditions for crabs and shrimps,

c. identify data that are available that would assist in the analyses of factors affecting abundance trends.

d. review and exchange current knowledge and data concerning factors affecting abundance and survival of crabs and shrimps and identify key scientific questions regarding reasons for abundance fluctuations.

These changes in the Terms of Reference are proposed because of:

a. The large number of crab and shrimp species in the North Pacific, and the resultant need to focus on just a few key species. The species identified provide an interesting array of the complex life histories and habitat requirements that may provide interesting contrasts when examining natural and/or anthropegenic causes of abundance variation.
b. The large number of researchers involved to some extent with at least some of the identified species. The WG felt a need to restrict the scale of its mandate to allow optimal progress to be acheived.

Review of Documents

Because of poor attendance no documents were reviewed at this initial meeting.

WG members are asked to provide a list of organizations and key researchers or experts in their respective country, along with their fields of interest. Each member should provide several recent publications that provide a review of crab or shrimp species, or their fisheries. The list of species identified as important (Appendix 2) should also be ammended as necessary. This information is to be provided to Dr. Otto by January 1, 1997.

Resources of crabs and shrimps

A provisional list of exploited and important species (Appendix 1) is attached.

Status of Resources

a. Each WG member is asked to bring to the next meeting previous published material on stock status, recent population abundance trends, and what is known or hypothesized about the causes of these fluctuations. For a suggestion as to how stocks or populations of species might be grouped, see Appendix 2, which is reasonably complete for the eastern Pacific but probably incomplete for the western Pacific. Each WG member will be asked to present a brief summary of this information on relevant species within their region.

b. Species populations worthy of being considered by the WG are to be determined by each country's representatives. Critieria by which populations may be identified include stage of population exploitation, unique management approach, differences in pattern of abundance fluctuation, and quality and quantity of data. A commentary of every population need not be presented orally, as meeting time will be limited. Emphasis should be on those populations

which show contrast and best illustrate patterns of abundance in each geographic fisheries area selected.

c. From this information, the WG will compile a multispecies compendium as to what appears to be driving population abundance fluctuations and what research is underway or planned in member countries. From this compilation, we will then develop recommendations for PICES as to how relevant research can best be coordinated among Standing Committees and what future research is needed.

Future Meetings

a. The WG **recommends** that the next meeting of the WG be held for 5 days immediately before the 1997 PICES Annual Meeting in Korea. It is hoped that an Asian meeting will facilitate attendance by PICES member countries not present at this meeting.

b. Subsequent meetings will probably be held intersessionally, and at the next meeting, with more member countries hopefully present, an agenda over the life of the WG will be developed.

Appendix 1. A provisional taxonomic list of species of crabs and shrimps exploited in the PICES area (major taxon according to American fisheries Society Special Publication 17, common names per AFS or UN/FAO if possible). Question marks (?) either indicate uncertainty as to range, importance or general interest, or the need for further definition. Almost all species below have known commercial, recreational or subsistence fisheries that exploit them. * = important species to be considered by the WG.

PHYLUM, SUBPHYLUM, OR SUPERCLASS: Crustacea

CRABS *et al* :

CLASS: Malacostraca	
SUBCLASS: Eumalacostraca	
ORDER: Decapoda	
INFRAORDER: Anomura	
SUPERFAMILY: Paguroidea	
FAMILY: Lithodidae	Stone and king crabs
Red King Crab	*Paralithodes camtschaticus* *
Blue King Crab	*P. platypus* *
Hanasaki King Crab	*P. brevipes* *
Golden King Crab	*Lithodes aequispinus* *
Scarlet King Crab	*L. couesi* *
Paralomis spp	*Paralomis multispinus*
Paralomis spp	*Paralomis verrilli*
Puget Sound king crab	*Lopholithodes mandtii*
INFRAORDER: Brachyura	
SECTION: Oxyrhyncha	
SUPERFAMILY: Majoidea	
FAMILY: Majidae	Spider crabs

Tanner Crab	*Chionoecetes bairdi* *
Snow Crab	*C. opilio* *
Angled Tanner Crab	*C. angulatus* *
Grooved Tanner Crab	*C. tanneri* *
Benizuwai Tanner crab	*C. japonicus* *
Arctic lyre crab	*Hyas coarctatus*
Pacific lyre crab	*H. lyratus*
Sheep crab	*Loxorhynchus grandis*

SECTION: Cancridea
SUPERFAMILY: Cancroidea

FAMILY:Atelecyclidae	Horse crabs
Hair Crab	*Erimacrus isenbeckii* *
Helmut crab	*Telmessus cheiragonus*
FAMILY: Cancridae	Rock crabs
Dungeness crab	*Cancer magister* *
Red rock crab	*C. productus*
Yellow rock crab	*C. anthonyii*

SECTION: Brachyrhyncha
SUPERFAMILY: Portunoidea

FAMILY: Portunidae	Swimming crabs
Sand crab	*Portunus pelagicus*
Gazami Crab	*P. trituberculatus* *
Mud Crab	*Scylla serrata*

SHRIMPS

PHYLUM, SUBPHYLUM, OR SUPERCLASS: Crustacea

CLASS: Malacostraca
SUBCLASS: Eumamacostraca
ORDER: Decapoda

SUBORDER: Dendrobranchiata

SUPERFAMILY: Penaeoidea	Penaeoid shrimps
FAMILY: Penaeidae	
Kuruma prawn	*Penaeus japonicus* *
Fleshy prawn	*P. chinensis*
Shiba shrimp	*Metapenaeus joyneri* *
Yoshi shrimp	*M. ensis* *
Cocktail shrimp	*Trachypenaeus curvirostris*

SUPERFAMILY: Sergestoidea	
FAMILY: Sergistidea	
Akiami shrimp	*Acetes japonicus*
SUBORDER: Pleocyemata	
INFRAORDER: Caridea	
SUPERFAMILY: Pandaloidea	Pandalid shrimps
FAMILY: Pandalidae	
Sidestriped shrimp	*Pandalopsis dispar* *
Morotoge shrimp	*P. japonica* *
Northern shrimp	*Pandalus borealis eous* *
Humpy shrimp	*P. goniurus* *
Dock shrimp	P. danae
Coonstriped shrimp	*P. hypsinotus* *
Ocean shrimp	*P. jordani* *
Spot shrimp	*P. platyceros* *
Hokkai shrimp	*P. latirostris* *
SUPERFAMILY: Crangonoidea	
FAMILY: Crangonidae	
Northern sculptured shrimp	*Sclerocrangon boreas* *
Uneven sculptured shrimp	*S. salebrosa* *
?	Crangon franciscorum

Appendix 2. A list of important crab and shrimp stocks in the PICES area with a provisional classification of their size, trends in abundance, utilization and degree of fishery development. Current stock abundance categories are intraspecific relative to the historical level: small (s), medium (m) and large (l). Long term trends are periodically fluctuating (P), decreasing (D) and increasing (I). Fishery types are characterized as commercial (C), recreational (R) and subsistence (S). Fishery status is characterized as closed (*), undeveloped (U), developing (D), or fully developed (F). Question marks indicate uncertainty or lacking information.

	Abundance		Long-term		
Species/stock	Historical	Current	Trend	Type	Status
CRABS et al :					
Red King Crab					
Canada	s	s	?	C,R,S	D
S.E. Alaska	s	s-	?	C,R,S	F

	Abundance		Long-term		
Species/stock	Historical	Current	Trend	Type	Status

Cook Inlet	m	s	D	C,R,S	*
Kodiak	l	s	D	C,R,S	*
S. Ak. Peninsula	l	s	D	C,R,S	*
E. Aleutians	l	s	D	C,S	*
W. Aleutians	l	s	D	C,S	*
Bristol Bay	l	s	D	C	*
Pribilof Islands	s	s	D	C,S	F
Norton Sound	s	s	?	C,R,S	F
E. Kamchatka	s	?	?	C	F
W. Kamchatka	l	m?	D?	C	F
N.W. Sea of Okhotsk	s/m	s/m	?	C	F
Kurile Islands	s	?	?	C	F
E. Sakhalin Is.	s	s	D	C	F
W. Sakhalin Is.	s/m	s	D	C	F
Hokkaido	s/m	s	?	C	F

Blue King Crab

S.E. Alaska	s	s	?	C,R,S	F
Prince William S.	s	s	?	C,R,S	*
Other G. of Alaska	s	s	?	C,R,S	*
Pribilof Islands	l	s	D	C,S	F
St. Matthew Is.	l	m	?	C	F
N. Bering Sea	s	s	?	C,S	D
Cape Navarin	m	s	D	C	F
S. Koryak Caost	m	s	D	C	F
E. Shelikhov Bay	l	m	?	C	F
N.W. Shelikhov Bay	m	m	?	C	F
St. Iona Is.	s	?	D	C	F
E. Sakhalin Is.	s	?	?	C	F
W. Sakhalin Is.	s	?	?	C	F
Hokkaido	s	?	?	C	F
Sea of Japan	s	?	?	C	F

Hanasaki King Crab

E. Kamchatka	s	?	?	S	?
S.W. Kamchatka	m	?	?	C	F
N. Sea of Okhotsk	m	?	?	?	D
Kurile Islands	s	?	?	C	?
E. Sakhalin Is.	s	?	?	C	F
W. Sakhalin Is.	s	?	?	C	F
Hokkaido	l	D	?	C	F
Sea of Japan	m	?	?	C,R	F?

	Abundance		Long-term		
Species/stock	Historical	Current	Trend	Type	Status

Golden King Crab

Canada	s	s	?	C	U
S.E. Alaska	m	s	?	C	F
Other G. of Alaska	s	s	?	C	F
E. Aleutians	m	m	D?	C	F
W. Aleutians	l	l	D?	C	F
Bristol Bay	s	s	?	C	F
Pribilof Islands	s	s	?	C	F
N. Bering sea	s	s	?	C	D
E. Kamchatka	s	?	?	C,S	U
W. Kamchatka	m	s	?	C	F
N. Sea of Okhotsk	l	s?	D	C	F
Kurile Is.	m	s	D?	C	D/F
Hokkaido	s	?	?	C	?

Scarlet King Crab

Calif.- Washington	?	?	?	?	?
Canada	?	?	?	?	?
Gulf of Alaska	?	?	?	C	D
Aleutian Islands	?	?	?	C	D
E. Bering Sea	S	?	?	C	D
W. Bering Sea	M	?	?	C	U/L
N. Sea of Okhotsk	L	?	?	C	U/L

Tanner Crab

S.E. Alaska	s	s	D	C,R,S	F
Cook Inlet	m	s	D	C,R,S	F
Kodiak	l	s	D	C,R,S	F
S. Ak. Peninsula	l	s	D	C,R,S	F
E. Aleutians	s	s	D	C,R,S	F
W. Aleutians	s	s	D	C,R,S	L
E. Bering Sea	l	m	D	C	F
N.W. Bering Sea	s	s	D	C	F
S. Koryak Caost	m	?	?	C	F
Olyutorskiy Bay	l	?	?	C	F
W. Kamchatka	m/l	?	?	C	F

Snow Crab

E. Bering Sea	l	l	P	C	F
W. Bering Sea	l/m	l/m	?	C	F

	Abundance		Long-term		
Species/stock	Historical	Current	Trend	Type	Status

S. Koryak Caost	m	?	?	C	F
Olyutorskiy Bay	s	?	?	C	F
E. Kamchatka	s	?	?	C	F?
W. Kamchatka	m	?	?	C	U/D
N. Sea of Okhotsk	l	m	P	C	F
E. Sakhalin Is.	l	m/l	D	C	F
W. Sakhalin Is.	s	?	?	C	F
Sea of Japan	l	m	D	C	F
Angled Tanner Crab					
Canada	?	?	?	C	U
Gulf of Alaska	?	?	?	C	L
Aleutian Islands	?	?	?	C	L
E Bering Sea	?	?	?	C	L
N. Sea of Okhotsk	m	?	?	L	L
Grooved Tanner Crab					
Calif.- Washington	?	?	?	?	U
Canada	?	?	?	C	U
Gulf of Alaska	?	?	?	C	L
Aleutian Islands	?	?	?	C	L
E. Bering Sea	?	?	?	C	L
W. Bering Sea	s	?	?	C	L
Benizuwai Tanner crab					
Sea of Japan	l?	m?	?	C	F?
Hair Crab					
E. Bering Sea	m	m	?	C	F
Aleutian Islands	s	?	?	C	L
E. Kamchatka	s	?	?	C	U
S.E. Kamchatka	m	?	?	C	F
Kurile Islands	m	?	?	C	U/F
E. Sakhalin Is.	s	?	?	C	F
W. Sakhalin Is.	m	?	?	C	F
Hokkaido	l	m	?	C	F
Sea of Japan	m	l	?	C	F
Korean Coast	m?	?	?	C	F

	Abundance		Long-term		
Species/stock	Historical	Current	Trend	Type	Status

Dungeness crab

S. California	m	s	D,P	C,R	F
N. Calif.- Wash.	l	l	P	C,R	F
Puget Sound	m	m	P	C,R	F
Canada, WCVI	m	m	?	C,R,S	F
Canada, ECVI	m	m	?	C,R,S	F
Canada, QCI	l	m	D,P	C,R	F
Canada, Central	m	m	?	C,R,S	F
S.E. Alaska	l	m	P	C,R,S	F
Cook Inlet	m	s	D,P	C,R,S	F
Kodiak	l	s	D,P	C,R,S	F
S. Ak. Peninsula	m	s	D,P	C,R,S	F
E. Aleutians	m	s	D	C,R,S	F
E. Bering Sea	s	s	?	C	F

Sand crab ? STOCKS

FAO Area 61	l	?	?	C	F?

Gazami Crab ? STOCKS

FAO Area 61	l	?	?	C	F

Mud Crab ? STOCKS

FAO Area 61	l	?	?	C	F?

SHRIMPS

Kuruma prawn ? STOCKS

FAO Area 61	l	?	?	C	F?

Fleshy prawn ? STOCKS

FAO Area 61	l	?	?	C	F?

Shiba shrimp ? STOCKS

FAO Area 61	l	?	?	C	F?

Yoshi shrimp ? STOCKS

	Abundance		Long-term		
Species/stock	Historical	Current	Trend	Type	Status

FAO Area 61	?	?	?	C	F?
Cocktail shrimp ? STOCKS					
FAO Area 61	l	?	?	C	F?
Akiami shrimp ? STOCKS					
FAO Area 61	l	?	?	C	F?
Sidestriped shrimp					
Calif.- Wash.	s	?	?	C	F?
N.Coast B.C.	l	l	?	C	U-F
S.Coast B.C.	m	s	D	C	F
S.E. Alaska	s	s	?	C	F
Prince William S.	l	s	D	C	F
Cook Inlet	m	s	D	C	*
Kodiak	l	s	D	C	*
S. Ak. Peninsula	l	s	D	C	*
E. Aleutians	m	s	D	C	F
Morotoge shrimp ? STOCKS					
FAO Area 61	?	?	?	C	F?
Northern shrimp					
N. Coast B.C.	s	s	I?	C	F
S. Coast B.C.	s	s	D	C	F
S.E. Alaska	s	s	D	C	F
Cook Inlet	m	s	D	C	F
Kodiak	l	s	D	C	F
S. Ak. Peninsula	l	s	D	C	F
E. Aleutians	m	s	D	C	F
E. Bering Sea	l	s	D	?	?
W. Bering Sea	s	?	?	C	U
W. Kamchatka	s	?	?	C	U
E. Sakhalin Is.	s	?	?	C	U
W. Sakhalin Is.	m	m	?	C	F
N. Sea of Japan	m?	m	?	C	U

	Abundance		Long-term		
Species/stock	Historical	Current	Trend	Type	Status

Humpy shrimp

Cook Inlet	s	s	D	C	*
Kodiak	m	s	D	C	*
S. Ak. Peninsula	m	s	D	C	*
E. Aleutians	S	s	D	C	*
E. Bering Sea	m?	s	D	?	U
W. Bering Sea	s-l?	l	?	C	U-L
W. Kamchatka	S	l	?	C	U-L
S. Sakhalin Is.	s-m?	l	?	C	U-L

Coonstriped shrimp

N. Coast, B. C.	m	m	?	C,R,S	U
Cen. Coast, B. C.	m	m	?	C,R	U
S. Coast, B. C.	m	m	?	C,R	U
S.E. Alaska	s	s	?	C,?	?
Cook Inlet	l?	s	?	C,R,S	F
Kodiak	m,l	?	?	C	?
S. Ak. Peninsula	s	?	?	C	?
E. Aleutians	s	?	?	C	?
Tartar Strait	m	s	?	C	F
Peter the Great Bay	m	?	?	C	U

Hokkai shrimp Stocks ?

FAO Area 61	m?	?	?	C	?

Ocean shrimp

Calif.- Wash.	l	?	P	C	F
Offshore, B. C.	m	s	D	C	F
Inshore, B. C.	s	s	?	C	F

Spot shrimp

Calif.- Wash.	s	?	?	C,R	F?
Canada	l	l	?	C,R	F
S.E. Alaska	l	m	D?	C,R,S	F
Prince William S.	l	m	D?	C,R,S	F
Cook Inlet	S	l	D	C,R,S	F

Northern sculptured shrimp

W. Bering Sea	s?	s?	?	C	U
E. Kamtchatka	m	m	?	C	U

Uneven sculptured shrimp

W. Bering Sea	s?	s?	?	C	U
E. Kamtchatka	m	m	?	C	U

Appendix 3

Addendum to WG 12 Minutes

Minutes of Working Group 12 (WG 12 - Crabs and Shrimps) were presented to the Fishery Science Committee (FIS) on October 16. The minutes contained a proposal for a 1997 WG 12 meeting of five days immediately prior to the 1997 PICES meeting. Following this presentation there was discussion of where and when WG 12 should meet as it appeared to the FIS that a five day meeting prior to the 1997 PICES Meeting in Korea would result in conflicts with other working groups and sub-committees. The proposed duration and timing would also, in combination with PICES, result in an overly long and hence arduous meeting for participants. FIS requested that WG 12 members that were present reconsider where and when the Working Group might meet in 1997 and present a tentative meeting schedule.

Available WG 12 members were Dr. Glen Jamieson (Canada, Rapporteur), Dr. Jim Boutillier (Canada), and Dr. Robert S. Otto (U.S.A., Co-Chairman). This group met during the afternoon of October 16 and proposed the following in order to reduce conflicts and to facilitate participation by nations in the western portion of the Pacific rim.

1. An inter - sessional meeting would be held in an Asian country (to be decided) for a period of 4 - 5 days, probably in June 1997,
2. Results of this meeting would be communicated to the Task Team on Regional Experiments (REX) at their meeting immediately prior to the 1997 PICES meeting.
3. Tentative Schedule for the WG 12 1997 meeting

DAY 1

08:00 - 09:00.	Introductions, review of terms of reference and adoption of agenda.
09:00 - 12:00.	Review of Canadian Crab and Shrimp stocks.
13:00 - 14:00.	Review of USA stocks, California to Washington.
14:00 - 17:00.	Review of USA stocks, Gulf of Alaska.

DAY 2

08:00 - 12:00.	Review of eastern Bering Sea and Aleutian Island Stocks.
13:00 - 17:00.	Review of Russian stocks.

DAY 3

08:00 - 12:00.	Review of Japanese stocks
13:00 - 17:00.	Review of Chinese stocks

DAY 4

08:00 - 12:00.	Review of Korean stocks
13:00 - 17:00.	Work session - synthesis

DAY 5

08:00 - 12:00.	Work session - synthesis
13:00 - 17:00.	Plenary session, adjournment.