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International Council for the  
Exploration of the Sea

C.M. 1975/13

Gear and Behaviour Committee

ICES WORKING GROUP ON DATA COLLECTION IN FISH CULTURE RESEARCH

Report of Meeting held at Ostende 24-25 April 1975

Attendance

J J Foster (Convener)	Marine Laboratory, Aberdeen, Scotland.
R S T Ferro, J Pope	
J G de Wit, E J de Boer,	Rijksinstituut voor Visserijonderzoek
P Korbee, A Verbaan	Ijmuiden, Holland.
P J G Carrothers	Biological Station, St Andrews, New
	Brunswick, Canada.
H von Seydlitz	Institut fur Fangtechnik, 2 Hamburg 50,
	Palmaille 9, W. Germany.
G C Vanden Broucke,	Ryksstation voor Zeevisserij, Stadhuis,
R Fonteyne	Ostend, Belgium.
C Nedelec	Fisheries Industries Division, FAO, Via
	delle Terme di Caracalla, 00100 Rome,
	Italy.
J Prado	Institut Scientifique et Technique des
	Peches Maritime, Nantes, France.
I Bjørkum, L Karlsen,	Institute of Fishery Technology Research,
S Olsen	Trondheim, Norway.
A R Margetts,	Fisheries Laboratory, Lowestoft, Suffolk,
A E Urquhart (Rapporteur)	England.

Programme

The Convener's draft agenda, as follows, was adopted and worked through:

1. Convener's introduction and review.
2. The need for a computer system.
3. Extension of the Index system using key words.
4. Application of standards in data storage and analysis, in the equipment used for data logging, for research methods used in fishing gear technology and the selection of a project for data exchange.
5. Future arrangements.

1.0 Review of data Index.

1.1 The Convener outlined, for the benefit of new members, the purpose of the Working Group and the reasons for the decision made at its first meeting whereby the use of forms as a means of providing scientists with information on the research work being undertaken by scientists in other institutions as well as forming the basis of a data exchange scheme was accepted. Succeeding meetings of the Working Group had developed proposals

for the system, to be run through the ICES Secretariat, and for a form to summarise each experiment in reasonable detail, together with four additional forms each of which was designed to give fairly full details of the experiment. Trials of the scheme had shown that the Summary Form took about 30 minutes to complete, longer of course for one of the additional, detailed forms; it was intended that the latter would be completed optionally. There were still complaints that the forms did not contain this or that item but there could not now be a re-design.

1.2 The Convener reported that the scheme (described in CM 1974/B:2) had been criticised at the 1974 Meeting on account of the additional optional forms but that, in any case, the Working Group's recommendations for the various ICES Committees to standardise on codes required by this scheme had caused a deferment of the introduction of the scheme. In fact, the whole question of codes within ICES is to be dealt with by a special meeting at the Montreal meeting of ICES when the code requirements of all committees will be considered.

1.3 Mr de Wit reminded the meeting of the time spent at the previous meeting on selecting the coding systems. The Convener agreed that the Working Group had made every effort to use standard codes but ICES Council had decided that codes must be standard within ICES Committees.

1.4 Mr Olsen mentioned the discussion of the Report (CM 1974/B:2) at the 1974 meeting and he asked that the Working Group should consider a point that was made that the scheme called for more information to be provided than was justified by the objectives stated by the Convener (paragraph 1.1). The Convener replied that the Report had been accepted by the Gear and Behaviour Committee and that the scheme seems to be the best method available. He then asked each delegate for their opinion of using this scheme compared with all the other methods, chiefly published papers or those presented at ICES meetings. Each agreed that the scheme was correct in principle and should be given a fair trial but one or two delegates felt that the Administrative report should serve a more useful function by fully describing future work.

1.4.1 The Convener indicated that the additional detailed forms would be useful in a future computer application but should not now be included in the scheme except where interested members are prepared to provide this information separately.

1.5 The Convener then proposed that the Summary Form, only, should be introduced for use in all member countries on a trial basis and that the use of the information be monitored as carefully as possible in order to provide justification or otherwise for continuation and possibly a computer application. This was agreed.

1.6 It was further agreed that this scheme could proceed by adopting both the standard ICES region code and the Statistics committee Gear code which follows the classification of the FAO code previously selected by the Working Group.

1.7 It was also agreed that the FAO Gear code, in particular, should be supported at the meeting in Montreal on codes.

1.8 Mr Carrothers pointed out that the liaison officers proposed in the Report (CM 1974/B:2) were not to be appointed as recommended and it was agreed that the scheme would have to be run by Working Group delegates.

2.0 The need for a computer system.

2.1 It was agreed that there was no need at this time to consider this matter further in view of the resolution at paragraph 1.5.

### 3.0 Key words

3.1 The Convener reviewed the discussion of the previous Working Group meeting on the intended use of Key words in the computer system as an aid in servicing enquiries efficiently but went on to say that as the computer application was being postponed the matter was not essential at this time but should be noted as a future requirement of the scheme.

3.2 Mr Olsen gave brief details of the use of key words in Norway and Mr Nedelec of the Arial system in FAO. It was agreed that the Working Group should define its own definitive key words in due course.

### 4.0 Standardisation

4.1 The Convener suggested that the initial approach to this subject would be for each delegate to describe the instrumentation in use in their country, the medium in which it was recorded and the method of analysing this data. From this review it would perhaps be possible to identify areas where standardisation already existed but at any rate areas where standardisation was desirable and worthy of further discussion by the Working Group.

4.2 Each member, in turn, described their research systems and processing methods. The Convener pointed out that, in the absence of the Norway member, Norway was also developing their expertise in this field and he then summarised the review by noting that four countries, Canada, Netherlands, Germany and Scotland were at a comparable level of expertise and suggested that these members should form the nucleus of the standardisation team. Other countries with an interest in developing research in this field would of course be able to participate.

4.2 The Convener suggested that as the result of informal discussion there were good possibilities for collaboration at a practical level between Canada, Germany, Netherlands and Scotland but that the standardisation of instruments should now be considered. Mr de Boer said that the ideal was of course for all to work using common equipment but in practice the instrumentation systems are likely to be somewhat different from country to country and that accordingly he felt that it would be helpful if descriptions of instrumentation systems could be exchanged between countries. In this way it should be possible to identify the best or most suitable solution to a technical problem. It was agreed that nominated delegates would provide the Convener by the end of May 1975 with a list of instrumentation systems giving also their accuracy, type of output and application.

4.4 The Convener then returned the discussion to the data transfer aspect of the proposed collaboration scheme saying that perhaps the only way to clarify the problems associated with compatibility of format would be to agree in the first place to exchanging raw data. Mr de Boer concurred adding, however, that he felt that in line with his view on instrumentation it was likely that the data was being processed slightly differently in each country so that for instance computer programs might be incompatible.

4.5 The Convener summarised the discussion so far by saying that it seemed likely that a common project for collaboration could be based on a type of fishing gear on which all or most countries are working so that some benefits would accrue to the participants in addition to definition of the problems of standardisation of instrumentation and output format. He then suggested that the format of the output need not perhaps be fixed although agreement might be reached by the Working Group in some areas.



Describing the standard procedure followed by Aberdeen scientists the Convener stated that this practice was essential and that furthermore it enabled persons not previously acquainted with the system to use it without delay.

4.6 In the discussion on standard procedures which followed, the Netherlands delegates pointed to the problem of using a procedure manual on commercial vessels and the Norway delegate felt that though sympathetic to standard forms it might be quicker just to exchange data. The Convener replied that standard procedures were just as important where there were no scientists on the vessel and that on non-standard data it was always difficult to identify useful data. Mr Seydlitz felt that a specific experiment should be agreed at this meeting and this was accepted by Messrs Carrothers, de Boer, and Ferro.

4.7 The Convener then referred to Mr Prado's offer of his facilities for testing models and in the discussion on this matter it was agreed that procedures should be standardised between England (WFA) and France and that, if possible, Mr Prado should be sent data in connection with the collaboration project. Mr Prado would be free to select any one topic but even if it proved impracticable to complete or even commence a topic, the Convener asked that Mr Prado report back in due course. Mr Seydlitz said that it would be useful if a list of models that were available could be provided and the Convener asked Mr Prado if it would be possible to do so in due course.

#### 5.0 Future arrangements

5.1 It was agreed that collaboration should be conducted on an informal basis initially but that a meeting of participants would certainly be needed at a later stage to discuss problems and decide future actions. The chief participants would attend such a meeting but it should be open to all interested members of the Gear and Behaviour Committee and that because of this it was recommended that the project should be afforded the status of a Working Group which should ideally cover all data processing aspects.

#### Recommendationss

1.1 The Working Group recommends to the Gear and Behaviour Committee that the scheme proposed in the previous report (paras 3.4 and 3.2 CM 1974/B:2) be amended so that the only requirement will be the completion of the Summary Form. It is considered desirable that the ICES Secretariat should administer the scheme as agreed.

1.1.1 Optionally, however, individual scientists may make use of the additional detail forms A, B, C or D on an informal basis and this trial will be administered by the Convener.

1.2 That during the trial period of the amended scheme, the liaison officers in each country should be members of the Working Group.

1.3 The Working Group recommends to the Gear and Behaviour Committee that the codes selected after careful deliberation at the previous meeting, should be presented for serious consideration at the 1975 meeting at Montreal.

1.4 The Gear and Behaviour Committee is requested to note that though it is not considered necessary at this time to pursue the matter of a computer application for the scheme, the possible requirements of such an application may follow the trial period. It is therefore desirable that this point should be considered by ICES Council in the allocation of future computer resources.

1.5 Following paragraph 1.4 above, it is also desirable that ICES Council should be acquainted with the Working Group's proposal to use a key word system for computer retrieval, noting that the Working Group intends to define keywords specific to the requirements of their scheme.

1.6 The Working Group recommends to the Gear and Behaviour Committee that the practical collaboration to establish standard procedures and data formats, in those parts of research identified at this meeting viz - by co-operation between interested members of the Working Group but principally Canada, Netherlands, Germany and Scotland should continue. It is intended that the initial stages will be conducted on an informal basis administered by the Convener but it should be noted that a formal meeting to formulate proposals may be necessary in the future.

1.7 The Working Group recommends to the Gear and Behaviour Committee that arising from recommendations 1.1 and 1.6 there is a need to consider how to monitor these two projects. In the view of this Working Group a separate Working Group on Data Processing is essential as a means of providing specialist support and continuity of developments in this field.

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