

Abstracted Recommendations from the Meeting on the ICES Service Hydrographique,
March 1966. (Ref. C.M. 1966/N:1a)

It is recommended:-

A. ICES Oceanographic Data Lists

1. that publication of the ICES Oceanographic Data Lists be discontinued, except for some special categories of data, as indicated below;
2. that all data to the end of 1962 be published as ICES Oceanographic Data Lists, except for the bathythermograph data the flow of which has not been satisfactorily;
3. that the Data Lists still be published from co-operative studies, performed under the auspices of the Hydrographical Committee and reported to ICES;
4. that to speed up printing of the delayed volumes of the Data Lists, about 60 volumes up to the end of 1962, an additional allocation of 10,000 D. kr. be given to the purpose during each of three successive years;
5. that additional support be given for completion of data volumes from joint investigations:-
 - a) Overflow Expedition (10,000 D.kr.)
 - b) RHENO Expedition of 1965
 - c) Skagerack Expedition of 1966;
6. that the oceanographic data, whenever published and/or stored either by the national institutions and services or by the Service Hydrographique be presented following identical or at least compatible schemes. It will be the task of the Service Hydrographique to distribute guidance to the national institutions and services in this respect;
7. that the full responsibility for the quality of the oceanographic data, to be published and/or stored by the Service Hydrographique, be transferred from the Service Hydrographique to the national institutions and services, except for the data mentioned in 2 above;

B. Punched Card Holdings of the Service Hydrographique

8. that the oceanographic data be still collected and stored in the Service Hydrographique to form the basis of its work as a regional data centre and also as an analysis centre for various scientific purposes of ICES, as listed under D below;

9. that the punched card and other data holdings of the Service Hydrographique be limited to the standard observations, as listed in the ICES Punching Manual;
10. that the Service Hydrographique be given the financial support for including in the data holdings machine-generated values of σ_t etc. and machine-interpolated values for standard depths;
11. that an ad hoc meeting be convened during the Council Meeting in October 1966 in order to try to resolve the difficulties connected with storing bathythermograph data, this process not working satisfactorily at present, as some countries do not have the resources for digitizing bathythermograms, and as some national agencies have adopted different punched card formats for their own use of the bathythermograph data;

C. Informational Activities of the Service Hydrographique

12. that the Service Hydrographique be given the new task of collecting and disseminating information on completed cruises, with the station charts included. Thereby cross reference should be made, if possible, to the programmes published in International Marine Science. The information should be circulated both immediately when available and also as annual reports.

In addition to providing the Council's scientists with an up to date account of the progress of hydrographic work in the ICES area, these station charts will prove useful for oceanographers preparing articles with hydrographic charts and sections for the Annales Biologiques.

The other Committees of the Council should be asked to give advice on the possibility of including biological stations on the charts;

13. that the Service Hydrographique prepare and distribute annually a booklet comprising information on the punched cards in its holdings;
14. that the Service Hydrographique continue to co-operate with the IOC Secretariat in preparing a new revised edition of the booklet "Ocean Data Stations" and in keeping this loose-leaf type of booklet up to date, in accordance with the proposal outlined in the report of the 2nd meeting of the IOC Working Group on Ocean Data Stations, viz., that the Service Hydrographique takes responsibility for maintaining an up to date index of ocean data stations in the ICES area (North East Atlantic, east of 42°W) and for transmission to the IOC Secretariat of all changes and new entries to this index;
15. that the Service Hydrographique furnish free of charge copies of data (on punched cards or on lists) on request to national institutions and services and/or scientists of the member countries who have been authorized by the delegates of each member country to forward such requests. The value of such a delivery free of cost should not exceed 100 D. kr.;

D. Applications of the Punched Card Holdings

16. that, provided the time-lag can be reduced to six months at maximum, continuation of the monthly charts of surface temperature and salinity, partly including also residual currents, prepared for

the years 1950-52 by the Lowestoft Laboratory and for 1952-58 by the Service Hydrographique, be made possible, as the charts have apparently proved quite useful in the long run. This service should be re-started on a tentative basis only and covering limited areas. The charts should be prepared by a computer. (When considering this recommendation due attention must be paid to item 26 below);

17. that the tables and diagrams of monthly surface temperature and salinity anomalies for 1905-1964 started in the Lowestoft Laboratory on basis of the ICES Atlas (mentioned in 19 below) and its continuation be completed in collaboration with the Service Hydrographique;
18. that the Hydrographical and Plankton Committees be asked to consider whether the accomplishment of both the following tasks is necessary:-
 - a) Preparation of tables of mean monthly surface temperature and salinity for the years 1955 onwards. (Continuation of the tables of the ICES Atlas: "Mean Monthly Temperature and Salinity of the Surface Layer of the North Sea and Adjacent Waters from 1905 to 1954".)
 - b) Continuation of the series (1957-1962) of tables of monthly means of surface temperature and salinity for areas of the North Sea and the north-eastern North Atlantic.Due attention should be paid to the fact that these two studies do not cover quite the same region and have not been based entirely on the same fields;
19. that the Hydrographical Committee be asked to give advice on the feasibility of preparing atlases, similar to the above mentioned ICES Atlas, for the Barents Sea and for the seas around Iceland;
20. that the Hydrographical Committee (and possibly other Committees) be asked to give advice as to the desirability or not of regular preparation and publishing by the Service Hydrographique of historical charts of temperature and salinity at a number of depth levels, based on data of certain cruises or surveys, possibly with the occurrence of fish indicated. (Cf. the herring hydrography charts prepared in the 1950's at the instigation of the biologists.) The Meeting however, did not wish to give a high priority to such a project;

E. Other Tasks for the Service Hydrographique

21. that the series (1876-1963) of monthly anomalies of surface temperature for regions of the northern North Atlantic and for an area off the eastern coast of Scotland be continued and also summarized in one volume;
22. that collaboration be continued with the German Hydrographic Institute on
 - a) mean monthly charts of the salinity distribution at various depth levels in the North Sea,
 - b) an investigation of the haline stratification of the North Sea, based on salinity observations 1902-1954;

F. Staff, Room, Machines for the Service Hydrographique

23. that a sorting machine be rented, at an estimated expense of about 8,400 D. kr. a year, for sorting of the punched cards with a view to the preparation of tables and other summaries;

24. that an archive room, if possible fireproof, be made available to the Service Hydrographique for the storage of the punched cards and for holding the sorting machine;
25. that the Service Hydrographique, in order to enable it to meet the demands of scientists, especially of biologists, of the member countries, be given the scientific and technical staff and facilities for undertaking the tasks conferred on it.

It is felt that even if publication of ICES Oceanographic Data Lists is discontinued in a few years time, except for those mentioned in 3 above, the work load of the Service Hydrographique will increase and necessitate the employment of additional staff;

G. Other Recommendations

26. that measures be taken to expand into a more stable, continuous programme the successful pilot project carried out under the leadership of Dr. J. Eggvin which has shown the feasibility of preparing and disseminating rapidly charts and sections of such oceanographic parameters as surface temperature and salinity, bottom temperature, depth of thermocline etc.

However, being not yet aware of what the Sub-Committee on Telegraphic Communication of Oceanographic Data would recommend, the Meeting was not in a position to give a precise recommendation. Nevertheless, the Meeting wished to emphasize that, should the project place too great a strain on the resources of the Bergen Laboratory, its repetition in the future could instead be carried out by the Service Hydrographique. (When considering this item due attention must be paid also to 16 above);

27. that the Plankton Committee be asked to consider the feasibility of arranging for exchange of biological data between the ICES member countries. In this connection attention is drawn to the interim report of the SCOR Working Group 18 and to the report from the 3rd Meeting of the IOC Working Group on Data Exchange.

Though it was realized that care should be taken to avoid duplication of work done by other organizations and agencies it was, on the other hand, felt that time might now have come to consider this question in some detail;

28. that the ICES member countries and their national institutions and services be asked to co-ordinate their participation in the ICES data exchange with their commitments to the IOC within the framework of its "declared national programmes", since both ICES and IOC schemes of data exchange pursue one and the same goal of making oceanographic data internationally available. This co-ordination should result in rapid transmission of the relevant data both to the Service Hydrographique and to the IOC exchange system (WDC A and/or B).