FOR COLLATIMG CENTRE USE

CRUISE SUMMARY REPORT	Centre: DOD Ref. No.:							
	Is data exchange							
SHIP enter the full name and international radio call sign of the ship from which the data were collected, and indicate the type of ship, for example, research ship; ship of opportunity, naval survey vessel; etc.								
Name: FRV "Walther Herwig III"	Call Sign: <u>DBFR</u>							
Гуре of ship: <u>Fisheries Research Vessel</u>								
CRUISE NO. / NAME WH253	enter the unique number, name or acronym assigned to the cruise (or cruise leg, if appropriate).							
CRUISE PERIOD start (set sail) start day/ month/ year to 13/07/2003 end day/ month/ year day/ month/ year (return to port)								
PORT OF DEPARTURE (enter name and country) Bremerhaven (GER)								
PORT OF RETURN (enter name and country) Bremerhaven (GER)								
RESPONSIBLE LABORATORY enter name and address of the laboratory responsible for coodinating the scientific planning of the cruise								
Name: Institut für Seefischerei, Bundesforschungsanstalt für Fischerei								
Address: Palmaille 9, D-22767 Hamburg								
Country: <u>Germany</u>								

Dr. Christopher Zimmermann, Institut für Seefischerei

OBJECTIVES AND BRIEF NARRATIVE OF CRUISE enter sufficient information about the purpose and nature of the cruise so

as to provide the context in which the report data were collected.

Cruise WH253 was conducted in the framework of the international hydroacoustic survey on pelagic fish in the North Sea, which is co-ordinated by an ICES planning group. Further contributors to the quasi-synoptic survey are the national fisheries research institutes of Scotland, Norway, Denmark and The Netherlands. The results are delivered to the ICES herring assessment working group, they represent since 1984 the most important fishery independent data for the assessment of herring stocks in the area.

**CHIEF SCIENTIST(S)** enter name and laboratory of the person(s) in charge of the scientific work (chief of mission) during the cruise.

The working area for "Walther Herwig III" was confined to the South-Eastern North Sea between 52°N and 57°N, and the 20 m depth line off the English, Dutch, Danish and German coasts (see attached map). Acoustic measurements were conducted between 0600 and 2200 on East-West or North-South transects with 15 or 30 nm spacing. For the identification of echo traces and further biological sampling, 27 hauls with a pelagic net were conducted. After each haul and at 65 additional stations, CTD profiles were recorded. The survey area was almost doubled as compared to last year's survey in an attempt to reach the southern summer distribution limit of sprat in the North Sea.

Objectives: Hydroacoustic recording of pelagic fish stocks, biological sampling for the verification of echoes, calibration of the hydroacoustic equipment, hydrographic investigations.

Narrative: FRV "Walther Herwig III" left the port of Bremerhaven on June 26th at noon, and calibrated the hydroacoustic equipment under favourable conditions in the morning of June 27th off Helgoland. Therefore, it was not necessary to sail to Kristiansand. Until July 4th, the vessel surveyed the eastern part of the area where mostly juvenile herring was expected. After an exchange of guest scientists on Helgoland, "Walther Herwig III" covered the remaining area with a wider transect spacing until July 12th. The vessel reached Bremerhaven on 13th July 2002 in the morning, having sailed 2569 nm.

An extended cruise report giving age disaggregated abundance and biomass of clupeids and detailed hydrographic data will be available after final data and sample evaluation in early December 2003. This report will be delivered to and published by the ICES Planning Group for Herring Surveys in January 2004. **PROJECT** (IF APPLICABLE) if the cruise is designated as part of a larger scale cooperative project (or expedition), then enter the name of the project, and of organisation responsible for co-ordinating the project.

Project name: International hydroacoustic survey on pelagic fish in the North Sea and West of Scotland

Coordinating body: International Council for the Exploration of the Sea/Planning Group on Herring Surveys

**PRINCIPAL INVESTIGATORS:** Enter the name and address of the Principal Investigators responsible for the data collected on the cruise and who may be contacted for furtherinformation about the data. (The letter assigned below against each Principal Investigator is used on pages 2 and 3, under the column heading 'PI', to identify the data sets for which he/she is responsible)

- A. Dr. C. Zimmermann (Institut für Seefischerei, BFA für Fischerei Hamburg)
- B. E. Götze (Institut für Fischereitechnik und Fischqualität, BFA für Fischerei Hamburg)
- C. M. Stein (Institut für Seefischerei, BFA für Fischerei Hamburg)

D.

## MOORINGS, BOTTOM MOUNTED GEAR AND DRIFTING SYSTEMS

This section should be used for reporting moorings, bottom mounted gear and drifting systems (both surface and deep) deployed and/or recovered during the cruise. Separate entries should be made for each location (only deployment positions need be given for drifting systems). This section may also be used to report data collected at fixed locations which are returned to routinely in order to construct 'long time series'.

PI See top of page.	L deg	APP ATITUDE min	TE POSIT	DNGITUD min	E/W	DATA TYPE  enter code(s) from list on cover page.	DESCRIPTION  Identify, as appropriate, the nature of the instrumentation the parameters (to be) measured, the number of instruments and their depths, whether deployed and/or recovered, dates of deployments and/or recovery, and any identifiers given to the site.
none							

## SUMMARY OF MEASUREMENTS AND SAMPLES TAKEN

Except for the data already described on page 2 under 'Moorings, Bottom Mounted Gear and Drifting Systems', this section should include a summary of all data collected on the cruise, whether they be measurements (e.g. temperature, salinity values) or samples (e.g. cores, net hauls).

Separate entries should be made for each distinct and coherent set of measurements or samples. Different modes of data collection (e.g. vertical profiles as opposed to underway measurements) should be clearly distinguished, as should measurements/sampling techniques that imply distinctly different accuracy's or spatial/temporal resolutions. Thus, for example, separate entries would be created for i) BT drops, ii) water bottle stations, iii) CTD casts, iv) towed CTD, v) towed undulating CTD profiler, vi) surface water intake measurements, etc.

Each data set entry should start on a new line – it's description may extend over several lines if necessary.

NO, UNITS: for each data set, enter the estimated amount of data collected expressed in terms of the number of 'stations'; miles' of track; 'days' of recording; 'cores' taken; net 'hauls'; balloon 'ascents'; or whatever unit is most appropriate to the data. The amount should be entered under 'NO' and the counting unit should be identified in plain text under 'UNITS'.

under 'NO' and the counting unit should be identified in plain text under 'UNITS'.				
PI see page 2	NO see above	UNITS see above	DATA TYPE  Enter code(s) from list on cover page	DESCRIPTION  Identify, as appropriate, the nature of the data and of the instrumentation/sampling gear and list the parameters measured. Include any supplementary information that may be appropriate, e. g. vertical or horizontal profiles, depth horizons, continuous recording or discrete samples, etc. For samples taken for later analysis on shore, an indication should be given of the type of analysis planned, i.e. the purpose for which the samples were taken.
1	27	Stations	B14	Pelagic Trawl Hauls for Verification of Echoes: Species composition, Sub-Sampling of
				Herring and Sprat for Lenght frequencies and Age Determination
2	1992	Naut. Miles	G73	Track used for Echo Integration
3	92	Stations	H10	Vertical CTD Profiles
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				Please continue on separate sheet if necessary

Page	4

TRACK CHART: You are strongly encouraged to submit, with the completed report, an annotated track chart illustrating the route followed and the points where measurements were taken.

Insert a tick(♥) in this box if a track chart is supplied

X	

**GENERAL OCEAN AREA(S):** Enter the names of the oceans and/or seas in which data were collected during the cruise – please use commonly recognised names (see, for example, International Hydrographic Bureau Special Publication No. 23, 'Limits of Oceans and Seas').

**North Sea** 

**SPECIFIC AREAS:** If the cruise activities were concentrated in a specific area(s) of an ocean or sea, then enter a description of the area(s). Such descriptions may include references to local geographic areas, to sea floor features, or to geographic coordinates. **Please insert here the number of each square in which data were collected from the below given chart** 

Southern North Sea, Dogger, German Bight, Fisher Field 216 only

