CRUISE SUMMARY REPORT	FOR COLLATING CENTRE USE			
	Centre: Ref. no: Is data exchange restricted? Yes In part No			
SHIPenter the full name and international radio call sign of the ship from where example, research ship; ship of opportunity, naval survey vessel; etc.				
Name: TRIDENS Ca	ll Sign: PBVO			
Type of ship: FISHERIES RESEARCH VESSEL				
CRUISE NO./NAME name or North sea Hydro Acoustic	HERAS 2005 enter the unique number, acronym assigned to the cruise (or cruise let, if appropriate).			
CRUISE PERIODstart (set sail)27 day06 month2005 yearto	22072005enddaymonthyear(return to port)			
PORT OF DEPARTURE (enter name and country) IJMUIDEN, TH	HE NETHERLANDS			
 CHIEF SCIENTIST(S) enter name and laboratory of the person(s) in ch cruise. Bram Couperus, NEDERLANDS INSTITUUT VOOR VISSEF INSTITUTE FOR FISHERIES RESEARCH (RIVO B.V.) OBJECTIVES AND BRIEF NARRATIVE OF CRUISE enter su so as to provide the context in which the reported data were collected. Estimate the abundance of herring and sprat in the North Sea. In sprat stocks. 	NDERZOEK, NETHERLANDS INSTITUTE FOR ountry: THE NETHERLANDS harge of the scientific work (chief of mission) during the RIJ ONDERZOEK, NETHERLANDS ufficient information about the purpose and nature of the cruise nput index for the assessment of the Herring and			
PROJECT (IF APPLICABLE) if the cruise is designated as part of a la then enter the name of the project, and of the organisation responsible for coo				
Project name:				
Coordinating body: ICES Planning Group for Herring Surveys	(PGHERS)			

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 further information 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. Bram Couperus
- В.
- C.
- D.
- E.
- F.

PI	APPROXIMATE POSITION				DATA TYPE	DESCRIPTION identify, as appropriate, the nature of the instrumentation, the parameter (to be) measured, the number of instruments and	
see top	LATITUDE LONGITUDE		enter code(s) from list on				
of page	deg	min N/S	deg	min E/W	cover page	their depths, whether deployed and/or recovered, dates of deployment and/or recovery, and any identifiers given to the site.	

SUMMARY OF MEASURED 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 of samples. Different modes of data collection (e.g. vertical profiles as opposed to underway measurements) should be clearly distinguished, as should measurement/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.

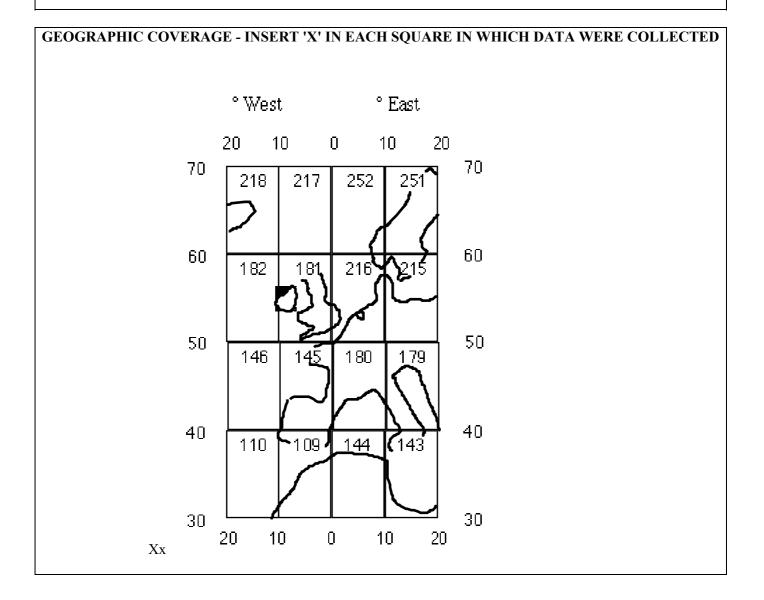
NO, UNITS: for each data set, enter the estimated amount of data collected expressed in terms of the number of: 'stations'; 'miles' of track; 'days' of recording; 'cores' taken; net 'hauls'; balloon 'ascents'; or whatever unit is most appropriate to the data. The amount should be entered under NO and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

PI	NO	UNITS	DATA TYPE	DESCRIPTION
see page 2	see above	see above	enter code(s) from list on cover page	identify, as appropriate, the nature of the data and of the instrumentation/ sampling gear and list the parameters measured. Include the 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.
Couperus	1997	Nautical miles	Hydro acoustic data	NASC's (Nautical Area Scattering Coefficients) or SA values
Couperus	48	CTD casts	Hydrographic	Salinity, temperature, depth
Couperus	27 (15; 10)	Trawl stations	Biological data	Length frequency fishspecies, data on sex, weight, maturity, age (# biol. samples herring; biol. #samples sprat)

TRACK CHART:	You are strongly encouraged to submit		V
illusua	the completed report, an annotated track chart ating the route followed and the points where rements were taken.	Insert a tick ($$) in this box if a track chart is supplied.	·

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

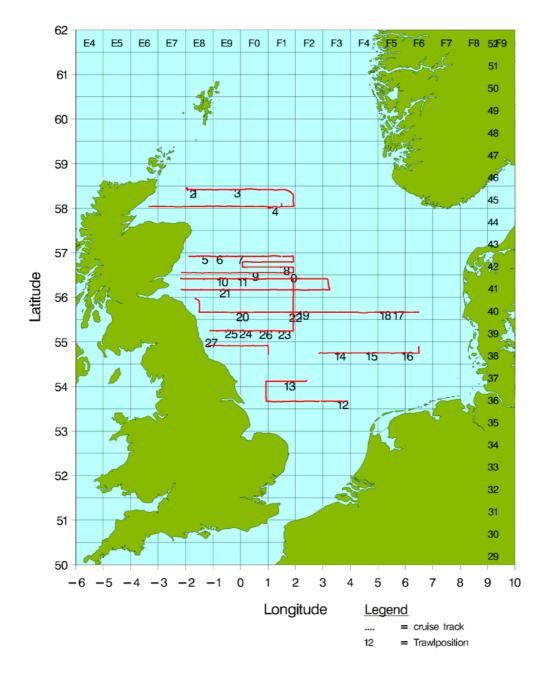
SPECIFIC AREAS: If the cruise activities were concentrated in a specific area(s) of an ocean or sea, then enter a description of the area(s). Such descriptions may include references to local geographic areas, to sea floor features, or to geographic coordinates.



THANK YOU FOR YOUR COOPERATION

Please send your completed report without delay to the collating centre indicated on the cover page.

procedure vaartuigen nr: XX versie: 02 ingangsdatum: 01-03-2002 paraaf directeur:



Cruise track and trawlstations, RV Tridens 27 June - 22 July 2005.