

Application for Consent to conduct
Marine Scientific Research

Date: 01/09/2015

1. General Information

1.1 Cruise name and/or number: 394

1.2 Sponsoring Institution(s):	
Name:	Thünen Institute of Sea Fisheries, Federal Research Institute
Address:	Palmaille 9, 22767 Hamburg GERMANY
Name of Director:	Dr. Gerd Kraus

1.3 Scientist in charge of the Project:	
Name:	Dipl.Biol. Jens Ulleweit
Country:	Germany
Affiliation:	Thünen Institute of Sea Fisheries
Address:	Palmaille 9, 22767 Hamburg, Germany
Telephone:	+49 40 38905 217
Fax:	+49 40 38905 268
Email:	jens.ulleweit@ti.bund.de
Website (for CV and photo):	http://www.ti.bund.de/de/sf/personal/wissenschaftliches-personal/ulleweit-jens-dipl-biol/

1.4 Entity(ies)/Participant(s) from coastal State involved in the planning of the project:	
Name:	Steve Milligan
Affiliation:	CEFAS
Address:	Lowestoft, Suffolk NR33 0HT
Telephone:	+44 1502 562244
Fax:	
Email:	Steve.milligan@cefas.co.uk
Website (for CV and photo):	

1.4 Entity(ies)/Participant(s) from coastal State involved in the planning of the project:	
Name:	Ian Holmes
Affiliation:	CEFAS
Address:	Lowestoft, Suffolk NR33 0HT
Telephone:	+44 1502 562244
Fax:	
Email:	ian.holmes@cefas.co.uk
Website (for CV and photo):	

2. Description of Project

2.1 Nature and objectives of the project:
<i>The cruise is part of the international mackerel and horse mackerel egg survey. The main objective of the survey is to produce both an index and a direct estimate of the biomass of the north east Atlantic mackerel stock and an egg production index for the southern and western horse mackerel stocks by sampling of mackerel and horse mackerel eggs and parental animals. The survey provides fisheries independent data which are used for the assessment of the above mentioned stocks. Countries participating are: UK (Scotland), Ireland, the Netherlands, Germany, Spain, Portugal, Iceland, Faroe Islands.</i>

In general the concentration of the spawned eggs is correlated with the number of parental fish having produced the eggs. For planktonic fishing a modified Gulf Sampler will be used (“Nackthai”). The parental animals are sampled by trawl gear for fecundity estimates.

2.2 If designated as part of a larger scale project, then provide the name of the project and the Organisation responsible for coordinating the project:

DCF funded survey, coordinated by ICES Working Group WGMEGS

2.3 Relevant previous or future research projects:

2.4 Previous publications relating to the project:

Report of the working group on mackerel and horse mackerel egg surveys (Bergen 2005), Living Resources Committee, ICES CM 2005/G:09

Report of the working group on mackerel and horse mackerel egg surveys (Vigo 2006), Living Resources Committee, ICES CM 2006/LRC:09

Report of the working group on mackerel and horse mackerel egg surveys (Hamburg 2009), Living Resources Committee, ICES CM 2009/LRC:09

Report of the working group on mackerel and horse mackerel egg surveys (San Sebastian 2011), Science Committee, ICES CM 2011/SSGESST:07

Report of the working group on mackerel and horse mackerel egg surveys (Galway 2012), Science Committee, ICES CM 2012/SSGESST:04

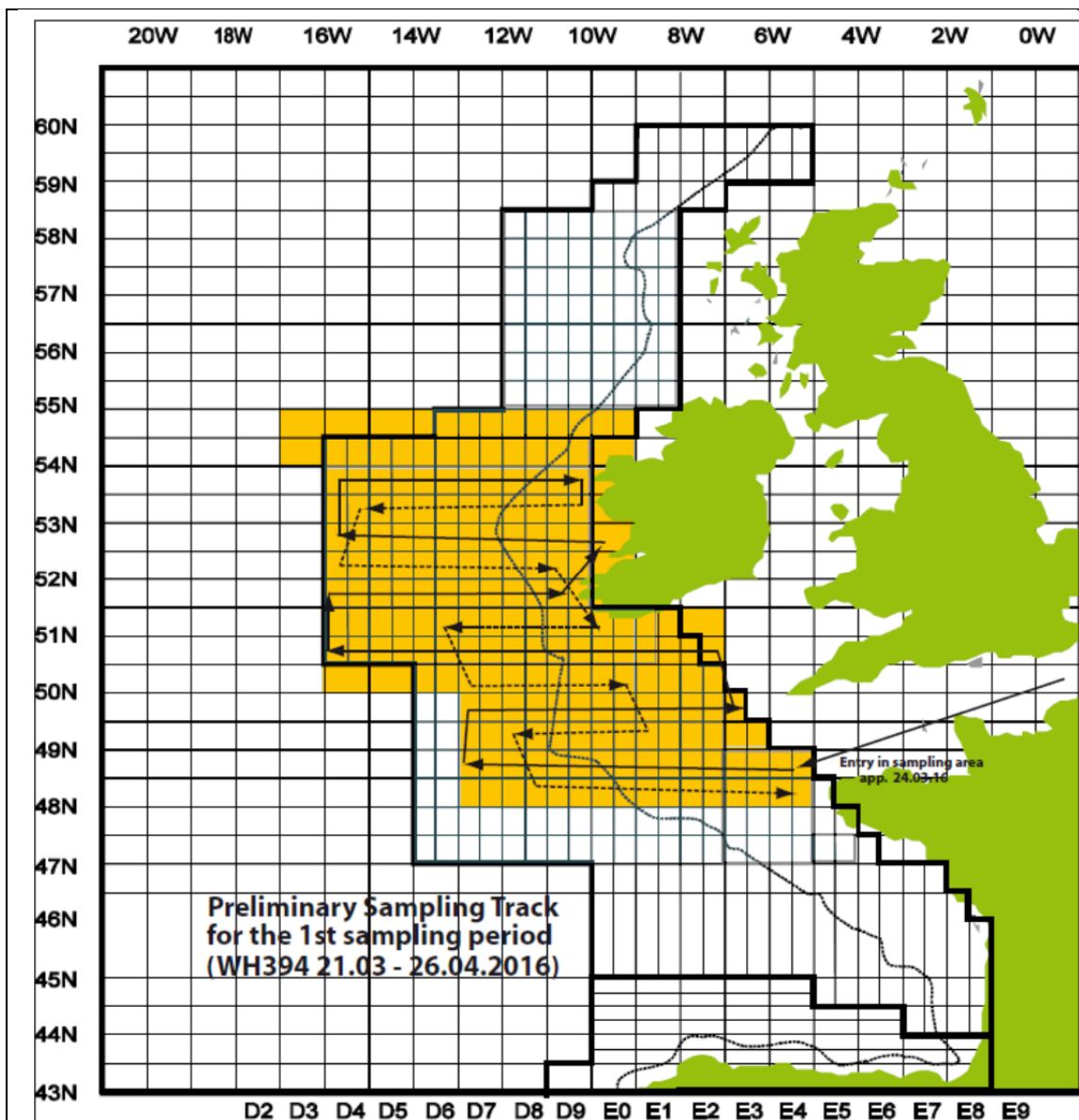
First Interim Report of the Working Group on Mackerel and Horse Mackerel Egg Surveys (Copenhagen 2015), ICES CM 2015/SSGIEOM:09. 66 pp.

3. Geographical Areas

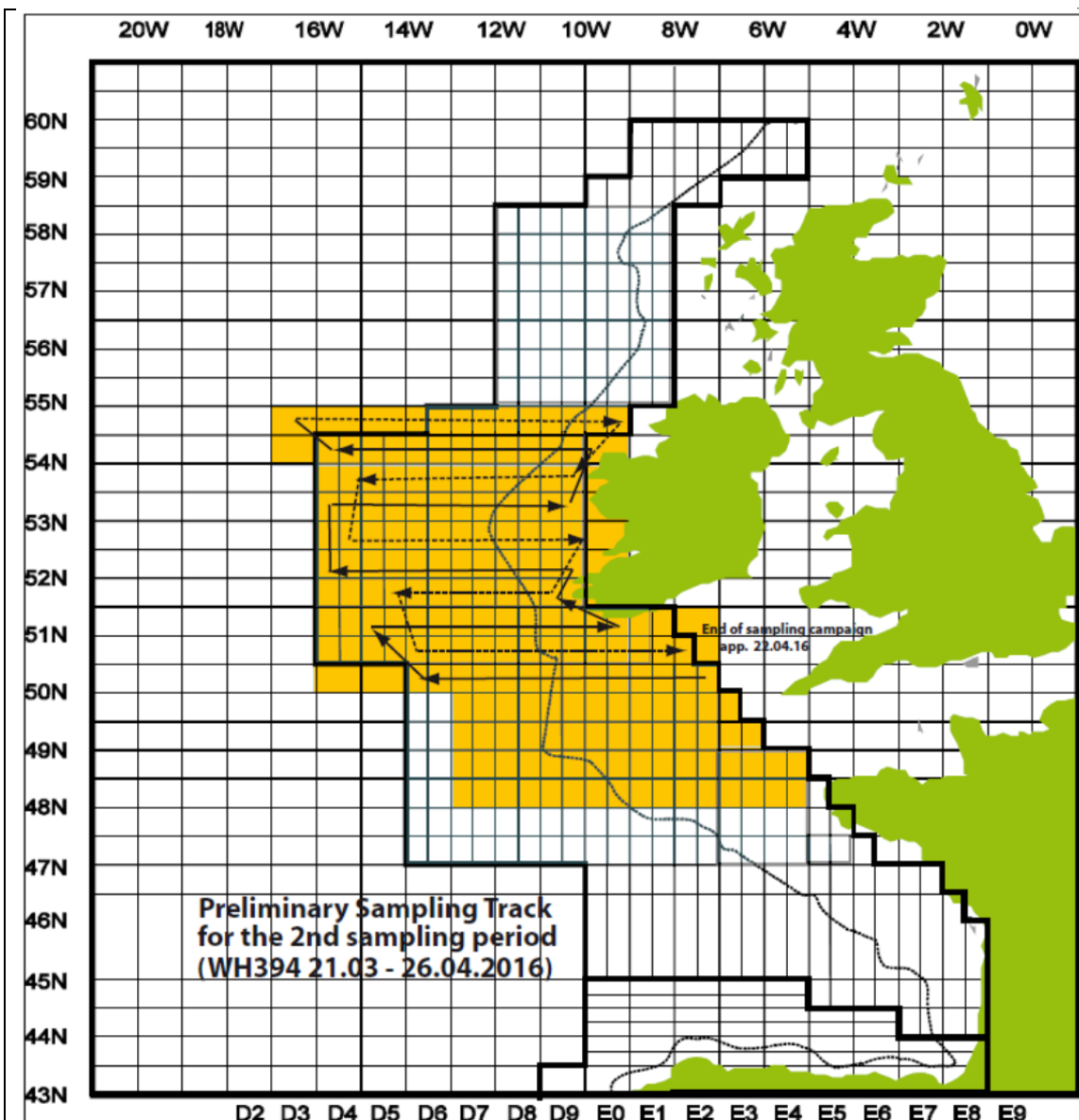
3.1 Indicate geographical areas in which the project is to be conducted (with reference in Latitude and longitude in decimal degrees, including coordinates of cruise/track/way points/sampling stations). Please provide coordinates in a separate excel spreadsheet.

55°N to 48 °N; 16°W to 5°W; it is intended to cover the shaded (orange) area on alternate transects first from South to North and then from South to North in each of the sampling periods (app. 21/03-10/04 and 11/04-26/04) and to take one plankton sample in each of the statistical rectangles within the area. The exact location of the station is, if possible, set in the middle of the rectangle (see chart of coordinates of plankton sampling sites). If not, stations are located in the rectangle according to nautical requirements. Trawl stations will be set according to the distribution of the fish and according to the recordings made during the cruise. At each station CTD recordings are made simultaneously during plankton collection and additional hydrographic data (CTD) and water samples are taken on selected stations.

3.2 Attach chart(s) at an appropriate scale (1 page, high-resolution) showing the geographical Areas of the intended work and, as far as practicable, the location and depth of sampling Stations, the tracks of survey lines, and the locations of installations and equipment.



Investigation area (shaded), Campagne N° 394 FRV "Walther Herwig III" for the first sampling period with intended cruise track



Investigation area (shaded), Campagne N° 394 FRV "Walther Herwig III" for the second sampling period with intended cruise track

4. Methods and means to be used

4.1 Particulars of vessel:	
Name:	Walther Herwig III
Type/Class:	Fisheries Research Vessel +100A5E2
Nationality (Flag State):	German
Identification Number (IMO/Lloyds No.):	9048392
Owner:	Federal Republic of Germany
Operator:	Bundesanstalt für Landwirtschaft und Ernährung (BLE), Referat 524, Haubachstraße 86, 22765 Hamburg
Overall length (meters):	63,18m
Maximum draught:	6,20m
Displacement/Gross Tonnage:	Ca 639 BRZ
Propulsion:	Diesel-Electric
Cruising & maximum speed:	ca 13kn
Call sign:	DBFR
INMARSAT number and method and capability of communication (including emergency frequencies):	Inmarsat Fleet Broadband + 870 773236187 (Bridge)
Name of Master:	H.O. Janßen or deputy
Number of Crew:	21
Number of Scientists on board:	12

4.2 Particulars of Aircraft:	
Name:	
Make/Model:	
Nationality (flag State):	
Website for diagram & Specifications:	
Owner:	
Operator:	
Overall Length (meters):	
Propulsion:	
Cruising & Maximum speed:	
Registration No.:	
Call Sign:	
Method and capability of communication (including emergency frequencies):	
Name of Pilot:	
Number of crew:	
Number of scientists on board:	
Details of sensor packages:	
Other relevant information:	

4.3 Particulars of Autonomous Underwater Vehicle (AUV):	
Name:	
Manufacturer and make/model:	
Nationality (Flag State):	
Website for diagram & Specifications:	
Owner:	
Operator:	
Overall length (meters):	
Displacement/Gross tonnage:	
Cruising & Maximum speed:	
Range/Endurance:	
Method and capability of communication	

(including emergency frequencies):	
Details of sensor packages:	
Other relevant information:	

4.4 other craft in the project, including its use:

4.5 Particulars of methods, full description of scientific instruments to be used (for fishing gear specify type and dimension) and location

Types of samples and Measurements:	Methods to be used:	Instruments to be used:	To be carried out within 12nm (yes or no):
Fish: mackerel, horse mackerel (gonads samples)	Trawling (Approx. 5 trawling stations in UK waters, mainly above the 200m shelf edge, depending on found fish concentrations)	For bottom fishing the trawl net "Grande Overture General (GOV) will be used, for pelagic fishing the "PSN 205" or a 1600# pelagic trawl (see charts attached)	yes
Plankton Samples	Plankton sampling (maximum sampling depth 200m or 5m above ground)	Modified Gulf Sampler (Nackthai)	yes
Water samples	Probe parallel to trawling and plankton stations	CTD probe	yes

4.6 Indicate nature and quantity of substances to be released into the marine environment:

none

4.7 Indicate whether drilling will be carried out. If yes, please specify:

none

4.8 Indicate whether explosives will be used. If yes, please specify type and trade name, Chemical content, depth of trade class and stowage, size, depth of detonation, frequency of Detonation, and position in latitude and longitude:

none

5. Installations and Equipment

Details of installations and equipment (including dates of laying, servicing, method and Anticipated timeframe for recover, as far as possible exact locations and depth, and Measurements):

none

6. Dates

6.1 Expected dates of first entry into and final departure from the research area by the research vessel and/or other platforms:

app. 24. March to 22 April for the total research area

6.2 Indicate if multiple entries are expected:

UK area: at least twice

7. Port Calls

7.1 Dates and Names of intended ports of call:

only tentative port call depending on weather and schedule: Plymouth approx. during 08.04.-10.04.2013 for two days – no special requirements

7.2 Any special logistical requirements at ports of call:

none

7.3 Name/Address/Telephone of shipping agent (if available):

8. Participation of the representative of the coastal State

8.1 Modalities of the participation of the representative of the coastal State in the research Project:

8.2 Proposed dates and ports for embarkation/disembarkation:

9. Access to Data, Samples and Research Results

9.1 Expected dates of submission to coastal State of preliminary report, which should include The expected dates of submission of the data and research results:
4 weeks after end of cruise

9.2 Anticipated dates of submission to the coastal State of the final report:
4 weeks after end of cruise

9.3 Proposed means for access by coastal State to data (including format) and samples:

9.4 Proposed means to provide coastal State with assessment of data, samples and Research results:

9.5 Proposed means to provide assistance in assessment or interpretation of data, samples And research results:

9.6 Proposed means of making results internationally available:
results are available through ICES WGMEGS


10. Other permits Submitted

10.1 Indicate other types of coastal state permits anticipated for this research (received or Pending):
Ireland, France

11. List of Supporting Documentation

11.1 List of attachments, such as additional forms required by the coastal State, etc.:

Signature:



(Jens Ulleweit)

Contact information of the focal point:

Name:

Country:

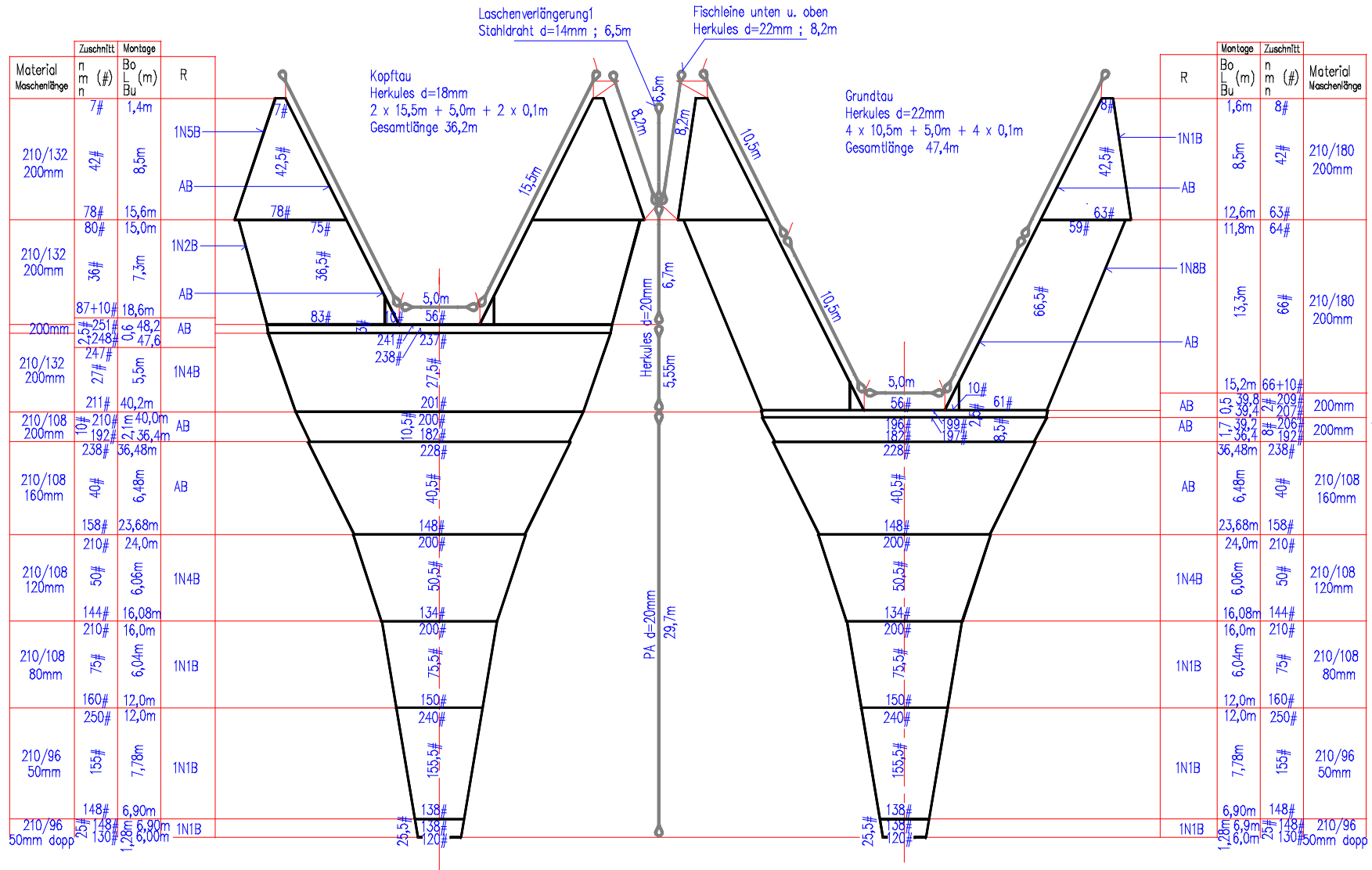
Affiliation:

Address:

Telephone:

Fax:

Email:



Material Maschenlänge	Zuschnitt		R
	n m	Bo Bu (m)	
210/132 200mm	7#	1,4m	1N5B
	42#	8,5m	
210/132 200mm	78#	15,6m	1N2B
	80#	15,0m	
200mm	36#	7,3m	AB
	87+10#	18,6m	
210/132 200mm	25#	0,6	1N4B
	248#	48,2	
210/108 200mm	247#	47,6	AB
	27#	5,5m	
210/108 160mm	211#	40,2m	AB
	10#	40,0m	
210/108 120mm	192#	36,4m	1N4B
	238#	36,48m	
210/108 80mm	40#	6,48m	1N1B
	158#	23,68m	
210/96 50mm	210#	24,0m	1N1B
	50#	6,06m	
210/96 50mm dopp	144#	16,08m	1N1B
	250#	12,0m	
210/96 50mm dopp	155#	7,78m	1N1B
	148#	6,90m	
210/96 50mm dopp	130#	6,00m	1N1B
	128#	6,90m	

R	Montage		Material Maschenlänge
	Bo Bu (m)	n m (#)	
1N1B	1,6m	8#	210/180 200mm
	8,5m	42#	
AB	12,6m	63#	210/180 200mm
	11,8m	64#	
1N8B	13,3m	66#	210/180 200mm
	15,2m	66+10#	
AB	0,5	209#	210/180
	1,7	209#	
AB	0,5	209#	210/180
	1,7	209#	
AB	36,48m	238#	210/108 160mm
	6,48m	40#	
1N4B	23,68m	158#	210/108 120mm
	24,0m	210#	
1N1B	6,06m	50#	210/108 80mm
	16,08m	144#	
1N1B	6,04m	75#	210/96 50mm
	12,0m	160#	
1N1B	7,78m	155#	210/96 50mm dopp
	6,90m	148#	
1N1B	6,90m	148#	210/96 50mm dopp
	6,00m	130#	

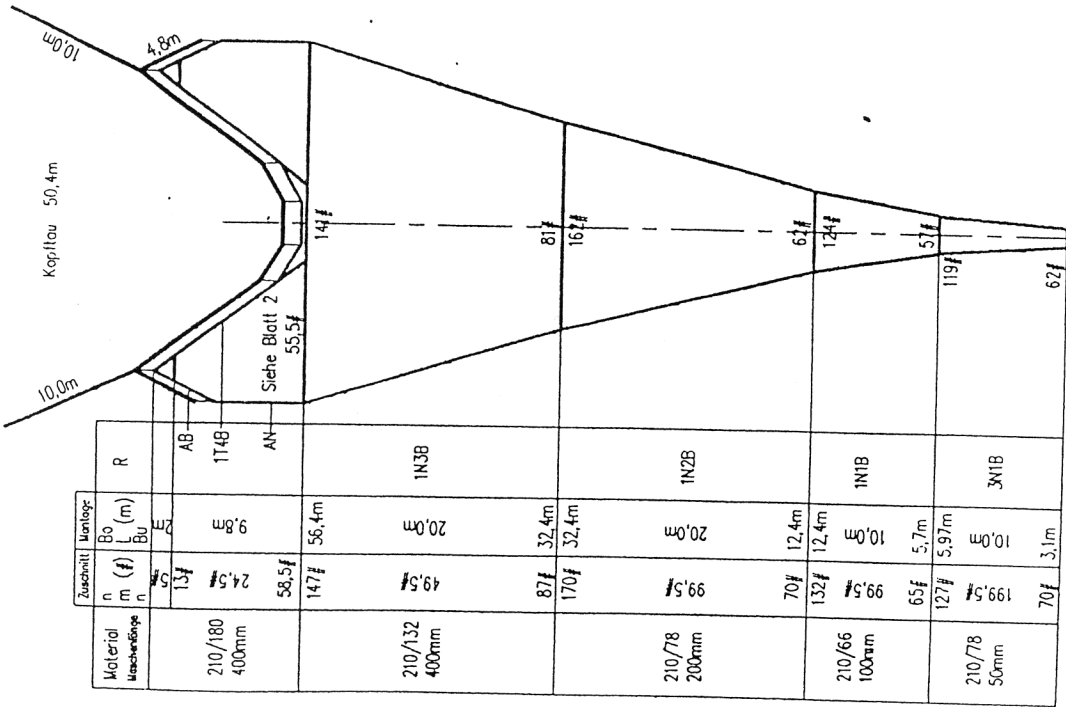
Gesamtlänge, ohne Steert : 51,64m

Gestreckter Umfang : 400# x 0,2m = 80,0m

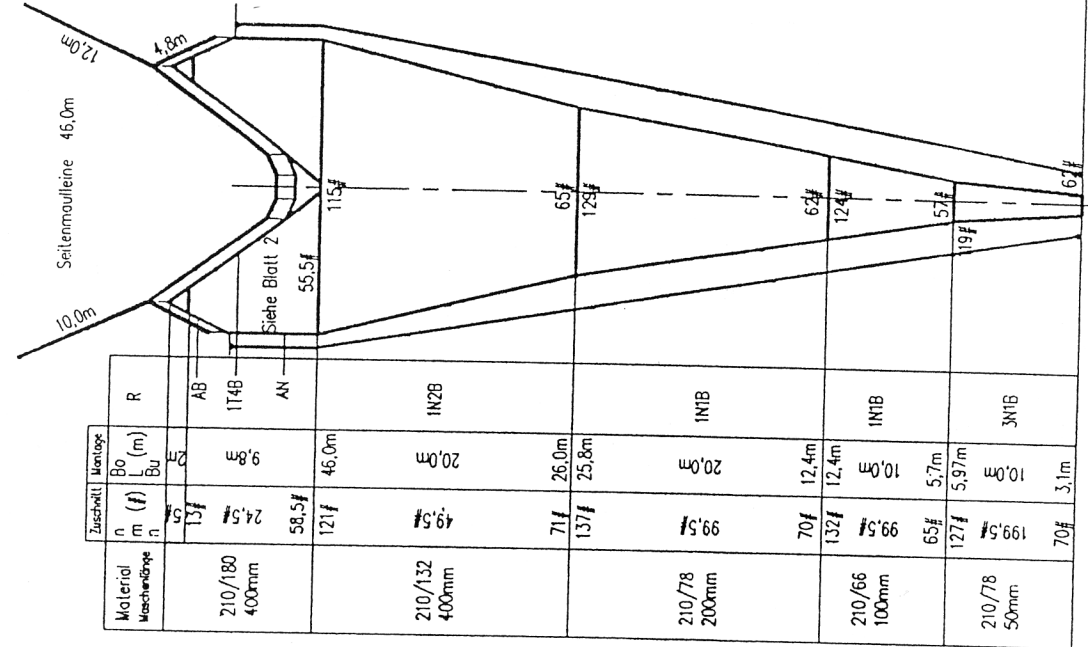
gov36471.skd

				<table border="1"> <tr> <th>Datum</th> <th>Name</th> </tr> <tr> <td>Bearb.: 09.01.02</td> <td>Rehme</td> </tr> <tr> <td>Gepr.:</td> <td></td> </tr> </table>		Datum	Name	Bearb.: 09.01.02	Rehme	Gepr.:	
Datum	Name										
Bearb.: 09.01.02	Rehme										
Gepr.:											
				<h2>Grundschieppnetz GOV 36/47</h2>							
				<p>Maßstab 1 : 400</p>							
				<p>Blatt 1 5 Bl.</p>							
Zust.	Änderung	Datum	Name	<p>Bundorforschungsanstalt für Institut für Fischereitechnik</p>							

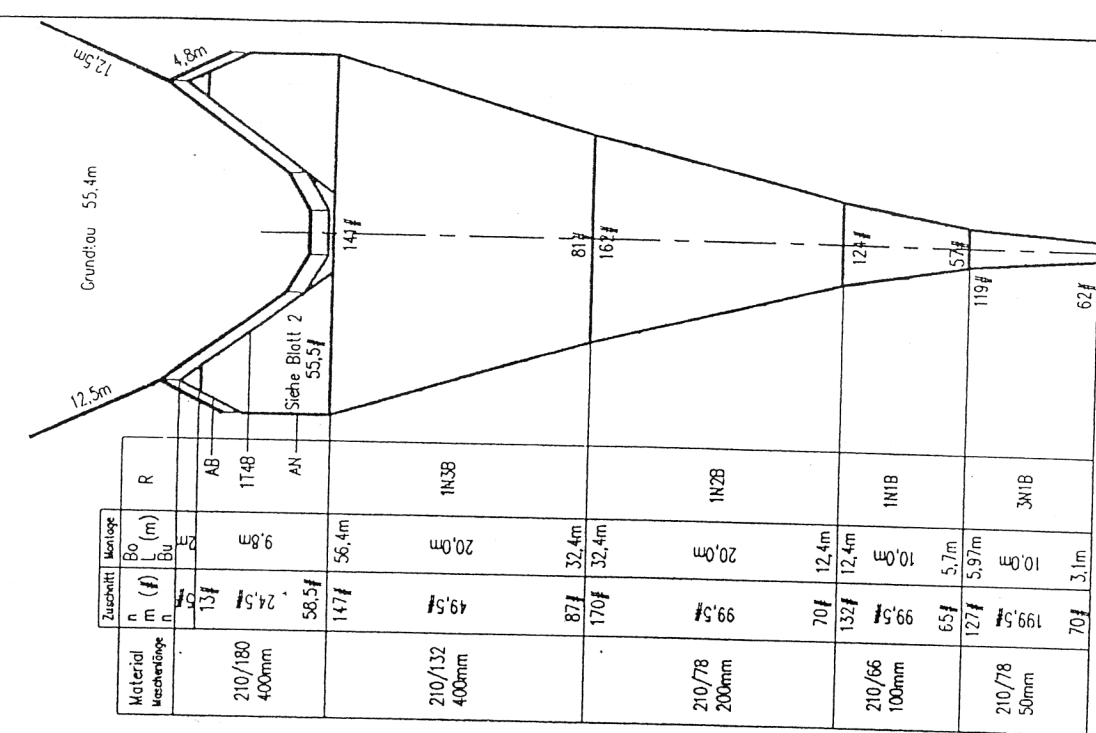
Überblatt



Seitenblatt



Interblatt



Gesamtlänge L_{ges} = 84,7m

Umfang U = 205m

Beauf.	Gepr.	Datum	Name
Bundlenkungsbüro für Fischer Institut für Fischereitechnik			
Zust.	402-20	Datum	Name

PSN 205m
für FFS Walther Herwig III

446.0.0.0.0

1 : 600

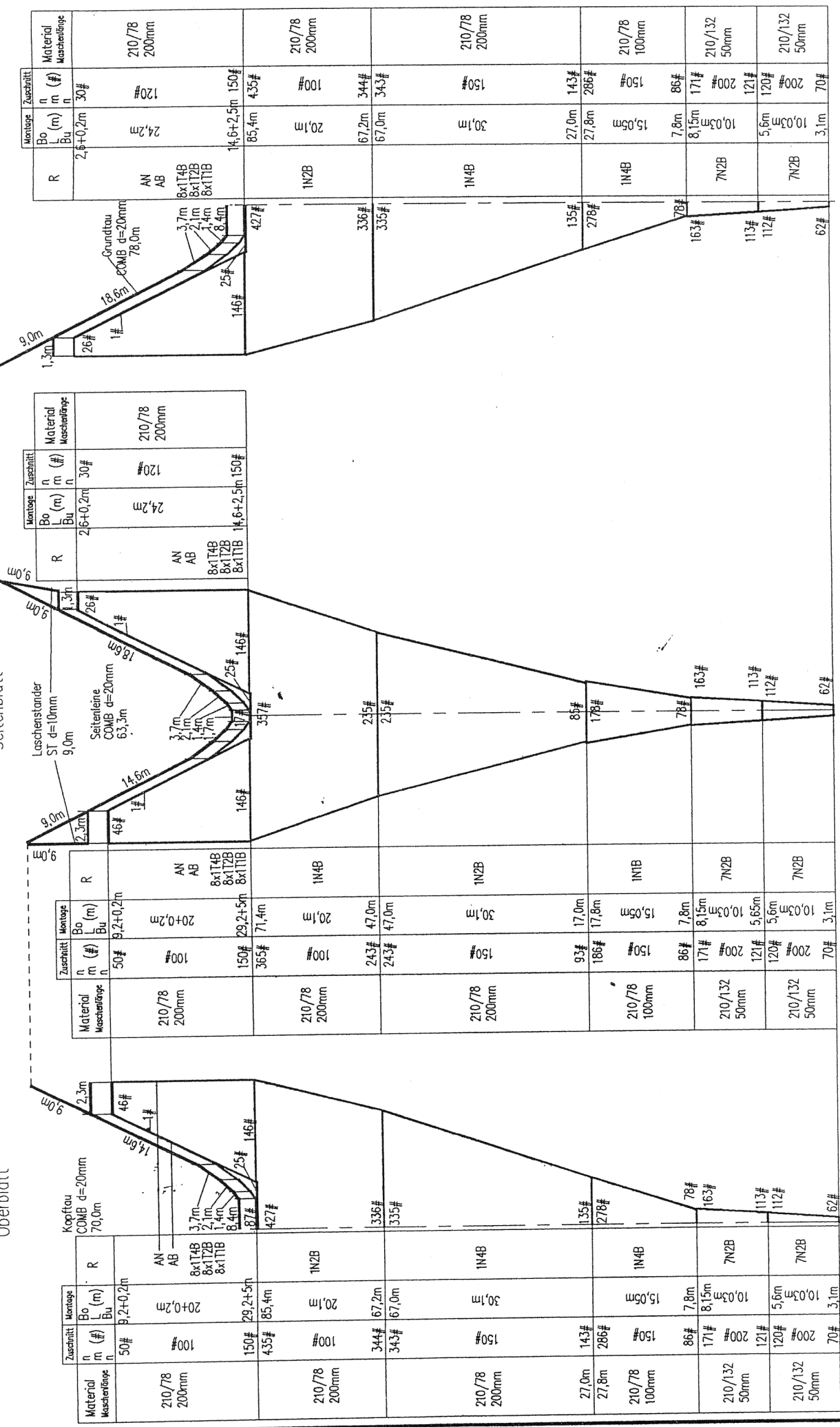
Blatt

1/2

Oberblatt

Seitenblatt

Unterblatt



Material			Zuschmitt			Montage				
Material Maschenweite	n	m (#)	n	m (#)	Bo L (m)	Bo L (m)	Bo L (m)	n	m (#)	R
210/78 200mm	50	9,2+0,2m	50	9,2+0,2m	9,0m	9,0m	9,0m	50	9,2+0,2m	AN AB
210/78 200mm	100	20+0,2m	100	20+0,2m	9,0m	9,0m	9,0m	100	20+0,2m	AN AB 8x1T4B 8x1T2B 8x1T1B
210/78 200mm	150	29,2+0,5m	150	29,2+0,5m	9,0m	9,0m	9,0m	150	14,6+2,5m	AN AB 8x1T4B 8x1T2B 8x1T1B
	435	85,4m	365	71,4m	2,3m	1,3m	1,3m	435	85,4m	
210/78 200mm	100	20,1m	100	20,1m				100	20,1m	1N2B
	344	67,2m	243	47,0m				344	67,2m	
	343	67,0m	243	47,0m				343	67,0m	
210/78 200mm	150	30,1m	150	30,1m				150	30,1m	1N4B
	143	27,0m	93	17,0m				143	27,0m	
	286	27,8m	186	17,8m				286	27,8m	
210/78 100mm	150	15,05m	150	15,05m				150	15,05m	1N1B
	88	7,8m	88	7,8m				88	7,8m	
	171	8,15m	171	8,15m				171	8,15m	
210/132 50mm	200	10,03m	200	10,03m				200	10,03m	7N2B
	121	5,65m	121	5,65m				121	5,65m	
	120	5,6m	120	5,6m				120	5,6m	
	200	10,03m	200	10,03m				200	10,03m	7N2B
	70	3,1m	70	3,1m				70	3,1m	

Gesamtlänge Lges=18,5m
Gestreckter Umfang U=31,4m

Pei Schleppnetz 1600# (314m)
Nach dem Entwurf der Fa. Hermann Engel

Beauftragter		Datum		Name	
Beauftr.	Geprc.				
Bundesforschungsanstalt für Fischerei Institut für Fischereitechnik					
Zust.	Änderung	Datum	Name		

1:750

Bl.
Blatt