NOTIFICATION OF PROPOSED RESEARCH CRUISE

PART B: GENERAL

1. NAME OF RESEARCH SHIP F.S. **"Poseidon"** Cruise No. P352

2. DATES OF CRUISE FROM 08.06.07 (embark Bremerhaven 07.06.07)
TO 05.07.07 (disembark Kiel 06.07.07)

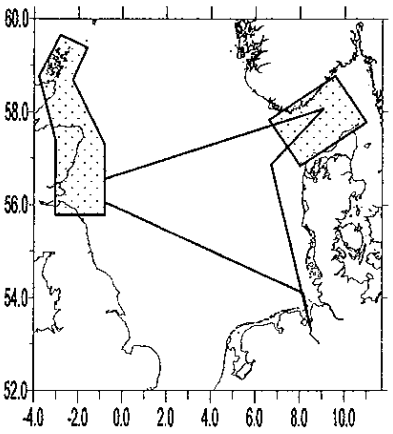
3. a) PURPOSE OF RESEARCH

The objective of this cruise is to conduct an limited oceanographic survey for key species (*Alexandrium* spp., *Pseudo-nitzschia* spp., *Dinophysis* spp., etc.) that form Harmful Algal Blooms in the North Sea and adjacent coastal waters. Profiling instrumentation (biooptics, physical oceanography, fluorescence) will be combined with sampling for phytoplankton, microzooplankton and metazooplankton for on board experiments on grazing, population genetics and toxin compartmentalization. This cruise is expected to contribute to the comparative studies conducted under GEOHAB to understanding the processes underlying bloom dynamics.

b) GENERAL OBERATIONAL METHODS (including full description of any fishing geartrawl type, mesh size etc)

The operational methods involved in this cruise involved standard oceanographic profiling instrumentation (CTD, HyperSpectral profiler, in situ fluorometer) and equipment for plankton sampling (Rosette sampler, plankton nets). No fishing gear will be deployed and no benthic dredge sampling is proposed. Plankton catch will be limited to size-fraction <300 µm, specifically for nanophytoplankton (20 µm) and zooplankton size fractions (150 and 300 µm) mesh size.

4. ATTACH CHART showing (on an **appropriate scale**) the geographical area of the intended work, positions of intended stations, tracks of survey lines, positions of moored / seabed equipment, areas to be fished:



Betroffene Küstenstaaten:
Großbrittanien, Norwegen, Dänemark

The coastal areas involved include those of Scotland/Great Britain, Norway and Denmark. The shaded grid areas indicated the general scope of the proposed sampling. No moorages or other seabed anchorages are planned, but rather a drifter will be deployed to follow the current track and the anticipated bloom patches of the target organisms. Plankton are by definition "wanderers" therefore fixed stations cannot be established in advance of the *in situ* sampling. To set the key stations for sampling and to begin the drift series, we expect to conduct a preliminary survey of the grid at approximately 5 km resolution and repeat as necessary with modified resolution.