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Agenda Item 5.2: **Elaboration of a recovery plan for harbour porpoises in the North Sea**

Agenda Item 5.6: **Population Distribution, Sizes and Structures (review of new information)**

Application for support of Baltic harbour porpoise acoustic survey

Submitted by: **Estonian Fund for Nature**

NOTE:
IN THE INTERESTS OF ECONOMY, DELEGATES ARE KINDLY REMINDED TO BRING THEIR OWN COPIES OF THESE DOCUMENTS TO THE MEETING

Estonian Fund for Nature

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Application for support of Baltic harbour porpoise acoustic survey.

Background

Historically quite abandoned cetacean species – Harbour porpoise – have almost distinct from central and northern parts of Baltic Sea. From 1950 there have been five findings of stranded animals from Gulf of Riga area and Baltic proper and one sighting from Gulf of Finland (see Annex 1). Nevertheless, during the last 10-15 years three porpoises have by-caught at Gulf of Riga area. Supported by sighting surveys carried out by Finland and Sweden, it is obvious, that porpoises are visiting the northern Baltic proper and archipelagos.
In connection with accession of Estonia to ASCOBANS, new activities have planned for getting more information about occurrence and distribution of porpoises in Estonian waters.
With support from Estonian Environmental Fund the public awareness campaign is planned in May – June 2004 to get sailors, fishermen etc informed about harbour porpoises and threats affecting the Baltic harbour porpoise population. Compare with Sweden and Finland, number of people spending their time out at sea is much smaller and probability of seeing porpoises is very low.
Modern acoustic devices (T-PODs – porpoise detectors) allow detecting porpoise sonar signals and occurrence of animals automatically and obtaining the information is not influenced by seasonal and spatial pattern of human activities at sea.

Objectives

The main objective of project is detecting harbour porpoise occurrence and estimating abundance in low-density distribution areas of Baltic Sea and applying modern inter-calibrated technology of cetacean research to Northeast Baltic regions, in co-operation with other countries in range.

Outcome

Knowledge about occurrence, seasonal and spatial distribution pattern of harbour porpoises in North-east Baltic.

Proposals for establishing marine protected areas for Natura 2000 network.

Activities

1. Training and calibration of PODs in German Oceanographic Museum, Stralsund. (second week of May 2004)
2. Deployment of T-PODs to 3-4 locations in Estonian coastal sea (end of May 2004).
3. Downloading data from T-PODs and replacing batteries. Once in month, June – November 2004.
4. Data analyses (November 2004 – January 2005)

Equipment and expenses needed

	Approximate Cost
Porpoise detectors	1900 € x 6 = 11 400 €
Data downloading system	1300 €
one week travel + accomodation to Stralsund,	1000 €
costs for material (batteries etc.),	800 €
anchoring system	650 €
Preparation of project, boat rent, running costs etc	3200 € (covered by Estonian Environmental Fund)
TOTAL	(18350€)

Technical specifications of site selection and deployment system.

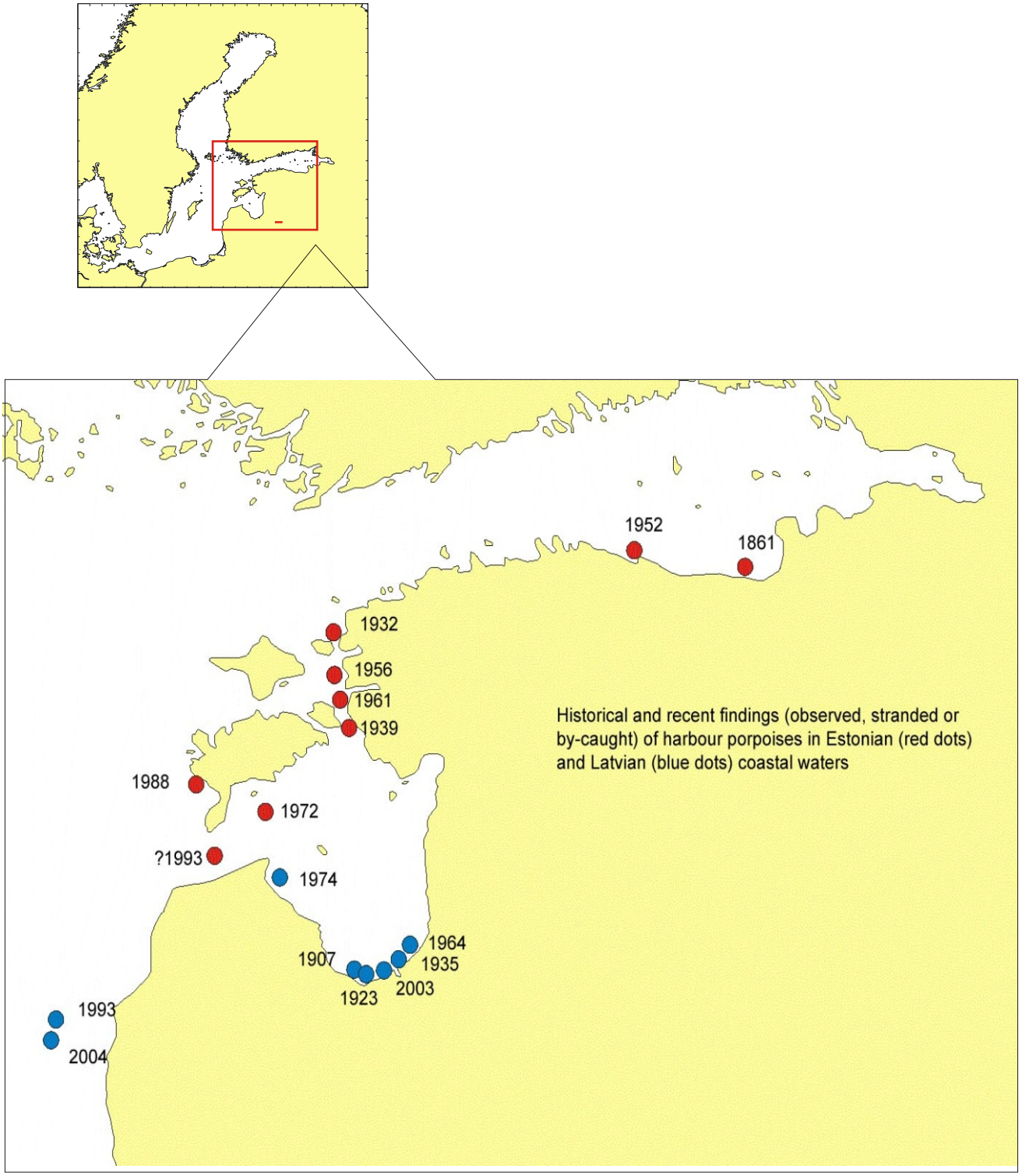
Estonian coastal sea is quite shallow and with many underwater reefs. Main ship routes are set to deeper sea areas. Passages between islands and mainland are relatively narrow. Pre-selected sites have set to passages or close to underwater reefs, above 20-meter depth line and outside from trawling areas. Maximum distance from shoreline is 10 nautical miles (see Annex 2). This allows using smaller and vessels for deploying and maintaining T-PODs. Use of small vessels also reduces the cost and makes work more flexible. It is preliminary agreed with Estonian Offshore Sailing Club (partner of “Sailing for the Seas”), that they can provide their sailing boats for fieldwork.

T-PODs will be deployed with submerged buoy-stations. All the mooring is underwater; system is build from anchors, buoys, and ropes (see Annex 3). Position of station will be measured by GPS when deployed. For maintaining and data downloading buoy-stations will be pulled out by grapnel.

Ivar Jüssi
Estonian Fund for Nature

Project manager

ANNEX 1


1952
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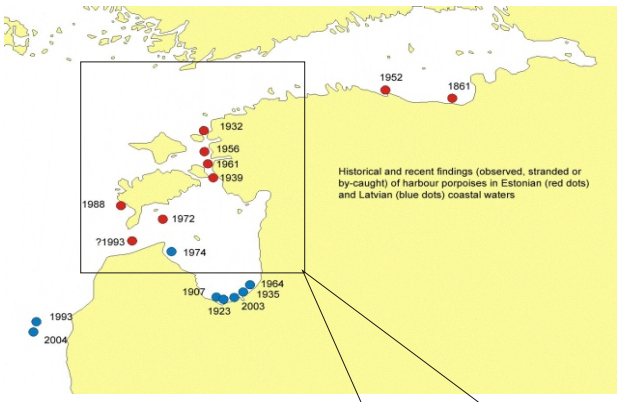
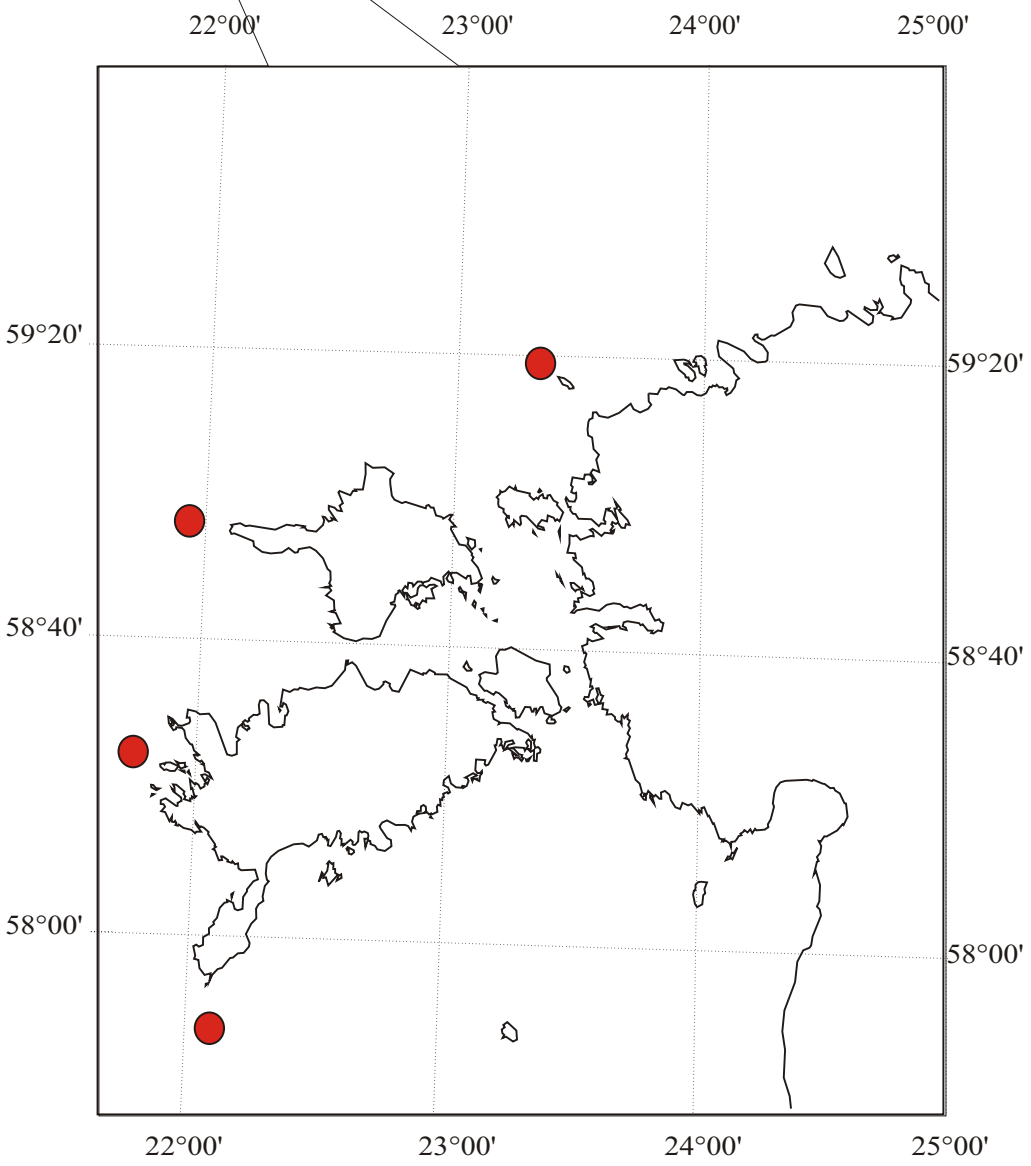
Historical and recent findings (observed, stranded or by-caught) of harbour porpoises in Estonian (red dots) and Latvian (blue dots) coastal waters

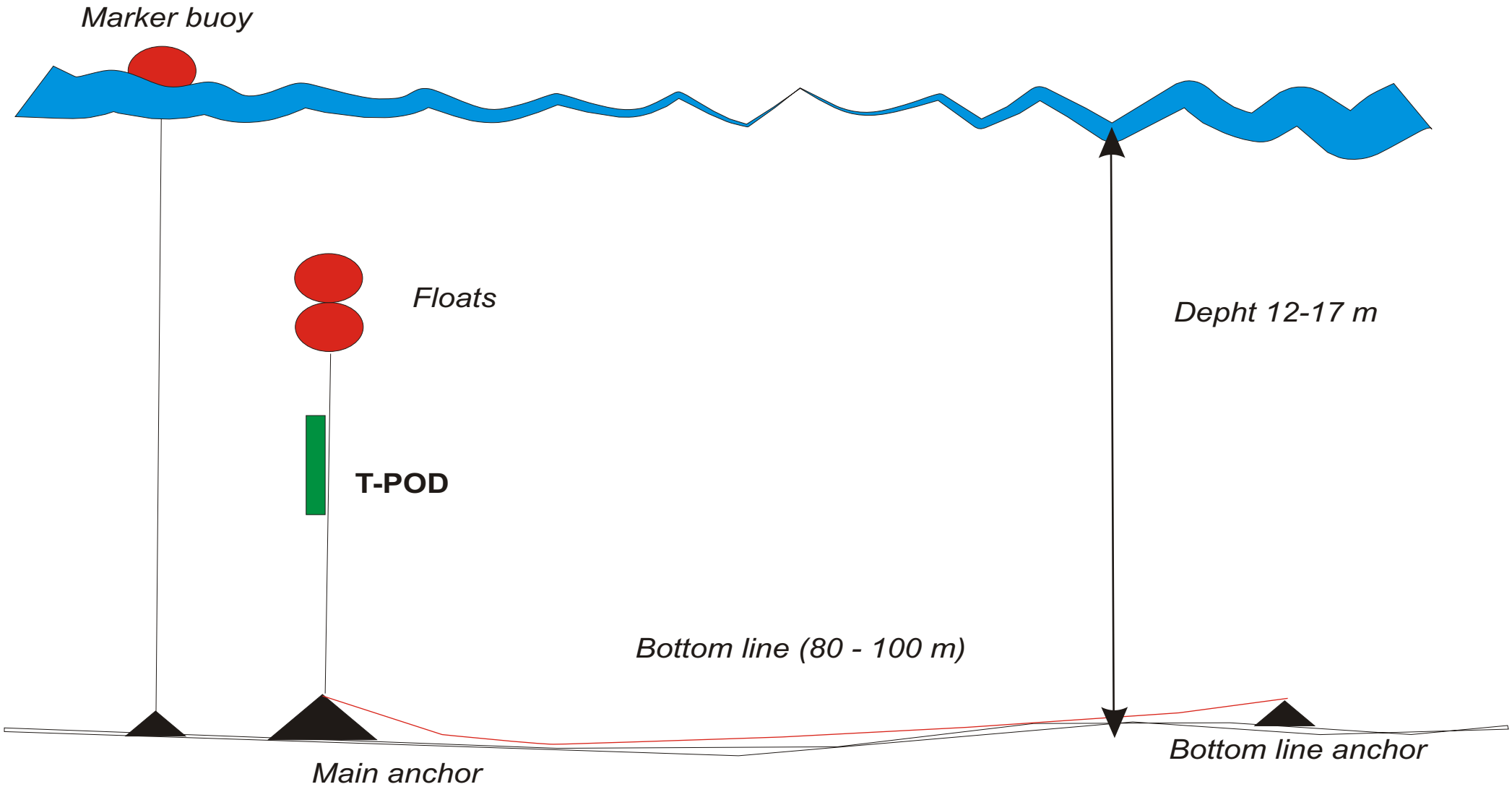
ANNEX 2





Pre-selected sites for Harbour porpoise acoustic survey 2004

ANNEX 3



Scheme of buoy-station