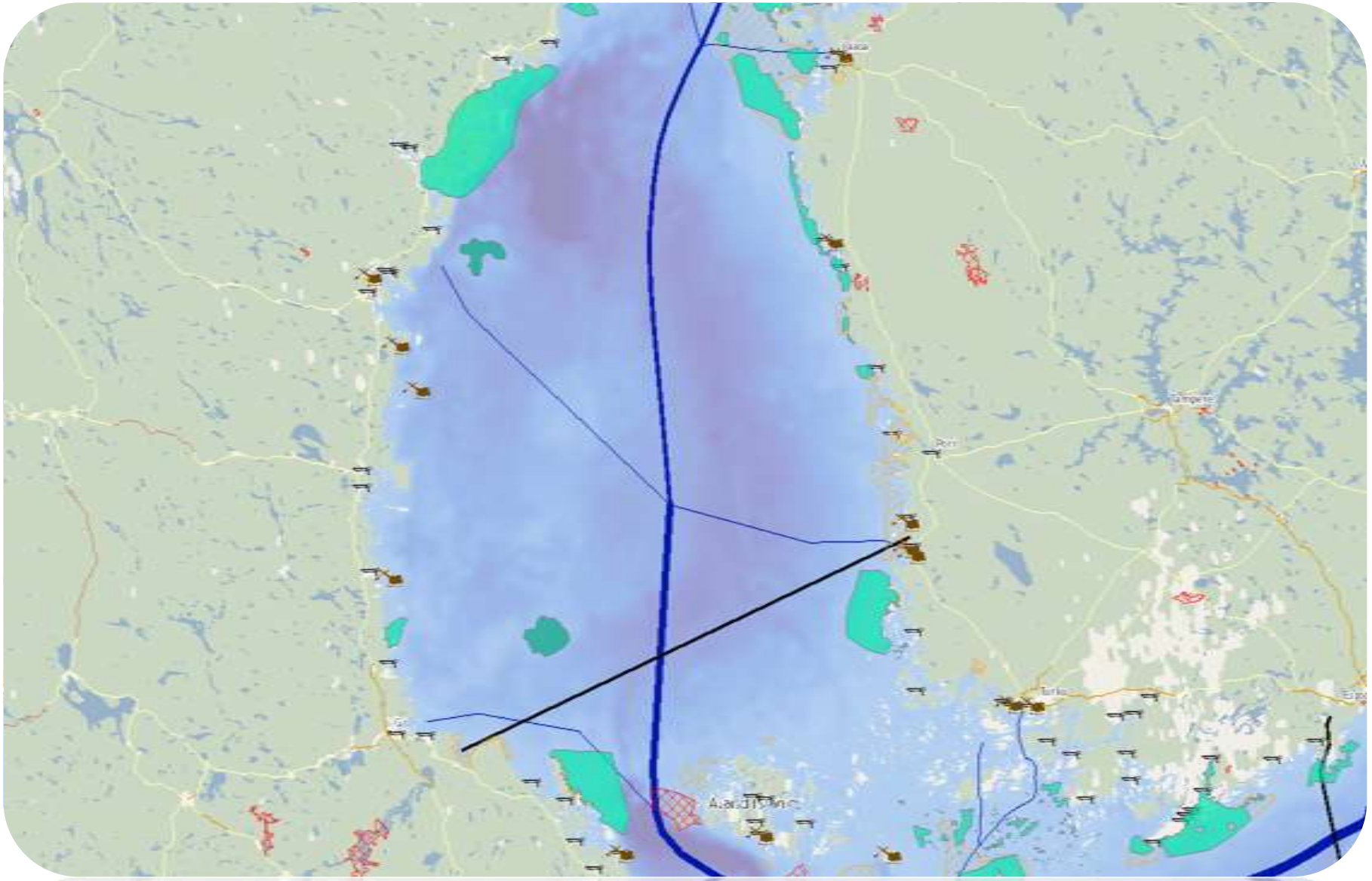
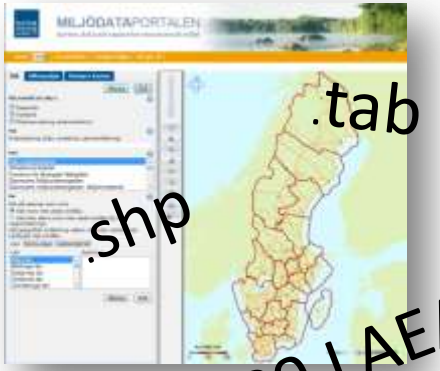


GIS in Plan Bothnia Project

Manuel Frias.
Planning Seminar. March 2011



HOW?

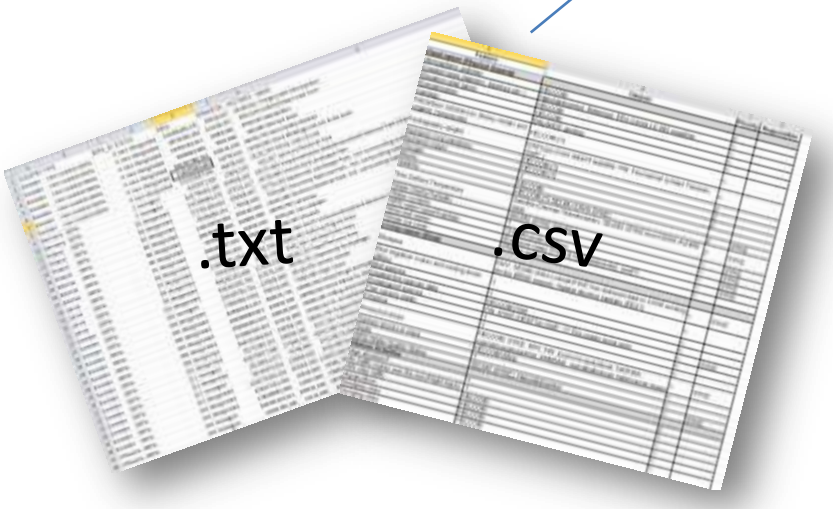


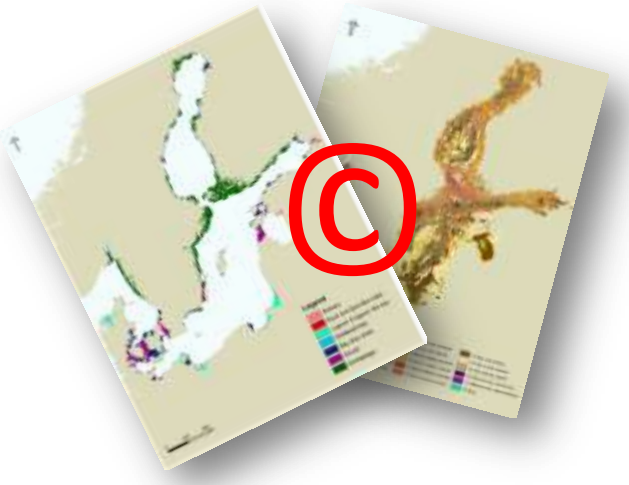
ETRS89 LAEA



WGS84

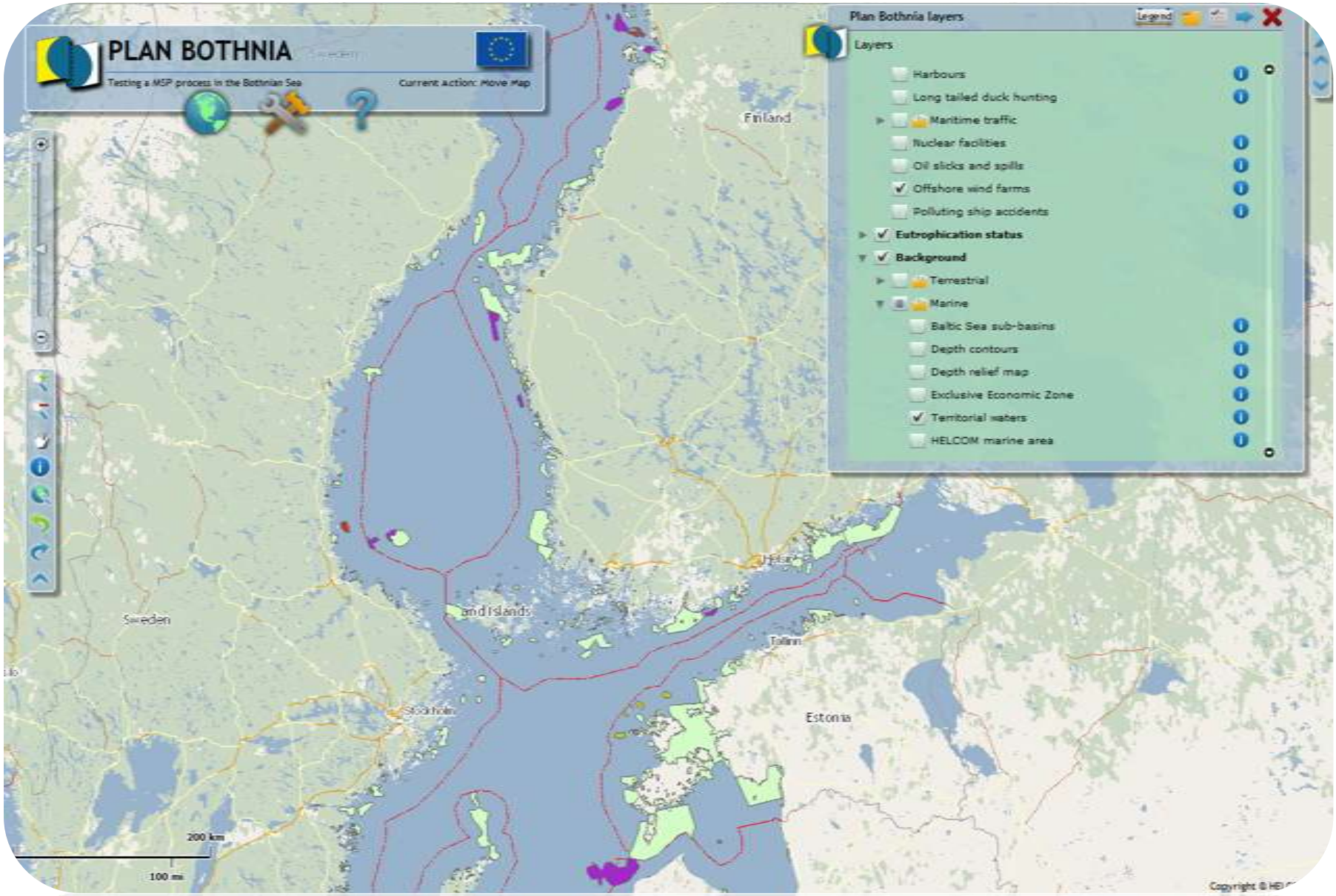
PLAN BOTHNIA





MAP SERVICE

Feature	Dataset	Priority NordR.	Priority SYKE	Priority CMS	Responsible	Comment NordR.	Comment HELCOM	Data already available at HELCOM
Dead nature (Physical Aspects)	**Dataset**	**Priority NordR.**	**Priority SYKE**	**Priority CMS**	**Responsible**	**Comment NordR.**	**Comment HELCOM**	Data already avail
Atmospheric pollution	HELCOM		2		HELCOM			1
Coastal types (lagoons, beaches etc)	Naturvårdsverket, Bottentyp, EEA Corine LC 200 coastline		1		No one			
Elevation relief (land)	HELCOM		1		HELCOM			1
Eutrophication	HELCOM		1		HELCOM			1
Geology	BALANCE geology		1		HELCOM			1
Hazardous substances (heavy metals and organic compounds)	HELCOM (?)		1		HELCOM			1
Hydrography (depth)	IOW topo (more detail if available: FIN: Finnmarinet ty/Harri Tolvanen, SWE:)		1		HELCOM			1
Nutrients concentrations	HELCOM (?)		2		HELCOM			1
Nutrients inputs	HELCOM (?)		2		HELCOM			1
Oxygen	?		2		HELCOM			1
Rivers	HELCOM				HELCOM			1
Salinity	HELCOM (?) SELMU (OIVA SYKE)		2		SYKE		HELCOM also has dataset	
Sea Surface Temperature	Satellite (German Warnemünde), SELMU (SYKE from NOAA AVHRR data)		2		SYKE			
Water Clarity/Turbidity	SELMU (SYKE Satellite)		1		SYKE			
Water currents	?		1		SYKE			
WFD water types/typology	CHARM project/ Selmu		1		SYKE			
Wind and waves	(Exposure maps SYKE & Naturvårdsverket, wind?)		1		SYKE			
Winter ice cover	(FMI ice service)		1		No one			
Living nature (Biota)					**Responsible**			
Biotopes	NVV, SELMU (Niko Leikola/SYKE has delivered data to COWI working for the BRISK project). Habitat directive habitats (EEA?)		1		SYKE			
Bird migration routes and nesting areas (IBAs)	?		1		CMS			
Bird species	?		1		No one			
Coastal fish species data	HELCOM FISH		1		HELCOM			1
Endangered species	FIN :SYKE (HERTTA) SWE :?? This needs some work.		1		SYKE			1
Fish nursery areas	?		1		No one			
Porpoise	?		1		HELCOM			1
Protected areas	HELCOM, SYKE, NVV, FIN: luonnonsuojelualueet, NATURA, luonnonsuojeluojelmat, RAMSAR, metsähallituksen hallinnoimat alueet		1		SYKE		HELCOM also has dataset	
Salmon stocks in rivers	HELCOM (Miia)		1		HELCOM			1
Seals	?		1		HELCOM			1
WFD Water Quality Status	SELMU (SYKE), Naturvårdsverket		1		SYKE			
Human Activities					**Responsible**			
Age & gender structure (Labour force aged popula	SCB / Tilastokeskus	1	2		Nordregio	Municipal data; 31.12.2010 data available in mid- March		
Age & gender structure (Dependency ratio)	SCB / Tilastokeskus	1	2			Municipal data;		


PLAN BOTHNIA
Testing a MSP process in the Bothnian Sea
Current action: Move Map
Plan Bothnia layers
Legend
Layers
Harbours
Long tailed duck hunting
Maritime traffic
Nuclear facilities
Oil slicks and spills
Offshore wind farms
Polluting ship accidents
Eutrophication status
Background
Terrestrial
Marine
Baltic Sea sub-basins
Depth contours
Depth relief map
Exclusive Economic Zone
Territorial waters
HELCOM marine area
Finland
Sweden
Estonia
Tallinn
Stockholm
200 km
100 mi