HELCOM MORE

Past, present and future

Manuel Frias
MONAS 19
Helsinki 19.11.2013

HELCOM

1 Overview of monitoring activities

2 Monitoring and assessment STRATEGY

3 Monitoring manual

2012 2013 2014 2015

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Overview of the marine environmental monitoring in the Baltic Sea



HELCOM Secretariat
June 2013
Version corrected after MORE 5

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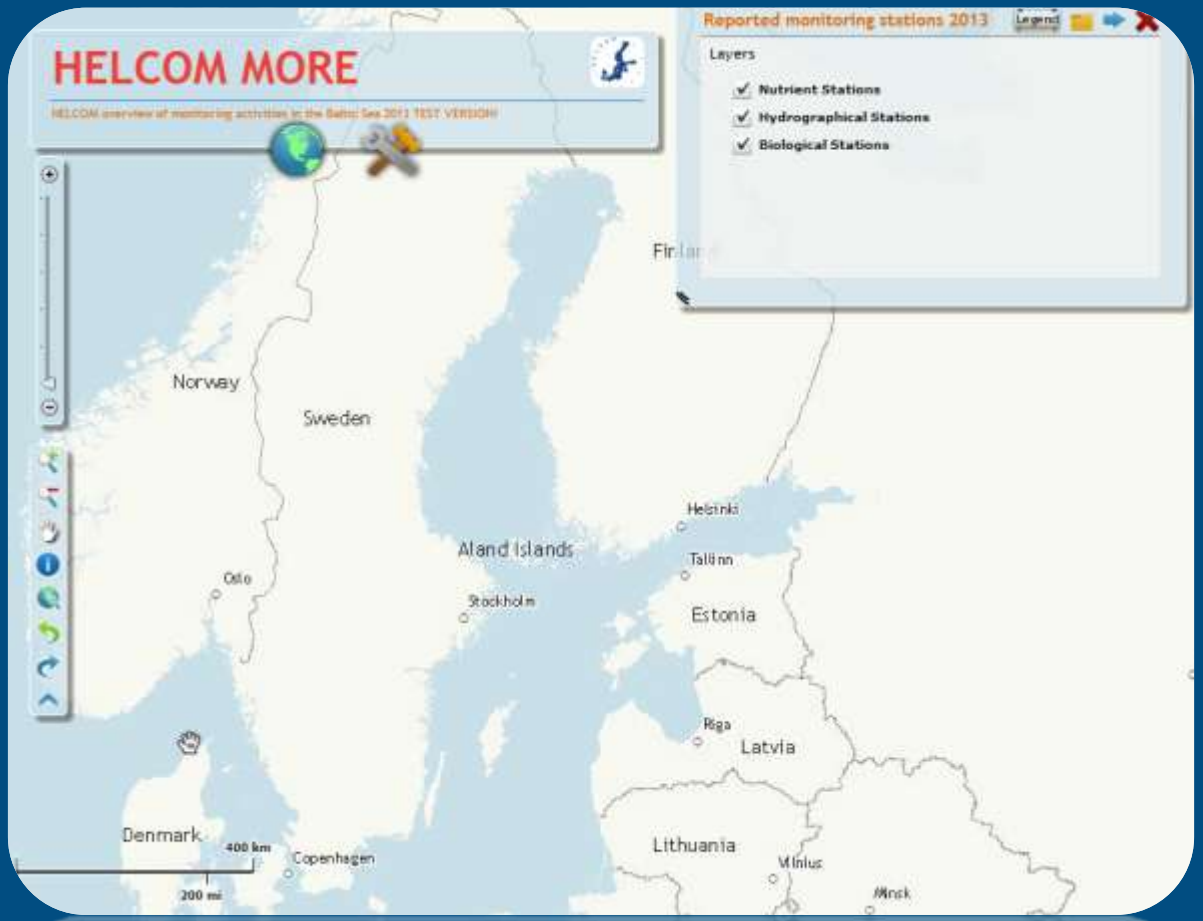
WHO sent WHAT so far?

	 Biological	 Hazardous	 Hydrographical	 Nutrients
Estonia				
Finland		✓	Only coastal	Only coastal
Denmark				
Germany	✓	✓	✓	✓
Latvia	✓	✓	✓	✓
Lithuania	✓	✓	✓	✓
Poland		✓	✓	
Russia				
Sweden	✓	✓	✓	✓


WHO sent WHAT so far?
Biological
Hazardous
Hydrographical
Nutrients
Estonia
Finland
Denmark
Ger
Latv
Lithu
Poland
Russia
Sweden
This was in MONAS last year!!

	 Biological	 Hazardous	 Hydrographical	 Nutrients	 Marine Litter
Estonia	✓	✓	✓	✓	✓
Finland	✓	✓	✓	✓	✓
Denmark	✓	✓	✓	✓	✓
Germany	✓	✓	✓	✓	✓
Latvia	✓	✓	✓	✓	✓
Lithuania	✓	✓	✓	✓	✓
Poland	✓	✓	✓	✓	✓
Russia			✓	✓	
Sweden	✓	✓	✓	✓	✓

The map service http://maps.helcom.fi/website/HelcomMORE/index.html



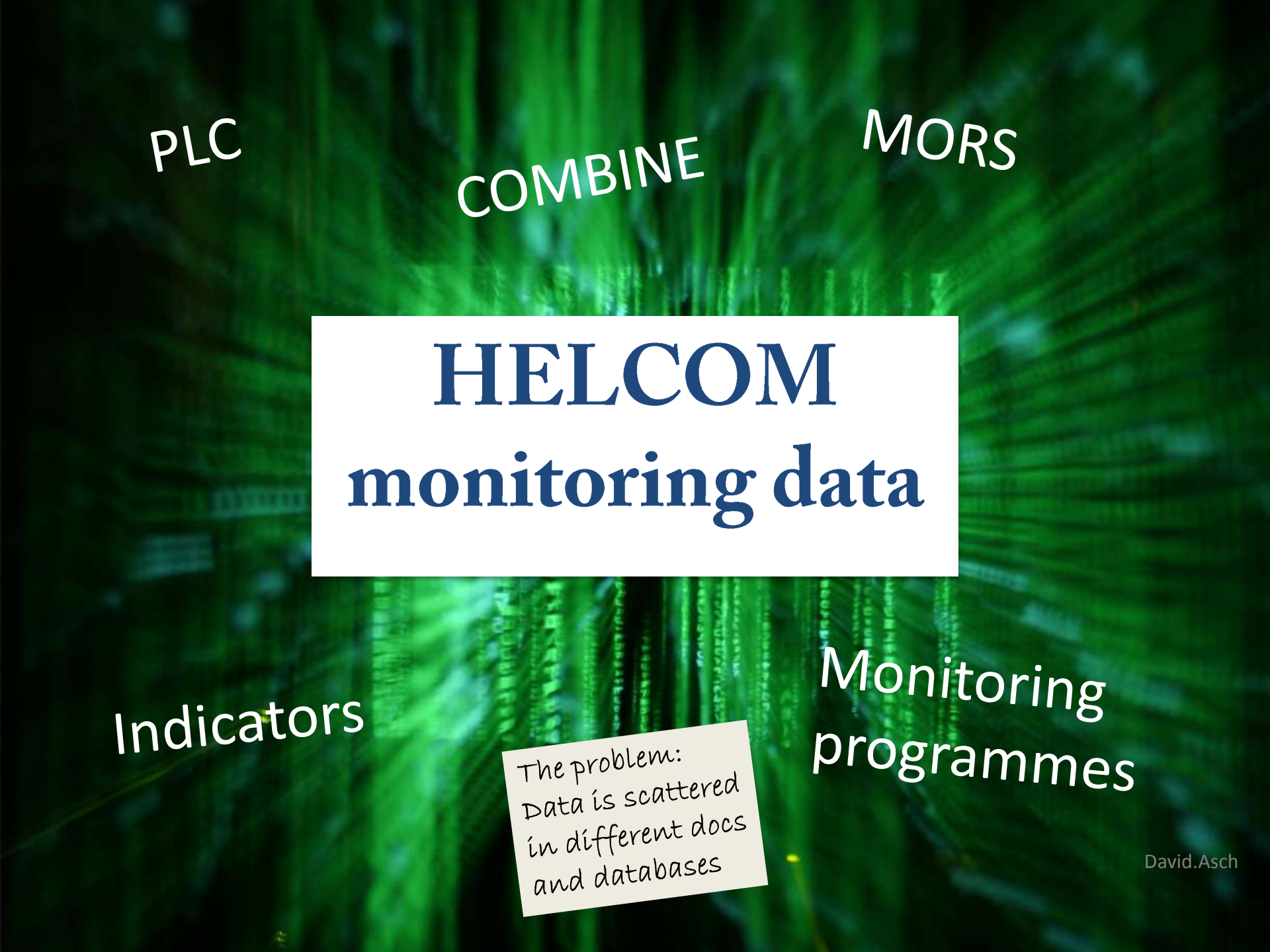
BALSAM will use this data!

The new Monitoring and Assessment Strategy

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The monitoring manual

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PLC
COMBINE
MORS
HELCOM
monitoring data
Indicators
Monitoring
programmes
The problem:
Data is scattered
in different docs
and databases
David.Asch



to present this information in one place

Coordination is the KEY



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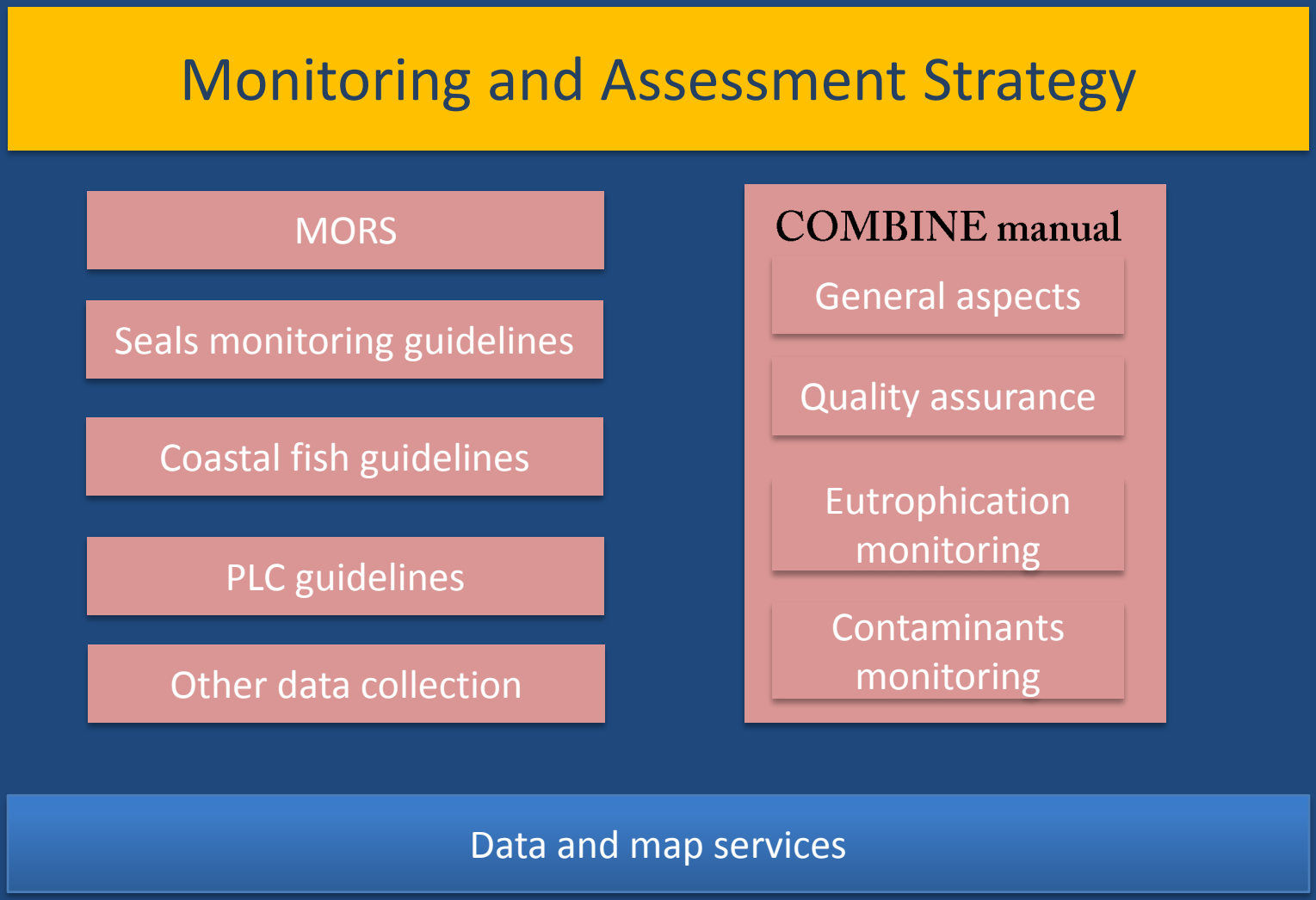
MSFD requirement

Reporting and coordination of monitoring programmes

How?



Current structure



Proposed structure

Monitoring manual

Monitoring and Assessment Strategy

Framework

General description of HELCOM monitoring

Summaries of the monitoring programmes

- Programme 1
- Programme 2
- Programme 3...

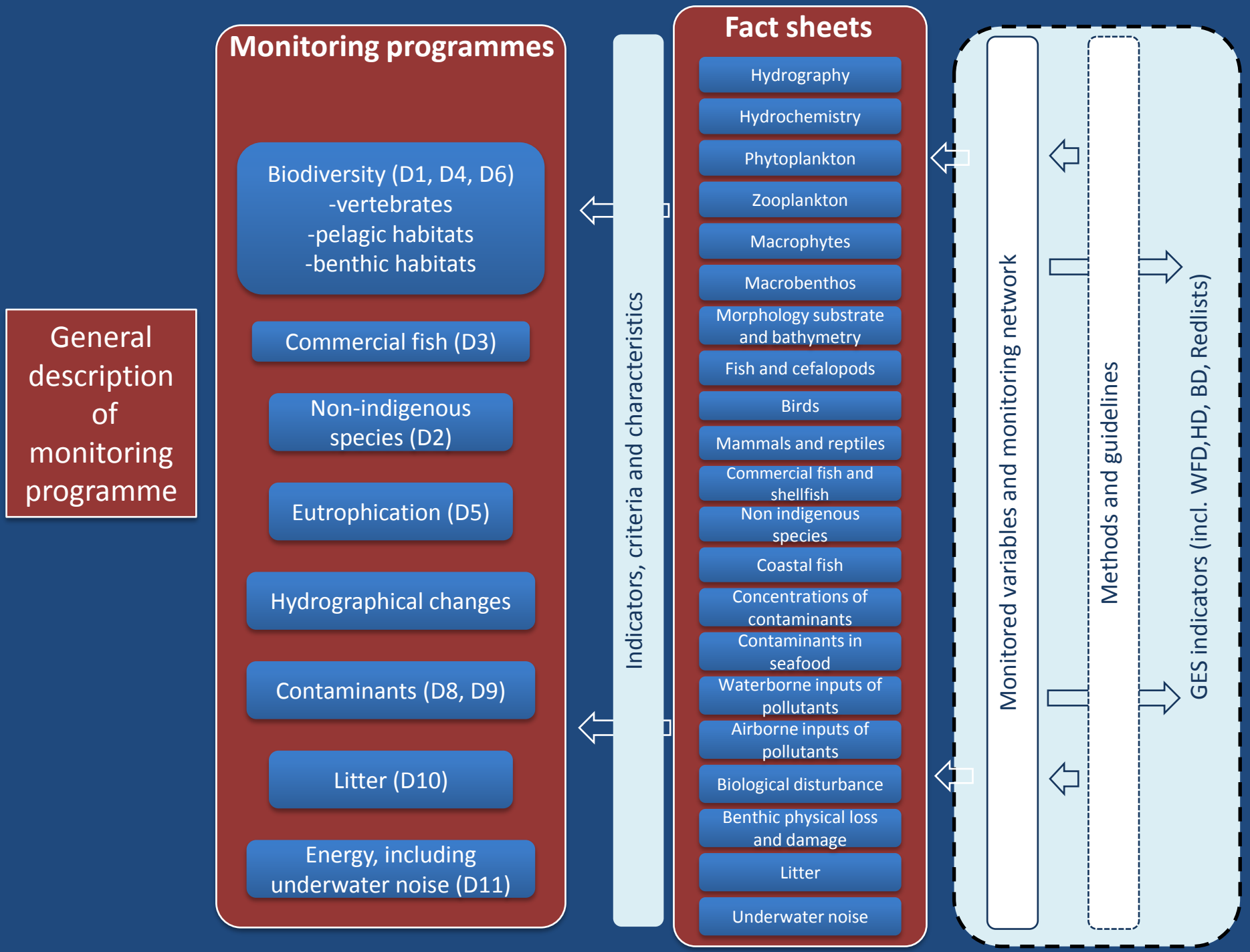
Monitoring fact sheets

- Hydrography
- Hydrochemistry
- Phytoplankton
- Zooplankton
- Macrophytes...

Technical guidelines (guidelines, methods, QA...)

Data and map services

Indicator-related assessment products


General description of monitoring programme
Monitoring programmes
Biodiversity (D1, D4, D6)
-vertebrates
-pelagic habitats
-benthic habitats
Commercial fish (D3)
Non-indigenous species (D2)
Eutrophication (D5)
Hydrographical changes
Contaminants (D8, D9)
Litter (D10)
Energy, including underwater noise (D11)
Indicators, criteria and characteristics
Fact sheets
Hydrography
Hydrochemistry
Phytoplankton
Zooplankton
Macrophytes
Macrobenthos
Morphology substrate and bathymetry
Fish and cefalopods
Birds
Mammals and reptiles
Commercial fish and shellfish
Non indigenous species
Coastal fish
Concentrations of contaminants
Contaminants in seafood
Waterborne inputs of pollutants
Airborne inputs of pollutants
Biological disturbance
Benthic physical loss and damage
Litter
Underwater noise
Monitored variables and monitoring network
Methods and guidelines
GES indicators (incl. WFD,HD, BD, Redlists)



Next steps

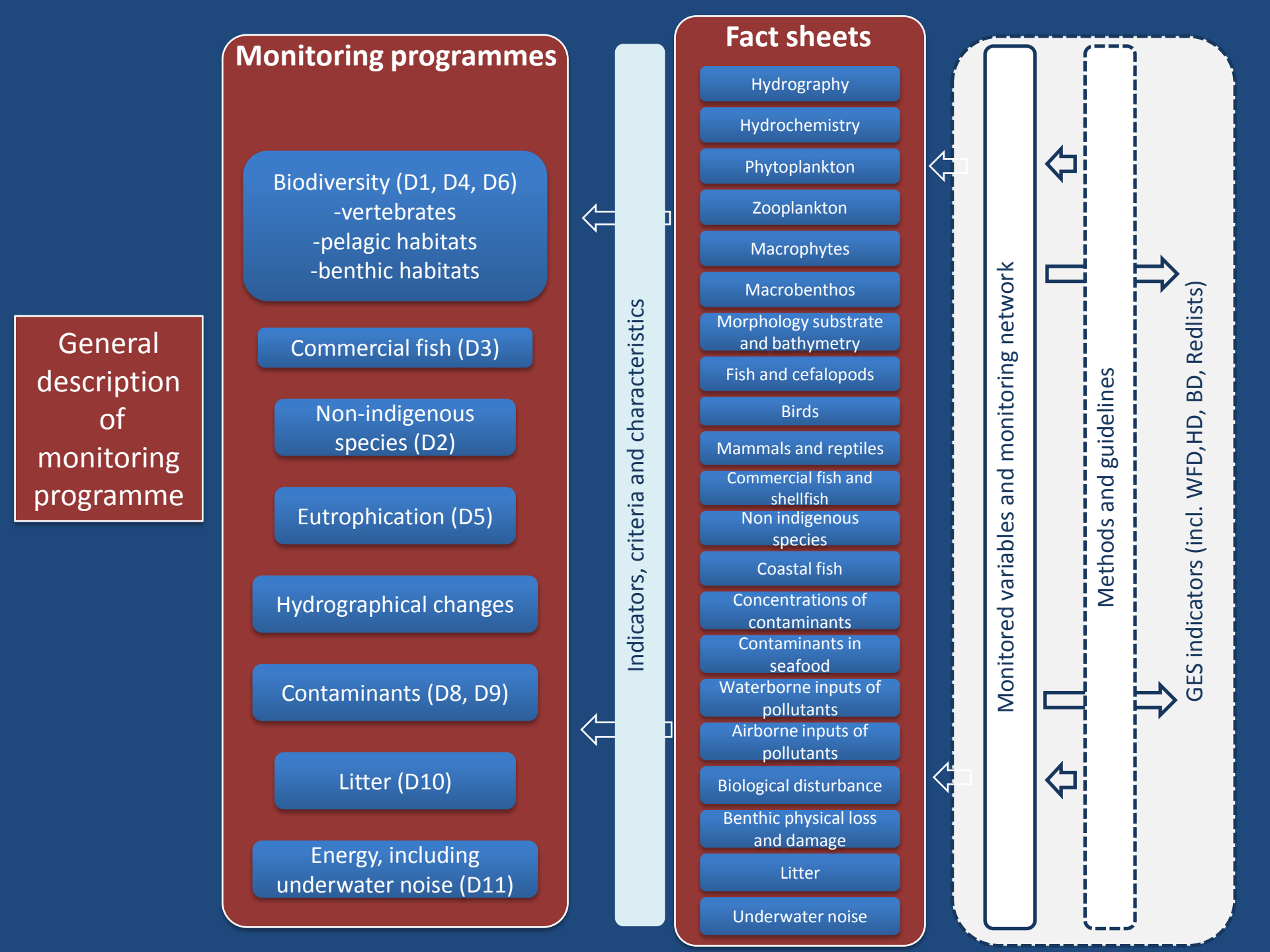
Berlin

13-14 January

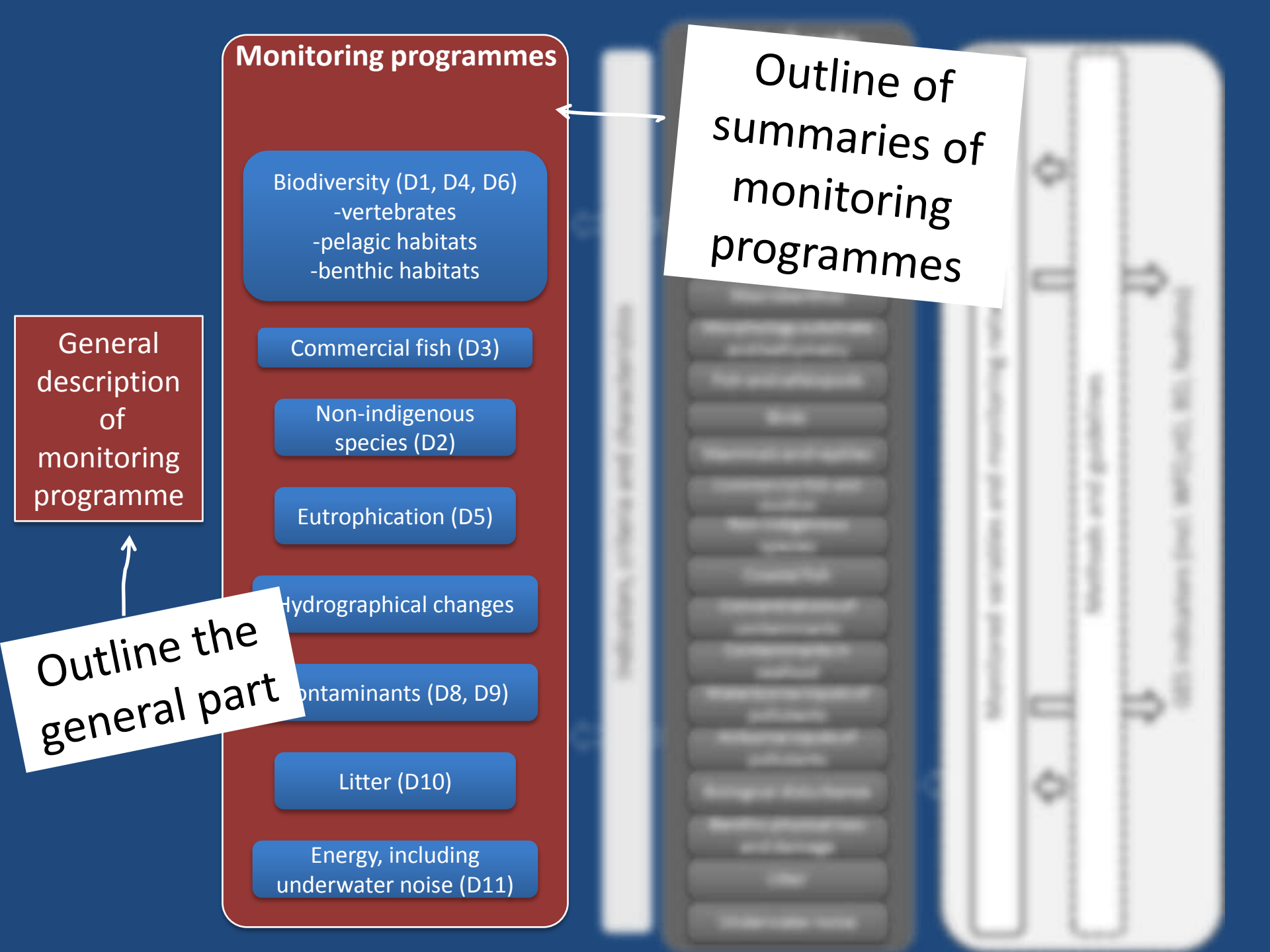
MORE – CORESET II

Robby van Moor

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General description of monitoring programme
Monitoring programmes
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Consider technical aspects


Monitoring programmes
Biodiversity (D1, D4, D6)
-vertebrates
-pelagic habitats
-benthic habitats
Commercial fish (D3)
Non-indigenous species (D2)
Eutrophication (D5)
Hydrographical changes
ontaminants (D8, D9)
Litter (D10)
Energy, including underwater noise (D11)
General description of monitoring programme
Outline the general part
Outline of summaries of monitoring programmes


Further develop fact sheet templates
Fact sheets
Hydrography
Hydrochemistry
Phytoplankton
Zooplankton
Macrophytes
Macrobenthos
Morphology substrate and bathymetry
Fish and cefalopods
Birds
Mammals and reptiles
Commercial fish and shellfish
Non indigenous species
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Concentrations of contaminants
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Waterborne inputs of pollutants
Airborne inputs of pollutants
Biological disturbance
Benthic physical loss and damage
Litter
Underwater noise



See you (some of you) in Berlin!

Nietnagel