



MariTime Spatial Planning [North Sea] Challenge 2050

Think Big – Think Long term –
Think Human

Noordzeedagen 2013

10 oktober 2013

Opzet presentatie

- Waarom serious games?
- Marine Spatial Planning Challenge 2011
- *Maritime* Spatial Planning Challenge 2050
 - Intro
 - Hoe werkt het?
 - Ecopath
- Doel van deze sessie

Waarom serious games?

- Geeft inzicht in complexe problemen
- Brengt mensen samen!
- Sociaal
- Interactief
- Educatief
- Experimenteren
- Fun
-





Marine Spatial Planning Challenge 2011

Deze Serious Game is gespeeld op de ICES, HELCOM/VASAB, OSPAR Workshop over MSP (Lissabon 2-4 november 2011)

Doel van de game

Doel van deze simulatie-game was om een bijdrage te leveren aan het internationale leerproces van (eco-based) MSP.

Doel in the game

“Maak een integraal Marine/Maritime Spatial Plan: definieer de planning horizon, teken de verschillende functies in en presenteer een beperkte set van (inter)nationale regels om het plan uit te voeren”

MSPchallenge2011

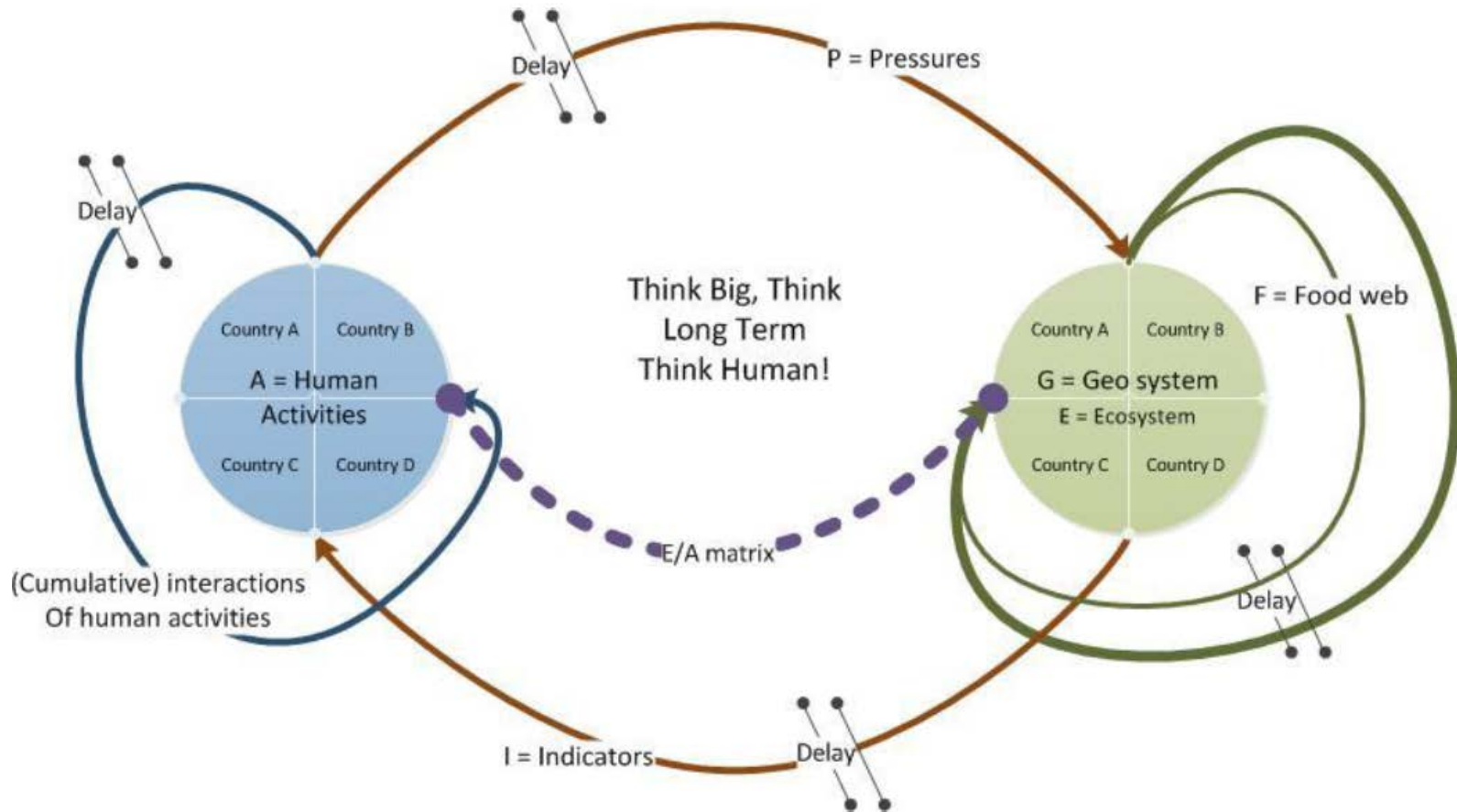




Maritime Spatial Planning Challenge 2050

- MSP Challenge 2050 is een computer ondersteund, multi-player, strategiespel.
- Het doel van de MSP Challenge 2050 is om spelers meer inzicht te geven in de consequences van planningsbeslissingen in ruimte en tijd.
- Het onderliggende model geeft spelers feedback over conflicten, effecten en de algemene performance.
- Concept is flexibel, en makkelijk uitbreidbaar (zowel qua functies en pressures als voor andere zeegebieden)

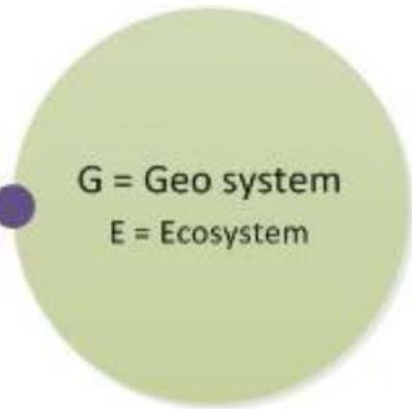
MSP denkmodel: hoe werk het?

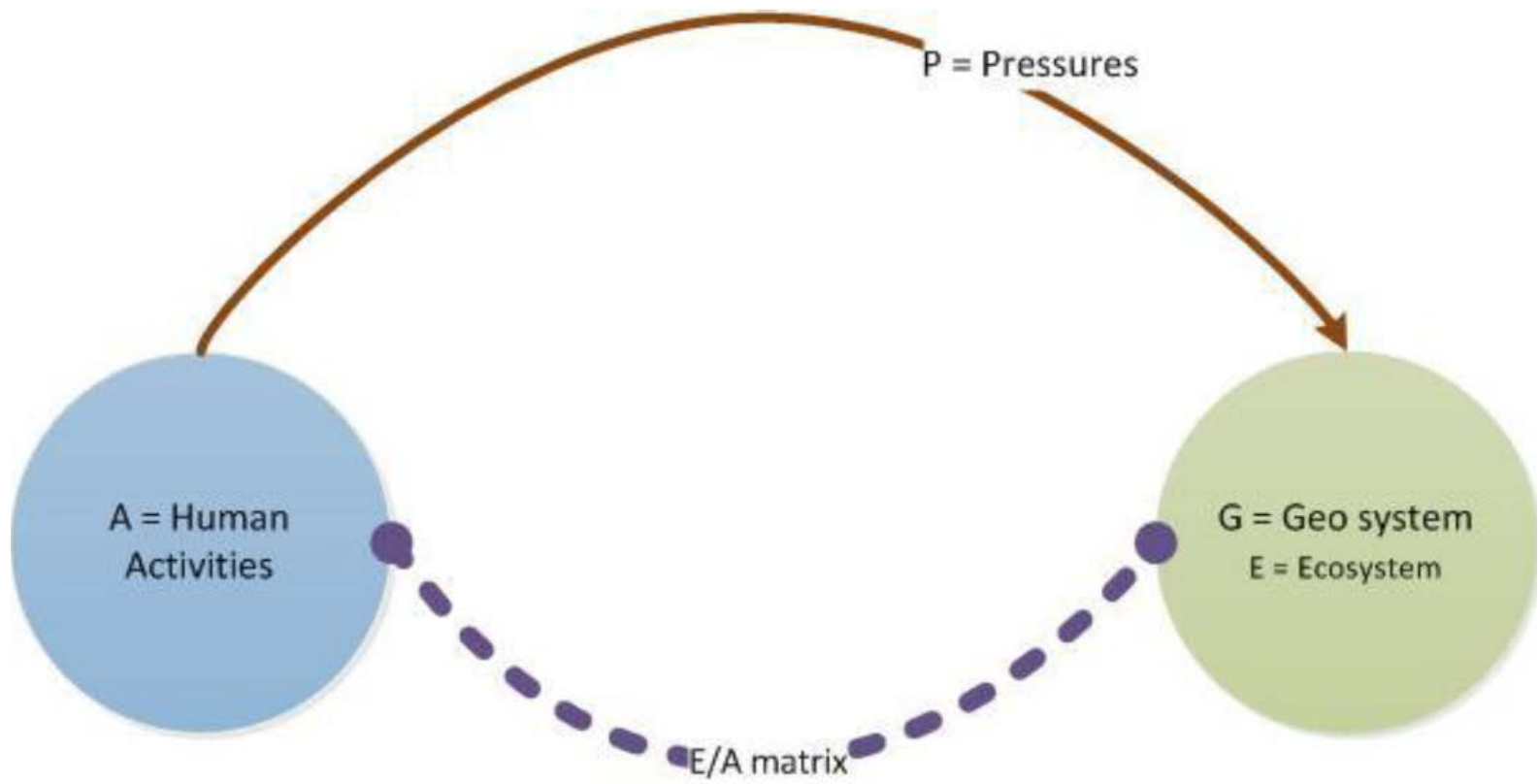


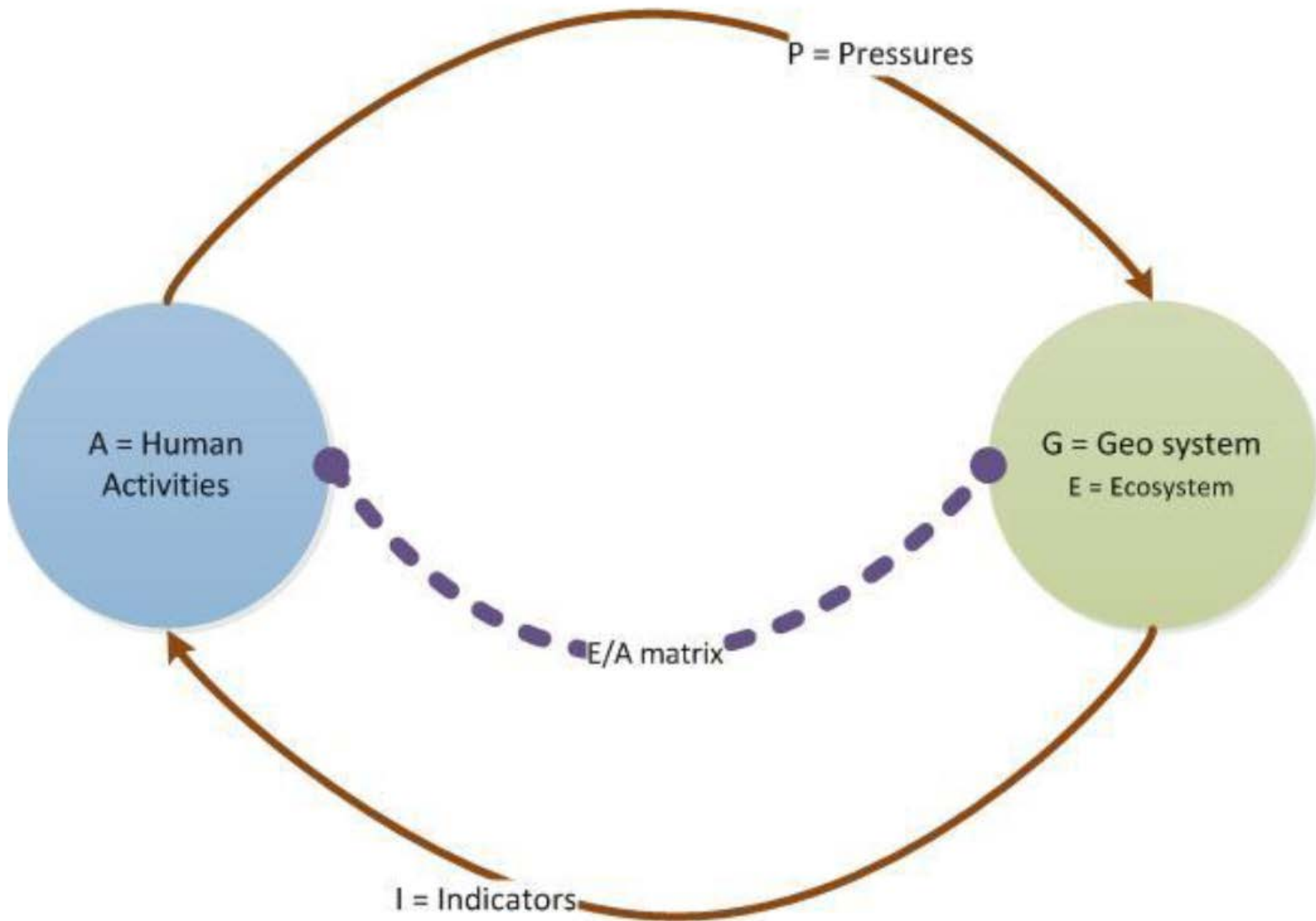


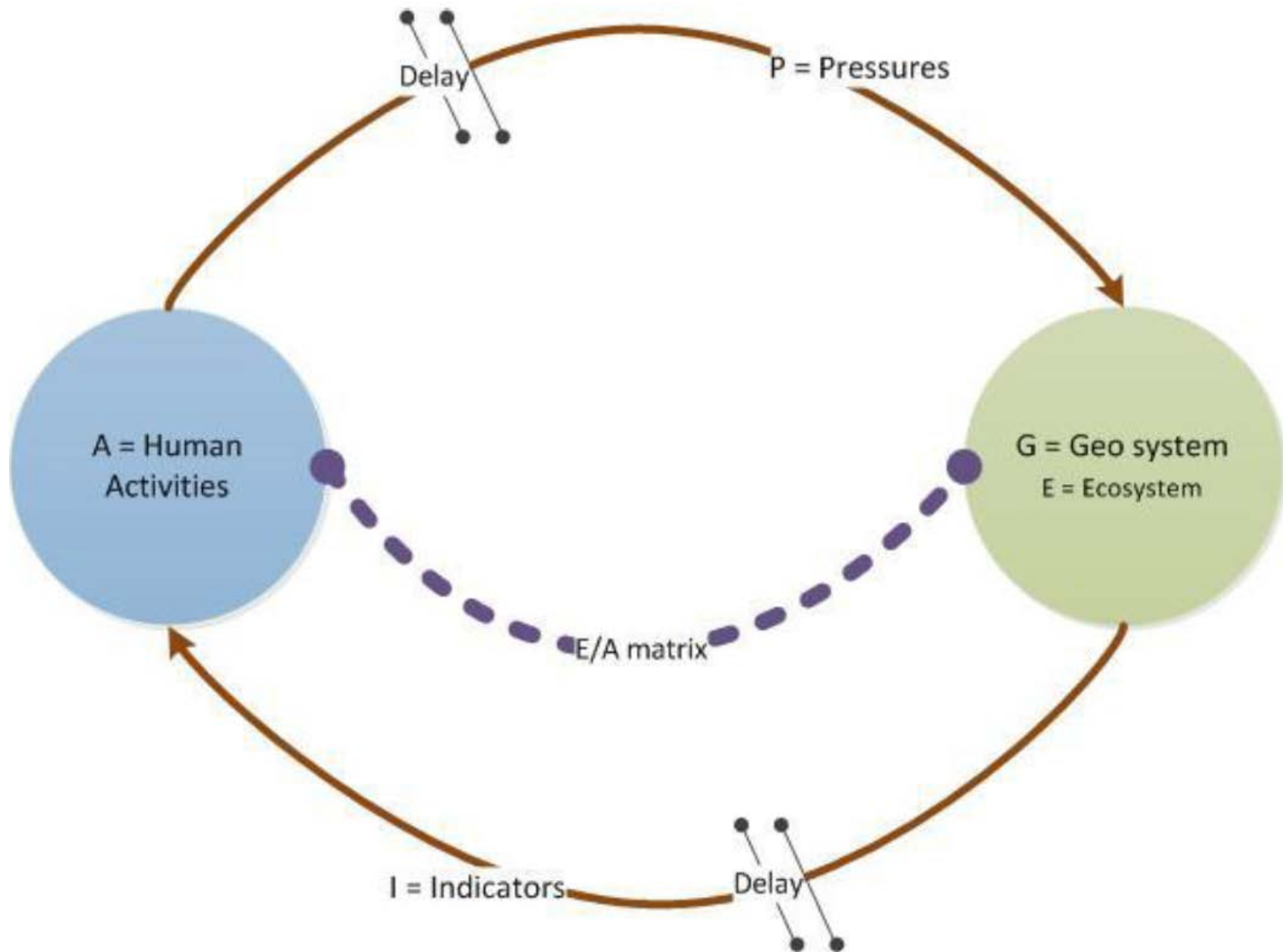
Players take home

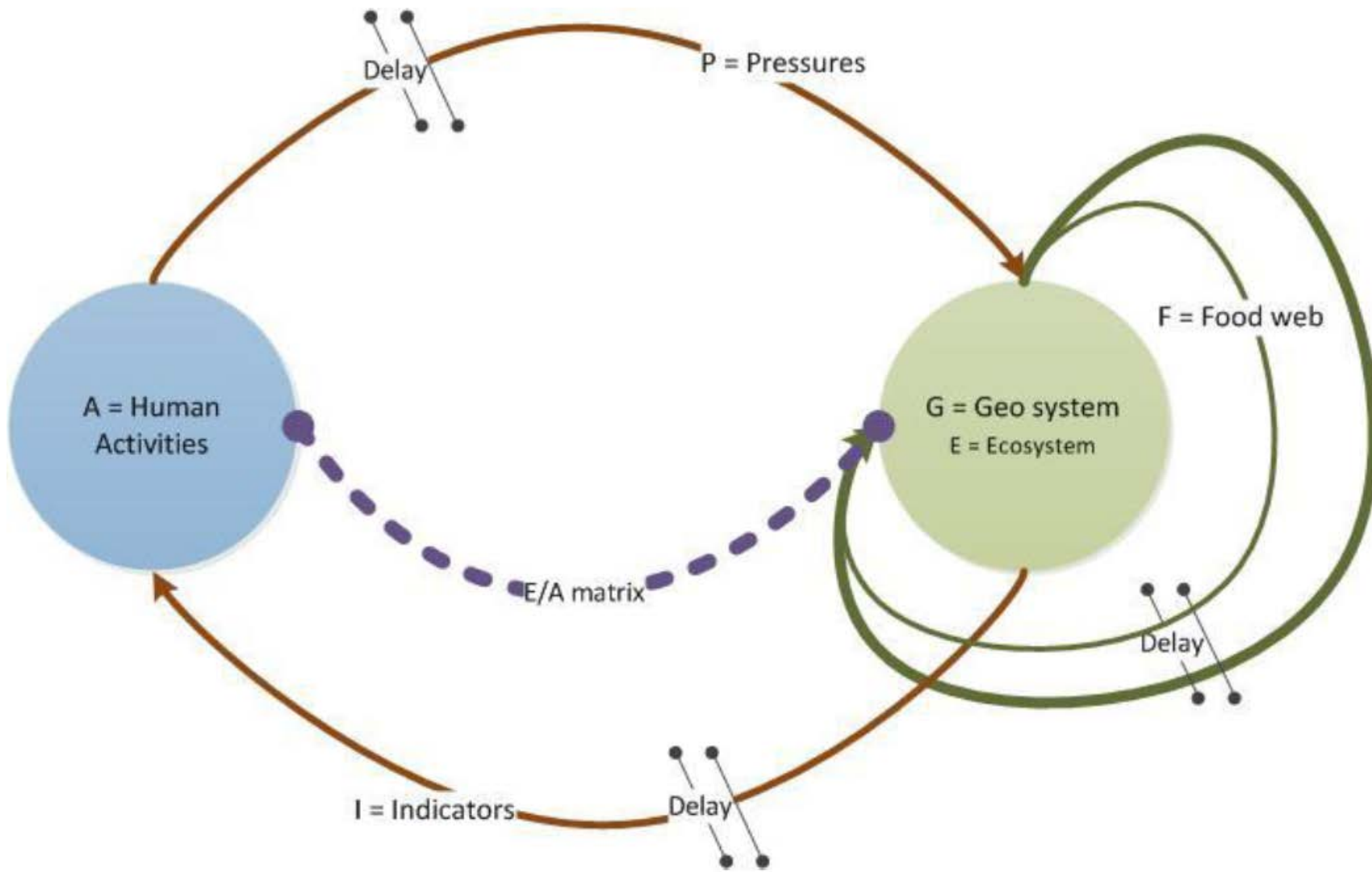
MSP INTERACTION MODEL

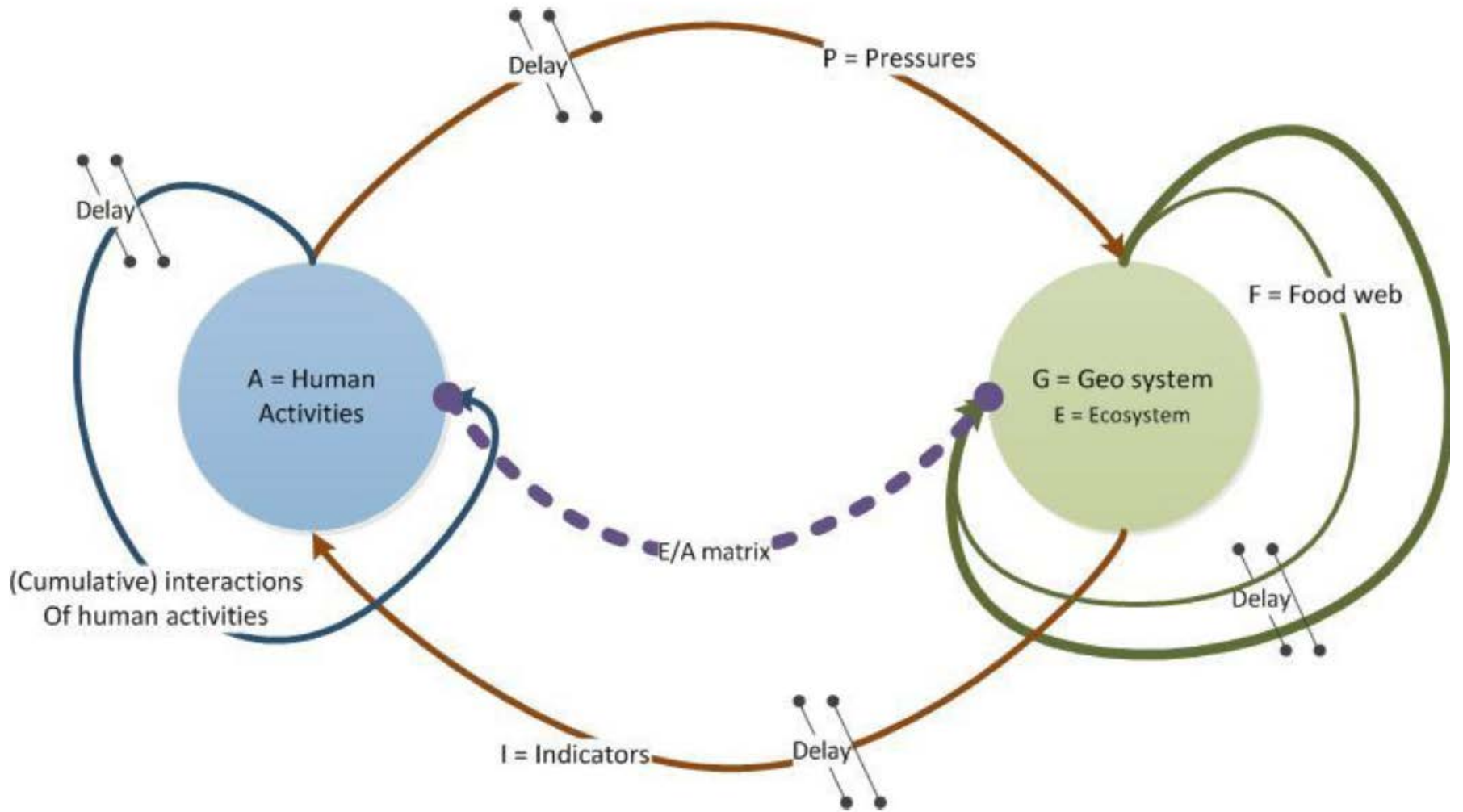


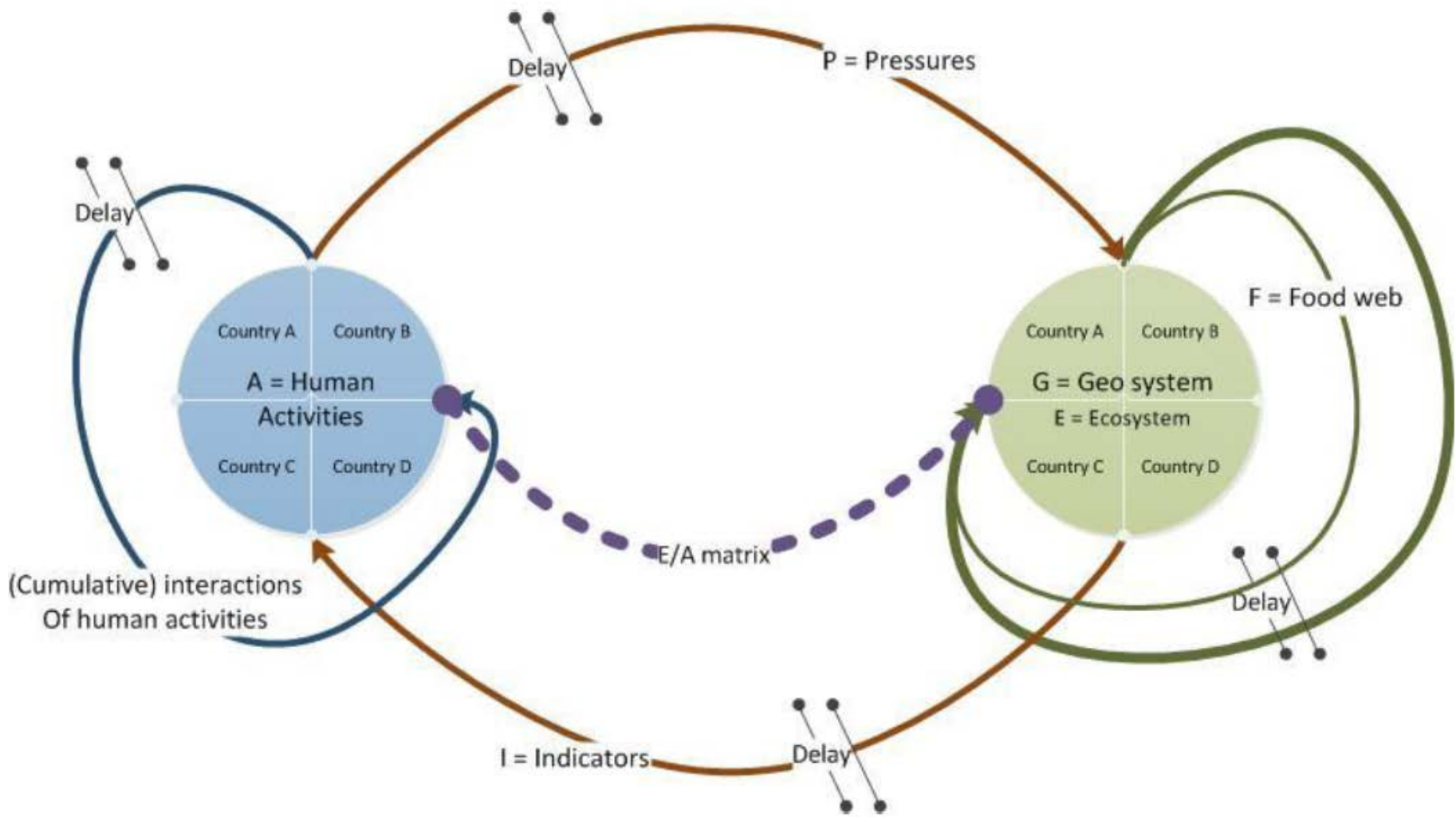


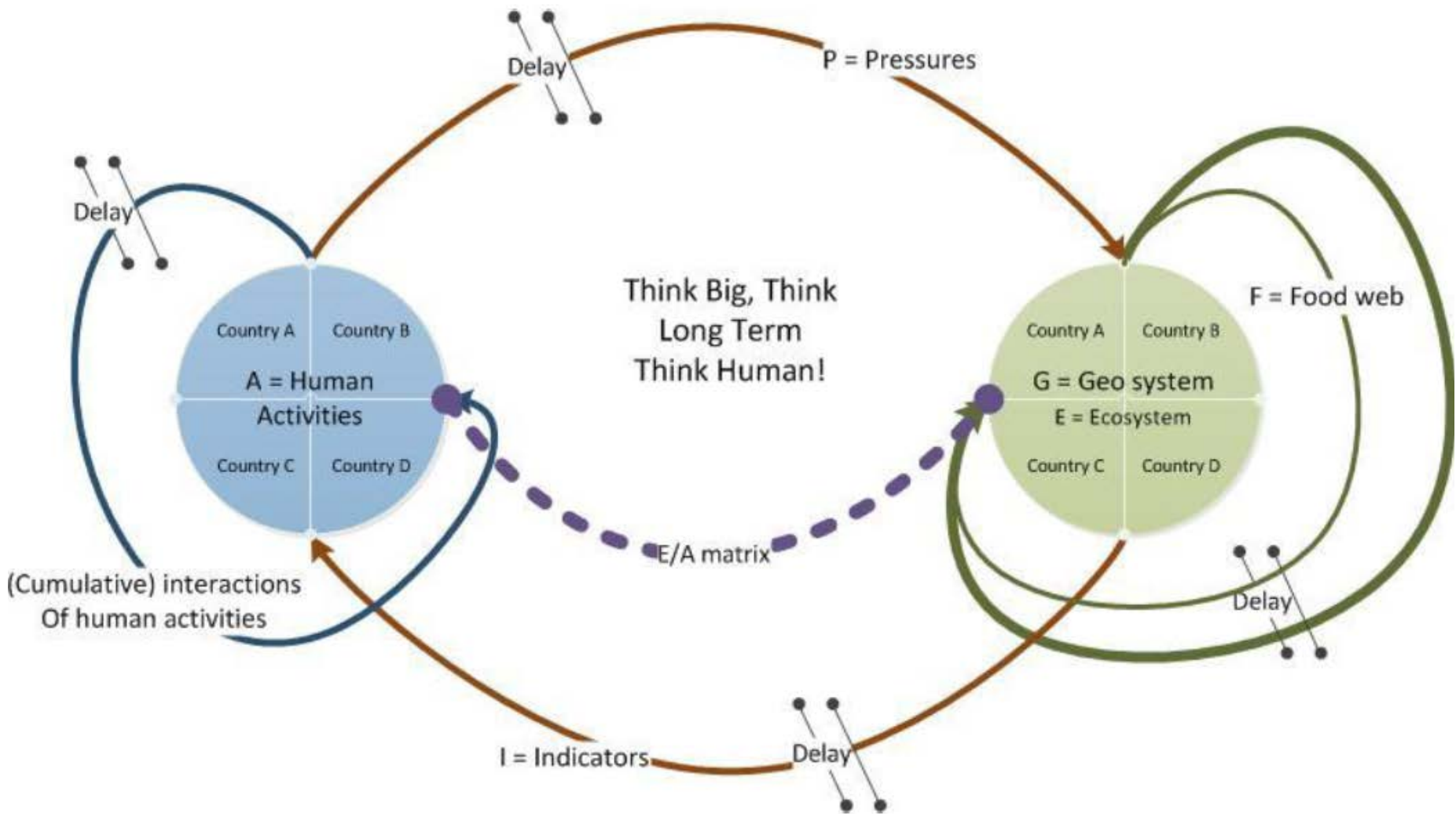






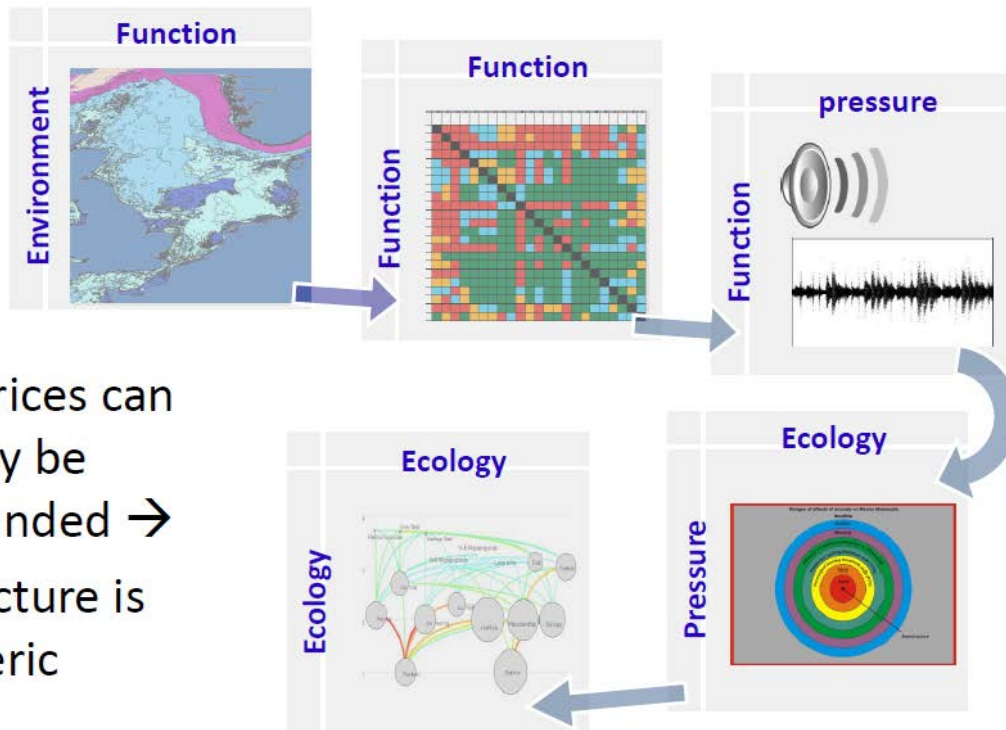






MSP Challenge 2050: hoe werkt het?

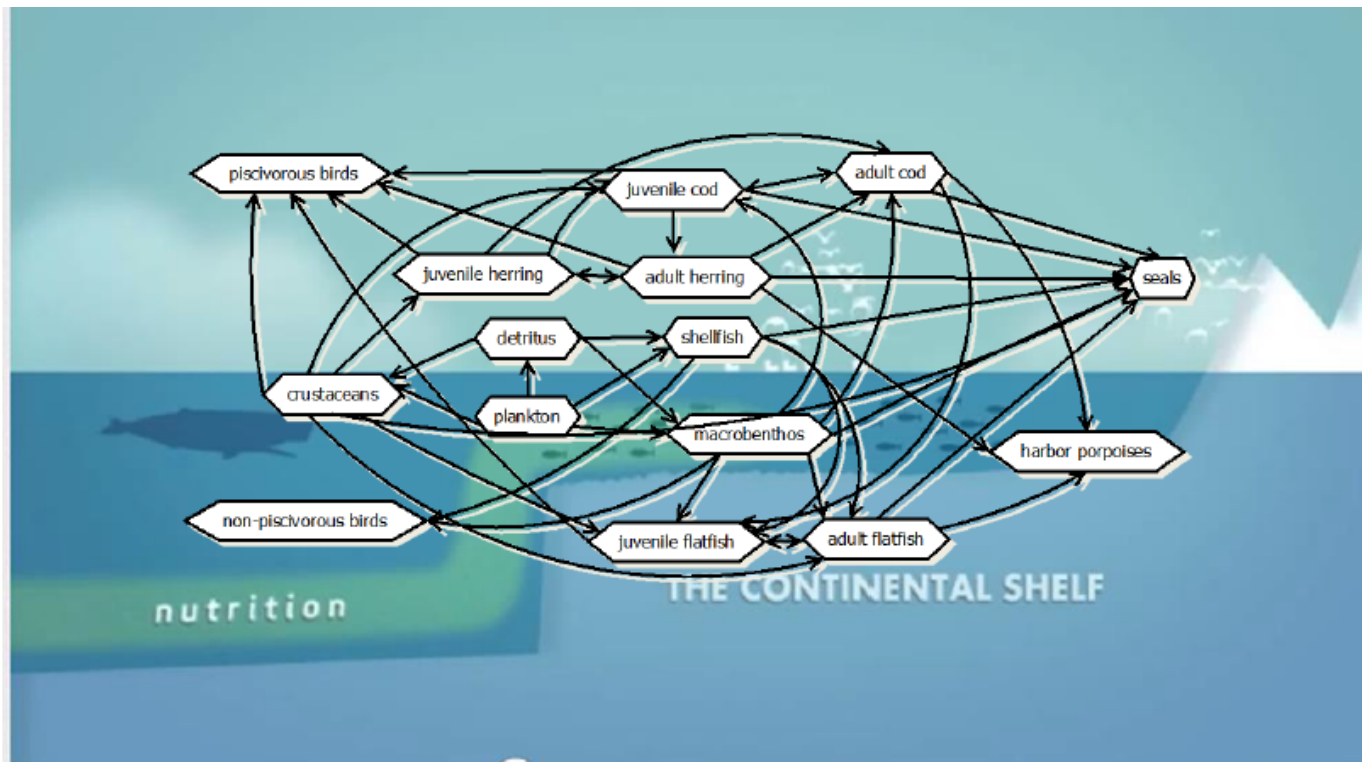
Relations in 5 matrices



Matrices can easily be expanded →
Structure is generic

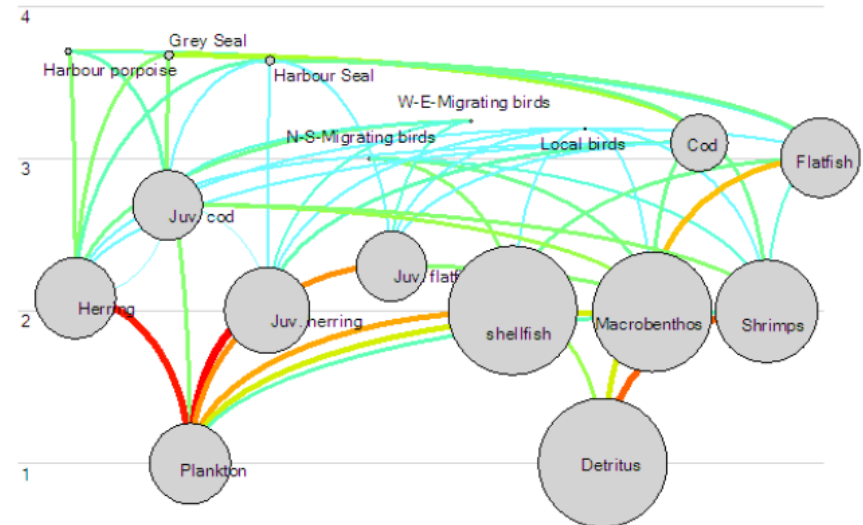
Voedselwebmodel: Ecopath (1)

- Vereenvoudigd voedselweb (steady-state model)
- Gedocumenteerde formules
- Relevante soorten voor planning



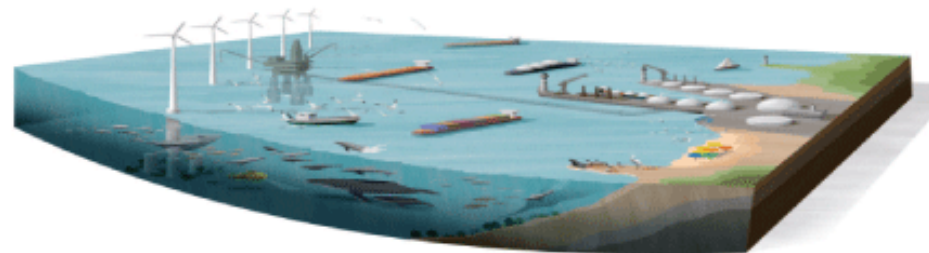
Voedselwebmodel: Ecopath (2)

- Totale biomassa van soorten in zeegebied
- Voorgeschreven gebieden van voorkomen: waar en relatief belang
- Effecten van pressures (bv visvangst) op voedselweb leidt tot verandering in biomassa
- Voedselweb herberekend en geherdistribueerd



Doel van deze sessie

- MSP Challenge 2050 testen in het traject naar “online” krijgen!
- Feedback ontvangen



MSP Challenge 2050

- Doel, middelen en rollen
- Gameplay
- Workshop



North Sea



Country Green

North Sea

Country Red

Country Yellow

Country Orange

Country Pink

Country Purple

Manage de
EEZ van
jouw land.

Country Green

North Sea

Country Red

Country Yellow

Country Purple

Country Orange

Country Pink



Real Time Strategy ~ 2050

Manage de
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Real Time Strategy ~ 2050

Digitaal aquarium




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Manage de EEZ van jouw land.

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Beleidskader

planners analysts

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Manage de EEZ van jouw land.

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Gameplay



FUNCTION LAYERS

- shipping routes
- aquaculture
- wind turbines
- wave turbines
- electricity sockets
- fossil fuel platforms
- cables

ENVIRONMENT LAYERS

- water depth
- wind speed and direction
- current speed and direction
- fossil fuel fields
- sand available
- wrecks
- eutrophication

ECOLOGY LAYERS

- detritus
- algae
- crustaceans (shrimp)
- macrobenthos
- shellfish
- juvenile flatfish
- adult flatfish

PRESSURE LAYERS

- noise
- sediment disturbance
- fishcatch
- hard substrate
- contaminants
- barrier
- marine litter

Gameplay

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- shipping routes
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PRESSURE LAYERS

- noise
- sediment disturbance
- fishcatch
- hard substrate
- contaminants
- barrier
- marine litter

- natural gas fields
- mixed fields
- oil fields

LEGENDA

MAP

GPS



Gameplay

The screenshot displays a marine planning software interface. The background is a map of the North Sea region, showing the coastlines of the United Kingdom, Ireland, and Scandinavia. The map is overlaid with several colored regions: a large purple area in the central North Sea, a smaller dark purple area to the west, and a light purple area to the south. On the left side, there are four vertical panels, each with a title and a list of items, each preceded by a diamond-shaped icon:

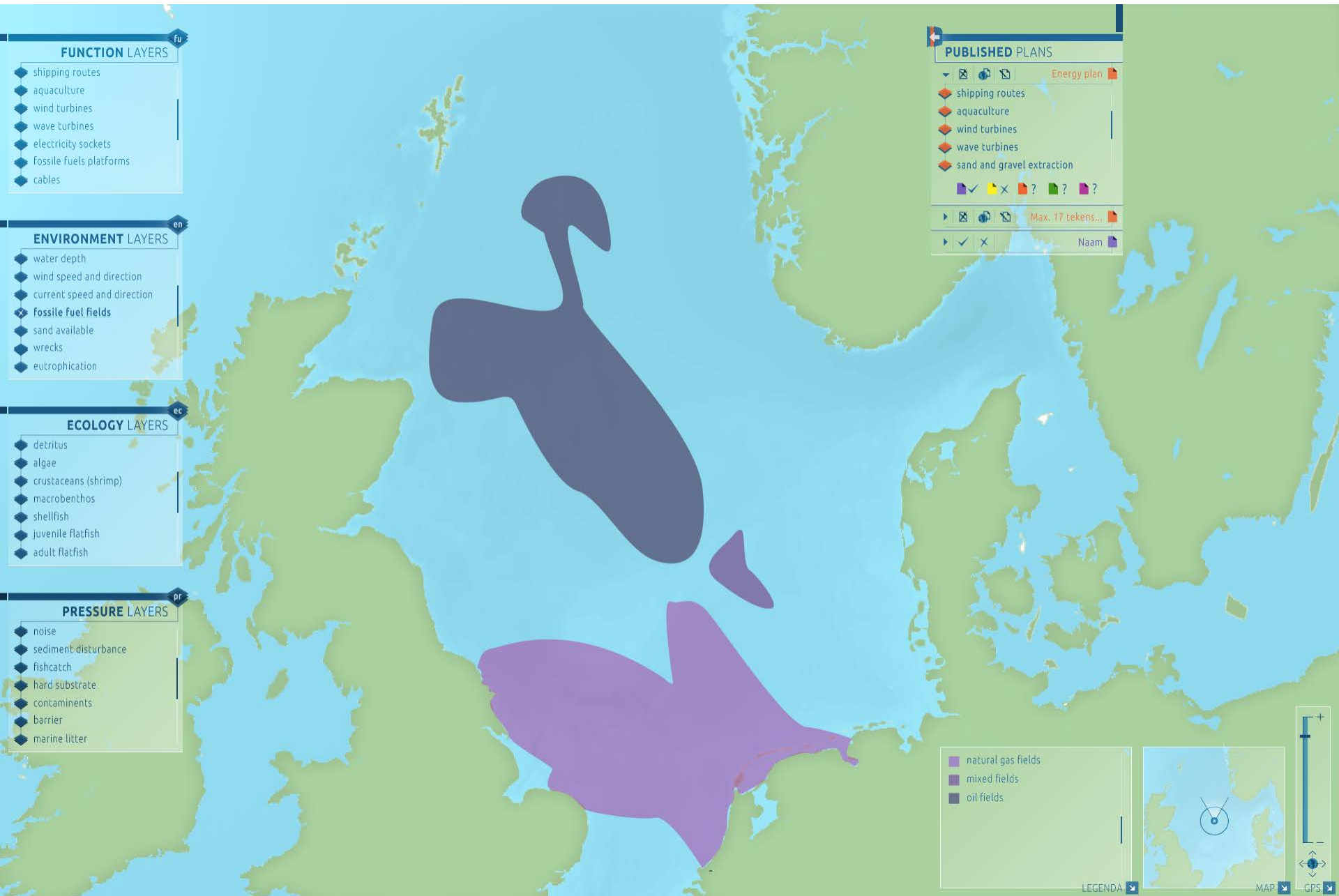
- FUNCTION LAYERS** (Fu): shipping routes, aquaculture, wind turbines, wave turbines, electricity sockets, fossile fuels platforms, cables.
- ENVIRONMENT LAYERS** (en): water depth, wind speed and direction, current speed and direction, **fossile fuel fields**, sand available, wrecks, eutrophication.
- ECOLOGY LAYERS** (ec): detritus, algae, crustaceans (shrimp), macrobenthos, shellfish, juvenile flatfish, adult flatfish.
- PRESSURE LAYERS** (pr): noise, sediment disturbance, fishcatch, hard substrate, contaminants, barrier, marine litter.

In the center, a 'NEW PLAN' dialog box is open. It has a title bar 'NEW PLAN' and a 'Name' field containing 'Untitled-1' with a '(max. 17 characters)' note. Below the name field is a 'Select layers:' section with two columns of checkboxes:

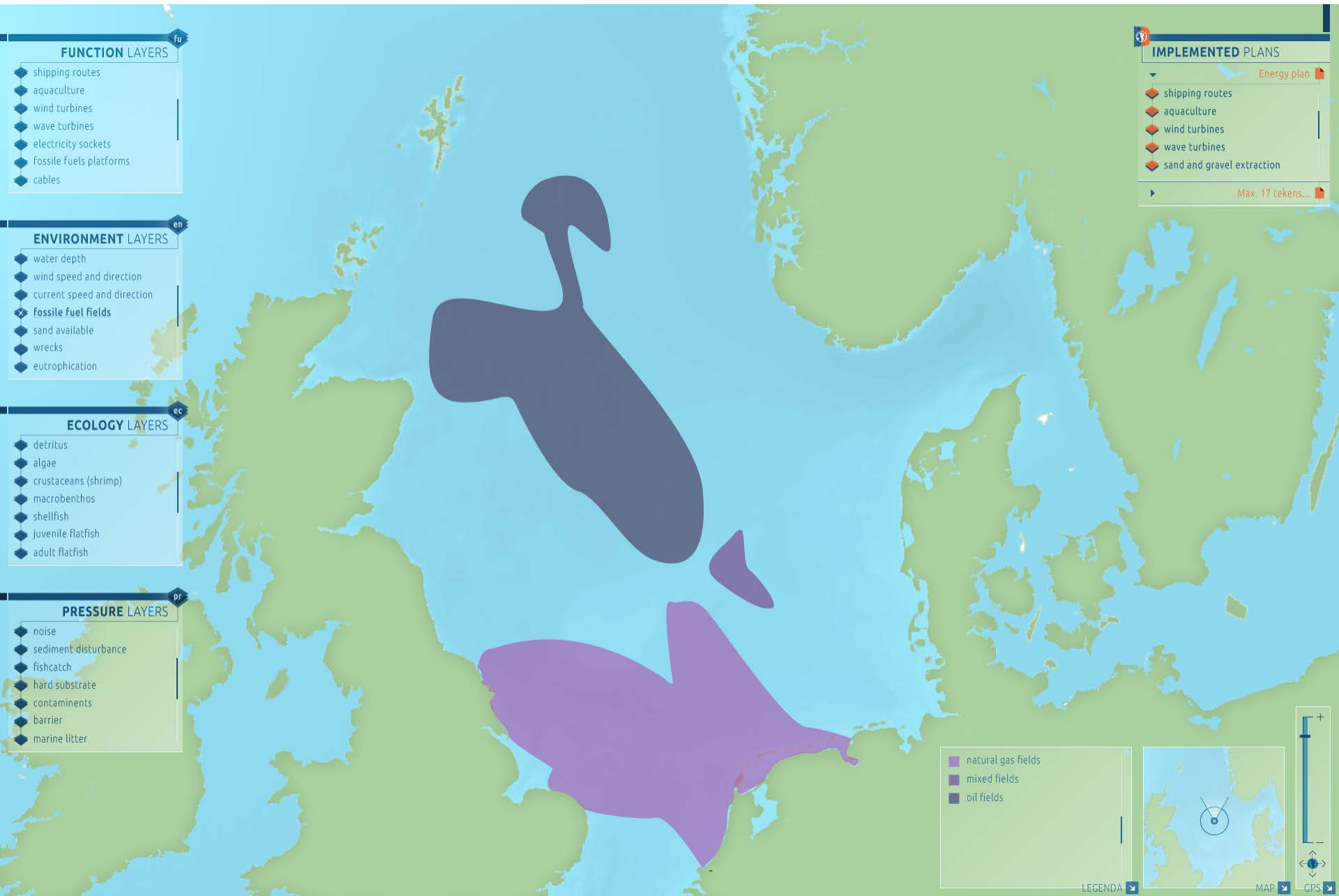
- Column 1: Shipping routes, Aquaculture, Wind turbines, Wave turbines, Tidal turbines, Electricity sockets, Fossile fuel platforms, Cables.
- Column 2: Pipelines, Harbours, Sand and gravel extraction, Military areas, Bird and habitat, Recreation, Dredging, Anchorage.

At the bottom of the dialog box are 'OK' and 'CANCEL' buttons. In the top right corner, there is a 'PLAN EDITOR' window showing a list of layers with red diamond icons: shipping routes, aquaculture, wind turbines, wave turbines, and sand and gravel extraction. Below this list are navigation icons and a text field containing 'Max. 17 tekens.....'. In the bottom right corner, there is a 'LEGENDA' window with a legend for 'natural gas fields' (light purple), 'mixed fields' (dark purple), and 'oil fields' (medium purple). Next to the legend is a 'MAP' window showing a small-scale overview map with a red circle indicating the current view area. To the right of the map is a vertical scale bar and a 'GPS' icon.

Gameplay



Gameplay



Gameplay

