Implementation of Green Network Plan in Estonia: assessing delivery of biodiversity services
Presentation plan

- GI context in Estonia
- delivery effectiveness of biodiversity services
  1. Has GI complemented the network of protected areas?
  2. Factors contributing and constraining planning of GI-s?
- conclusions
Estonian context

- multi-functional approach to ecological networks in Estonia has been noted in several studies as being among the pioneering national concepts in Europe (1970-1980s)
- It is based on a strong tradition of landuse planning, with wilderness and areas of conservation value, as core areas, interlinked by natural and semi-natural landscapes
„Honeycomb structure“ of ideal landscape by Rodoman
‘Green Network’ is a new term recently used in a spatial planning context in Estonia. It simplifies the complex theoretical concept of ecological networks and denotes a network with characteristics determinable in regular planning practice, e.g. scales, data-sources, steps of analysis determined, restrictions for land use, including socio-economic dimensions.
Estonian context

- ‘The hierarchy of the spatial planning system is organised mainly around basic administrative units in Estonia (i.e. country, county and municipality). The Green Network is addressed at all three levels of planning.
Estonian context

- The hierarchy of the spatial planning system is organised mainly around basic administrative units in Estonia (i.e. country, county and municipality). The Green Network is addressed at all three levels of planning.
In 1999, the phase of county planning was initiated including the design of the Green Network. By 2002, each of the 15 counties of Estonia had to prepare a map of ecological networks on a scale of 1:50,000. However, it took until the end of 2007 for all 15 counties to finish the preparation of these plans.
Estonian context

According to the Planning Act, the Green Network needs to be addressed in each municipality’s comprehensive plan (specify the boundaries and environmental conditions/restrictions).

Green network at regional level: Harju county
Green network at regional and community levels
Questions on ES services delivery:

1. /spatial/ Has the Green Network complemented the network of protected areas?

2. /functional/ What were the central factors contributing, or acting as a barrier, to success for managing spatial planning in respect of ecological networks
Method (1)

The mask layer of the Estonian Green Network was composed (MapInfo), for land use analysis the Estonian Base Map (1:50 000) and the Estonian Basic Map (1:10 000) and for Natura 2000 sites analysis the EELIS databases were applied.
The Green Network of Estonia and the Natura 2000 sites.

Validation year of a county’s thematic plan and the share of the county’s territory covered by the Green Network

Distribution of the Natura 2000 sites along the Green Network areas. SPAs – Special Protection Areas, SACs – Special Areas of Conservation. Counties are listed by % of territory covered by the Green Network.

Questions:

1. Has the Green Network complemented the network of protected areas?

2. What were the central factors contributing, or acting as a barrier, to success for managing spatial planning in respect of ecological networks?
Method (2)

- A comparative study of textual and cartographical planning documents of the Green Network was conducted (5 counties and 26 rural municipalities) and representatives of the key stakeholder groups were interviewed.
Results

- The formal method for specifying the Green Network in thematic plans was followed in all counties studied and its implementation was found to be reasonably uniform.
- Minor differences between counties occur in chapters reflecting the basic reference data and in sections specifying the restrictions for land use.
Results

- Clear differences in methodology were distinguishable between comprehensive plans produced by municipalities.
- In several cases the method for specifying the Green Network had not been applied and the contents of the explanatory section often contradicted the maps.
Results

- A wide range of stakeholders are relevant to Green Network planning at county and local levels.
- However, the tendency for conflicts between those involved in construction, forestry and transport sectors and local citizens suggests that not all key stakeholders are sufficiently engaged in the planning process.
Stakeholder involvement: groups and affiliations

Main stakeholder groups

- **Spatial planning**
- **Transport**
- **Research**
- **Forestry**
- **Environmental (incl. nature) conservation**

Their public/private affiliations:

**Governmental stakeholders**
- Ministry of Interior
- Ministry of Environment
- State Nature Conservation Centre
- State Forest Management Centre
- Road Administration
- and their regional departments

**Business**
- Spatial planning companies (representing experts of a variety of specialities)
- Forest companies

**Civil society**
- Environmental NGO-s
- Resource user groups
- Landowners
- Local people
Type of relationship to named stakeholders

- Agriculture: 3 conflictive, 22 partly good/partly conflictive, 1 good
- Nature conservation: 3 conflictive, 1 partly good/partly conflictive, 1 good
- Forestry: 1 conflictive, 6 partly good/partly conflictive, 1 good
- Transport: 1 conflictive, 2 partly good/partly conflictive, 1 good
- Spatial Planning: 4 conflictive, 3 partly good/partly conflictive, 1 good
- Landscape Planning: 13 conflictive, 4 partly good/partly conflictive, 2 good
- Citizens: 5 conflictive, 1 partly good/partly conflictive, 3 good
- Social/eco. research: 2 conflictive, 1 partly good/partly conflictive, 1 good

Stakeholder groups:
- Conflictive
- Partly good/partly conflictive
- Good
- Very good
Involvement-influence map of the Green Network stakeholders

- **Involvement** refers to interviewees’ reflections on their current and past experiences with involvement practices
- **Influence** depicts respondent’s self-assessed level of impact they perceive to have had on decision-making

Participation: Green network planning in rural municipalities of Harju county

- County planning document
  - Analyzing
  - Editing
  - Negotiating
  - Implementing

- Municipality planning document
Conclusions

- The Green Network has complemented the network of protected areas in large extent, however in **specific cases** (e.g. Nature Parks areas) and at **detailed** (municipal) level it requires further elaboration.

- The current planning and implementation through all administrative has been **centrally deviced**. There is a need for balancing bottom-up stream in governance.
Conclusions

- It is necessary to design the involvement at the **early phases** and **throughout all** of the planning processes to create a genuine open and flexible forum for discussion.
Thank You!

Köszönöm!