

Strategic Environmental Assessment and ecosystem services for regional planning in Chile: From understanding to practice

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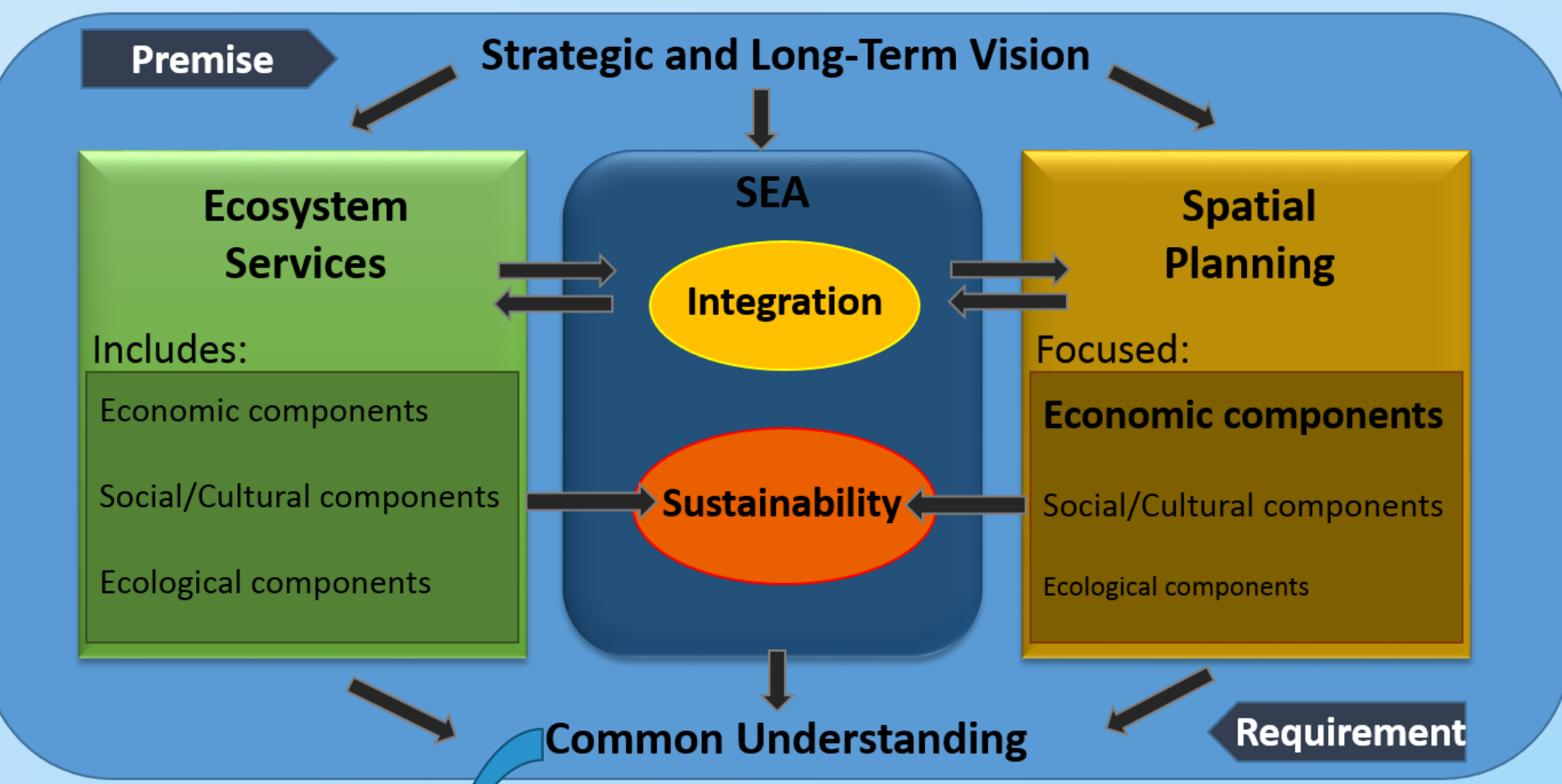
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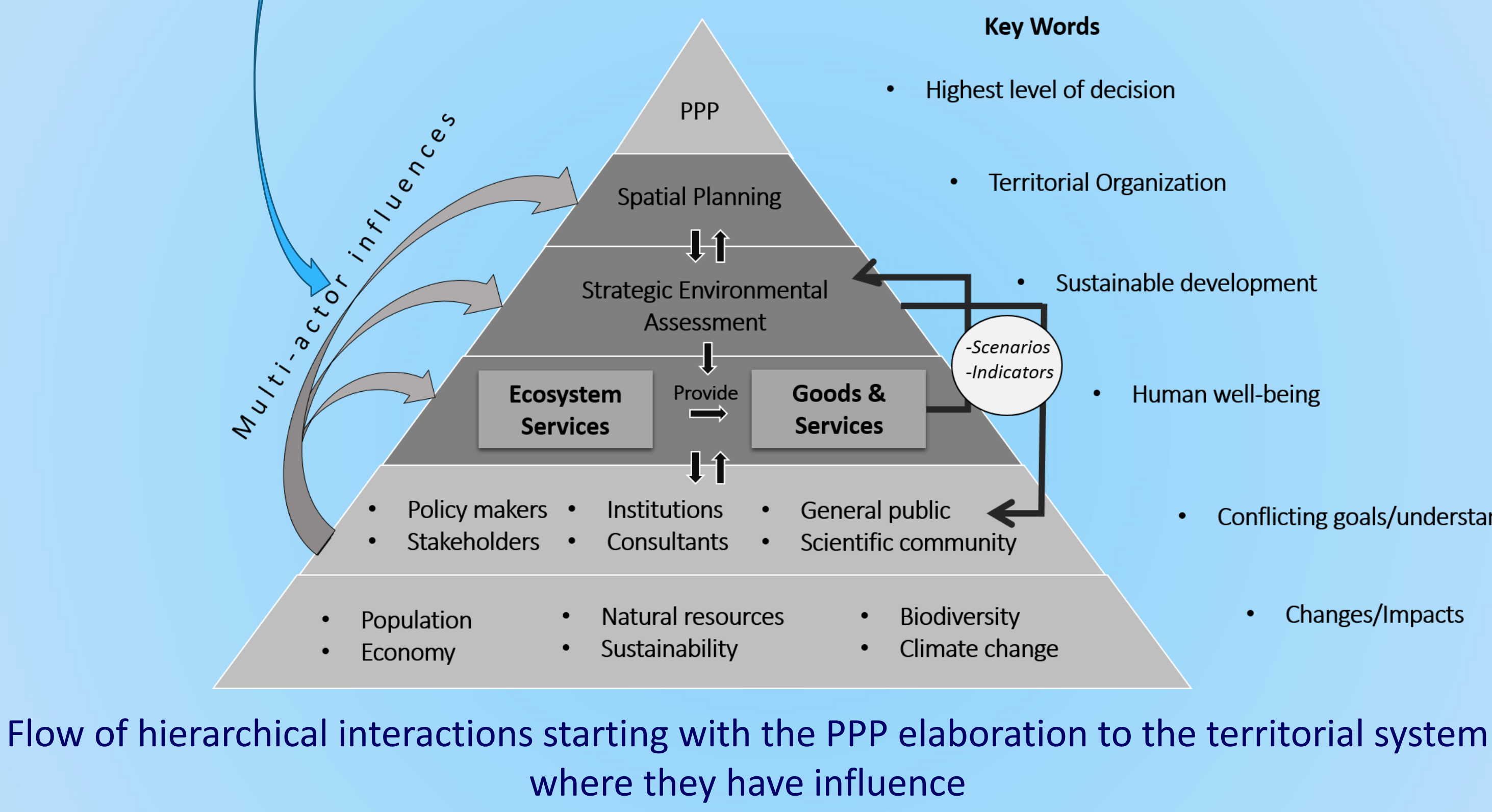
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“Even the most effective framework, methodology and/or set of methods is of little value in a regional planning context if a common understanding and vision is lacking (Modified from Noble et al. 2012). This is especially relevant to those responsible for making and implementing the decisions in different institutional scales”



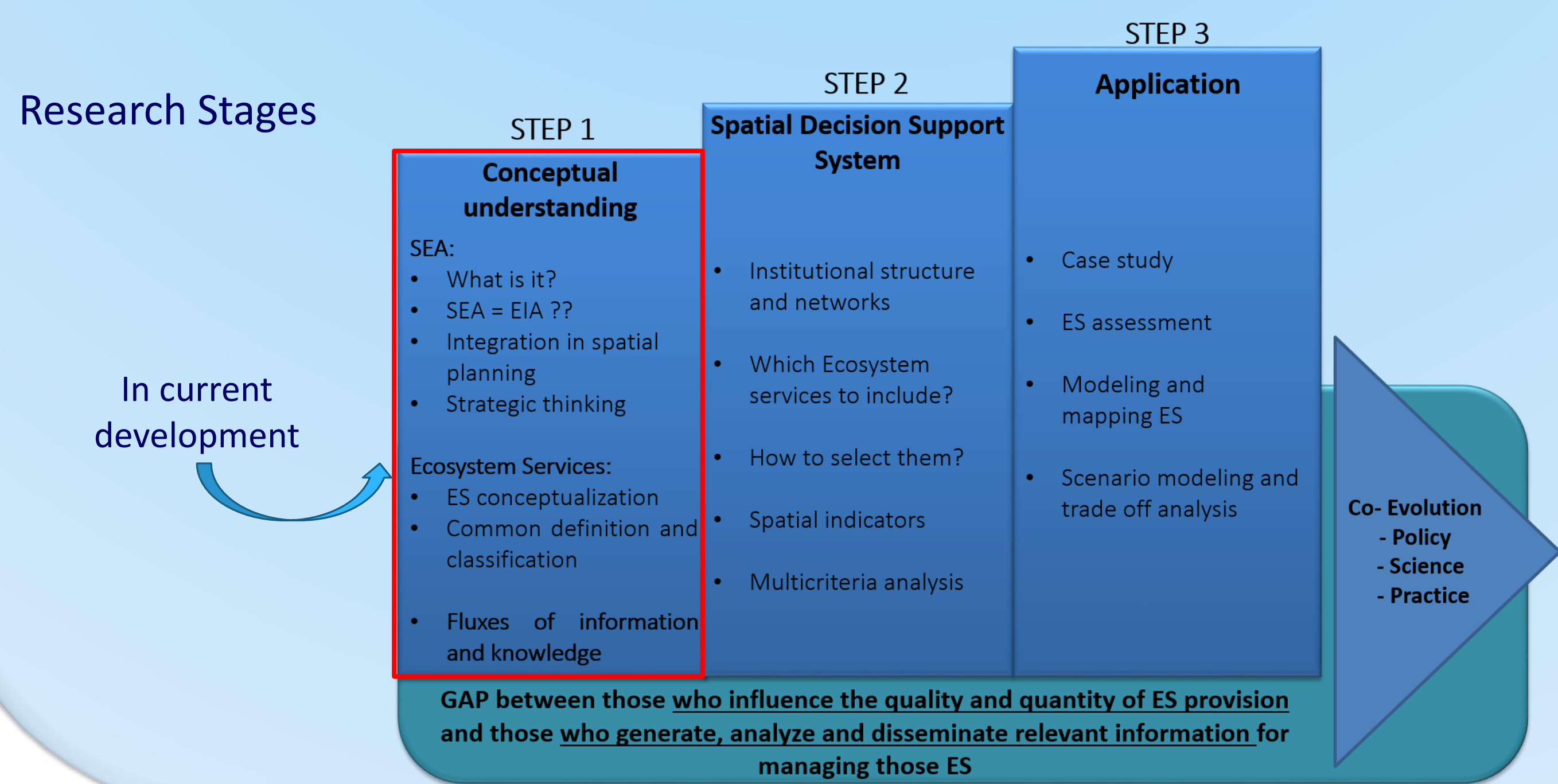
Research context and ecosystem services integration in spatial planning



Flow of hierarchical interactions starting with the PPP elaboration to the territorial system where they have influence

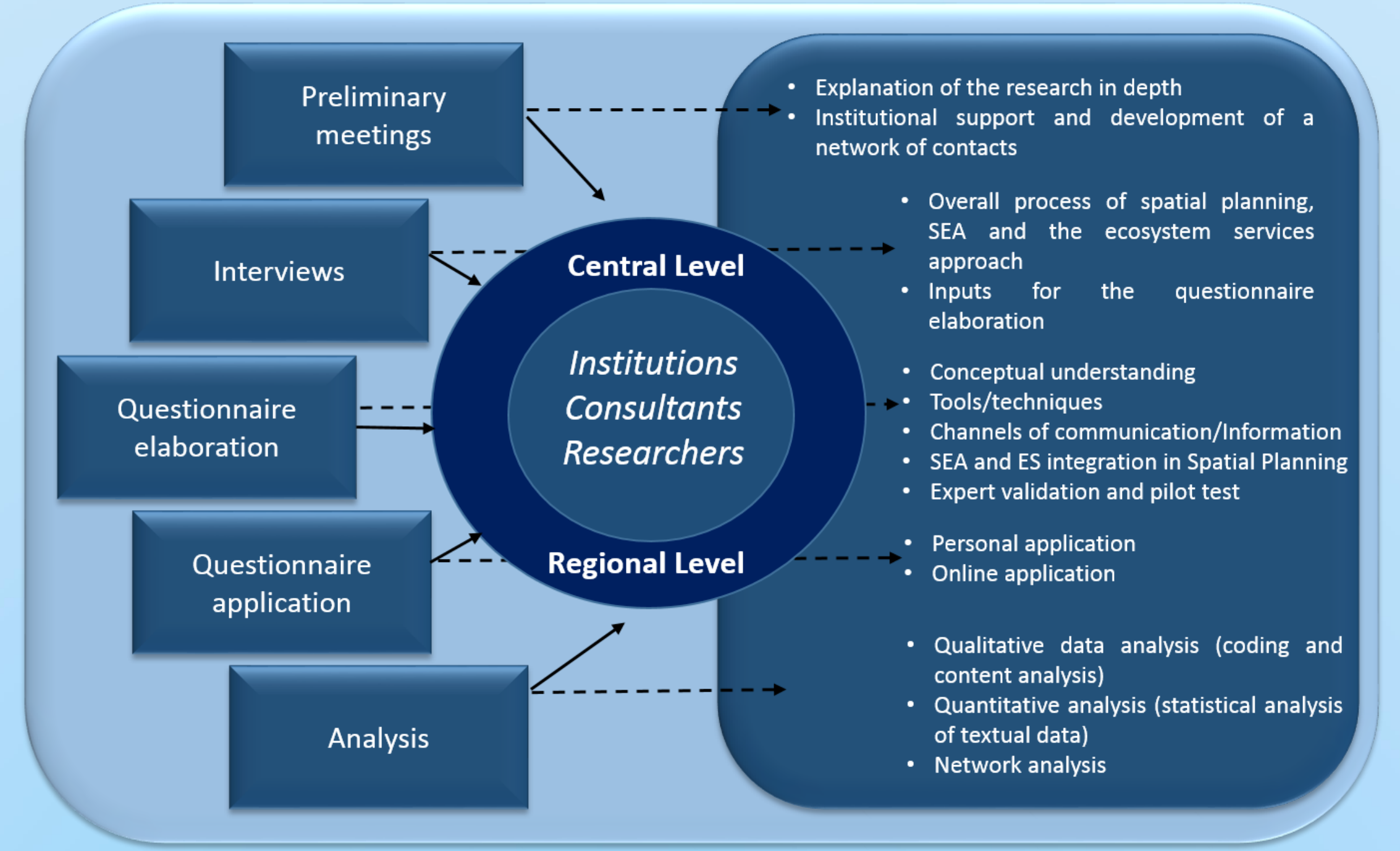
Objective

Identifying the variety of understanding/visions about SEA and ecosystem services from the different actors involved in the spatial planning process.



Methodology

General methodological framework



Questionnaire application



Some examples of application with Consultants (a) and public institutions (b,c)

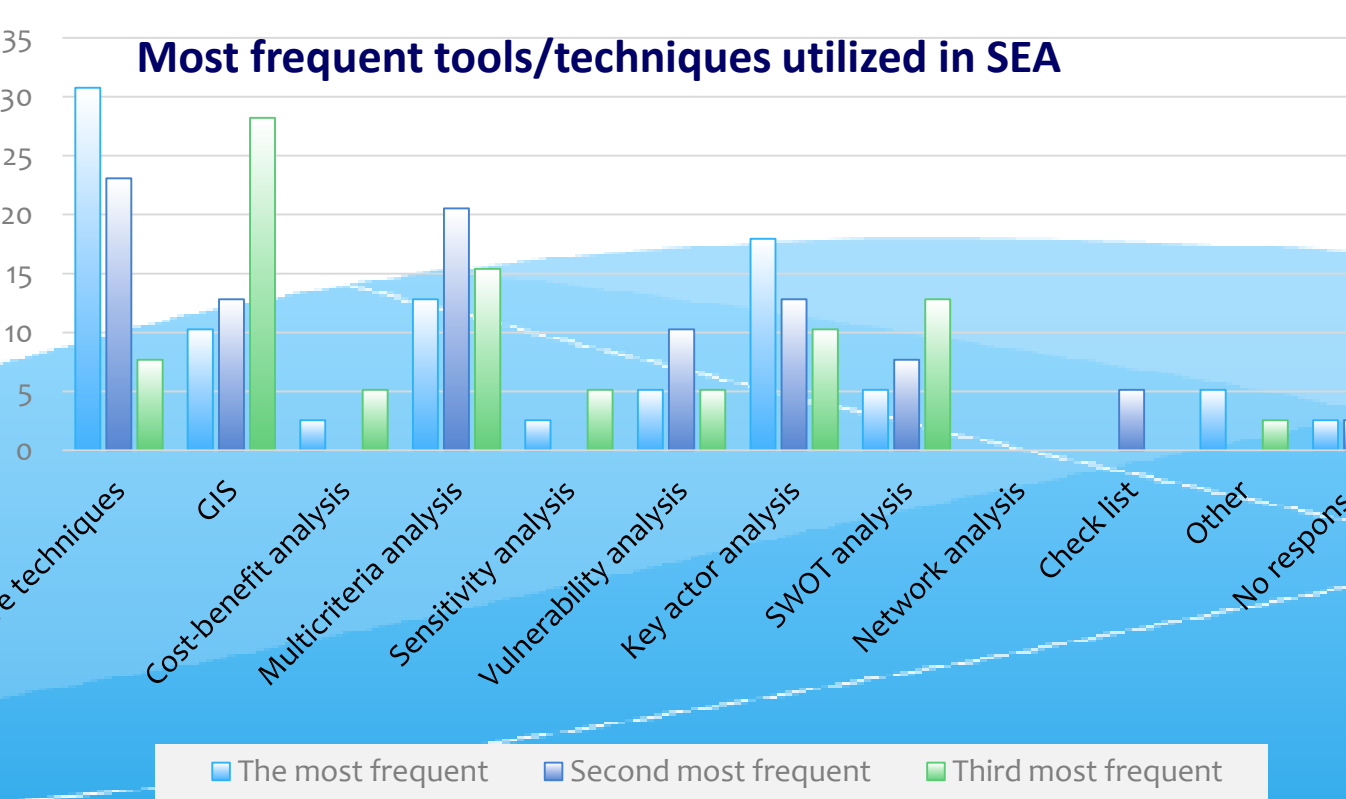
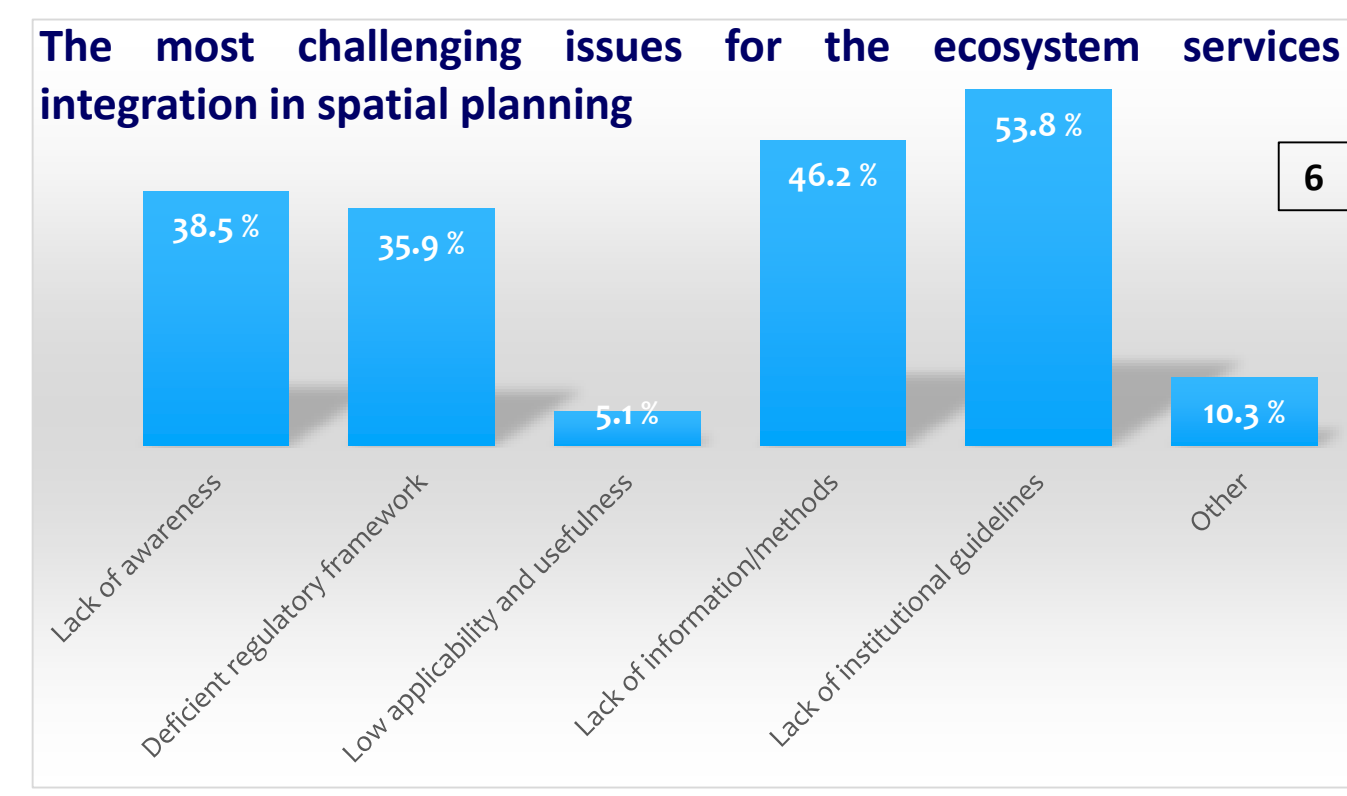
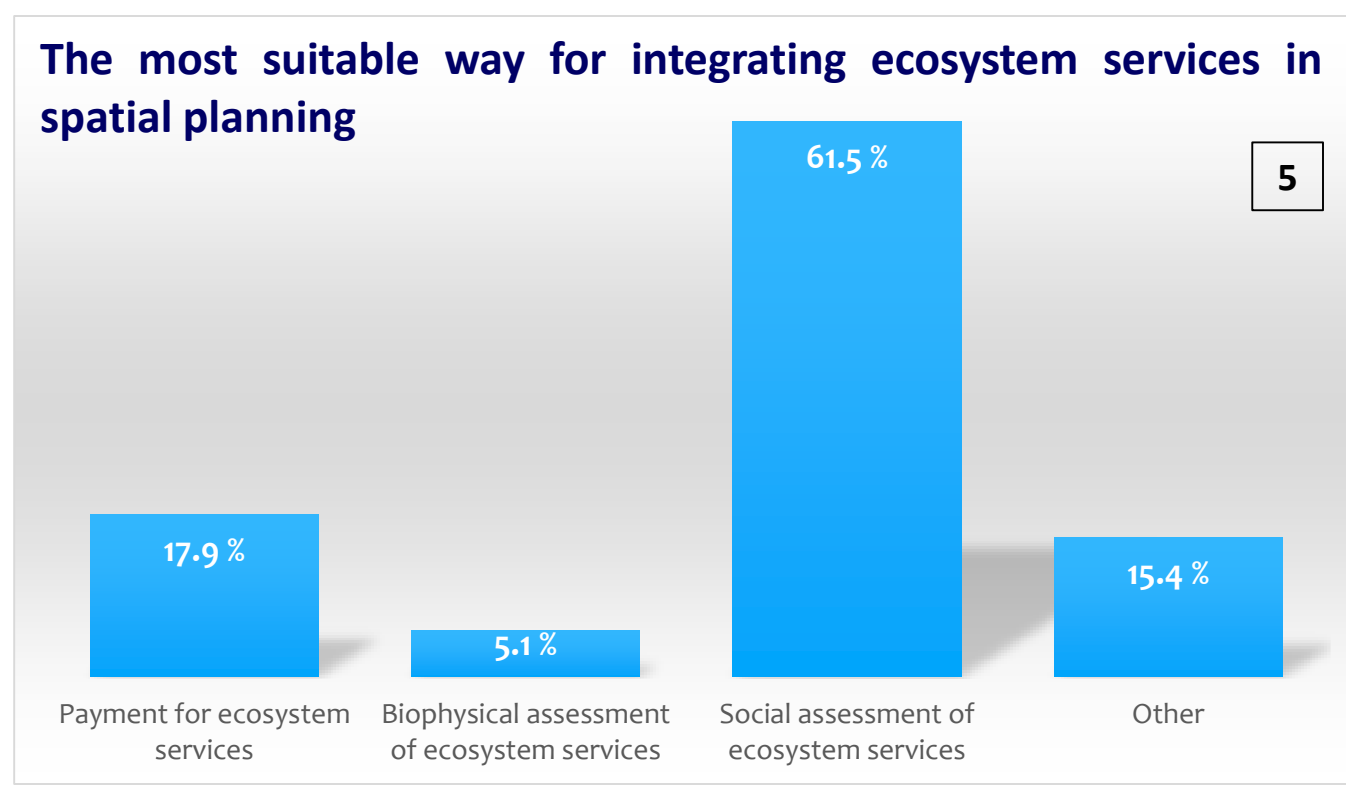
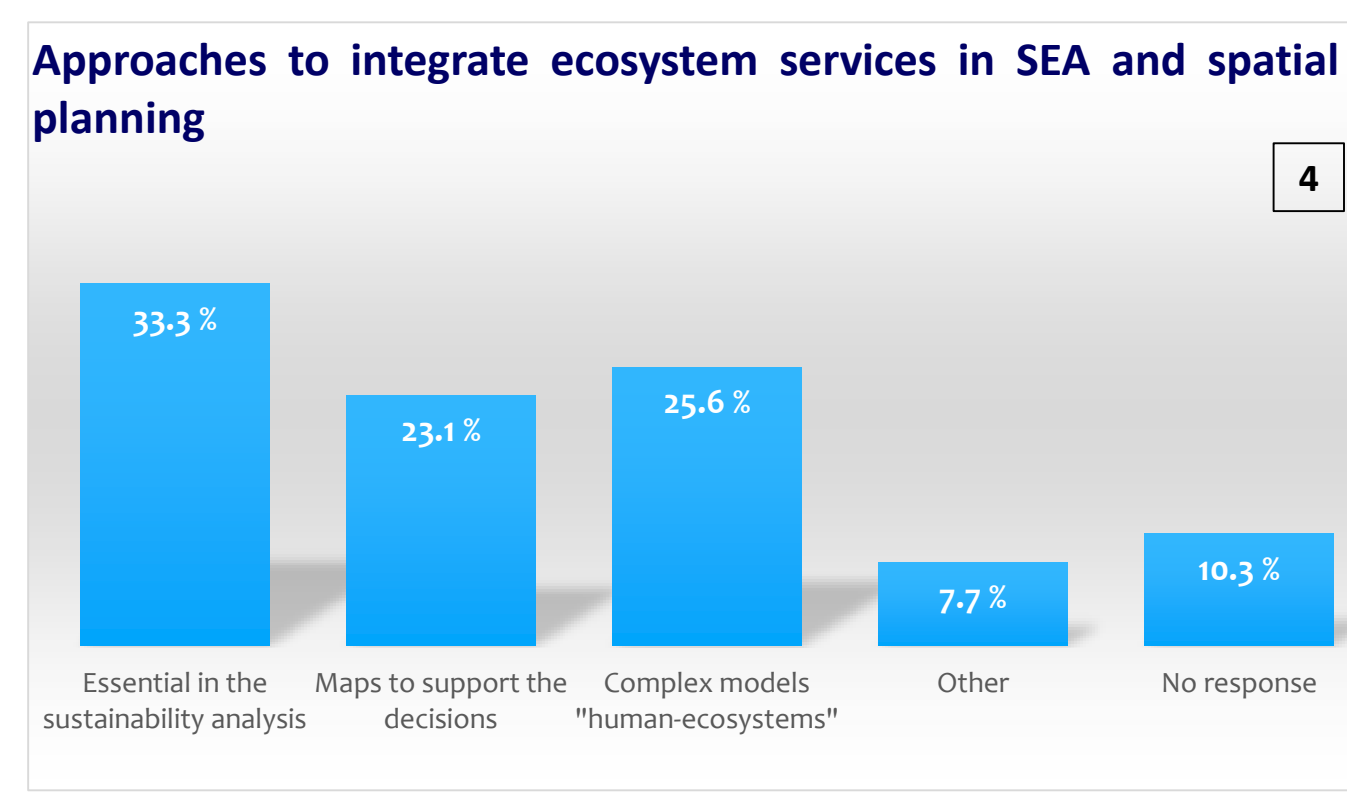
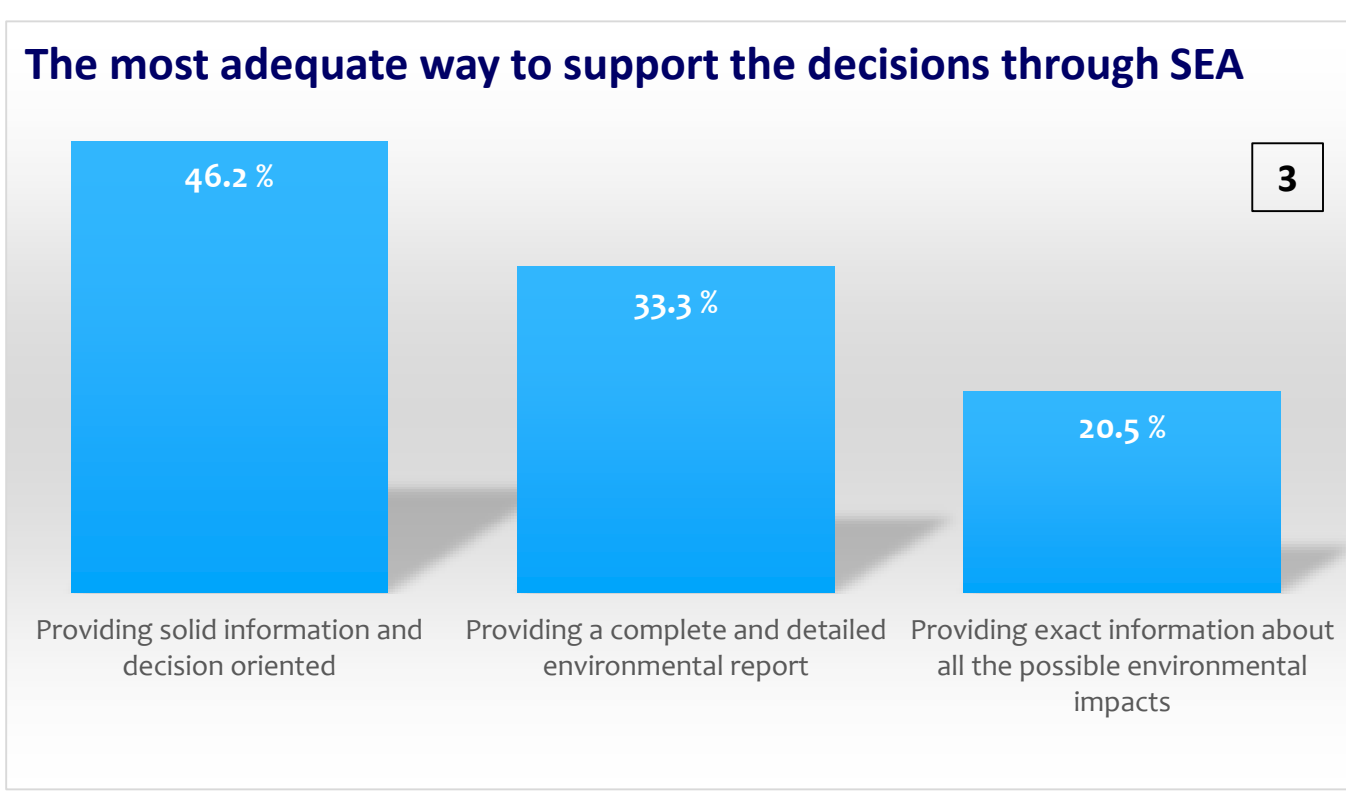
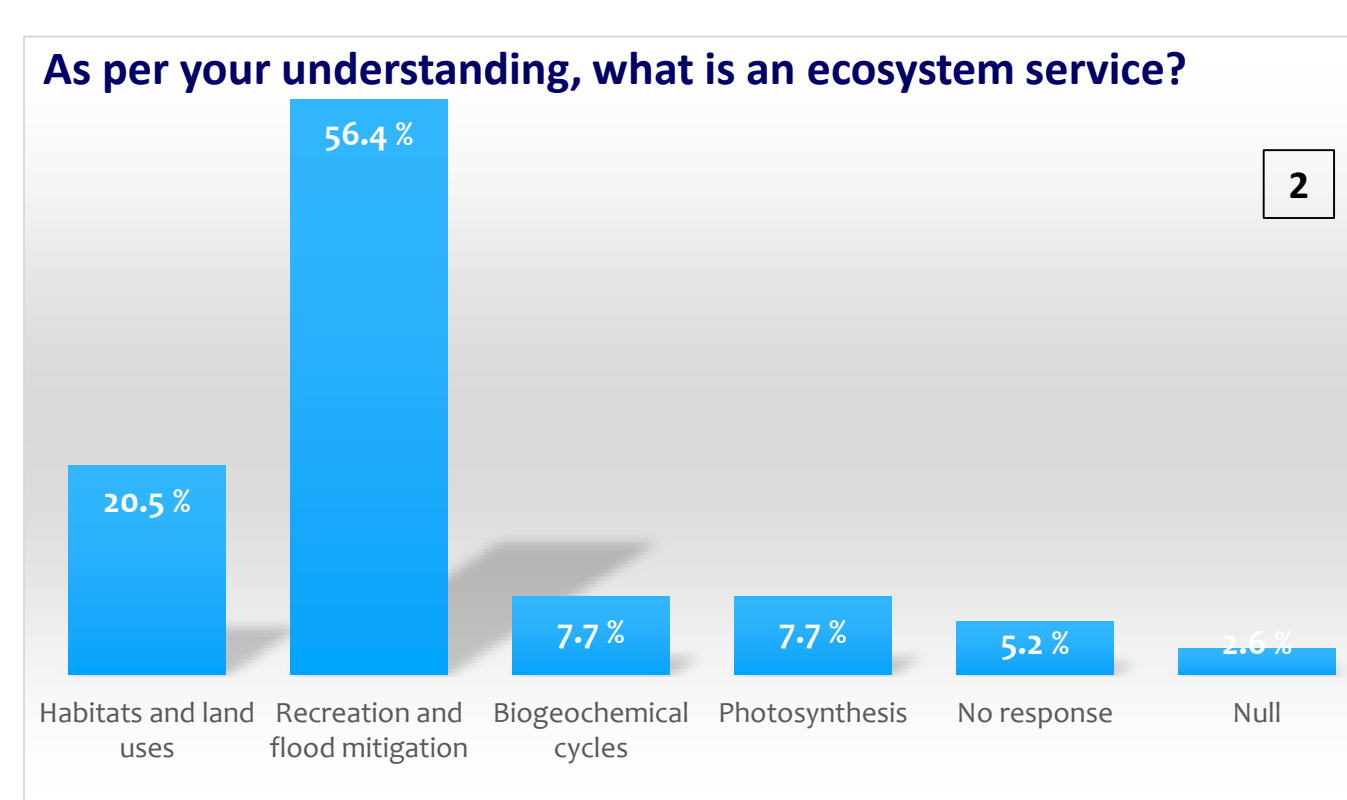
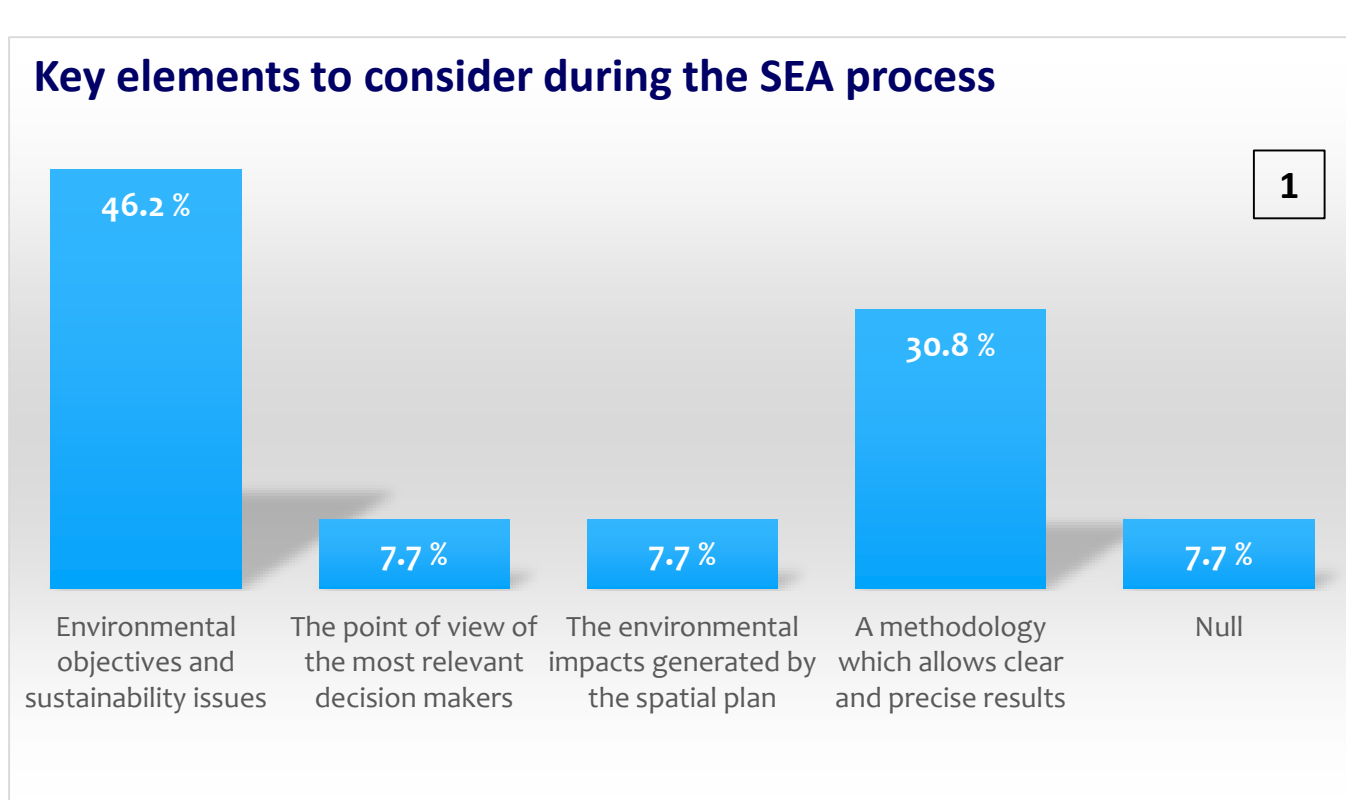
Results

Participants in the questionnaire application by region, institution and the principal function.

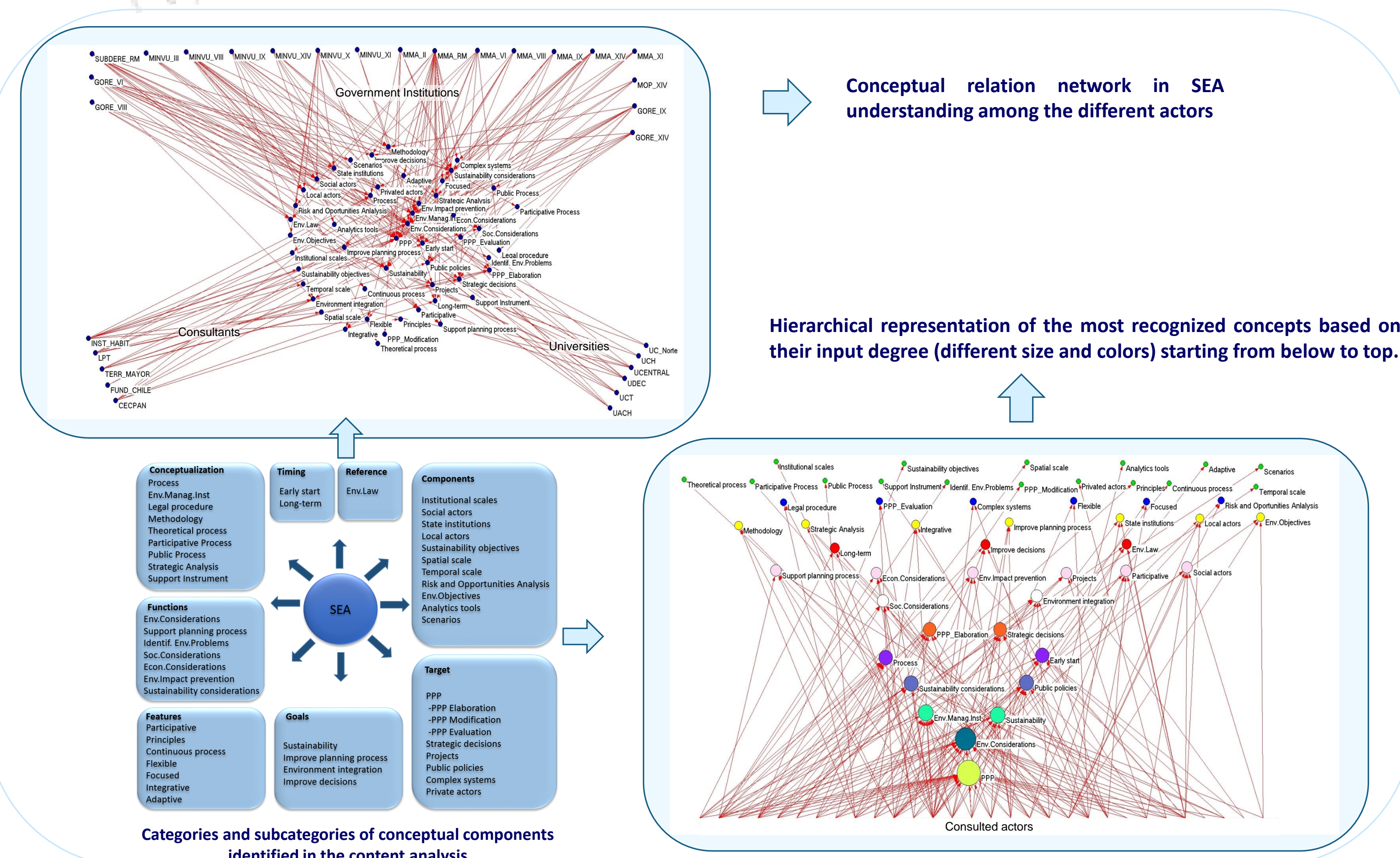
Region	Institution	Function
II	Ministry of the Environment (Regional office)	Person in charge of the natural resources, waste and risk assessment
II	Universidad Católica del Norte (University)	Researcher
III	Ministry of Housing and Urban Planning (Regional office)	Researcher / Director of the diploma course in SEA
RM	Universidad Central (University)	Researcher / Director of the diploma course in SEA
RM	Sub Secretary of Regional and Administrative Development (National office)	Adviser in the Department of Policies and Decentralization
RM	Fundación Chile (Consultant)	Environmental project analyst
RM	Ministry of the Environment (National office)	Professional of the Department of Environmental Economics
RM	Ministry of the Environment (National office)	Office of Environmental Assessment
RM	Ministry of the Environment (National office)	Office of Environmental Assessment
RM	Universidad de Chile (University)	Researcher
VI	Regional Government	Person in charge of the Spatial Planning Division
VI	Regional Government	Person in charge of the Spatial Planning Division
VI	Ministry of the Environment (Regional office)	Professional of the Environmental Coordination Section
VIII	Universidad de Concepción (University)	Researcher
VIII	Regional Government	Person in charge of SEA
VIII	Ministry of the Environment (Regional office)	Person in charge of SEA
VIII	Ministry of Housing and Urban Planning (Regional office)	Analyst of the Department of Urban Development and Infrastructure
VIII	Ministry of Housing and Urban Planning (Regional office)	Analyst of the Department of Urban Development and Infrastructure
IX	Ministry of Housing and Urban Planning (Regional office)	Chief of the Department of Urban Development
IX	Regional Government	Person in charge of the process of planning and territorial development
IX	Instituto de estudios del Hábitat. Universidad Autónoma (Consultant)	Environmental coordinator
IX	Regional Government	Person in charge of the Territorial Information Section
IX	Regional Government	Person in charge of the process of planning and territorial development / Secretary of the Regional Commission of the Coastal Land Use
IX	Ministry of the Environment (Regional office)	Person in charge of SEA and climate change
IX	Laboratorio de Planificación Territorial, Universidad Católica de Temuco (Consultant)	Project coordinator
IX	Laboratorio de Planificación Territorial, Universidad Católica de Temuco (Consultant)	Environmental analyst
IX	Ministry of Housing and Urban Planning (Regional office)	Spatial planning analyst/ Environmental coordinator
IX	Centro de estudios Territorio Mayor, Universidad Mayor (Consultant)	Director
IX	Laboratorio de Planificación Territorial, Universidad Católica de Temuco (University)	Researcher / Coordinator of the Laboratorio de Planificación Territorial
XIV	Ministry of Housing and Urban Planning (Regional office)	Chief of the Department of Urban Development
XIV	Ministry of the Environment (Regional office)	Person in charge of SEA
XIV	Regional Government	Professional of the Strategic Analysis Department
XIV	Regional Government	Person in charge of SEA
XIV	Ministry of Public Works (Regional office)	Professional of the Planning Department
XIV	Universidad Austral de Chile (University)	Researcher
X	CECPAN (Consultant)	Geographer in charge of the spatial planning thematic
X	Ministry of Housing and Urban Planning (Regional office)	Spatial planning analyst
XI	Ministry of the Environment (Regional office)	Person in charge of the natural resources, waste and risk assessment
XI	Ministry of Housing and Urban Planning (Regional office)	Chief of the Department of Urban Development

Geographic distribution of the participants

Results (Selected closed questions)



Question	Answer "others"
4	In the sustainability analysis but not as the essential component
4	Economic diagnosis
4	In the conceptual elaboration of the spatial plan
5	Evaluation of trade-offs and synergies among different ecosystem services
5	The incorporation of the concept in the policy context. Case studies are needed
5	The ecosystem services should not influence SEA but support an integrated territorial analysis
5	Loss/degradation matrices of ecosystem services
5	With a clear and solid conceptual definition
6	Considered irrelevant for an effective application
6	Lack of information about spatial modeling of ecosystem services
6	Limited institutional development
6	Political will
7	Soft systemic analysis
7	Economic valuation and environmental assessment
7	Economic valuation of ecosystem services



Final comments

In general, the understanding of SEA is relatively close to what is mentioned in the theory. However, there is still an important number of actors with the traditional EIA in mind, instead of a strategic vision.

Regarding to the ecosystem services approach, while most of the respondents involved were able to identify them in a proper way, there exist elements of confusion amongst almost half of the participants.

In relation to the ecosystem services integration in SEA and spatial planning, the most relevant and recognized aspect is the social evaluation. This should be incorporated in the sustainability analysis of the spatial plan.

Finally, the network analysis shows the structure of relations between the identified concepts in SEA and the actors who have recognized them. In this stage, the network analysis for the understanding about ecosystem services and the interrelation with SEA and Spatial planning is still in process in this research.



Acknowledgements

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