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Armenia, Azerbaijan, Belarus, Georgia, Republic of Moldova, Ukraine

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## Strategic Environmental Assessment (SEA): SEA for Regional and Spatial Plans: Key Issues

Online Training Workshop on the Practical Application of Strategic Environmental Assessment (SEA)  
in Regional and Spatial Planning

26-27 April 2021

Baku, Azerbaijan

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## Addressing cumulative effects

- **Cumulative effect** – aggregation of the same effects (e.g. nitrogen oxid) from numerous pollution sources (if projects evaluated in isolation, such effect could not be detected)
- **Synergic effect** – combination of different effects (e.g. different pollutants) creates a qualitatively different pressure on the receiving environmental component
  
- Typical cumulative effects:
  - Land uptake
  - Multiple pollution sources (emissions to air, water,...)
  - Fragmentation of biotopes
  - ...?
  
- Problem is lack of standards/quantified objectives/tresholds

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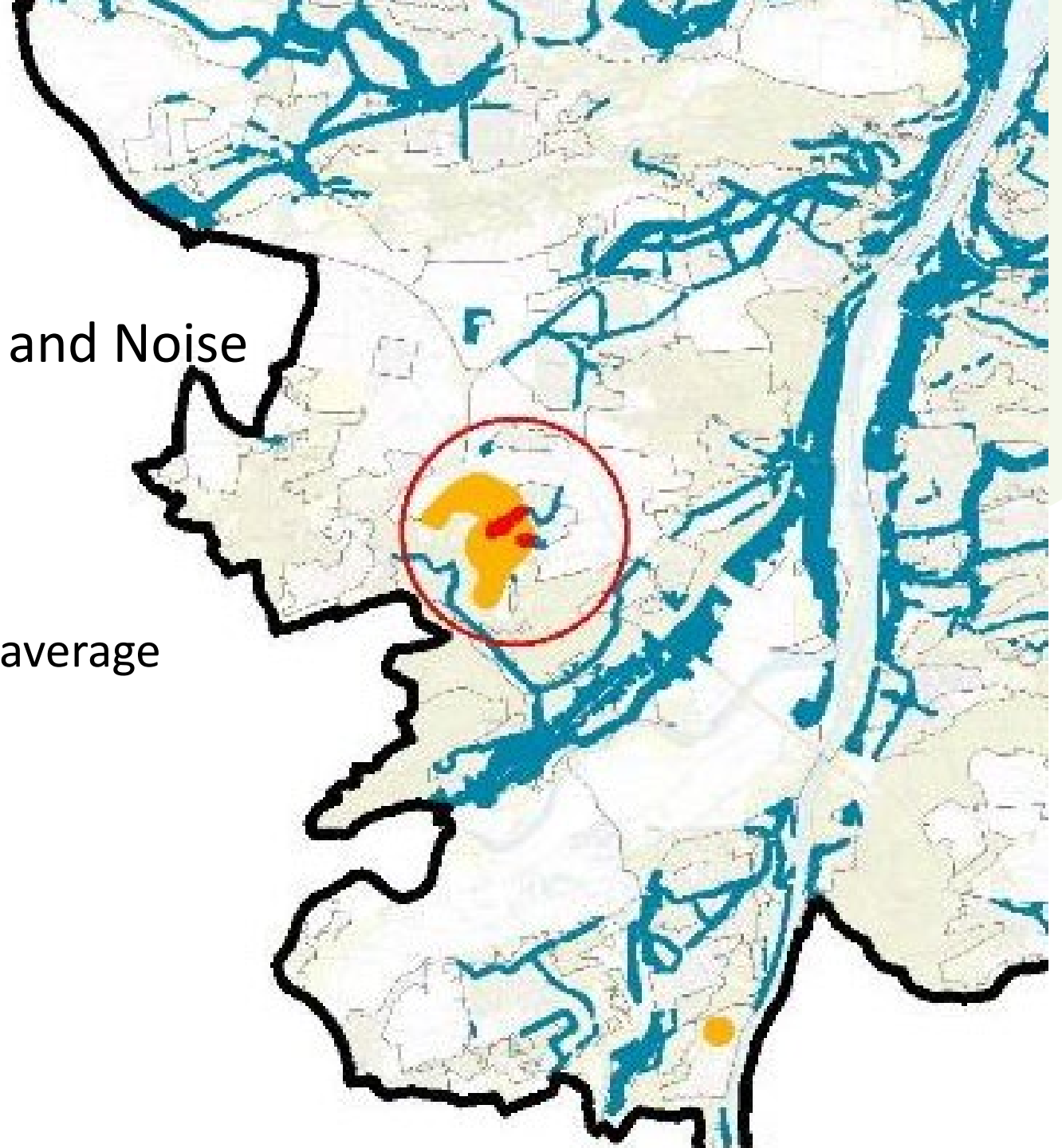


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- Synergic effect of Air pollution and Noise  
on Human health:

Simultaneously exceeded

- limits for noise at night,
- and limits for acceptable yearly average  
concentration of N<sub>2</sub>O





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## Inidirect (secondary) effects

- Effect on a given environmental component is taking place through other (related) environmental component
  - Pollution of water affects through consumption of contaminated water human health
  - Loss of forests can cause loss of biodiversity

Difficult to draw the line when identifying relevant problems worth analysing in any given SEA

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## Analyzing traffic noise in SEA

- Often inherently inaccurate due to lack of consideration for vertical alignment parameter of the proposed roads (corridors) (whether it is a “sunken line” or on a high embankment) and lack of info about technical design in general
- Lack of precise data on existing noise situation
- Simplified analysis typically rely on:
  - Modelled/estimated future traffic intensity (compared with BAU scenario)
  - Calculated noise levels for typical traffic situation
  - Population living in certain distance from the corridor (e.g. Within 30m, 50m, 100m, 200m)
- Results: Not a prediction of actual noise pollution, but a model for identification of potential problems and needs for mitigation measures on the project design level.

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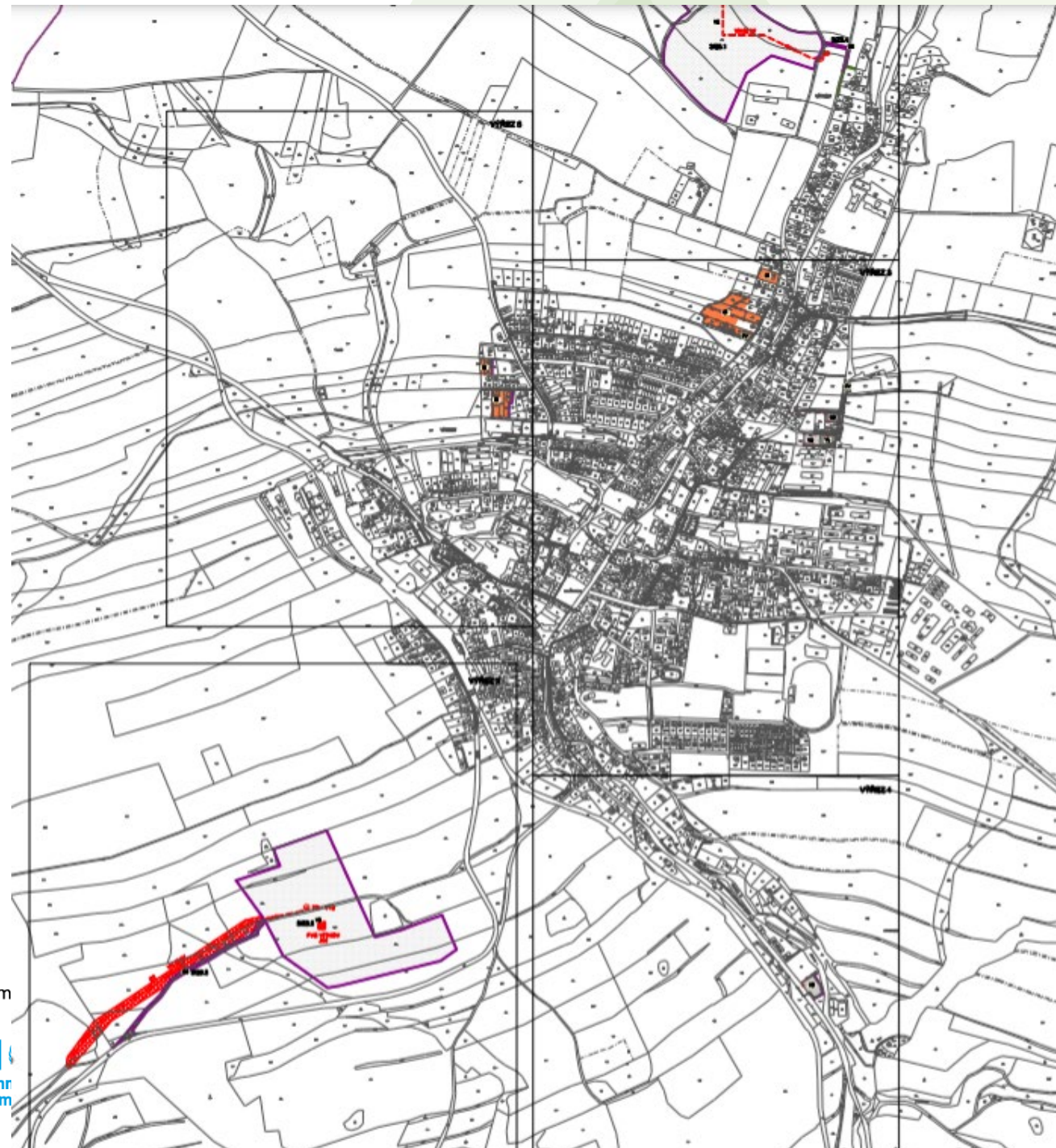




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# Investor-driven Spatial Planning

- Frequent changes compromise purpose and internal integrity of Spatial Plan
- Importance of SEA increases (to compensate for lack of complex strategy, to safeguard environmental interests against narrow-minded push for a momentarily fashionable project)



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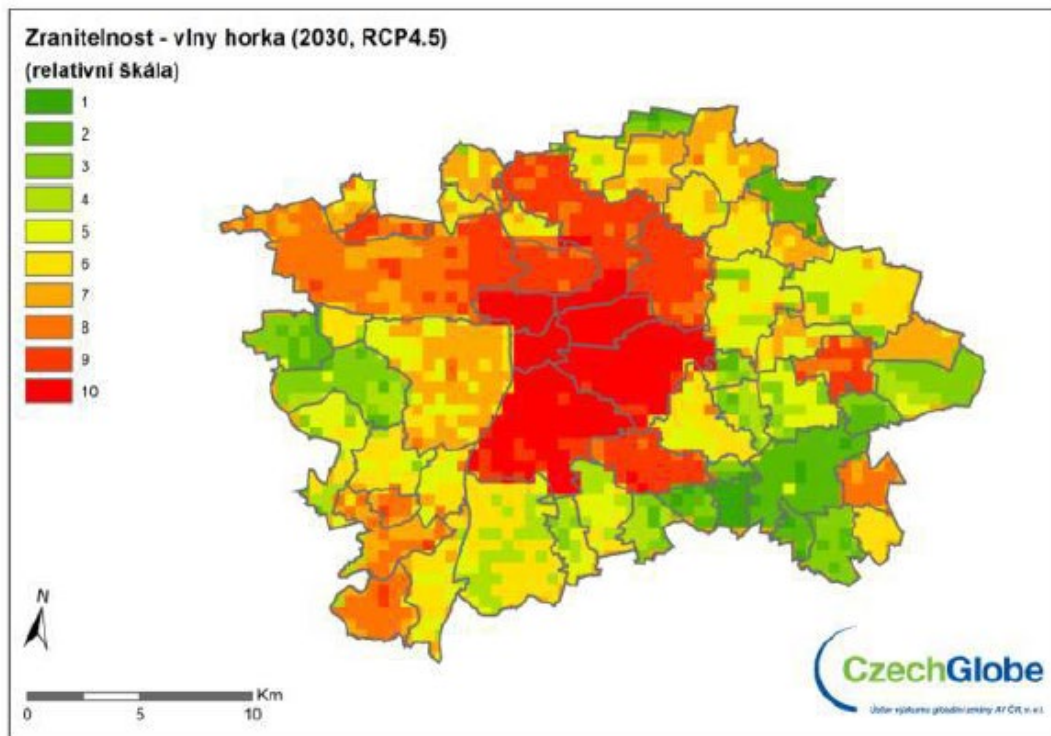


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# Climate Change Adaptation

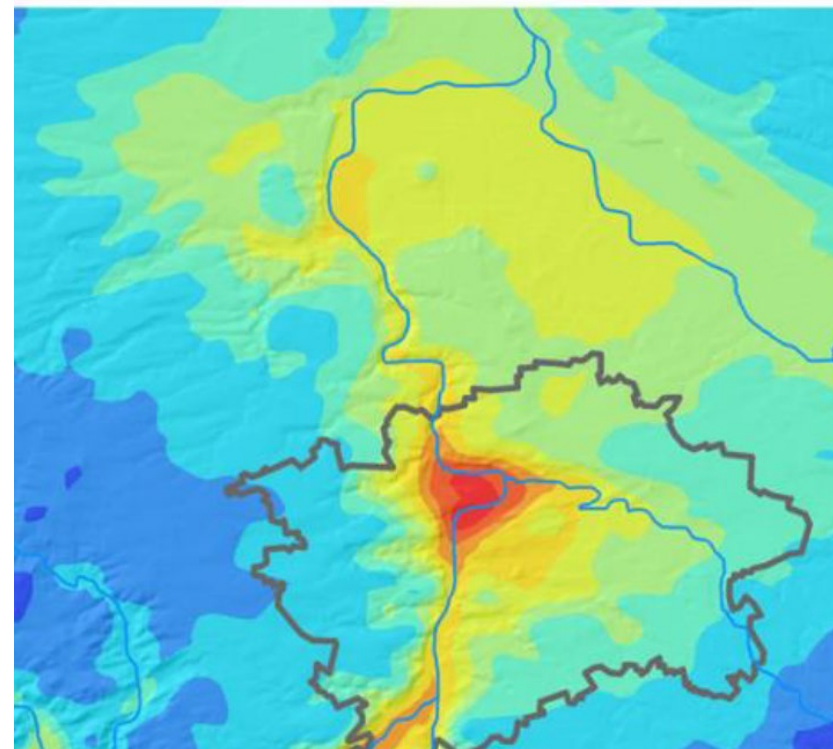
- Identification of vulnerable areas, population
- Floods, heat-waves, droughts, extreme weather events,...

Obr. 4.1: Zranitelnost obyvatel hlavního města Prahy vůči dopadům vln horka v r. 2030 podle scénářů RCP 4,5 (stabilizace koncentrací emisí CO<sub>2</sub> na nižších hodnotách).



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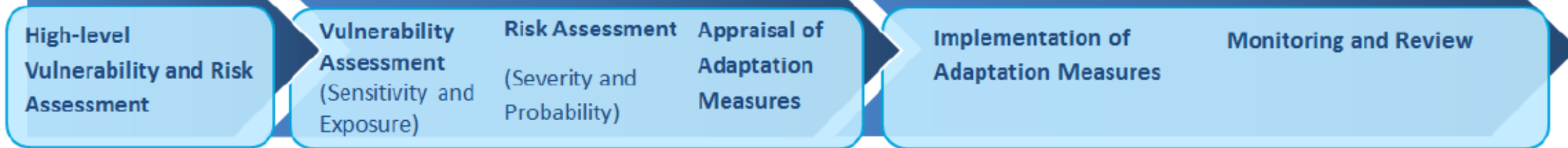


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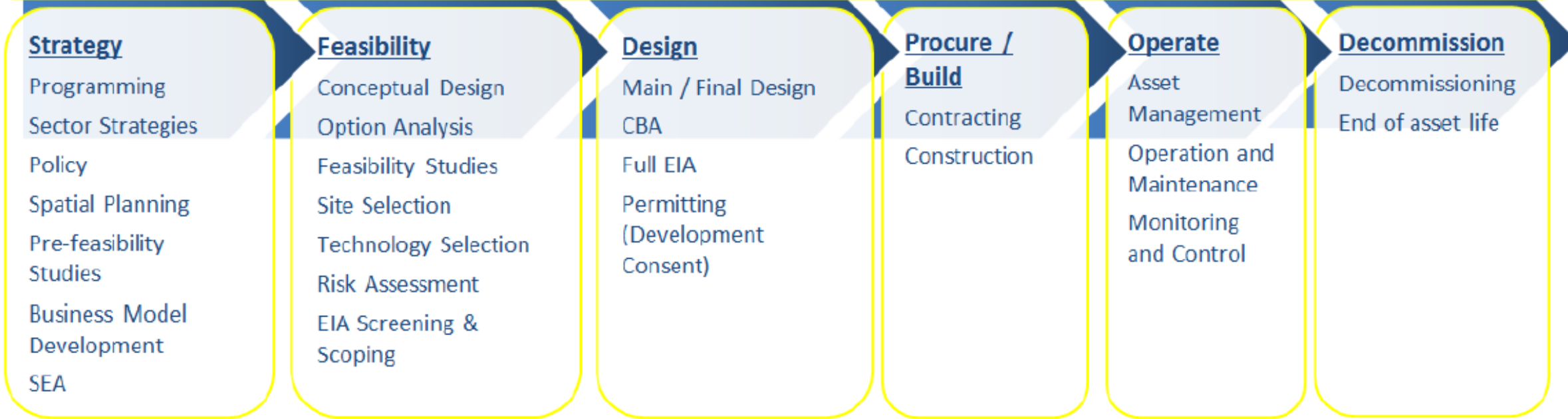
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## Climate Change Adaptation – Vulnerability and Risk Assessment and Enhancing Resilience



## Project Development Cycle







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## SEA Consultations

- Identification of relevant stakeholders (stakeholder analysis during Scoping)
- Somewhat broader definition of stakeholder than generally in Spatial Planning
- Shall be aligned with formal Planning process
- Role of SER?

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## In conclusion: What makes good SEA?

- Proper participatory process
- A good reliable report with
  - Identifies environmental risks and opportunities
  - Scientifically sound estimation of likely effects
  - Mitigation measures proposed
- Improvement of the plan under assessment
  - Ensured compliance with environmental goals
  - Put in place safeguards and monitoring for unforeseen effects
- Final decision (permit/approval) considering SEA conclusions
- Something else?
  - Seeking windows of opportunity to influence planning and decision making
  - Quality of planning and decision making are critical limits
    - Commitment to SEA results

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## Questions?

## Thank you for your attention!

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