

How to create conceptual model

+ 2nd seminar

+ Ontologies and Semantic Web
2025/2026

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Simplificati on of answering questions

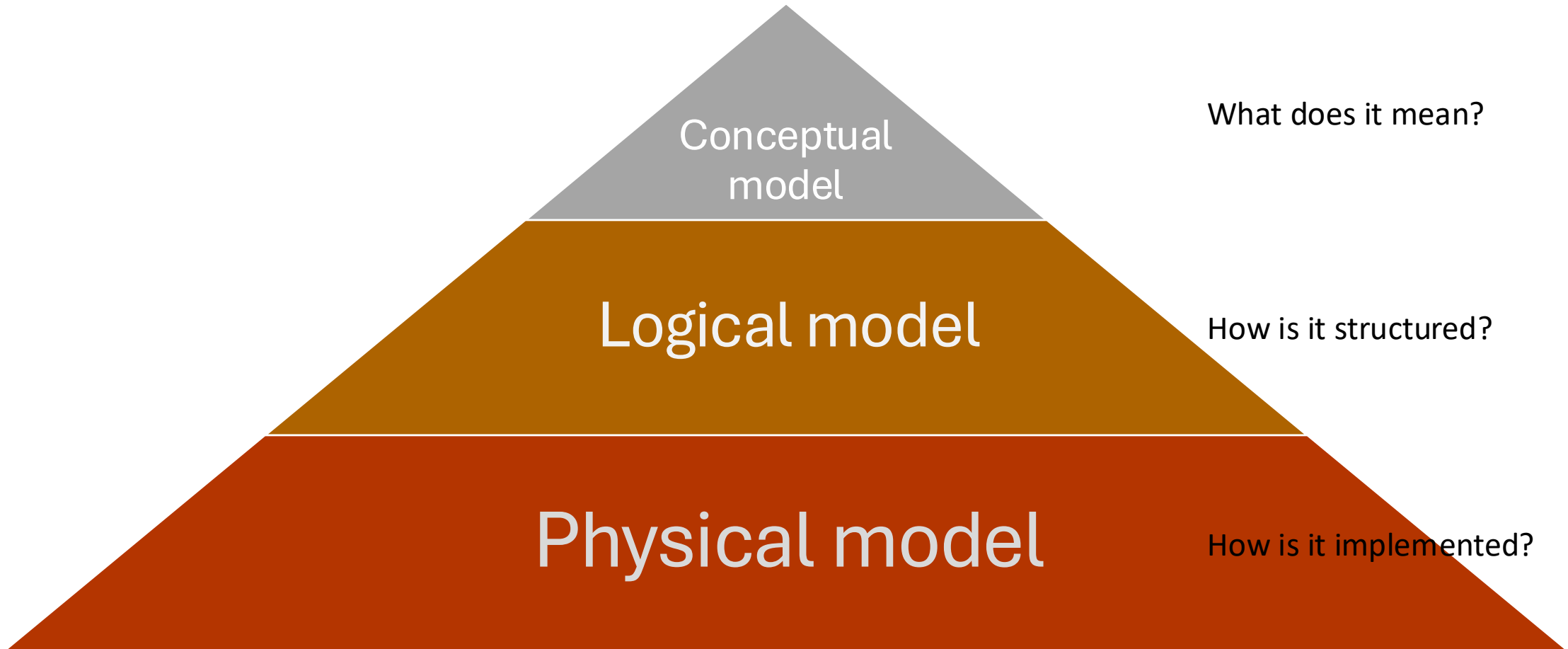


In which areas can I legally
camp or bivouac?

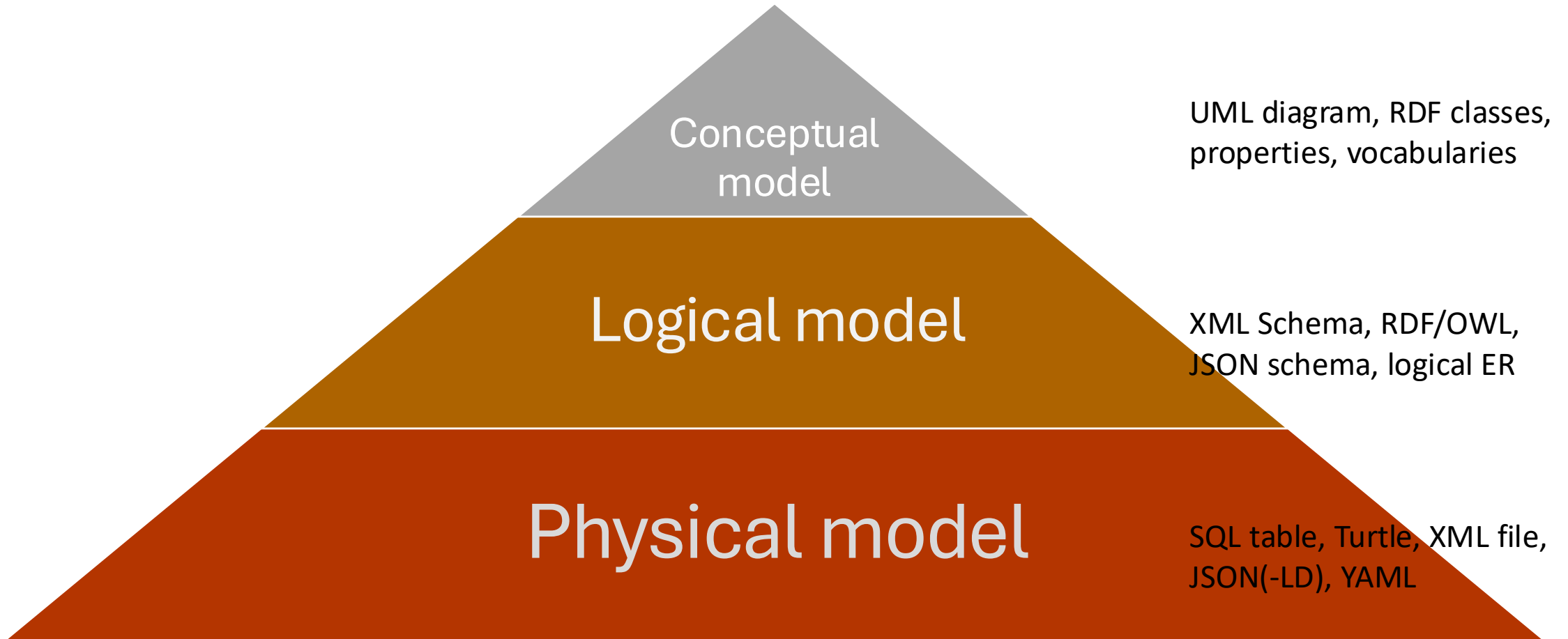


And abroad?

(Meta)data modelling

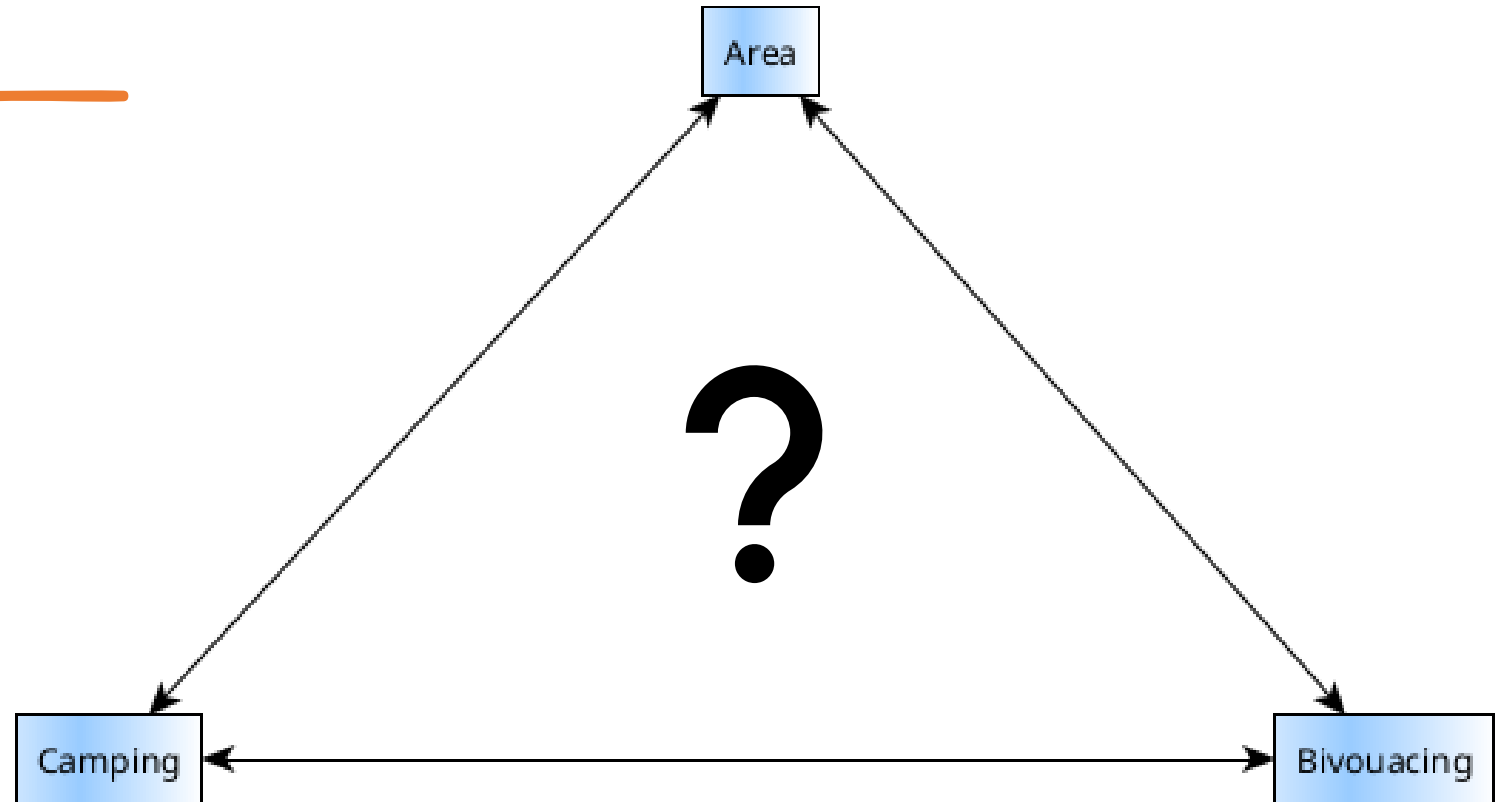


(Meta)data modelling



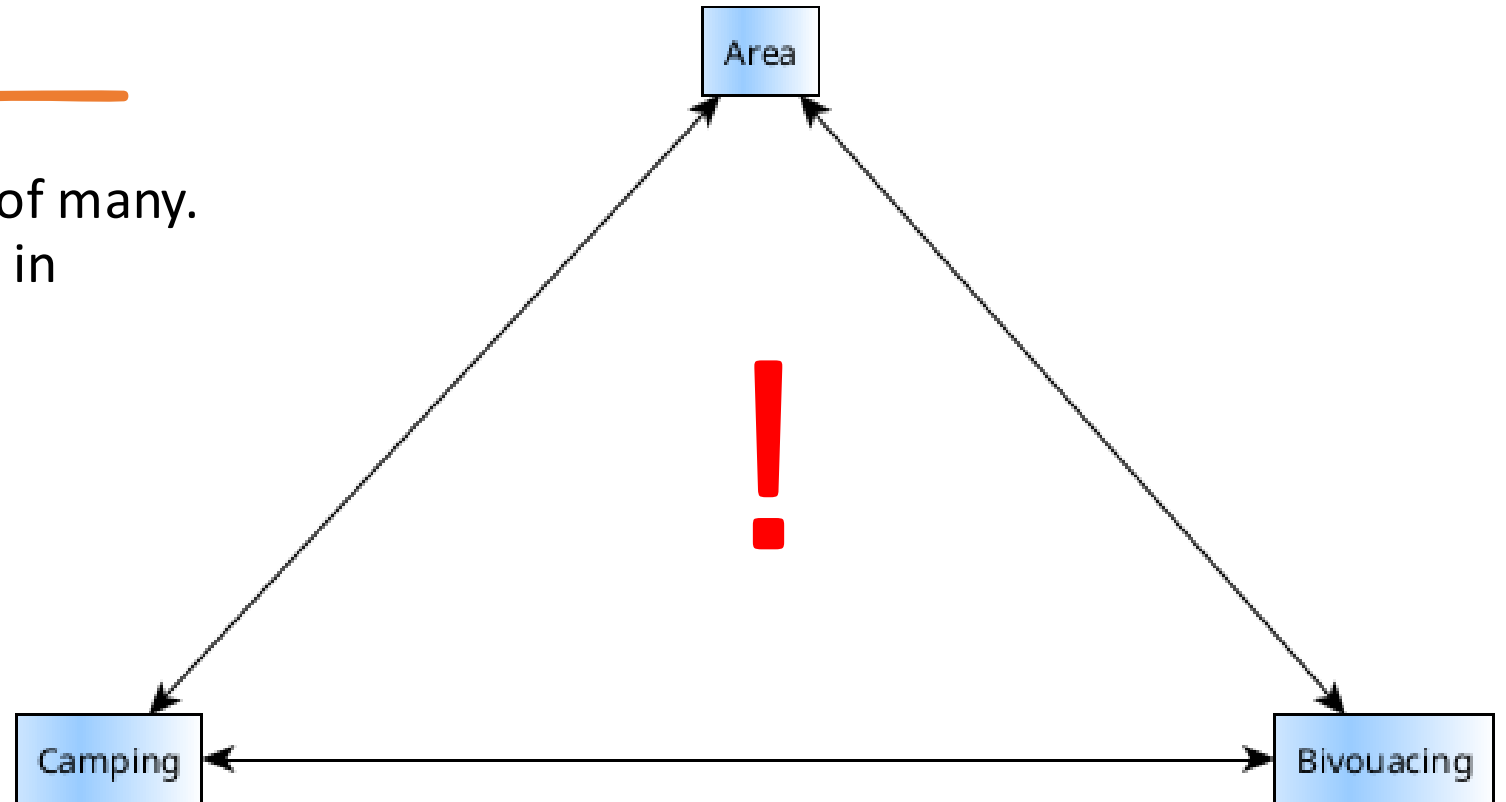
Generic conceptual model

- WHAT I want to find out?
- HOW to access it?



Generic conceptual model

Attention! Output model is one of many.
Same problem may be modelled in various ways.

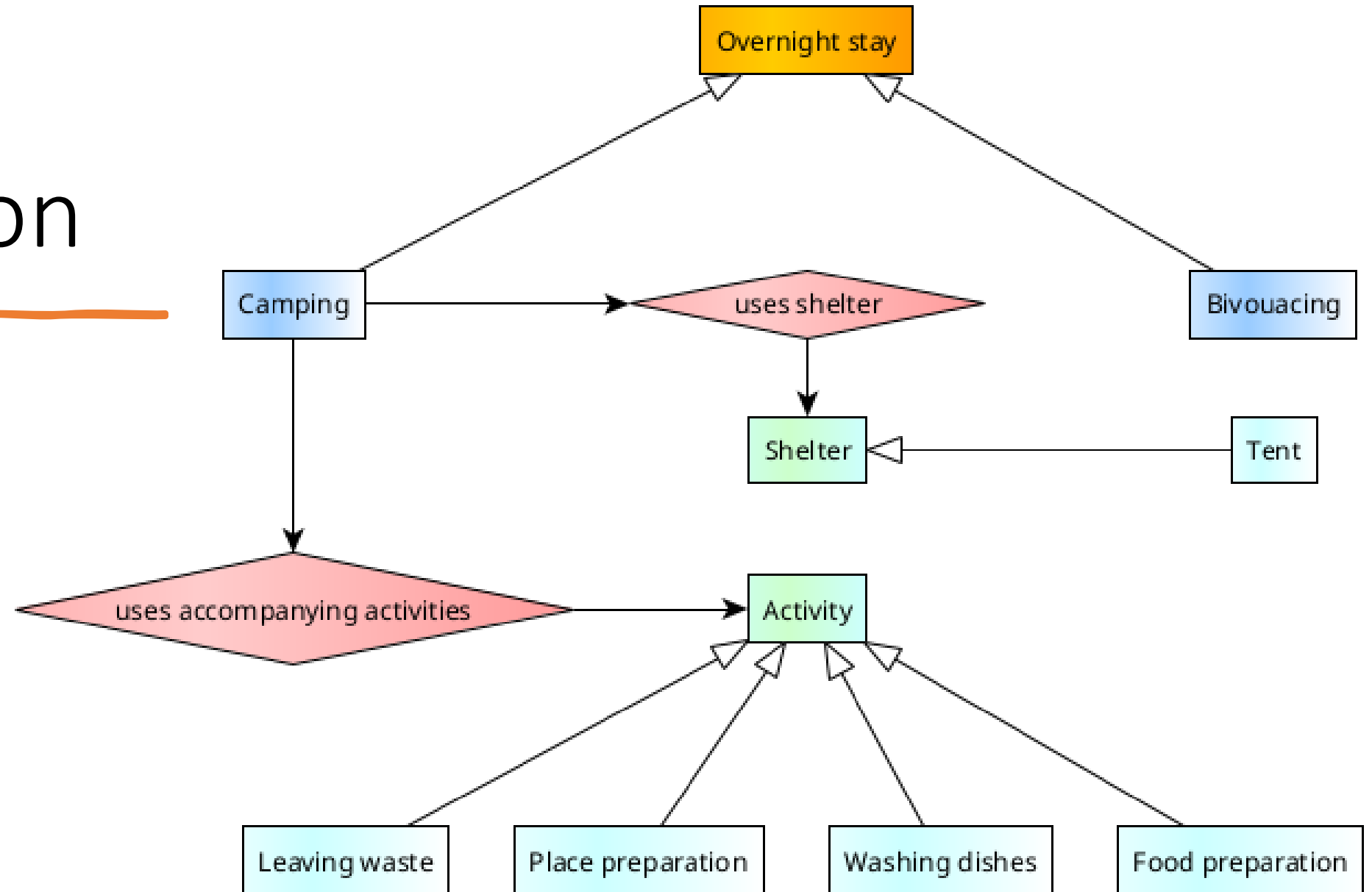


Terms definition

- Camping is understood as "a **set of activities** that allow a person (individual or group of people) to stay in one place in nature, usually with the possibility of spending the night". It is good to know that if camping is prohibited somewhere, this automatically applies to all its accompanying activities, such as **preparing a place for sleeping, preparing food, washing dishes, leaving waste**, etc. In some cases, staying in a given place during the day or spending the night in a motorhome or caravan (e.g. building an extension, preparing food, creating waste) may also meet these characteristics.
- Although camping is prohibited in national parks and protected landscape areas, there is one tolerated way of spending the night. "Mere bivouacing, i.e. spending the night (sleeping for one night under the open sky) **without shelter** (under a tarpaulin in bad weather) and provided that there are no signs of staying (especially **leaving waste**) is not considered camping." However, this does not apply in the case of quiet areas of national parks or national nature reserves, where movement outside the marked trails is prohibited.

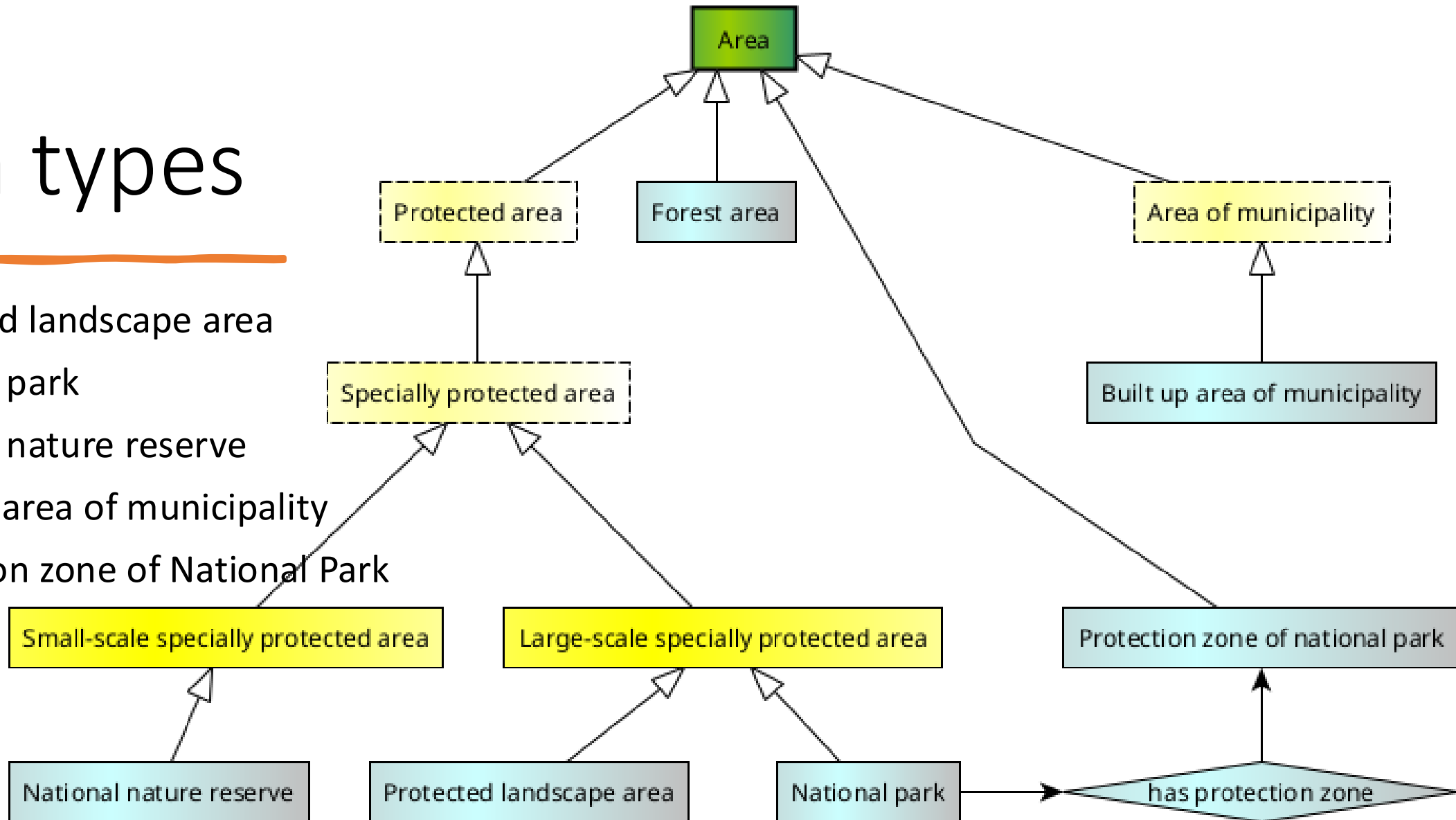
Terms definition

- Camping
- Bivouacing



Area types

- Protected landscape area
- National park
- National nature reserve
- Build up area of municipality
- Protection zone of National Park
- Forest



Area and its subdivisions

Task: find other semantics for the concept "area type" or "area zoning" and include it to the model in relation to the term Area.

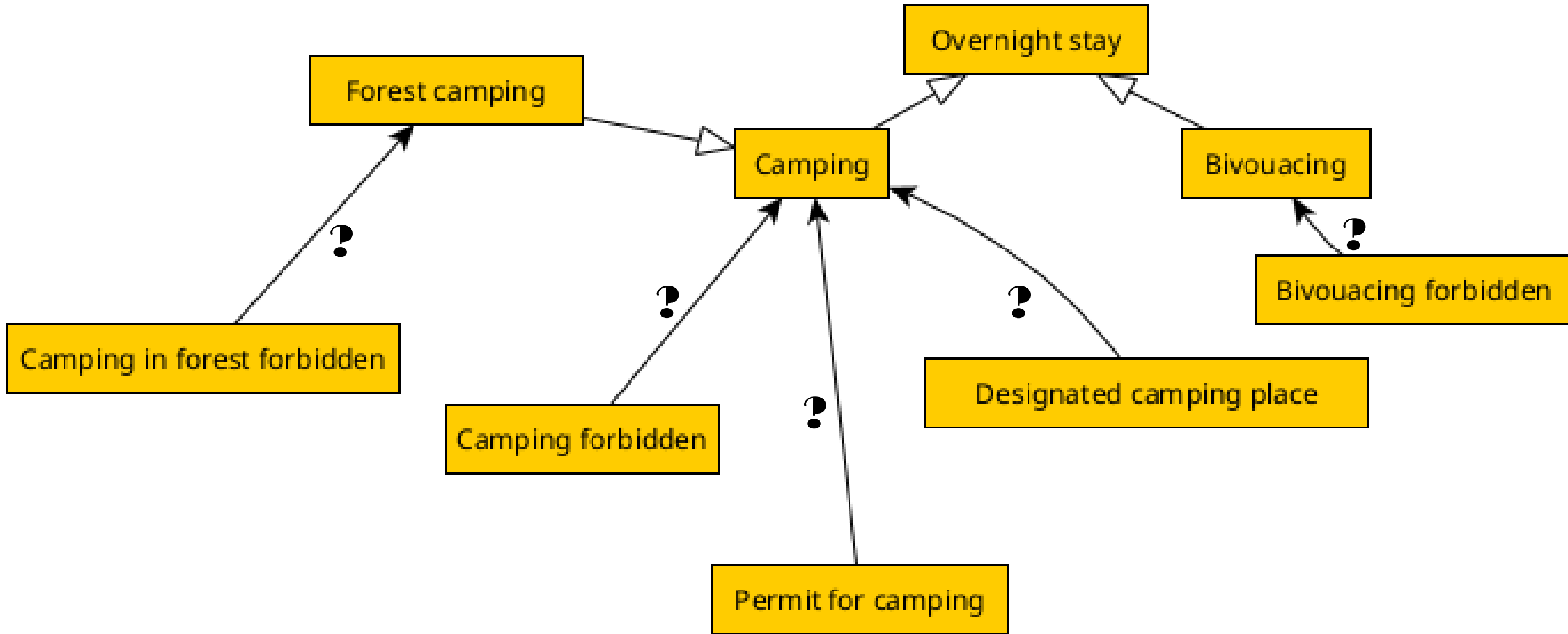
...Zoning plan, cadastral zoning, administrative unit...

Czech law 114/1992 Col., environmental law

- §16 (2) o): camping is forbidden in **national parks** outside **designated camping area**
- §16a (1) c): overnight stay forbidden in national park **České Švýcarsko** outside **designated camping area**
- §26 (1) b): camping forbidden in **protected landscape areas** outside **designated camping area**
- §29 j): camping forbidden in **national nature reserves** outside **designated camping area**
- §37 (3) a): in **protected zones of the National Park**, permission from the nature conservation authority is required, **outside built-up areas of municipalities**

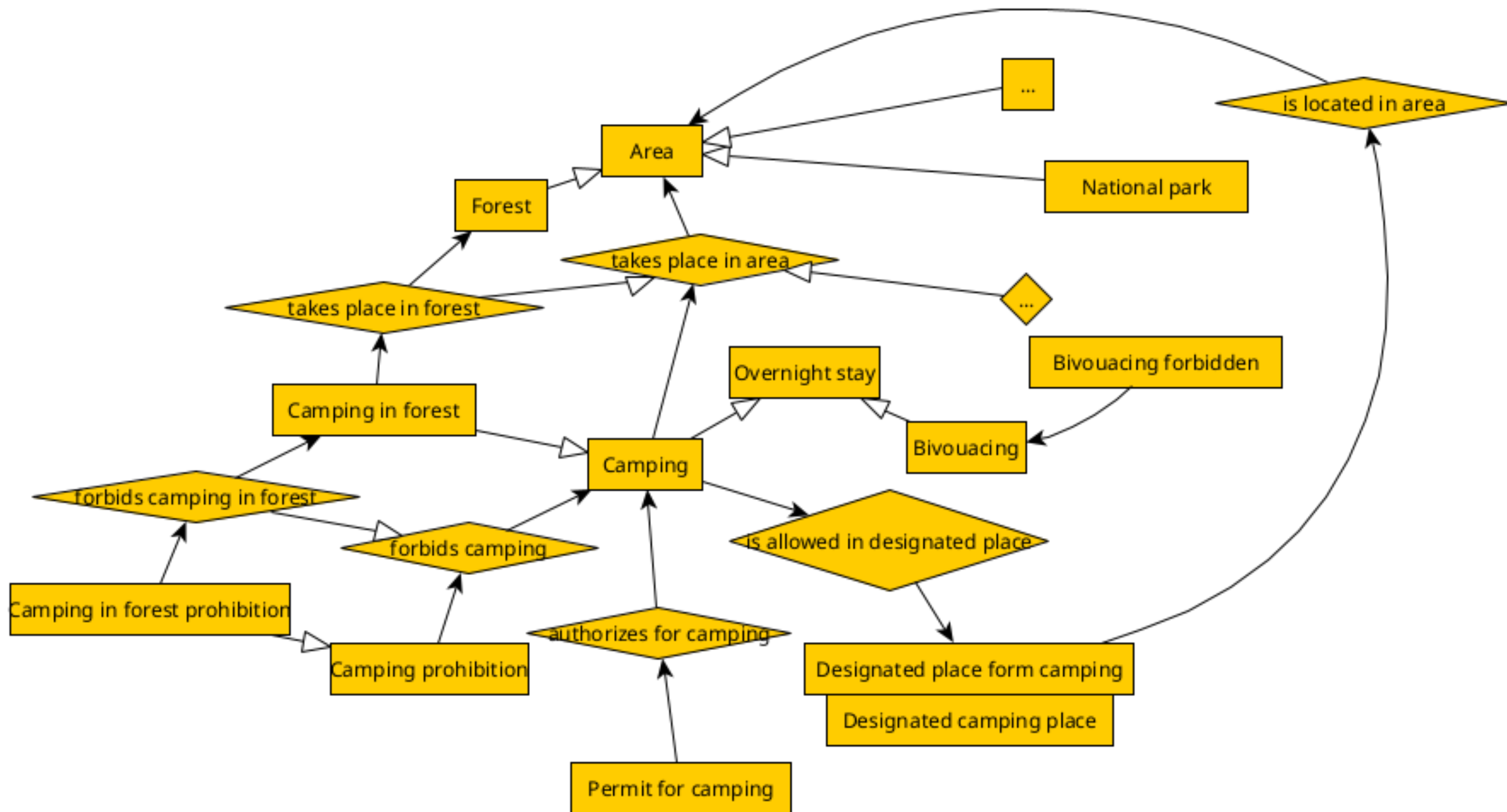
Czech law 289/1995 Col., forest law

- §20 (1) k): camping forbidden in **forests** outside designated camping sites
- §53 (1) f): by violating the previous one, a person commits an offense



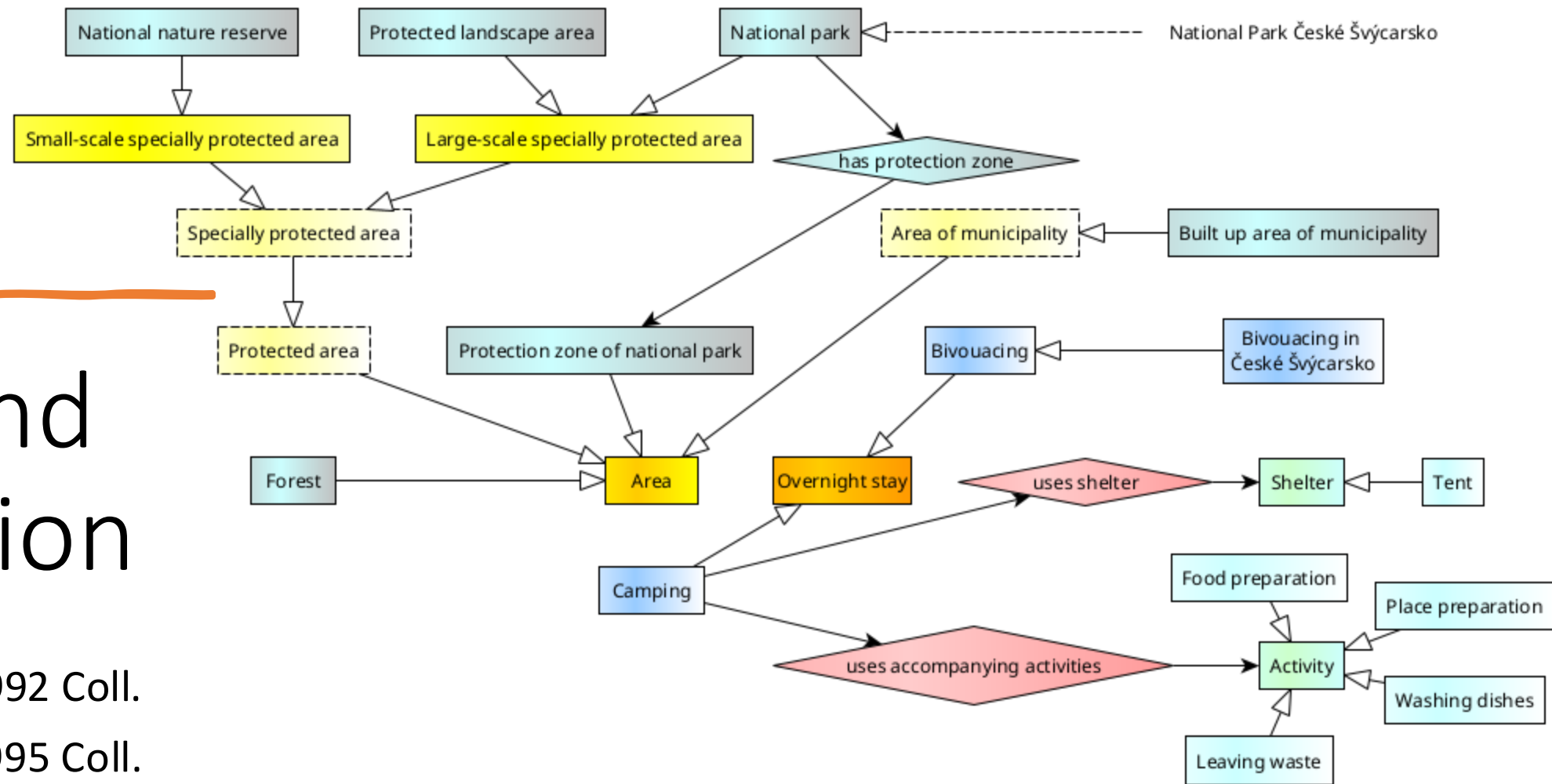
Czech law 114/1992 Col., environmental law

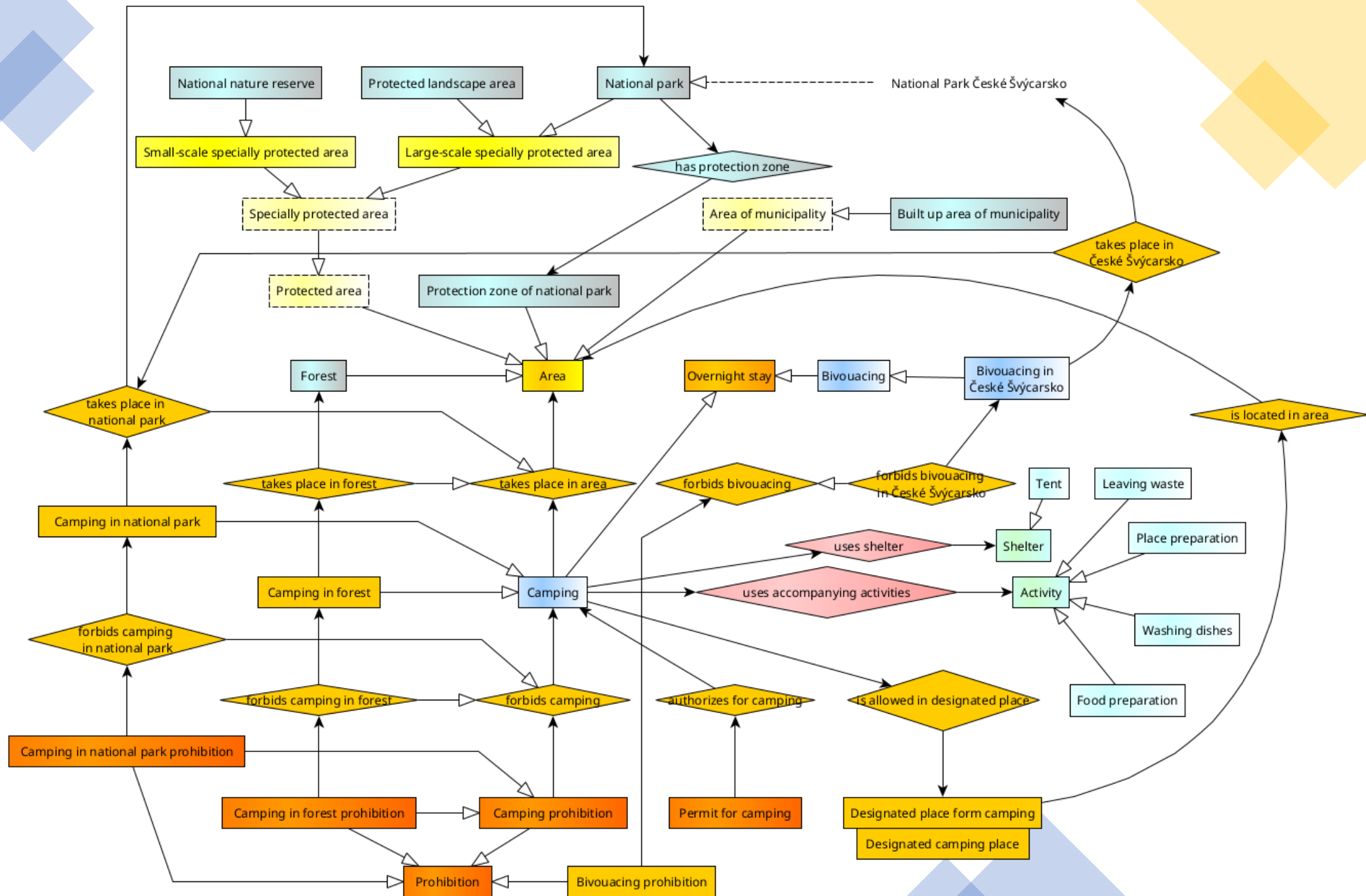
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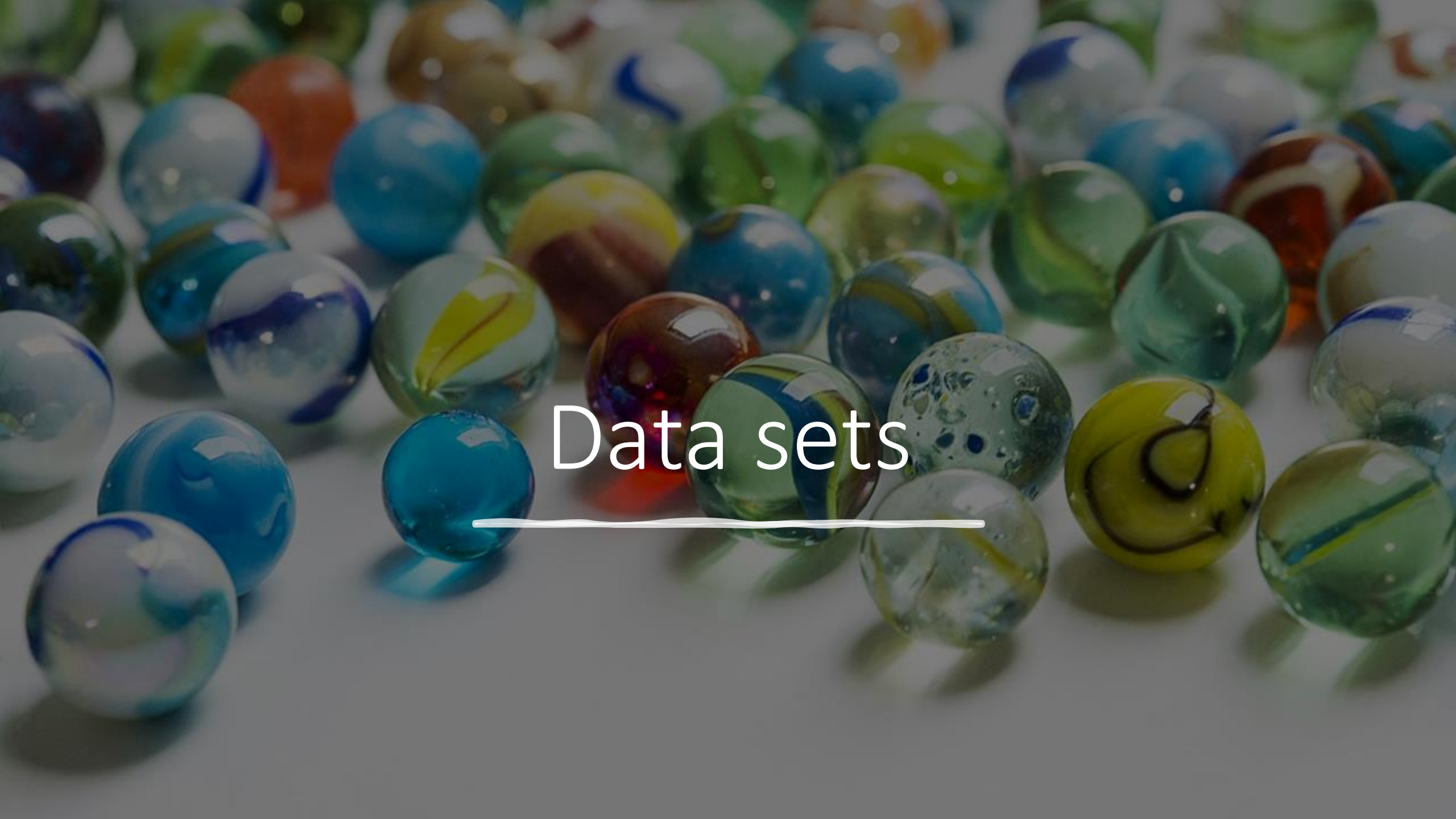


Laws and legislation

- Law no. 114/1992 Coll.
- Law no. 259/1995 Coll.

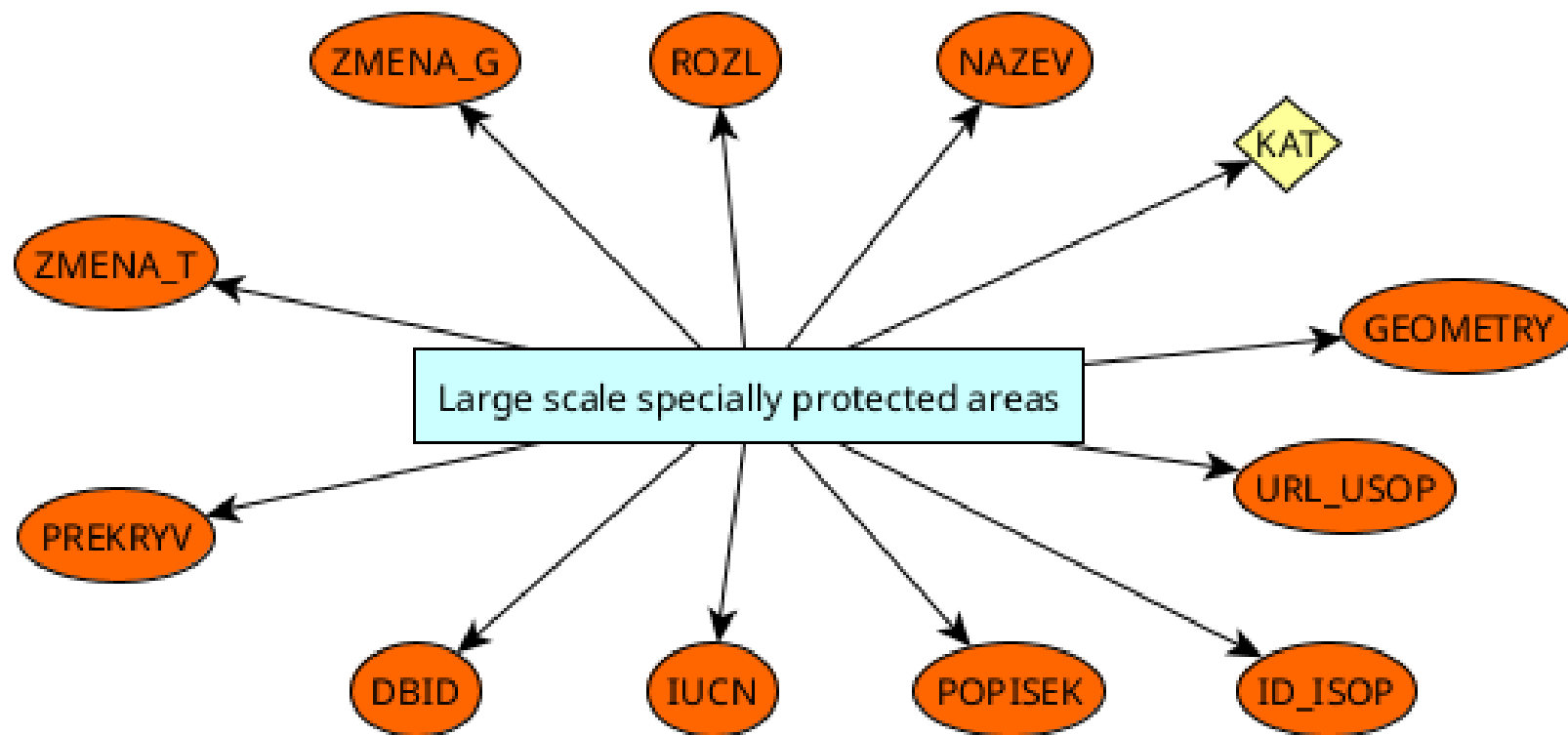




A close-up photograph of numerous colorful marbles scattered on a white surface. The marbles feature various patterns and colors, including solid colors like blue, green, and red, as well as marbled patterns in shades of blue, green, yellow, and white. The lighting is bright, creating soft shadows and highlighting the glossy texture of the marbles.

Data sets

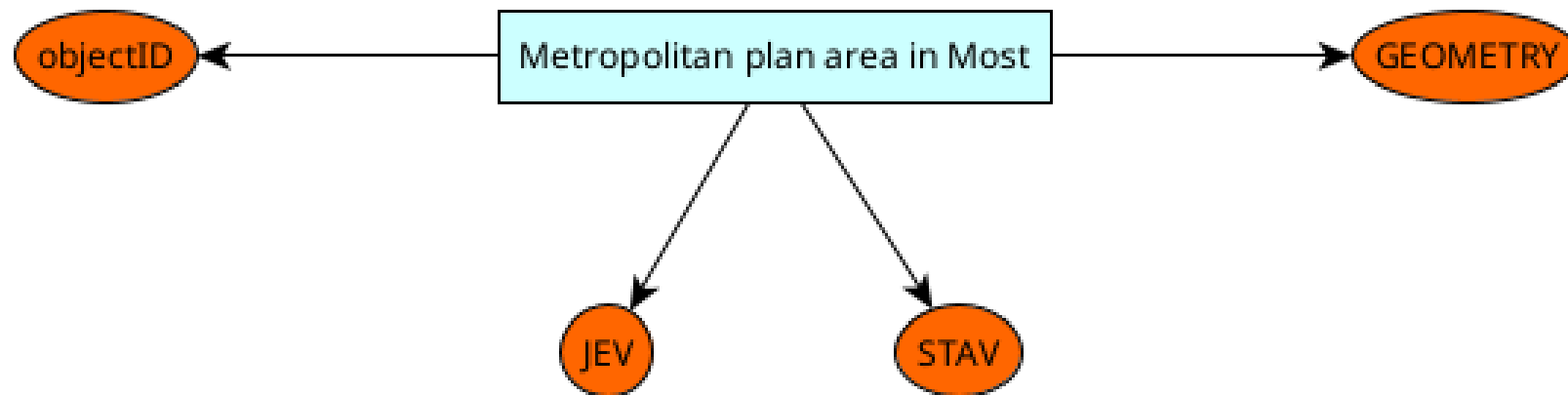
Large scale specially protected areas



Built up areas in Prague

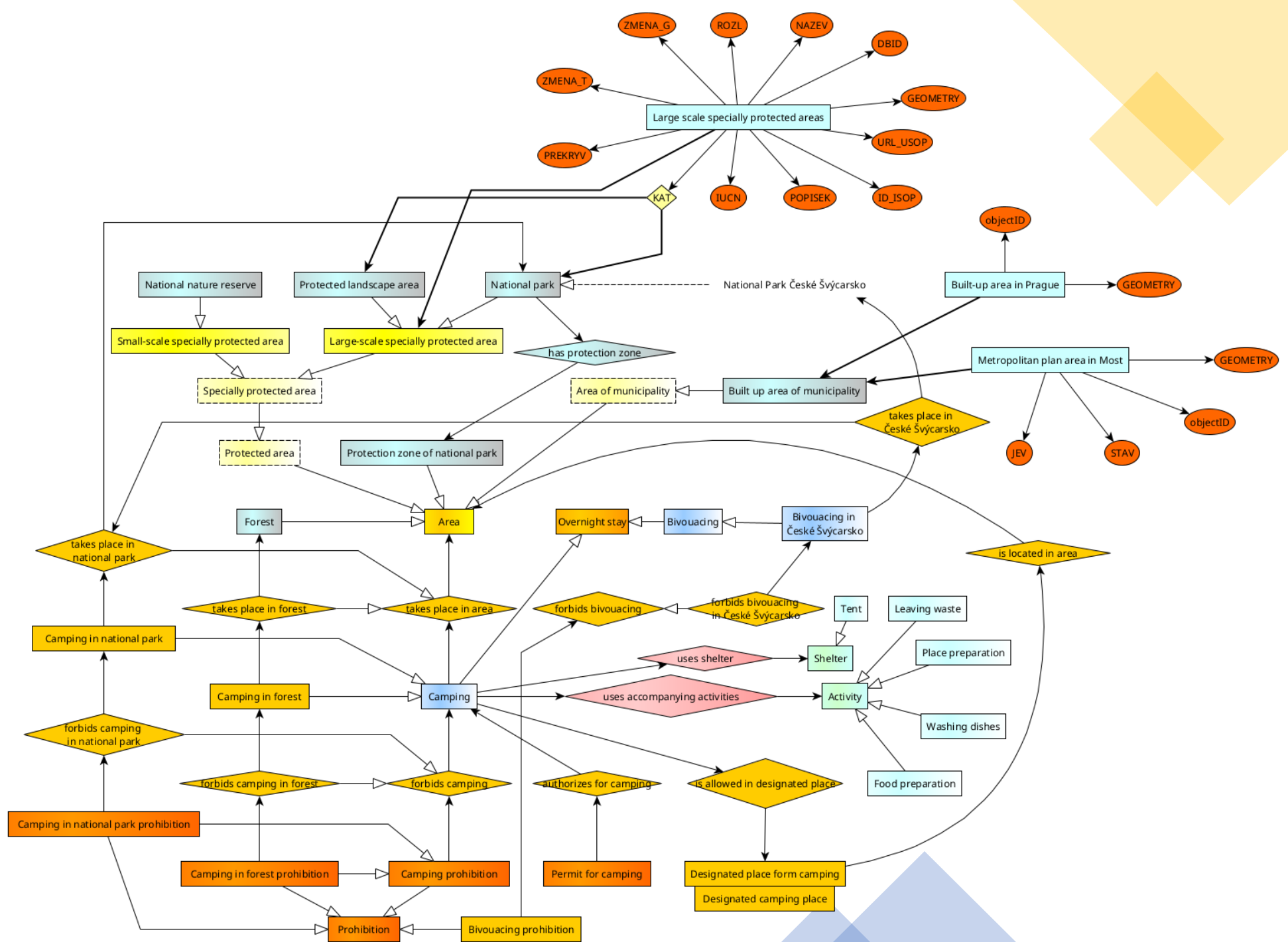


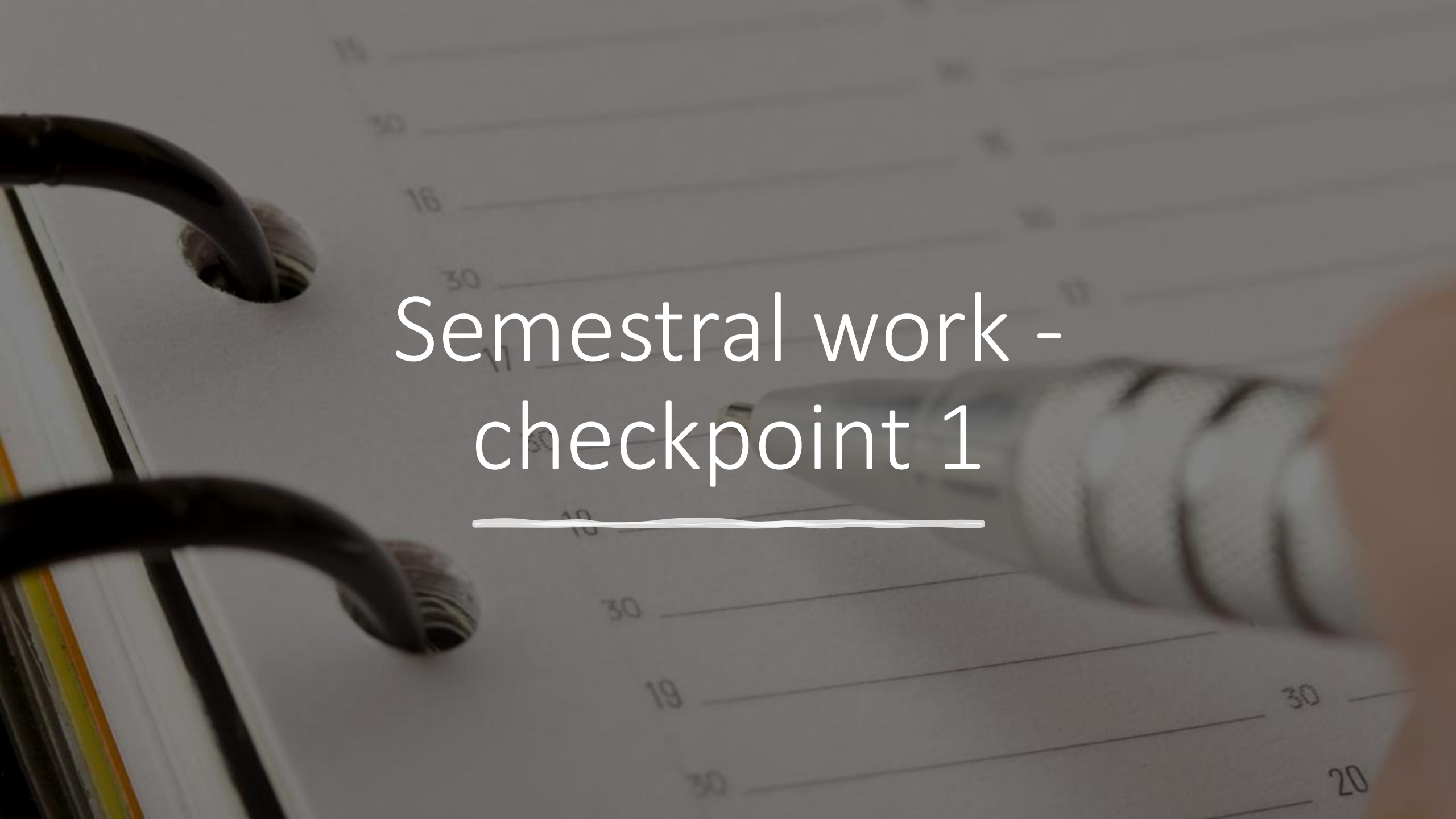
Built up areas in Most



Mapping

A black pushpin is pinned to a map background. The map features a grid of latitude and longitude lines, with a prominent radial pattern of lines emanating from the point where the pushpin is located. The word "Mapping" is written in a white, sans-serif font, centered horizontally and positioned above a thin, white, wavy underline.



The background is a close-up, slightly blurred image of a spiral-bound notebook. The notebook is open, showing several pages with horizontal ruling. A black spiral binding is visible on the left side. A silver pen with a black grip is lying diagonally across the middle of the notebook. A yellow pencil is also visible on the left side, partially obscured by the spiral binding. The text "Semestral work - checkpoint 1" is overlaid in the center of the image in a white, sans-serif font. Below the text is a white horizontal line.

Semestral work - checkpoint 1

- Choose or define a question; validate ,
- Create conceptual model,
- Find relevant data sources that helps answer the question,
- Create data models for datasets and map them to conceptual model,,
- Eventually revise conceptual model (e.g. narrow the meaning of a term based on the context used in data model).