

# Legal preconditions for mining (I)

## – Property rights, exploration and exploitation

Assistant prof. Lars Bäckström  
Luleå University of Technology  
Email: [Lars.Backstrom@ltu.se](mailto:Lars.Backstrom@ltu.se)

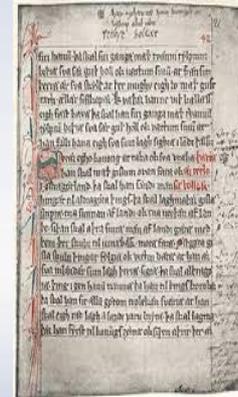


# Historical background

- Sweden has a long tradition of mining and mining legislation



# Historical background



# Mining in Sweden today (I)



## Mining in Sweden today (II)

- In 2018, about 75 million tons of ore were extracted in Sweden
- 0.0002% of the land is used for mining operations
- Sweden currently has 15 active mines run by 6 companies
- Types of ore (examples):
  - By far the largest iron ore (90%) producer in the EU
  - Produces about 40% of the EU's total production of zinc and lead
  - Produces about 10% of the copper production in the EU
- The largest mining companies in Sweden are **Loussavaara-Kirunavaara AB (LKAB)** and **Boliden Mineral AB**

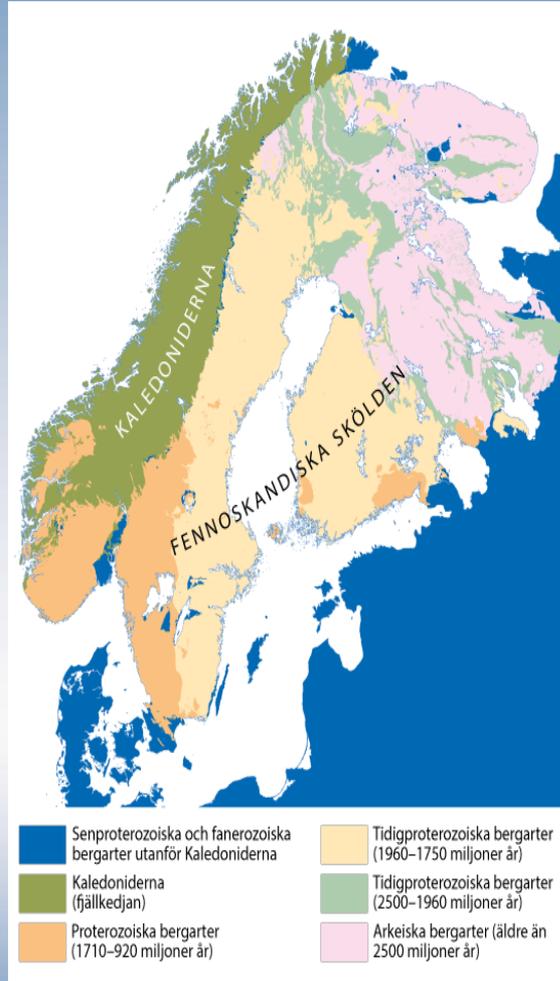
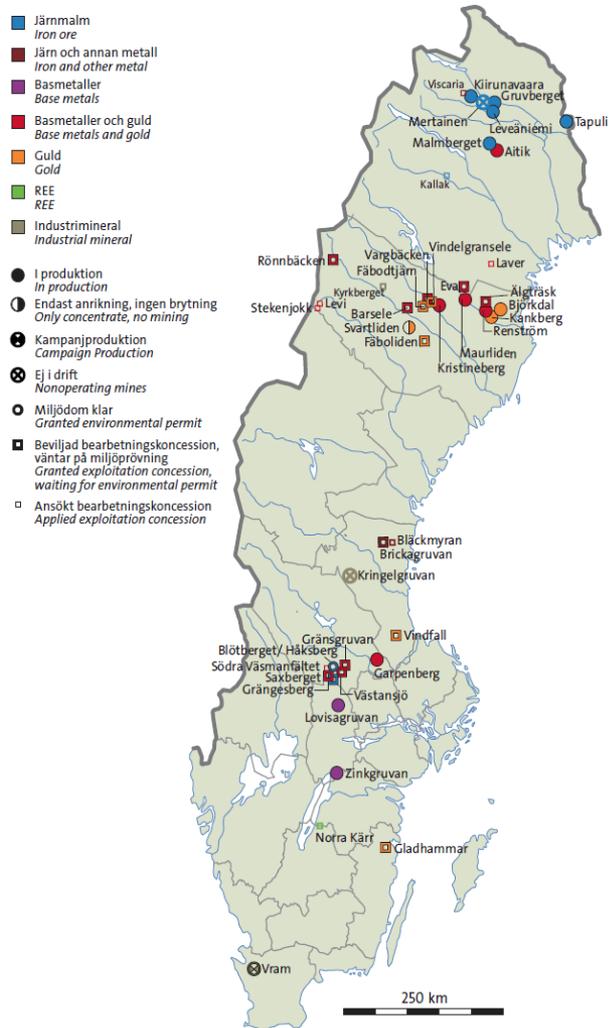
# General points of departure

- Sweden has very good geological conditions for mining
- Swedish law recognizes private ownership of land
- When you own land you are ‘in possession of a real estate’ (fastighet)
- Ownership of land (likely) includes the minerals lying in the bedrock/ground
- However, the rights/powers that follow from the ownership of land can be restricted by legislation
- The Swedish Mining Act constitutes such a restriction to the private ownership of land, *as it provides the right for basically anyone to extract mineral on somebody else’s land*

# Geological prerequisites

## Gruvor och aktuella koncessioner i Sverige 2018-08

Totalt 15 gruvor i drift varav 14 metallgruvor



# Private property rights

- Different starting points for the possession of land:
  - a) private ownership
  - b) limited right to land
- Swedish law lacks a general legal definition of the concept of private ownership
- Private ownership is, in principle, considered to mean that:
  - It is the owner who decides how the land should be used (or not used)
  - The owner can exclude others from using the land
- However, in accordance with the Swedish constitution, ownership can be restricted by legislation if “necessary to satisfy pressing public interests”

# The principal and current ownership of mineral

- Swedish legislation lacks explicit rules regarding vertical delimitation of real estates
- Research (my own) however indicates that also the elements of the soil below the surface (e.g. minerals) is part of the property and thus belongs to the landowner
- This ownership is however restricted by the minerals Act:
  - Gives everyone the right to extract minerals from other peoples' real estates

# Authorities in the permit process (I)

## The Mining Inspectorate:

- Established as a state authority in 1637
- Responsible for issuing permits for mineral exploration (exploration permit) and mining (exploitation concession)
- Carries out inspections of mines and provides information on mineral legislation and prospecting in Sweden
- Headed by the Chief Mining Inspector who decides on matters under the Minerals Act
- Part of the Geological Survey of Sweden (SGU), i.e. the agency for matters relating to bedrock, soil and groundwater

# Authorities in the permit process (II)

## The County administrative Board (CAB):

- Comments on issues regarding exploration permits
- Issues permits (certain types of exploration work requires a permit from the CAB, e.g., if the work involves off road driving with motor vehicles)
- Involved in the permit process for test mining
- Responsible for the issue of the area's suitability for mining (in connection with the decision made by the Chief Mining Inspector)
- Responsible for making sure that the activity complies with the conditions of permits as well as applicable legislation

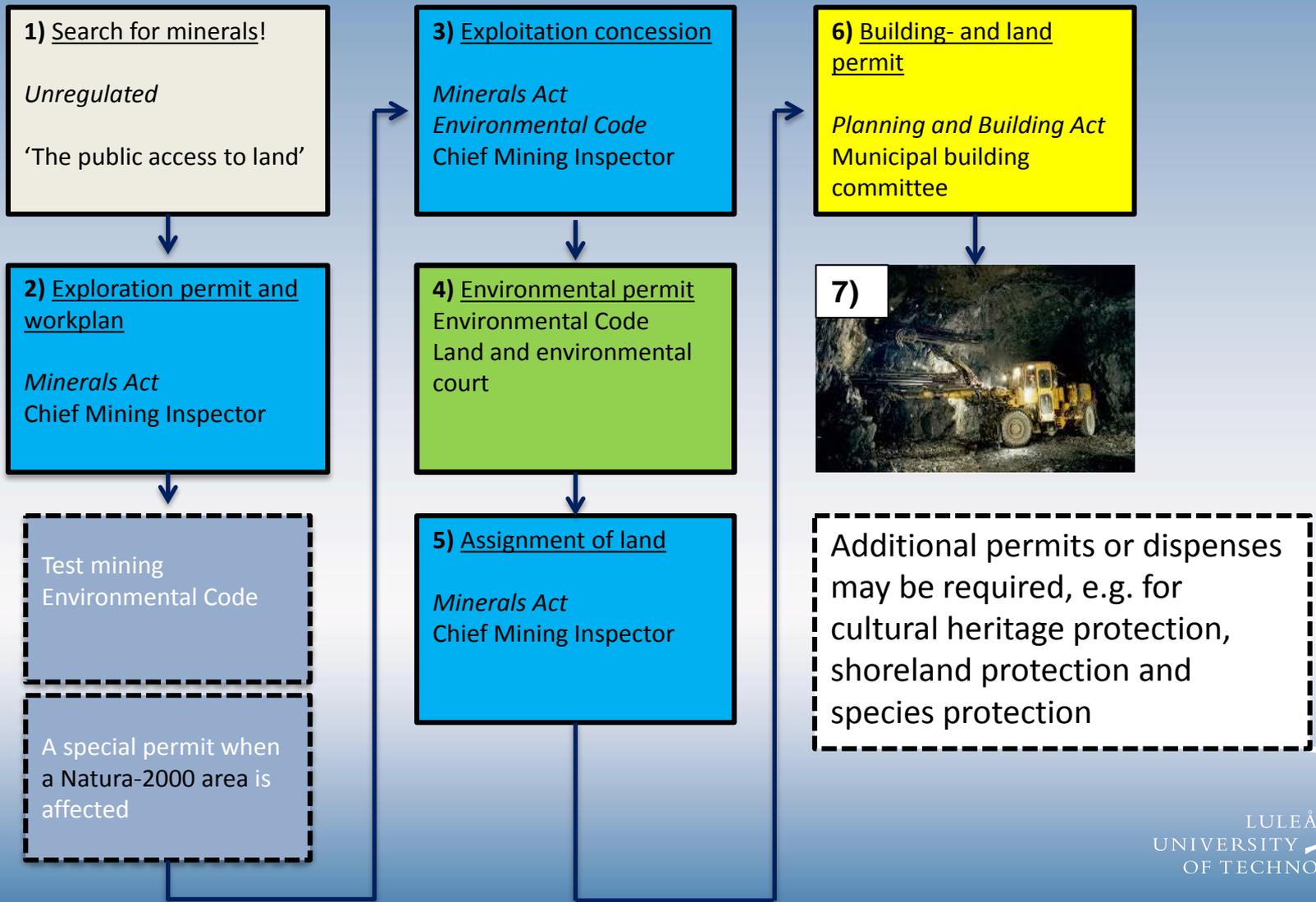
# Authorities in the permit process (III)

## The Land and Environmental Court:

- Decides on environmental permits and conditions for mining operations
- Maria will tell you more about this later!

A special permit is required when a Natura-2000 area is affected

# The licensing process



# Types of mineral

- Concession minerals
  - Mineral that is covered by the regulations of the minerals act
- Landowners minerals
  - Minerals that require the landowner's permission to extract

# Concession minerals

## The mineral substances covered by the Act are:

1. antimony, arsenic, beryllium, bismuth, cesium, chromium, cobalt, copper, gold, iridium, iron occurring in the bedrock, lanthanum and lanthanide series, lead, lithium, manganese, mercury, molybdenum, nickel, niobium, osmium, palladium, platinum, rhodium, rubidium, ruthenium, scandium, silver, strontium, tantalum, thorium, tin, titanium, tungsten, vanadium, yttrium, zinc and zirconium,
2. alum shale, andalusite, apatite, baryte, brucite, refractory clay or clinkering clay, coal, fluorspar, graphite, kyanite, magnesite, nepheline syenite, pyrite, pyrrhotite, rock salt or other similar salt deposits, sillimanite and wollastonite
3. oil, gaseous hydrocarbons and diamonds.

## 2) Exploration permit

- Necessary when the exploration work no longer can be carried out with the support of ‘the public right to areas’
- Provides exclusive rights to explore the area
- Permit presupposes that the applicant can make it probable
  - That the area contains concession minerals, and
  - That he is suitable for carrying out the exploration work
- A necessary but not sufficient prerequisite for commencing the exploration work
- Valid for three years, can be extended

# Exploration Work (cont.)

- To commence exploration work, the following is necessary:
  - Exploration permit
  - Financial/ security for any damage and encroachment caused by the exploration work
  - That a work plan is made and communicated with the Chief Mining Inspector, the land owner and other stakeholders (e.g. Sami Villages)

# Work plan

## The plan must include, for example:

- personal information about the permit holder
- information about the type of work that will be performed
- time schedule for the work
- information regarding the right to compensation for any damage or encroachment caused by the work

# Financial security (collateral)

- ‘Money’ to compensate e.g. landowners for damages and encroachment caused by the work
  - If the parties do not agree on the **size of the financial security**, the issue is referred to the County Administrative Board
  - If the parties cannot agree on the **extent of the damage**, the issue is referred to The Mining Inspectorate

## 3) Exploitation concession

- Gives the applicant the right to extract the ore in question
- Also means that no one else can get an expropriation permit in the concession area
- A necessary but not sufficient prerequisite for commencing with the exploitation
  - This also requires an environmental permit
- The permit is valid for 25 years, but can be extended

## 3) Exploitation concession (cont.)

To obtain concession, the following is necessary

- That the applicant can show that he/she is capable to extract the ore
- That the extraction is economically viable
- That the mining interest outweighs other (opposing) interests (in relation to land use)
- That financial security has been set for the remediation of the area

## 4) Environmental permit

- Mining is classified as an environmentally hazardous activity which requires a permit according to the Environmental Code
- In most cases, a permit for water operation is also required
- The environmental permit is a necessary prerequisite to commence with the mining
- Maria will tell you more about this later

## 5) 'Land Assignment'

- At this stage, it is decided which land area that can be used for the mining operation
- The idea is for the landowner and the permit holder to come to an agreement
  - If they cannot agree, the Chief Mining Inspector will decide
- The assignment of land does not mean that the landowner gives up the *ownership* of the land, it does however mean that he/she can no longer use it.
- The landowner always has the opportunity to choose whether the property should be redeemed or if compensation should be paid for the damage and the encroachment

## 6) Building permit and site improvement permit

- Building permit: required to construct buildings and other types of facilities
  - The municipal building committee decides
- Site improvement permit: required for work on the ground

# Criticism of the permit process

- **The process takes too long!**
- Many actors also consider the requirements regarding the content and scope of, for example the environmental impact statement, are unclear
- Stakeholders perceive that they have few opportunities to affect decision-making, and that they should be more involved in the decision-making process
- The mining industry is generally considered to be treated more favorably than other environmentally hazardous activities (“Gräddfil”)

# Thank You for listening!

## Questions?