The state as a promoter of exploration and mining

This audit concerned exploration and mining under the Mining Act (503/1965) and focused on the activities of the Ministry of Trade and Industry and the Geological Survey of Finland. These authorities' steering influence and financial input are significant. Other authorities' activities were considered mainly in determining the size of the state's input.

A reform of the Mining Act has been under discussion for years. The significance of mining as an industry is quite different now than when the Mining Act was enacted, along with its employment, regional policy and environmental impacts.

With the approval of the EEA Agreement, at the beginning of 1994 restrictions on foreign operations were removed from the Mining Act. Since then exploration and mining have largely been taken over by international companies and become part of their global operations.

Ore outputs have risen over the years, although Finland has only a few large mines. In 2005 the largest mine produced nearly 40% of the total output of over 40 mines.

Finland's mineral deposits are often small and concentrations are low, so most deposits are exploited by open-pit mining, which is cheaper than underground mining. Open-pit mines require a larger area, consume more energy, produce more waste rock and employ fewer workers than underground mines.

Half of Finland's mines operate only part of the year, and the figure appears to be rising.

Mines nowadays employ considerably fewer workers than in the past, particularly as a result of mechanization and open-pit mining. Statistics Finland's industrial statistics show that mines provide direct employment for about 1,500 people. According to the Ministry of Trade and Industry, this includes about 700 miners plus mill, office and other personnel. Statistics Finland's input-output tables

show that one job in ore mining and other mineral excavation adds about one job in other industries.

According to the Ministry of Trade and Industry, the extractive industry cluster employs about 13,400 people, but this also includes other exploitative activities as well as machine and equipment manufacturing.

The first main question was: How does the state support and promote exploration and mining?

Several state authorities promote exploration and mining. The Geological Survey of Finland spends over 10 million euros a year on exploration. Other state spending has fluctuated considerably from a few million euros to tens of millions of euros a year.

The state receives over a million euros a year from mining operations in the form of charges and sales income. The audit drew attention to the grounds on which charges are set, the size of charges and the collection of charges. Tax revenues from mining operations were not examined.

The Mining Act gives operators very strong protection, with exploration and mining being based on claim rights granted by the Ministry of Trade and Industry. These give the holder the exclusive right to conduct exploration and mining operations on someone else's land, without having to obtain permission from the land-owner. Up until summer 2006 consultation with landowners and other stakeholders was quite limited, but the situation has clearly improved since then.

The granting of claim rights under the Mining Act is almost entirely a matter of legal discretion. The Mining Act differs essentially from the Land Extraction Act and the Nuclear Energy Act, which give the licence granter much more leeway. With regard to mining operations as well as local authorities, landowners and other interests related to the public good, it makes a big difference what particular legislation covers natural resources.

The Mining Act has a broad scope. It also includes gold-panning and numerous minerals that have not been exploited on the basis of the Act. In deciding on the scope of the Mining Act, the main thing is to what extent and on what grounds the state should protect the exploitation of natural resources without having to purchase land or obtain permission from the landowner or compare different parties' interests. Another question involves who is responsible for explora-

tion and mining risks and to what extent. Weighing these questions is up to policy-makers.

On the basis of the audit, administration should pay more attention to investigating the different impacts on different parties depending on whether natural resources fall within the scope of the Mining Act or not, so that the information base in reforming the Mining Act is more complete. In spite of the risk involved, exploration is investment activity aimed at ensuring profitable operations for mining companies. In reforming the Mining Act, the special features of gold-panning should be taken into account.

The second main question was: Are authorities' tasks in promoting exploration and mining appropriate?

On the basis of the audit, there are several conflicts of interest in the way mining tasks are presently handled at the Ministry of Trade and Industry. The Ministry of Trade and Industry markets Finland as an excellent place for mining operations and promotes exploration and mining in various ways. At the same time it serves as the licensing and supervisory authority under the Mining Act. The ministry's tasks as a promoter of mining and mining companies' operations endanger its objectivity and independence as a licensing authority.

Mining authority tasks have been handled by a small unit at the Ministry of Trade and Industry, with resources sufficient to manage day-to-day work and not much else. Developing activities has been delayed and supervisory tasks related to claims and mining operations have not been handled properly. A large amount of information concerning mineral exploration has been lost, since most of the reports outlining claims have not been sent to the Ministry of Trade and Industry. Furthermore the ministry has not adequately monitored the quality of the reports it has received. Meanwhile considerable state funds have been used, and are still regarded as necessary, to collect information concerning mineral potential and resources.

The Ministry of Trade and Industry has not made sure that mining rights that have been granted by the ministry are only used during the period and for the purpose stipulated in the mining licence. Mining companies have been able to keep mining concessions without any intention of starting mining operations in the way they have indicated. Mining rights have been used to keep reserves rather than exploit them, thereby preventing competition and in-

creasing a company's value. Plentiful reserves have also reduced companies' interest in exploiting waste rock.

The third main question was: Do authorities act in such a way that the social benefits of the exploitation of minerals are maximized?

The Ministry of Trade and Industry has been aware of the need to develop the state's steering with regard to mining and in 2006 prepared policies to promote mining in Finland. These policies are based on the idea that Finland has exceptional mineral riches. Details concerning the amounts, characteristics, values or exploitability of mineral potential or resources have not been given, however. There has been no way for political decision-makers to check the geological potential and resource situation now or over the long run.

The audit made findings that suggest that mineral resources are in fact limited. The Ministry of Trade and Industry has also warned against drawing false conclusions from the positive outlook in the branch.

In the opinion of the National Audit Office, more detailed information that meets qualitative and quantitative requirements should be obtained and presented concerning Finland's mineral potential and resources so that the exploitation of minerals can be steered in an economically, socially and ecologically sustainable way.

Waste rock now accounts for a third of excavated rock at mines. Authorities have not paid much attention to waste rock or ways to reduce or exploit it, however, even though the need and possibilities to do so have been widely recognized. The matter has been left up to mining companies, but measures have not been very visible. In the opinion of the National Audit Office, the Ministry of Trade and Industry should study ways to deal with the matter and take the necessary measures, together with other parties.

On the basis of the audit, companies have been able to engage in mining operations partly at others' risk. The Mining Act says nothing about responsibilities extending decades after operations cease or conditions in which a mining company no longer exists or can no longer bear responsibilities. The Ministry of Trade and Industry has noted that one of the greatest weaknesses of the Mining Act in its present form concerns the ceasing of operations and related responsibilities.

In the opinion of the National Audit Office, the Ministry of Trade and Industry should see that securities, contingency funds or other such means are used to ensure compliance with the principle that the polluter pays, in all situations.

There is also an obvious need to steer mining operations from the viewpoint of appropriateness. The National Audit Office considers it important for the Ministry of Trade and Industry to investigate the social benefits and negative impacts of mining operations, taking into consideration tax revenues from mining and how impacts that were anticipated when operations began have materialized, among other things.

The fourth main question was: How effective have authorities' activities been?

Promoting mining at the Ministry of Trade and Industry has focused on increasing mining operations and creating the preconditions for exploiting deposits. Negative impacts and stakeholders have not received adequate attention. The situation has improved since the Ministry of Trade and Industry changed the procedure for handling appeals in 2006 so as to give all stakeholders the possibility to express their views on claim and concession applications. The ministry has also developed procedures for justifying decisions and informing stakeholders.

Landowners' possibilities to protect their interests in the mining process are poor, partly because of the need to protect interests for decades and in different processes. Furthermore different kinds of compensation and charges are based on legislation that is quite open to interpretation, and these are set following different procedures or must be negotiated with the mining company.

The audit found that the nominal value of the claim compensation and concession charges that are paid to landowners according to the Mining Decree has not been increased for 18 years, so payments have substantially lost their significance as compensation for lost proceeds. The holder of mining rights must pay the landowner a fair price for extracted minerals. The audit indicated that the level of extraction charges is low, and it would appear that the extraction charges that have been approved by the Ministry of Trade and Industry have never been revised later on. According to the Ministry of Trade and Industry, concession charges and extraction charges are not sufficient to cover the negative impacts of a concession on

the landowner over a period of decades. Consequently it has recommended that landowners should consider selling land to the mining company.

On the basis of the audit, the Ministry of Trade and Industry's information on the extraction charges that are paid to landowners and the application of the relevant provision in the Mining Act concerning fairness is sketchy. During the course of the audit the Ministry of Trade and Industry reported that in 2007 it started a study of the criteria used in setting extraction charges in order to increase background information and expertise. This work will also be of use in reforming the Mining Act.

In the opinion of the National Audit Office, the Ministry of Trade and Industry should investigate landowners' position and rights and pay sufficient attention to this matter in reforming the Mining Act, which is out-dated as a whole.

Mineral exploration in Finland is more extensive than in any other EU member state. The biggest actor is the state, through the Geological Survey of Finland. Most states have got out of exploration and left it up to commercial companies. This happened in Sweden in 1991. The Finnish system has been justified on the grounds that the Geological Survey of Finland does the kind of initial exploration that mining companies do not do, using a long-term approach and taking into consideration companies' operations so as to avoid overlap. The audit indicated that the Geological Survey of Finland has not limited itself to initial exploration but does the same kind of exploration as companies. Furthermore companies also do initial exploration in Finland. Some companies have viewed the Geological Survey of Finland as a competitor.

The Geological Survey of Finland has had a duty to report to the Ministry of Trade and Industry any economically significant deposits or ore substances, and the ministry has invited tenders for these. Interest in projects has been low. Over half of sites have not been sold and the one-off payments and royalties that have been received by the state have been small, as well as additional investments to explore sites that have been agreed with companies. If further exploration replaces activities that companies would do anyway, it cannot be considered an additional investment in exploration in Finland. Information concerning exploration investments was not available during the audit.

Seven of the sites discovered by the Geological Survey of Finland have a working mine. The first of these was discovered in the 1950s. The sites differ greatly in size. The decision has been made to open one mine (Suurkuusikko, discovered in 1986) and fairly good progress has been made at Kevitsa (1987) and Talvivaara (1977). Opening a mine requires a long time frame and lots of money. One should also remember that deposits were discovered at a time when exploration was carried out by a small number of Finnish companies and the Geological Survey of Finland.

If the state conducts exploration, this means that the risks of exploration are shifted from companies to the state. It is unclear what state or national interests could not be taken care of in Finland by companies' exploration work. On the basis of the audit, one should consider whether there is a need to continue state exploration in Finland. Its benefits have been modest in relation to the costs incurred by the state. The relation between benefits and costs will weaken in future, with exploration also being conducted by numerous international professional organizations, whose purpose is to make a profit.

The Ministry of Trade and Industry should also consider the fact that the Geological Survey of Finland competes with companies in exploration operations, as has been pointed out many times. By engaging in exploration the Geological Survey of Finland tends to hinder and replace companies' activities, and this also applies to initial exploration.