Finnish and Swedish law on mining in light of collaborative governance

Ismo Pölönen*, Christina Allard** & Kaisa Raitio***

Abstract

Today, access to minerals and the development of mines are both closely linked to combating climate change, enabling developments in transitions of energy and transportation systems. New mineral extraction projects are highly contested, and the mining sector has been struggling with both environmental and social governance, as well as the legitimacy of mineral exploration and mining activities. Collaborative governance aims to address these challenges by suggesting deeper, more interactive modes of engagement for planning and decision-making procedures. It calls for cooperative relations and deliberative approaches to environmental governance. This article comparatively explores relationships between collaborative governance and legislation on mining in Finland and Sweden. It argues that Finnish and Swedish mining-related laws and, in particular, land use planning and environmental impact assessment laws, have collaborative objectives and support the use of interactive and co-operative planning modes. However, corresponding legislation does not require broad consensus on critical decisions, and format and quality of collaborative processes can significantly differ case-by-case within the minimum legal requirements. This article identifies timing of statutory participation as a key factor for successful collaborative practices, and suggests changes to mining laws in this regard. It cautions that a unilateral focus on procedure means a risk of disregarding the close interplay between the procedural and substantive sides of regulatory frameworks – sides that are crucial for successful outcomes of collaborative processes.

1. Introduction

1.1 Growing needs for minerals

Today's society is largely dependent on using mineral commodities. Infrastructures, logistics, food production, energy technology, information and communications technology, and consumer electronics all rely on an array of metals and minerals. The growing world population, accelerating urbanisation, and distributed wealth have all created an increasing demand for natural resources, despite more effective recycling and substitution.¹

The need for the minerals, in the foreseeable future, is closely linked to the critical role of mining and metals in global climate governance. The

^{*} Professor of Environmental Law, University of Eastern Finland, Law School, P.O. Box 111, 80101 Joensuu, Finland. Email: ismo.polonen@uef.fi.

^{**} Associate Professor of Law, Luleå University of Technology, Division of Social Sciences / Law, SE-971 87 Luleå, Sweden. Email: christina.allard@ltu.se.

^{***} Associate Professor in Environmental Communication, Swedish University of Agricultural Sciences, Department of Urban and Rural Development, P.O. Box 7012, SE-75007 Uppsala, Sweden. Email: kaisa.raitio@slu.se.

¹ Nurmi & Rasilainen 2015, p. 753. Focusing on metal resources, global extraction of metal ores grew by more than 250% between 1970 and 2010, and the extraction of iron and copper ores accounted for more than half of the global extraction of metal ores (UNEP IRP 2016). Recently and in particular, global nickel production has shown significant growth. Nakajima et al. 2018, p. 369.

Paris climate targets of not exceeding 2 °C warming and making best efforts to reach 1.5 °C within this century will require a radical restructuring of energy supply and transmission systems, globally. Ongoing transitions include large-scale electrification of both energy and traffic systems. The transition puts forward new requirements for energy storage technologies, which, leads, in turn, to rapidly-increasing needs for the mining of metals for batteries (metals such as cobalt, lithium, and graphite), along with a growing need for common minerals (e.g. nickel).²

A growing demand at the global level for these minerals indicates an increase in exploration and mining initiatives in Finland and Sweden in forthcoming decades. The Fennoscandian Shield has been regarded as the richest area of mineral resources in Europe; Finland and Sweden, located in the center of the Shield, are composed of a variety of geological formations and contain a wide variety of mineral deposits.³ Not surprisingly, the two States are presently important producers within the EU of ore and metals; Sweden is, for instance, the biggest producer by far of iron ore.⁴

1.2 Needs for and challenges of collaborative governance

The mining sector has been struggling with the environmental and social governance and legitimacy of mineral exploration and mining activities. It is evident that mining can cause significant environmental damage, even under the rule of modern environmental legislation and within the bounds of self-regulation regimes. Tailings management failures in Finland (Talvivaara 2012), Sweden (Blaiken 2008/2012, Svartliden 2009–2011),⁵ and Canada (Mount Polley 2014) point to this conclusion.⁶ Furthermore, current regulatory regimes and practices seem to be inadequate in effectively addressing conflicting interests and rights such as those of mining, tourism, nature conservation, and indigenous Sami reindeer herding.⁷

At the same time, digitalisation and social media have enabled new waves of active citizenship and social movements that reach across and beyond individual conflicts, addressing both international audiences and investors of the mining industry.⁸ A widened array of opportunities for influence seems to mean that affected individuals and communities are increasingly acting outside of statutory procedures like land use planning, environmental impact assessment (EIA), and permitting processes. Recent cases, such as in preliminary mining plans in Heinävesi⁹ (municipality in Eastern Finland), Jokkmokk¹⁰ (municipality in Northern Sweden), and Scania¹¹ (county in southern Sweden) show

² World Bank 2017, *passim*; Nakajima et al. 2018, p. 369. The technologies assumed to populate the clean energy shift (wind, solar, hydrogen, and electricity systems) are significantly more material-intensive in their compositions than current traditional fossil-fuel-based energy supply systems are. Vidal, Goffé & Arndt 2013, p. 894.

³ Nurmi & Rasilainen 2015, p. 761.

⁴ SOU 2018:59, p. 35. Finland: 11 metal mines were in operation in 2018. See Sector report on the mining industry, 2019. Sweden: 12 operating metal mines in January 2020. Nine of these mines are within the Sami reindeer herding area. See SGU 2020, p. 31.

⁵ SOU 2018:59, p. 85–87; Müller 2014, p. 98–102, 113.

⁶ The overall number of tailings dam failures has even increased in recent years: from eight in the period 1999–2003, to sixteen in 2014–2018. Armstrong et al. 2019, p. 2–6. According to Armstrong et al. (2019, p. 6), pressure on mines to increase production and cut costs may be the underlying causes of many tailings dam failures, even if immediate causes are excessive rainfall, poor management practices, or poorly understood geotechnical characteristics. See also Kauppi et al 2013, p. 26–27, 39–40.

⁷ Tiainen et al. 2014, p. 47–60; Similä & Jokinen 2018, p. 164–167; Raitio et al. 2020, p. 25–28.

⁸ Faehnle et al. 2017, passim.

⁹ Leino & Miettinen 2020, p. 305–321, 348–354.

¹⁰ http://www.whatlocalpeople.se/ (accessed 2020-09-

¹¹ https://vetonu.se/ (accessed 2020-09-11).

that active producing and sharing of information, large-scale campaigns, and the influencing of decision-makers by civil society can all occur before formal procedures (EIA, land use planning and permitting) involving the public.

From the perspective of environmental law, these issues are linked to theory and legislation regarding public participation referring to access to environmental information, as well as public participation in environmental decision-making and access to justice, as enshrined in the Aarhus Convention.¹² Such participatory rights are regarded as crucial sustainability instruments that support a) better implementation of (environmental) legislation and policy, b) greater reconciliation of diverse interests and objectives, and c) increased legitimacy (acceptability) of decisions and management practices.¹³ It is commonly argued that public participation improves quality of planning and decision-making through broadening information bases and incorporating multiple values, interests, and knowledge into planning and decision-making.¹⁴ However, it can be questioned as to whether or not formal participatory rights are adequate in addressing the requirements today's society sets for the planning, impact assessment, and permitting of projects such as mining. Minimum requirements of these instruments are seemingly insufficient for addressing the conflicting land use interests, ensuring the legitimacy of mining policies, or gaining a Social License to Operate (SLO, referring to local acceptance and legitimacy) for projects with significant environmental and social impacts.¹⁵

It seems obvious that more interactive, deeper modes of engagement are needed to achieve promises of participation, both in terms of improved reconciliation and legitimacy in complex and contested environmental decision-making. Such approaches have been, in policy literature, interchangeably referred to as communicative or collaborative planning, collaborative environmental management and collaborative governance. 17

Collaborative governance has been defined as "the processes and structures of public policy decision making and management that engage people constructively across the boundaries of public agencies, levels of government, and/or the public, private and civic spheres in order to carry out a public purpose that could not otherwise be accomplished";18 it calls for localised participatory and deliberative approaches to environmental governance.19 The term "collaborative" recognizes that no single actor has the knowledge, instruments, resources, or authority to tackle complex environmental and social problems and related uncertainties. The approach builds upon face-to-face dialogue and co-operative relations between government bodies, non-governmental organisations, and private interests. Collaborative governance is often attached to an aim to reach a workable agreement or consensus that enjoys wide support (although not necessarily unanimity) without co-

¹² These three pillars of public participation are a cornerstone of the Aarhus Convention (Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters, 1998) which is the key international agreement on public participatory rights.

¹³ Pappila & Pölönen 2012, p. 178–179.

¹⁴ E.g. Appelstrand 2002, p. 282–285; Verchuuren 2005 p. 29–33.

 $^{^{15}\,}$ Thomson & Boutilier 2011, p. 1779–1796; Poelzer et al. 2020, p. 1103–1105.

¹⁶ See also Holley & Sinclair 2013, p. 32–33.

 $^{^{\}rm 17}\,$ E.g. Healey 1997; Wondelleck & Yaffee 2000; Emerson et al. 2012.

¹⁸ Emerson et al. 2012, p. 2.

¹⁹ Karkkainen 2004, p. 473; Holley & Sinclair 2013, p. 33.

ercion, bargaining, or an imbalance of power or resources.²⁰

Collaborative process is not merely about negotiation, it is about building shared understanding and trust among stakeholders.²¹ The promise of a collaborative approach is constructed from the assumption that such an approach can help increase problem-solving capacity, improve the handling of uncertainties, and minimize destructive conflicts – all by providing an orderly forum for interests articulation and value co-creation. Some policy initiatives for dialogues around mining have emerged in both Finland (e.g. network for sustainable mining²²) and Sweden (e.g. Swedish Mining Innovation²³ and Georange²⁴), to this end.

One key criticism of collaborative approaches relates to their lack of attention to unequal power relations between actors.²⁵ The collaborative approach often ignores the broader context within which the interactions take place. Regulation in which planning is embedded is of profound importance for the role collaboration can play. The regulatory context affects both the options of authorities and leverage of different stakeholders.²⁶ The incentive to engage in collaborative processes depends on each actor's alternative options (called Best Alternative to Negotiated Agreement, BATNA, in conflict liter-

ature),²⁷ and, unless a minimum degree of access and influence of the participants in the process is secured, attending a collaborative process might be contrary to the interests of, in particular, citizens and groups that are critical of the proposed project.

Another critical aspect of collaborative approaches concerns an inherent focus on consensus-seeking and a priori assumption of finding win-win solutions between all interests. With increasing pressure on the land to deliver "more of everything", it becomes necessary to recognize the need for trade-offs regarding different land use scenarios. Any decision in favor of one land use over another implies an exclusion of alternative land use decisions that could have been taken.²⁸ Mining, by nature, implies the exclusion of a wide array of other land uses within a mining area - from a legitimacy perspective, it is crucial to both recognize and be transparent about choices (exclusions) made in each related process. Legally speaking, these types of tradeoffs play another role when property rights, such as Sami reindeer herding rights, are at stake; to characterise a "right" as an "interest" decreases the significance of the "right" - it invites discourse involving compromise and negotiations, therein.²⁹ Such a situation is especially evident regarding the Swedish mining regulations.³⁰

These critiques highlight the importance of understanding the regulatory context within which collaborative initiatives take place. One of the key challenges, then, is to have enough flexibility while, at the same time, creating a trust in the system through adequate predictability for both mining companies and citizens. This brings us back to the basic participatory rights

²⁰ Hamilton & Wills-Toker 2006, p. 758; Holley & Sinclair 2013, p. 36–37.

Meadowcroft 1998, passim.; Ansell & Gash 2008, p. 544, 558 and Ulibarry 2019, passim.

²² See the webpages of the Finnish Network of sustainable mining: https://www.kaivosvastuu.fi/in-english/ (accessed 2020-09-11).

²³ See the webpage of the Swedish mining innovation for a sustainable future: https://www.swedishmining innovation.se/ (accessed 2021-01-26).

²⁴ See the webpage of the Georange, a non-profit organization tasked to create constructive dialogue: https://www.georange.se/ (accessed 2020-09-11).

²⁵ Holley & Sinclair 2013, p. 37.

²⁶ Raitio 2012, p. 309, 314–316.

²⁷ Fisher & Ury 1981.

 $^{^{28}}$ See also Mouffe 2005; Connelly & Richardsson 2004, $\it passim$.

²⁹ Eisenberg 1998, p. 363, 374–375.

³⁰ Raitio et al. 2020, p. 10, 12.

outlined in the Aarhus Convention; while they may not be adequate in improving the legitimacy and conflict-solving capacity of mining legislation, it would be a false conclusion to perceive them as unnecessary. Rather, Aarhus Convention rights can be characterized as a minimum standard that more collaborative approaches can be built upon. Furthermore, it is essential to ensure that substantive, provisions-setting boundaries for approving mining activities and related decisions are adequate. Bringing the procedural and substantive perspectives together, the key question, then, is whether or not current law provides adequate possibilities for citizens, communities, and rights-holders to all be able to influence the concrete outcomes of the planning and permitting processes regarding mining developments. Unless this occurs, collaborative initiatives risk being open to destructive power dynamics.

Against the background above, this article explores the relationships between collaborative governance and Finnish and Swedish legislation regarding mining developments.

1.3 Research setting and the structure of the article

This article has two closely-interlinked objectives. The first objective is to analyze how Finnish and Swedish mining-related laws address collaborative governance. The article examines comparatively whether or not, and if so then through what legal mechanisms, mining laws a) require, enable, or block direct dialogues and cooperative relations between stakeholders³¹ and b) create platforms for mutual learning and negotiations. The second objective of this arti-

³¹ "Stakeholder" is used here as a broad concept and refers to all actors whose interests are engaged. Actors include mining companies, affected individuals and enterprises (e.g. from within the field of tourism), NGOs, authorities, municipalities, and rights-holders such as Sami reindeer herding communities.

cle is to identify the legal routes through which participatory and collaborative processes can make a difference in the content of crucial decisions – in this case, regarding the permissibility of the mining and related conditions attached to permits that limit the negative impacts of such activities.

Procedures regarding gold panning and exploration (that precedes mining permit phase) are not in the scope of this article. In the context of the pillars in Aarhus Convention, our focus is on *ex ante* participatory elements of law and, to a lesser degree, on legal standing. Questions on access to environmental information is not part of our analysis.³²

This article represents a legal-scientific analysis in which policy research provides a perspective for assessing national laws. Legal and comparative analyses are utilized as primary research methods. In terms of materials, this article mostly utilises statutes, case law, preparatory works of the acts, and literature.

Structurally, the article is divided into three main sections in addition to its introduction and conclusions, and it covers the key Finnish and Swedish regulatory tools applicable to mining, with respect to collaborative governance and public participation. First, we analyse the land use planning systems (Section 2), followed by an examination of the role of environmental impact assessments (EIA) in mining governance (Section 3). Mining and environmental permit procedures are discussed in Section 4, before we draw conclusions (Section 5) in relation to our objectives. Prior to the main sections, we briefly contextualise mining governance issues in regards to Sami rights in the two countries (Section 1.4); such contextualisation is necessary, be-

³² The fundamental principle on access to public documents, in both Finnish and Swedish laws, attest to good access to information, including environmental information.

cause Sami Rights and international standards on Indigenous Rights are key issues – especially for mining governance in Sweden.

1.4 Context in relation to Sami livelihoods

There is a distinct difference between Finnish and Swedish mining governances and their respective challenges, especially in regards to the role of Sami rights and, within that notably, reindeer herding rights.³³ Compared to Swedish law, Finland's Mining Act (621/2011) offers strong protection for Sami culture and livelihoods34 within the "Sami Homeland", an administratively-demarked area situated in the northernmost corner of Finland.³⁵ The Finnish Constitution affords Sami linguistic and cultural self-governance within this area, 36 but not outside of it. Where decisions and activities negatively affect the Sami in the designated area, the Finnish State (including Ministries and State authorities) is obliged to directly consult with the Sami Parliament of Finland, so as to seek solutions that better accommodate the rights and needs of the Sami.³⁷ Internationally, this is known as "a State duty to consult" Indigenous Peoples.38 So far, only few activities for exploration have taken place inside the Sami Homeland in Finland, and no mining

³³ In Finland the majority of reindeer herding is performed by Finns, and according to the Reindeer Herding Act (848/1990) s. 4 anyone permanently living within the Finnish reindeer herding area, and who is a citizen of a country within the EU, has the right to own and herd reindeer. In Sweden reindeer herding it is an exclusive

livelihood for the Sami.

permits, as such, exist.³⁹ Exploration plans have faced strong resistance by local Sami.⁴⁰ The existing mines in Lapland, Finland, are located south of the Sami Homeland border. The situation is nearly the opposite in Sweden.

Mining in Sweden occurs, to a large extent, within Sami reindeer herding areas, with herding areas, overall, comprising some 50 percent of the State's territory. 41 The Swedish Minerals Act (1991:45) does not afford explicit protection to Sami culture and livelihoods. However, in Sweden, in contrast to Finland, Sami reindeer herding is regarded as a usufruct right based on immemorial prescription,⁴² making Sami reindeer herding communities' important rights-holders in mineral permitting procedures. There remains an unresolved extent to which Sami rights are currently perceived as major obstacles for efficient mineral developments in the North of Sweden. Several appeals, as well as critiques of Sweden's corresponding legislation, have resulted in a standstill within the mining permitting system.⁴³ Mining developments in Finland

³⁴ Most importantly, the Act (s. 50) sets up obstacles to granting a permit (for exploration, mining, or gold panning) where the planned activity substantially undermines traditional Sami livelihoods and Sami culture. See further Koivurova et al. 2015, p. 19–21.

³⁵ The area is demarcated through the Sami Parliament Act 974/1995, s. 4, and roughly comprises of the three northernmost municipalities Enontekiö, Utsjoki, and Inari.

³⁶ Finnish Constitution, 1999, s. 121, para. 4.

³⁷ Sami Parliament Act, s. 9.

³⁸ Allard 2018, p. 26.

³⁹ The designation of "wilderness areas", a specific conservation category introduced by the Finnish Wilderness Act (62/1991), also helps to explain the lack of larger industrial sites, such as mines, in Lapland. A vast majority of the wilderness areas are located within the Sami Homeland; the aim of wilderness areas is to keep them as close to their pristine, natural state as possible, as well as to protect Sami culture and traditional livelihoods.

⁴⁰ In May 2014, the Irish mining company Karelian Diamond Resources (backed by Australian-British Rio Tinto) had an area reserved for preparing an application for exploration permit; however, due to strong local opposition, the company backed out one year later. See Lassila 2018, p. 1–9. See also Koivurova & Petretei 2014, p. 129–30, 133.

⁴¹ The majority of existing metal mines are located in the counties of Västerbotten and Norrbotten. Sami reindeer herding communities are already facing cumulative impacts of several other competing land uses, including wind power parks, water power, tourism facilities, and infrastructure projects.

⁴² Allard 2011, p. 159–183; Allard & Brännström 2020, p. 429.

⁴³ Müller 2014, p. 231–241; Raitio et al. 2020 p. 25.

and Sweden has to be balanced with Sami livelihoods and international standards on Indigenous Rights, whereas the cases have been much more common in Sweden.⁴⁴

2. Land use planning as a tool for collaborative governance and effective participation

2.1 Finnish planning law

2.1.1 The design and aims of the Finnish planning system

Finnish land use planning law is mostly based on Finland's Land Use and Building Act (132/1999, LBA) and Land Use and Building Decree (895/1999, LBD). The LBA provides a hierarchical system for planning whereby national land use objectives, written in broad terms and adopted by the Government, directs the preparation of regional plans adapted by regional council. The regional plan sets the framework and directions for both the master plans and detailed plans adopted by the municipal council. Regional plans are legally binding; however, typically these plans leave plenty of discretion for municipalities, and focus is put on mid- and long-term objectives and strategies for regional land use. These plans guide regional development and steer land use on issues that are of a trans-municipal or regional nature. Both master plans and detailed plans can direct land use on diverse levels, ranging from non-binding recommendations to strict limitations on the use of plots. These plans can direct all land use activities in the area (master plans can span an entire municipality), but, alternatively, they can have a focus on specific theme(s) or project(s), such as housing, recreation, wind energy developments, or just one project, such as a mine or wind farm. 45

Objectives of Finland's land use planning legislation are manifold; the ultimate purpose is to make living environments healthy, safe, attractive, and socially functional, as well as to reconcile different land use interests in a sustainable way. Aims of the planning law also reflect collaborative governance; the Land Use and Building Act aims "to ensure that everyone has the right to participate in the preparation process, and that planning is high quality and interactive, that expertise is comprehensive and that there is open provision of information on matters being processed" (LBA s. 1 para. 2). It is commonly argued that the planning provisions of the LBA include a spirit of collaboration. 46

In the Finnish system, as a rule, at least one land use planning procedure must precede decisions concerning mining permit regulated by the Mining Act (621/2011). Predominantly small, low impact mines can be waved from the planning procedure under the LBA.⁴⁷ The cases in which land use planning is not needed are, these days, exceptions; the volumes of minerals, waste rock, and soil to be removed have significantly increased in recent decades.⁴⁸

Land use plans in Finland always include a strategic environmental assessment (SEA). The EU SEA Directive (2001/42/EC) is implemented in Finland through the sections of the LBA regarding impact assessment and participatory rights, as discussed after this section. Preparation of the SEA Directive was taken into account in the late 1990s, when planning-law reform was prepared in Finland.⁴⁹

⁴⁴ See also Tiainen, Sairinen & Sidorenko 2015, p. 143.

⁴⁵ On the basis of the Finnish land use planning scheme, see e.g. Jääskeläinen & Syrjänen 2014, p. 96–99; Pölönen & Malin 2011, p. 132–133.

 $^{^{46}}$ See also Syrjänen 2005, p. 42–43, 77 and Jääskeläinen & Syrjänen 2014, p. 51.

⁴⁷ This conclusion can be derived from section 47.4 of the Finnish Mining Act and its preparatory works (Bill on the Mining Act 273/2009, p. 103). See also Pölönen 2013, p. 421–424.

⁴⁸ See e.g. Similä & Jokela 2018, p. 152.

⁴⁹ Bill on the Land Use and Building Act (HE 101/1998, p. 58).

2.1.2 Collaborative elements and means for influencing

The Finnish Land Use and Building Act promotes collaborative governance through providing a wide range of opportunities for interested parties and members of the municipality to participate in planning from the very beginning of the process. Planning processes typically include three key phases for public participation (ex ante): a) an initial phase, in which a scheme for interaction procedures and impact assessment, as referred in s. 63 of LBA, is prepared, b) a draft plan phase (s. 62 of LBA, s. 30 of LBD), and c) a planning proposal phase (s. 65 of LBA). Additionally, the LBA provides access to justice for a variety of individuals, NGOs, legal entities, and authorities. Notably, all members of a municipality have the right to appeal a decision that approves a land use plan, excluding minor alterations of a detailed plan, in terms of its impacts (Local Government Act (410/2015) s. 137 para. 1 and LBA s. 191 paras. 1 and 3).

Participatory and collaborative processes are drafted within the LBA in flexible terms, leaving considerable discretion for the planners to choose actual forms of participation. The LBA (s. 62 para. 1) states that planning procedures must be organized and that the principles, objectives, and goals, as well as possible alternatives in planning, publicised, so that interested parties⁵⁰ have an opportunity to participate in plan preparation and the estimating of the plan's impact, as well as to state their opinion on it in writing or orally.⁵¹ Furthermore, s. 65 para. 1 of the

LBA requires that the plan proposal must be presented in public. According to this provision, the presentation of the proposal must be publicized in an appropriate manner in view of the purpose and significance of the plan, and members of the municipality and interested parties shall be provided with opportunity to express their opinions on the matter (objection). The LBA (s. 65 paras. 2 and 3) also requires authority responsiveness to objectors, in the form of the planning authority's stating of its reasoned opinion on an objection, made known to objectors who have so requested and provided their addresses.

The LBA also includes provisions on consultation. In the preparation phase of the regional plan, the planner must be in contact with the Ministry of Environment and the Centre for Economic Development, Transport and the Environment (CETE). Consultation must be arranged between the competent ministry, the CETE, and the regional council, so as to clarify how national objectives and other key goals pertain to the drawing up of the plan. Other plans concerning national or important regional land use objectives, or that are otherwise important in terms of land use, natural values, cultural environment, or government authorities' implementing obligations, must be prepared in communication with the CETE. Consultations must be arranged between the CETE and the local authority, so as to clarify how national objectives, as well as regional and other key goals, pertain to drawing up such a plan. (s. 66 paras. 1-2 of the LBA). These duties strengthen the collaborative potential of the LBA, however the consultations take

⁵⁰ Interested parties include "landowners in the area and those on whose living, working or other conditions the plan may have a substantial impact, and the authorities and corporations whose sphere of activity the planning involves" (Section. 62.1 of LBA).

⁵¹ Also, the Land Use Planning Decree (LBD, 895/1998) leaves considerable discretion to the planner to decide how participation is arranged. Section 30.1 of the LBD sets four alternative ways of organizing possibility for

interested parties, and other members of the municipality, to express views during the preparation of the plan. According to this provision, a planner can reserve opportunity for expressing opinion in 1) in written form, 2) oral form, 3) a specific event concerning a plan, or 4) another suitable way.

place only between authorities and within a restricted scope.

Since Finnish planning law only sets a loose framework for process, the collaborative nature of land use planning in Finland is highly dependent on the planners' choices regarding participatory tools. Requirements of the LBA enable planning practices in which multiple modes of collaborative governance (e.g. interactive meetings, working groups, and workshops) are utilised. The modes can be tailor-made to the characteristics of the plan, project, area, and stakeholders in question. On the other hand, the LBA also enables a minimalistic approach from the perspective of collaborative governance. In these cases, the process may include a possibility to lodge written comments on the planning documents and/or give oral feedback in public events organized by planner (s. 30 of the LBD), however these modes lacks genuine dialogue, negotiations, and co-operative attitude.⁵² Minimum level of participation, mostly in the form of lodging written opinions, broaden an information base for the planner and decision-maker, but it can have weak performance in facilitating learning or/and minimising potential conflicts.

When it comes to legal routes for effective participation and local governance, master and detailed planning belong to key instruments in the Finnish legal system. This is due to the autonomy of municipalities in planning issues, as provided for by the Finnish Constitution (731/1999), the Local Government Act (410/2015), and established case law of Finnish Supreme Administrative Court (SAC).⁵³ In the case of the Muonio windfarm (SAC 2015:116), for example, a specific area was reserved for the windfarm in both the regional and proposed de-

tailed plan. The developer and municipality had also made a land use agreement, under the LBA, on the preparation and cost implications of the plan in question. However, the local municipal council rejected the proposed detailed plan, due to its judgement that the windfarm would cause significant negative impacts on scenery and nature-based tourism. The SAC held that the Council had not used its discretionary powers in contradiction to the valid law, and, thus, it maintained the decision of the Council. The Muonio case illustrates that, even when there is a regional plan directing more detailed planning, a municipality is not necessarily required to implement the higher-level plan. In such situations, a municipality cannot designate the area for other purposes (causing significant harm to the objectives of the regional plan), however it may end up planning nothing for the area. This implies that the toolkit of local governance includes the option of being passive in such matters which can, in turn, have crucial impacts on both land use and development of projects.

Despite the differences of mining and wind energy projects in regards to characteristics of the activities and applicable norms, the Muonio case is also applicable to the mining sector. In most situations, a mining permit decision cannot be given without a land use planning process, in accordance with the LBA, where relationships between land use interests are considered. The standard of *lex specialis* does not apply in such circumstances, since the Finnish Mining Act leaves the legal implications of plans to be determined under the LBA (s. 47, para. 4 of the Mining Act), and mining does not have priority over other land use interests in Finland's planning law.⁵⁴

While the Muonio case (SAC 2015:116) and several other cases (e.g. SAC 2015:95, SAC

⁵² See also Syrjänen 2005, p. 78 and 209.

⁵³ See also Ekroos & Majamaa 2015, p. 10 and Pölönen 2016, p. 72.

⁵⁴ See also Pölönen 2016, p. 77 and Heinilä 2019, p. 49.

12.8.2015 t. 2160) emphasise the strong role of municipality in land use issues, an underlying aim of land use planning is to support balanced outcomes and the coexistence of diverse land uses (principle of integration).⁵⁵ It is only when coexistence and harmony between livelihoods or other interests are not possible (an activity has an excluding impact in relation to other forms of land use) that the municipality should prioritize land use interests.⁵⁶ The legal status of this principle appears to be weakened by the above-mentioned case law, pointing to a municipality's broad discretion in deciding a) for what purposes sites are designated and b) whether land use plans are to be prepared at all.⁵⁷

On the whole, planning (in particular, master planning) can be utilised as a municipality-level governance tool to determine the relationships between mining and competing land use interests such as tourism, housing, and nature conservation. When a municipality decides whether or not there are preconditions for mining from the land use perspective, the practice itself nears that of a veto right.⁵⁸ However, such planning decisions must be based on (flexible) norms-setting content requirements for the plan as well as (sufficient) studies and impact assessments.

2.1.3 Case of Kuusamo

Despite the fact that a municipality has the legal potential to direct and restrict mining activities and other land uses through land use planning, this can be a rather difficult legal exercise in practice. Such a situation is illustrated in a recent case of master planning in Kuusamo.

The case of the Kuusamo master plan cannot be fully understood without first looking into the developments and circumstances existing prior the planning process. In 2011, before the land use planning process started, a mining company had begun the environmental impact assessment process of a proposed gold mine project. Planned mining sites of the project were relatively close to the nationally-famous ski resort (named Ruka, 4–12 km from the planned open-pit mines) and the Kitkajoki River (1 km from the closest site), with specific nature and recreation values.⁵⁹

The gold mine initiative stirred up a full-blown conflict between mining and other local livelihoods already in the beginning of the EIA process, and the process (2011–2013) was actively used as a forum for opposing the project. Hearings of the environmental impact report phase ended up with 225 critical statements and opinions, some of them including over 1.000 signatures. Additionally, the EIA authority gave a very critical statement regarding the quality of the EIA report and process.⁶⁰

The city of Kuusamo responded to the mining conflict by preparing a policy guideline for integrating the uses of natural resources. The document stated that mining activities in Kuusamo can only be considered in areas where there are no significant adverse effects on nature values, natural products, food production, landscape, waterways, tourism imagery, and settlements.

⁵⁵ Regarding the aim of the land use planning system to provide locational preconditions for diverse functions, projects, and activities of society, see e.g. Jääskeläinen & Syrjänen 2014, p. 97 and 305.

⁵⁶ See also Syrjänen – Jääskeläinen 2013, p. 9.

⁵⁷ Pölönen 2016, p. 73–74.

⁵⁸ Autonomy of the municipality in land use planning can also be seen as a link between the non-legal concept of Social License to Operate and the legal system. If the operation (or initiative or plan, for a development project such as a mine or wind mill) does not gain a social license during the EIA and planning process, this can have a crucial impact on the land use planning decision taken by municipality council, since planning decisions under the LBA allow for a variety of arguments and values to be taken into consideration.

⁵⁹ Pölönen 2016, p. 84–86.

⁶⁰ Pölönen 2016, p. 85–86.

According to the document, based on the information available it was not possible to launch mining or its enrichment operations without risk to the Oulanka-Ruka-Kitka-regions.⁶¹

A strategic master plan spanning the entire municipality (5.805 km²) was the main tool for implementing the municipality's policy guideline. The aim of the strategic master plan was to address the conflict between mining and other livelihoods and prevent such conflicts in other areas of Kuusamo, by designating areas as suitable and not-suitable for mining and enrichment projects. The plan included three different zones: 1) a no-go zone, 2) a zone with specific restrictions on mines and where enrichment was forbidden, and 3) a zone where mines and enrichment are possible (excluding uranium mines) if the activities fulfill requirements set in the other norms. Technically, a 'no-go zone' was established by banning mining and enrichment in planning stipulations that were attached to a development marking of Rm-1 (nationally and internationally significant area for tourism). The purpose of this zone was to secure preconditions for nature-based tourism and protect the nature values of the Kitkajoki River. The size of the area was 450 square kilometers, approximately one tenth of the total size of Kuusamo.⁶²

Since the planned gold mine was located in a 'no-go zone', the mining company appealed the decision approving the strategic master plan to the Administrative Court of Northern Finland. Based on this appeal, the Administrative Court (12 June 2018, dnro 00058/17/4102) overruled the planning decision and returned it to the municipality. According to the Court, the impact assessment of the plan and studies for integrating different land uses were insufficient,

and the master plan would have caused unreasonable burden for the holders of mining rights.

In its decision (SAC 2019:67) the Supreme Administrative Court maintained the outcome of the Administrative Court (overruling and returning the decision based on the master plan), but it fully rewrote the reasoning of the judgement. Unlike the Administrative Court, the SAC did not refer to inadequate examinations and impact assessments, but, rather, it considered that the planning technique used in master plan did not comply with the law. This judgement shows that the direction and restriction of land uses in master planning must be done by designating areas for specific uses, rather than explicitly banning certain industries in certain areas; however, the effects of both approaches can be the same, in practice. According to the SAC, "In the Master Plan, land use, such as mining, is primarily directed by designating areas to different uses." The decision of the SAC recalls that the preconditions of mining operations are to be resolved by licensing procedures that must take into account existing plans and affected areas. The Supreme Administrative Court also maintained that the municipality cannot preventively limit what types of plans it will subsequently prepare.

Based on the reasoning of the SAC, one branch of industry cannot be explicitly prohibited in a large area by the strategic land use plan. The SAC paid particular attention to the fact that the regulations in Kuusamo's master plan did not directly concern the environmental effects, but, rather, the prohibition of certain types of business. It is also noteworthy that the SAC did not state that marking for the 'no-go zone' was itself against the law; the marking was annulled on the grounds that it was closely tied to the explicit prohibition of mines that were found to be illegal.

Despite the outcome of the SAC's decision, the reasoning indicates that master planning

⁶¹ Kuusamo 2014.

⁶² Kuusamo 2015.

can be used for directing and restricting mining operations, and that mines are not in a special position in this regard, which was not clear before the Kuusamo case. However, a municipality must be careful in choosing planning techniques.

2.2 Swedish planning law

2.2.1 Planning instruments and mineral developments

Before discussing the ways in which Swedish planning law supports need for collaborative governance, this subsection first highlights corresponding key planning tools and links between planning and mineral developments in the Swedish legal setting.

Specific municipal planning, with respect to mining development, occurs late in the Swedish regulatory framework, typically taking place after decisions concerning environmental permits. Such planning targets development of infrastructure, buildings, dams, etcetera in one detailed plan, focusing on the constructed environment and covering only small areas. The Swedish Minerals Act (1991:45) does not stipulate any planning requirements before mining permit decisions as in Finnish mining law; in Sweden it is only required that the mining authority (the Mining Inspectorate) must assure that a permit decision does not contradict existing legally binding plans (a detailed plan or an area plan).⁶³ However, mineral developments normally take place in rural areas lacking legally binding plans.⁶⁴ It could be argued that Sweden's planning tradition is weighted in favor

Under Sweden's Planning and Building Act (2010:900, PBA), all municipalities must have an "up-to-date" comprehensive plan that covers the total area of the municipality (PBA ch. 3 ss. 1, 23 and 25). Thus, spatial land use planning in Sweden exists mainly on the municipal level, under the principle of municipal planning control.⁶⁶ The non-binding comprehensive municipal plan (similar to the Finnish master plan) is aligned towards serving as a tool for visionary and strategic decisions that coordinate superior goals, programs, and strategies, 67 and new amendments to the plan, in effect as of April 2020, strengthen the alignment further. The aim of the most recent amendments is to strengthen the comprehensive planning as a strategic planning instrument.⁶⁸ The plan must be made more distinct in supporting subsequent plans and planning processes, especially in regards to the necessary steps for manifesting desired land uses.

Whether the revised and stricter provisions regarding the requirement that the comprehen-

of urban contexts and the constructed environment, including housing needs.⁶⁵

⁶³ See Minerals Act ch. 4 s. 2 para. 6. The Mining Inspectorate cannot allow an application that "counteracts" legally binding plans; however, smaller discrepancies are acceptable.

⁶⁴ See e.g. Bäckström 2015, p. 241. This situation was already anticipated by the preparatory works to the Swedish Minerals Act, see Prop. 1988/89:92 Om ny minerallag-stiftning m.m., p. 77.

⁶⁵ Bjärstig et al. 2018a, p. 37. This is reflected in guidelines by the advisory agency regarding spatial planning in the National Board of Housing, Building and Planning, and research on Swedish comprehensive plans which has a focus on urban settings and the constructed environment.

⁶⁶ This principle is a cornerstone of Swedish planning and enshrined into the Planning and Building Act ch. 1 s. 2. Each municipality, thus, has ultimate responsibility to decide on planning and building matters within its administrative borders. This authority rests on municipal self-government, as enshrined in the Swedish Constitution, the Instrument of Government of 1974, ch. 14 s. 2. See also Prop. 2009/10:170, p. 131, 387.

⁶⁷ Prop. 2009/10:170, p. 177.

⁶⁸ This is anchored in three key concepts: continuity, good application, and clear decisions. See Prop. 2019/20:52, En utvecklad översiktsplanering, p. 30, 32. Note that regional planning in Sweden is allowed only for the urban areas of Stockholm and Malmö, under chapter 7 of the Planning and Building Act. See PBA ch. 7 ss. 1–2; Prop. 2017/18:266, 40-1; the new chapter 7 came into effect 1 January 2019.

sive plan must be *current* will increase the role of the comprehensive plan remains to be seen, however it's not likely.⁶⁹ In sum, although the comprehensive plan is not legally binding, it does have an influence on other decision-making.⁷⁰ At the same time, decisions related to permit applications, such as those regarding mineral developments, can be approved even where an activity contradicts values, interests, or prioritising stated in the comprehensive plan for a specific area.

The detailed plan⁷¹ mentioned above is, to a larger extent than the comprehensive plan, related to permitting processes, either for controlling habitation and buildings or steering localizations for the establishment of industries. The plan sets the conditions for buildings, structures, roads, parks, etcetera for smaller areas, and it is legally binding. Through a detailed plan, a municipality may prioritize certain land uses, such as mining, that are not entirely in line with - or even that contradict - purposes stipulated in the comprehensive plan.⁷² In a permit process, such as for a new mine, an existing, detailed plan needs to accommodate the industrial development, otherwise the permit cannot be granted,⁷³ or the plan must be adjusted beforehand by the

municipality. This means that a key function of the detailed plan is to shift away from inconsistent land uses from what the plan stipulates.⁷⁴ In rural areas lacking detailed plans, the establishment of a new mine will normally require the preparation and adoption of a detailed plan for erecting buildings and related infrastructures,⁷⁵ while also securing successful outcomes for building permit applications.⁷⁶ Expansion of a pre-existing mine is usually covered by detailed planning (with an objective to promote the mining industry). Since this plan is legally binding, any permit decision must be in line with the purpose of the plan.

Sweden's planning system is hierarchical, but the linked system is frail in that comprehensive plans are not legally binding and serve only as guides for ulterior plans. The municipality must, in their comprehensive planning, always state specific "areas of national interest", following Chapters 3 and 4 in the Environmental Code (1998:808),⁷⁷ and declare how these areas should be safeguarded (PBA ch. 3 s. 4). Such provisions in the Code function as broad guidelines for solving various land use and resource management prioritisation questions for areas where the State has significant public interests to guard, such as

⁶⁹ PBA ch. 3 s. 25 and Prop. 2019/20:52, En utvecklad översiktsplanering, p. 46–9. There is now a set time-limit for when the comprehensive plan is considered to be current and up to date, and a review of the plan during each term is now incorporated into a requirement for the municipal council to make a 'planning strategy' for each term.

⁷⁰ Josefsson 2019, p. 70.

⁷¹ Another legally binding subordinate plan in Sweden is the area plan (Sw. *områdesbestämmelser*), see PBA ch. 4 ss. 41–43. In areas without detailed plans, a municipality may use an area plan to implement certain aspects of the comprehensive plan, such as in planning for a vacation settlement, communications, or to secure a national interest under EC chs. 3-4. Usually, a detailed plan includes more in-depth planning.

⁷² Cf. Josefsson 2019, p. 71.

⁷³ Minerals Act ch. 4 s. 2 para. 5; Environmental Code ch. 2 s. 6 para. 3.

⁷⁴ Michanek & Zetterberg 2017, p. 493.

⁷⁵ PBA ch. 4 s. 2 para. 1 point 1 or 3a. This provision invokes the so-called "command for detail planning" in explicitly stipulated situations in the Act. According to preparatory works, an overall assessment on a case-to-case basis is necessary; however, in situations where buildings and structures in total cause a "significant environmental impact", a detailed plan is compulsory – which is the case with new mines. See Prop. 2017/18:167 Ett tydligare och enklare detaljplanekrav, 20–1. See also the conclusion in Bäckström 2015, p. 239–41.

⁷⁶ A municipality must deny a building permit application in an area without detailed planning if the "command for detail planning" is invoked. See PBL ch. 9 s. 31 point 2.

⁷⁷ See further Michanek & Zetterberg 2017, p. 142–44.

areas with conservation interests, reindeer herding, mineral deposits, wind energy, etcetera.⁷⁸

In rural areas in Sweden, and especially in the North, public interests are commonly overlapping in areas (and coexistence is the standard formula), making prioritizing difficult both for the municipality and in mining permitting procedures; with insufficient public consultations, decisions are at risk for being perceived as illegitimate. Investigated and suggested areas of national interest are considered before formal decisions are made by the corresponding sector authority,⁷⁹ and this occurs through hearing with other authorities, including the municipality, but not with the public at large.

Preparatory works to the Swedish Minerals Act have already emphasised difficult coordination between municipal planning and mineral extractions. Recent research on rural comprehensive planning in Swedish mountain municipalities, where important mineral deposits exist, indicates that comprehensive planning procedures have a general lack of resources and low status, which, in turn, affects and limits stakeholder involvement and implementation in respect to sustainable development goals. Recording to the status of the swedish mineral deposits exist, and limits stakeholder involvement and implementation in respect to sustainable development goals.

2.2.2 Collaborative elements and means for influencing

While collaborative planning is a major branch of current planning theory highlighting the need for new methods of citizen and stakeholder participation, the realisation of collaborative planning in Swedish practice remains elusive, and legal research on the subject is scarce. Land use planning in Sweden has mostly focused on urban settings and the constructed environment

and less so on rural contexts.82 Despite recent amendments strengthening the comprehensive plan as a visionary, strategic tool, little has been done to support and streamline public participation. At the same time, citizen participation is enshrined into the PBA as a part of democratic freedom (cf. PBA ch. 1 s. 1). Consultation opportunities are an established part of both developing and amending municipal planning instruments (e.g. PBA ch. 3 s. 8; ch. 5 s. 6), with an aim to improving the basis for decisions as well as transparency and opportunities for influence (e.g. PBA ch. 3 s. 8 para. 2). However, the provisions only establish a broad framework for participatory and collaborative processes; it is each municipality's ambition, knowhow, and economy that ultimately determines the planning outcome with respect to the degree of collaborative governance that occurs.

In relation to a proposed comprehensive plan (PBA ch. 3 s. 8), the municipality must ensure consultation with a) the county administrative board, the regional board, and other affected municipalities, and b) municipality citizens as well as other authorities, organisations, and individuals with significant interest in the proposal. Similar consultation requirements apply with respect to proposed detailed plans, but the regional board is switched to the Land Survey Agency, and, because of the plan's binding nature, consultations include more specifically the concerned parties, such as affected land owners, rights-holders, and residents (PBA ch. 5 s. 11). It should be noted that, in Sweden, Sami as indigenous reindeer herders have equal status to any other stakeholders in respect to having their voices heard, including during the impact assessment process.

⁷⁸ Prop. 1997/98:45 Del 1, p. 244–5; Prop. 1985/86:3, p. 46.

⁷⁹ Michanek & Zetterberg 2017, p. 150–51.

⁸⁰ Prop. 1988/89:92, p. 77.

⁸¹ Bjärstig et al. 2018a, p. 35–54.

⁸² Bjärstig et al. 2018b, p. 781–795; Solbär, Marcianó & Pettersson 2019; Österlin & Raitio 2020.

Integrated into the preparation of planning instruments is a strategic environmental assessment (SEA), under the Environmental Code (EC) chapter 6.83 A SEA is required, with respect to plans, where a municipality develops or amends a plan, if its implementation is likely to have significant environmental effects (EC ch. 6 s. 3).84 Two sets of consultations take place during the Swedish SEA process: first, with respect to determining whether the plan is likely to cause significant environmental effects (EC ch. 6 s. 6), and second, in relation to deciding on the scope of the assessment (EC ch. 6 s. 9). The first and second phases of consultation include, legally speaking, only authorities - that is, affected municipalities, county administrative boards, and other authorities (EC ch. 6 ss. 6, 10). The public may, however, express their opinions on the proposed plan and the accompanying draft SEA report before the adoption of the plan (EC ch. 6 s. 15). Thus, the SEA is an integral part of the municipal planning process.85

It is stipulated that the municipality should strive to coordinate different consultations as much as possible (EC ch. 6 s. 46). The linkages between planning consultations and the SEA provisions are, however, not straightforward, and a close study of the preparatory works is needed. Neither the provisions nor the preparatory works of the SEA set terms or formats for consultations, leaving these details, instead, up to the degree of the motivation of each munici-

The planning process, as such, however, has the potential for genuine collaborative governance, and the PBA, or the SEA provisions, do not hinder voluntary, in-depth consultations and other means for citizens to participate in increased ways. However, it could also be said that the minimum legal requirements, given their vague wordings, remain low. A bigger problem seems to be that land use planning for mining developments in Sweden is largely detached from early permitting procedures, unlike in Finland.

In addition to public and stakeholder influence in the planning process *pre* decisions, access to justice is an integral part of environmental rights in Sweden. While detailed plans are legally binding, they can be appealed and challenged in court. 88 However, the legislator has desired restriction in legal standing, 89 wherein legal standing regarding the adoption of detailed plans essentially are qualified by case law. 90 In essence, all residents and land owners within the plan area are deemed to "be concerned", and can also include property owners outside the plan area who own land adjacent to the area. 91

pality.⁸⁶ This is also confirmed by recent studies regarding Swedish mountain-region municipalities in rural areas,⁸⁷ regions where a majority of Sweden's mineral deposits are located.

⁸³ The latest changes to the SEA provisions concern clarifications supporting Swedish implementation of the SEA Directive. See Prop. 2016/17:200, p. 1, 83–7. See also new amendments proposed in Ds 2020:19 Genomförandet av MKB-direktivet i plan- och bygglagen.

⁸⁴ See the critical assessment on the implementation of the SEA by Josefsson 2019. He argues that Swedish implementation is poor in regards to the concepts of "plan" and "significant environmental effects".

⁸⁵ PBA ch. 3 s. 8 paras. 1 and 3; ch. 5 ss. 11, 18–19. See prop. 2018/20:52, p. 70.

⁸⁶ Cf. Regulation on Environmental Assessments (2017:966).

⁸⁷ Bjärstig et al. 2018a, p. 35–54.

⁸⁸ PBA ch. 13 ss. 2 a, 8 and 11–12.

⁸⁹ Prop. 2009/10:170, 358-9.

⁹⁰ Legal standing is grounded in the public administrative law principle that a natural person should "be concerned" by the decision. See Public Administration Act (2017:900) s. 42.

⁹¹ What defines the right to legal standing is the effect a decision has upon the appellant. See e.g. the Supreme Court cases NJA 2017 s. 421, at paras. 10–11, NJA 2019 s. 629, at paras. 23–4, and NJA 2015 s. 976. The latter case concerns the Mining Company LKAB, which has an exploration permit within the plan area and exploitation permits adjacent to the area; the Court held that LKAB

The situation of late municipal detailed planning and approval of permit applications for buildings, structures, and excavations can, in the future, become more controversial. As stated, permit applications for infrastructure necessary for operating industry typically form the final stages in the entire permitting process.⁹² What happens, then, if a municipality refuses building and excavation permits for a mining company,93 or if a municipality neglects or blocks the adopting of a mandatory detailed plan for infrastructure and buildings? Ultimately, the principle of municipal planning control means that each municipality decides if, where, and how planning takes place. Only rare situations invoke the so-called "command for detail planning" and thus trump municipal authority. In such circumstances, the government can order a municipality to adopt the detailed plan.94 To the authors' knowledge, this situation has never occurred regarding mineral exploitation.⁹⁵

So far, municipalities in rural areas with declining populations have approached mining companies with open arms. However, in recent years several exploration permits for battery minerals have been approved in the very south

had legal standing because the plan was directly affecting the company's activities.

of Sweden, in areas not accustomed to prospecting activities or mines. This activity has spurred massive local and municipal critique and many appeals. One can only anticipate that all municipalities will not be as cooperative as in the north, regarding late-stage detailed plans and building permit applications. The weakness of the Swedish planning model may prove to be a disadvantage and in fact jeopardise mine development. He majority of approved exploration permits and existing mines are located in the two northernmost counties of Sweden, Norrbotten and Västerbotten. Pr

2.3 Comparative viewpoints

From our analysis it is clear that Finnish and Swedish legal systems regarding land use planning have collaborative objectives and potential; they share the aims of interactive planning and transparency, as well as legislation enabling planning practices wherein multiple modes of collaborative governance can be applied. They can both be tailored-made in relation to characteristics of a plan, an area, and stakeholders in question. However, the laws only set broad frameworks for participatory and collaborative processes, and land use planning is heavily dependent on planners' choices regarding participatory tools used and degree of motivation therein. The planning laws in both countries enable a minimalistic approach from the perspective of collaborative governance; in these situations, the process includes formal hearings and public events but lacks genuine dialogue, negotiations, and co-operative attitude.

When it comes to effective routes to influencing decisions, our analysis reveals that land use planning is an instrument that is more important in Finland than in Sweden for the pur-

⁹² "Vägledning för prövning av gruvverksamhet", SGU Report 2016:23, p. 9, 70.

⁹³ This is possible in an area without a detailed plan, under the argument that the municipality must first plan the area, see PBL ch. 9 s. 31 point 2.

⁹⁴ See PBA ch. 11 ss. 15–6. This occurs only if concerning a) an area of national interest (e.g. regarding valuable mineral deposits) that has not been sufficiently protected, or b) land uses that cover two or more municipalities and that have not been coordinated properly. See PBA ch. 11 s. 10 point 1–2.

⁹⁵ There is currently a conflict between Kiruna municipality and LKAB regarding a detailed plan. LKAB have formally requested the government to order Kiruna municipality to issue the detailed plan (2020-05-11) (Sw. *planföreläggande*). See https://www.svt.se/nyheter/lokalt/norrbotten/darfor-kan-lkab-tvingas-att-minskapa-gruvbrytningen (accessed 2020-05-12).

⁹⁶ See also Bäckström 2015, p. 240.

⁹⁷ SGU, Årsredovisning 2018, 2019, p. 27.

pose of organising relationships between mining and other land uses. Finnish municipalities have a stronger role early-on regarding mining developments. In most circumstances in Finland, municipality-level planning decisions are required for mining permits, and planning can be used for directing and restricting mining operations. Mines are not in a special position in Finland, in this respect. Thus, the municipality has a crucial role in Finland from the land use perspective, deciding whether there are preconditions for a mine in a certain area; this power is close to a veto right, in practice.98 Autonomy of municipalities in planning issues means that the State can force municipalities to start a planning process only in exceptional circumstances; this applies to both countries.

In Sweden, the non-binding comprehensive plan has a similar steering function as the Finnish master plan; however, the Swedish plan always addresses the whole area of a municipality, giving the plan a rather general character. Since a comprehensive plan already exists for each municipality in Sweden, such a plan is rarely amended simply due to planned mineral extractions. This fact, in turn, means that (in Sweden) participation does not take place at an early stage regarding land use planning. Unlike Finnish legislation, the Swedish Minerals Act does not legally require a binding plan to be adopted before a mining permit can be approved. Therefore, planning in the context of mineral development in Sweden typically occurs late in the entire process and via the detailed planning of corresponding buildings and other structures.

⁹⁸ If the project involves uranium or thorium mining, also Finland's Nuclear Energy Act (990/1987) is relevant from the perspective of local governance. Mining and enrichment operations for uranium and thorium are subject to the permission of the municipality. This amendment was made to Nuclear Energy Act (Section 21.4) when the Mining Act was reformed.

Conversely, the permitting authorities responsible for deciding on mining developments play a crucial role in the Swedish regulatory framework; cooperation and consultation between those authorities and municipalities does exist. Swedish planning law is tied closely to the natural resource management provisions of the Environmental Code, including public interests and designated "areas of national interest" (Sw. *riksintressen*); these elements are accounted for within the comprehensive plan, and they have profound influence on mining permit decisions.

3. Environmental Impact Assessment

3.1 The EIA as a tool for participation and collaborative governance

Public participation and consultations are fundamental parts of environmental impact assessment,99 and from a collaborative governance perspective this process holds great potential. In EIA theory, the EIA process has been widely viewed as a deliberative planning tool that includes the potential for communicative planning, mutual learning, and a unique way for the public to participate and influence environmental planning and decision-making. The EIA is meant to be an open process for discussion and participation of different actors. It aims to increase the transparency and broadens the information base of environmental policy planning and decision-making. It is also meant to be an interactive and communicative policy instrument that should facilitate direct participation, offering different forms of participation during the EIA process.¹⁰⁰

Corresponding legislation provides frameworks for the environmental impact assessment process, including public participation. Howev-

⁹⁹ As noted by Wood (2003, p. 275), "EIA is not EIA without consultation and participation."

 $^{^{100}\,}$ See e.g. Wilkins 2003 p. 409 and Pölönen et al. 2011, p. 125.

er, the practices of public participation and consultation have evolved, to a large extent, without direct legal obligations - in Finland, Sweden, and elsewhere. The types of public participation and consultation differ not only between jurisdictions, but also between the projects. ¹⁰¹ Modes of EIA participation can range from provision of information to many types of in-depth consultations with specific groups, and the participation can even be linked to direct public power, for example to determine in co-operation with affected indigenous communities whether a mining project should proceed or not (also known as the principle of free, prior and informed consent, FPIC).¹⁰² There are numerous tools of consultation and participation used in EIA processes, such as: 1) public meetings, 2) community advisory committees, 3) community liaison staff, 4) public inquiries, questionnaires, and surveys, 5) steering groups in which a wide range of stakeholders are represented, 6) workshops, 7) participatory GIS¹⁰³, and 8) social media. Aside from regulatory demands, the choice of participation method (or mix thereof), depends on the aims and policies of the developer, stage of the EIA, public being engaged, nature of the action, and local circumstances.¹⁰⁴

Finnish and Swedish legislation on environmental impact assessments have common grounds in two EU Directives, namely the EIA

Directive (2011/92/EU, amend. 2014/52/EU) and the SEA Directive (2001/42/EC). The EIA Directive is applied in the case of individual projects, such as mines, and the SEA Directive is applied at the strategic level, covering certain public plans or programmes. In Finland, the EIA Directive is implemented mainly through the Act on Environmental impact assessment procedure (EIA Act 252/2017), while the SEA Directive is implemented by the Act on the Assessment of the Effects of Certain Plans and Programmes on the Environment (SEA Act 200/2005), the Land Use and Building Act, and the Act on Water Resources Management (1299/2004). In Swedish law, both EU Directives on impact assessment have been implemented into the Environmental Code (1998:808) Chapter 6, in which sector legislation, such as the Planning and Building Act and Minerals Act, is referred to. Chapter 6 of the Environmental Code (EC) has been amended fairly recently (in force January 2018), 105 giving effect to changes within the EIA Directive. 106 In both countries, strategic environmental assessment is always carried out in the land use planning process, as has been previously discussed. Forthcoming analysis in this article will focus on the project-level EIA.

3.2 The Finnish EIA setting

In Finland, the EIA is carried out as a separate procedure, and its significant elements are accomplished before a permitting process starts. The key characteristics of the Finnish EIA system include a mandatory scoping phase and a so-called EIA liaison authority system for guidance and quality-control. Liaison authority is a re-

¹⁰¹ On the relationship between EIA theory, law, and practices, see Pölönen & Perho 2018, p. 3–10.

Wood 2003, p. 277; Heinämäki 2016, p. 217, 219–220;Tomlinson 2019.

¹⁰³ Participatory GIS (geographic information systems) refers to geographic technologies made available to the public concerned to provide capacity for them in generating, managing, analysing, and communicating spatial information. Spatial information can be, for example, information about cultural sites, the environment, and natural conditions of the area (e.g. species perceptions), or opinions, wishes, fears, and ideas related to a place. Seppänen 2016, p. 54–55.

Wood 2003, p. 277–279; Pölönen & Perho 2018, p. 8–10.

¹⁰⁵ Prop. 2016/17:200 Miljöbedömningar.

¹⁰⁶ These amendments meant an overhaul of Chapter 6, where the old chapter was replaced by a new structure and a few new concepts, and these changes relate both to the SEA and EIA, but primarily to the EIA provisions. Prop. 2016/17:200, p. 1, 66, 70.

gional authority (a unit in a Centre for Economic Development, Transport and the Environment) focusing on EIA issues. This arrangement supports the quality of the EIA, while it enables a single authority to specialize in EIA issues and thus build a vast expertise on relevant legal requirements, guidelines, and good practices. ¹⁰⁷

The Finnish EIA law exhibits aims of collaborative governance, however it provides only loose frameworks for collaborative practices. As a minimum, the Finnish EIA Act requires that two hearings are arranged during an EIA process - one in the scoping phase and another in the EIA report phase (s. 17 and 20 of the EIA Act). A hearing takes place in written format. In practice, anyone can lodge comments on the scoping document (called environmental programme) and EIA report. 108 In its latest revision, a provision on pre-consultation was added to the EIA Act, but it is not a means for public participation (third parties do not have a right to initiate or participate in the negotiations). The purposes of the pre-negotiation are to promote the management of an entirety of assessment, planning, and permit procedures required for the project, as well as the exchange of information between the developer and the authorities, and to improve the quality and usability of documents for streamlining procedures (s. 8 of the EIA Act). In Finland, by policy choice, legislation clearly excludes other stakeholders from these consultations.

Furthermore, s. 21 of the EIA Act states that the developer and coordinating authority may agree to arrange public notification and hearings in another manner, in addition to the hearings regulated by s. 17 and 20 of the Act. Based on this provision, it is an established practice that two oral hearings are arranged during the EIA

While interactive participatory tools are increasingly utilised in EIA practice (beyond the legal minimum), developers have maintained their dominant roles in arranging and controlling participatory procedures. As a result, participatory tools can also be used for manipulation, and viewpoints and suggestions provided by participants may, thus, have a negligible impact in a substantial sense (marginal-to-no impact on planning decisions).111 On the other hand, the task of the EIA liaison authority within the Finnish system is to ensure that the developer considers the (legally) relevant viewpoints and comments presented by the public; the steering function of the liaison authority balances the asymmetric division of power between the developer and the public.112

The timing of an EIA and participation has been identified as a critical factor for the

process. 109 This means the occurrence of public events in which a scoping document and EIA report are introduced and the public has a chance to pose questions and comments regarding these documents. It depends to a large extent on the developer (and the developer's consultants) as to how these events are facilitated and whether meeting techniques employed support dialogue, mutual learning, and trust between stakeholders. In many instances, participatory processes also include use of EIA steering groups where various stakeholders are represented. Increasingly, workshops, tools of social media, and participatory GIS are also used in the Finnish context, so as to enhance the communication and capacity of the public in generating both information and opinions.¹¹⁰

¹⁰⁷ Pölönen et al. 2011, p. 123.

¹⁰⁸ Pölönen & Perho 2018, p. 39–40.

¹⁰⁹ See also the Government Bill for the new Finnish EIA Act (HE 259/2016), p. 63.

¹¹⁰ Pölönen & Perho 2018, p. 8–9.

¹¹¹ See also Hokkanen 2007, p. 261–265.

Hokkanen 2007, p. 261–265; Pölönen 2007, p. 63–65, 187–192.

effectiveness of the EIA and the public's arguments. This is clearly a strength of the Finnish EIA system, wherein the law provides for an early start to a participatory process. The EIA Act (s. 15 para. 1) states that "The environmental impact of the project must be assessed at the earliest possible stage in the design process, taking into account further preparation of the project, with alternatives still open." The absolute deadline for accomplishing this process, in Finland, is the decision-making phase (s. 15 para. 2 of the EIA Act).

Despite the fact that developers cannot be forced to reveal their project plans in the early phase of planning (such as by requiring a scoping document to be submitted), separation of the EIA and permitting procedures does, in fact, mean an early start for an EIA. An early phase of technical planning means that a wider range of project alternatives is available when participatory procedures and dialogues within the EIA start. This process supports innovative co-designing of a project and efficient solutions to conflicting issues, in-line with collaborative governance. This process could be further enhanced by more inclusive pre-consultations in which all relevant stakeholders participate in initial discussions and planning of the EIA process. As mentioned earlier, the EIA Act restricts third-party participation in pre-consultations, under Section 8. However, there are no legal restrictions to arranging informal consultations for other stakeholders if a developer, such as a mining company, so wishes.

When it comes to the timing of the EIA in mining cases, the Mining Act must also be considered. The latest changes to the Mining Act (578/2019) imply that a developer can initiate mining a permit procedure in a manner that creates privilege to mining rights (right to exploit

¹¹³ Hokkanen 2007, p. 271–272; Pölönen 2007, p. 275–276.

minerals at the site), even if the EIA is unfinished (s. 32.1 of the Mining Act). This is a clear weakening of the legal setting of mining, from the collaborative perspective. The amendment created incentive for mining companies to postpone EIA studies and submit mining permit applications in which one project alternative is chosen, before consideration of alternatives would be carried out in an EIA. Prior to the amendment, a mining permit application had to be fully completed, including an EIA report and reasoned conclusion from the liaising authority, before its submission could result in a privilege to mining rights.

On whole, Finnish EIA legislation provides sound frameworks for communicative planning and collaborative governance, but the collaborative nature of each process varies considerably depending on the aims and strategies of a developer and other stakeholders.

3.3 The Swedish project-based EIA

In contrast to Finland, the Swedish EIA is tightly connected to the permit process, in fact it is a prerequisite for starting an EIA process under the Environmental Code (EC).¹¹⁴ With Sweden's split permitting process, it follows that one EIA is required for a mining permit (first EIA) and one for a corresponding environmental permit (second EIA).¹¹⁵

In Sweden, the EIA is conducted by the applicant – the mining company – but commonly out-sourced to consultants. The county admin-

¹¹⁴ EC ch. 6 s. 20; Michanek & Zetterberg 2017, p. 195.

¹¹⁵ A third EIA may be required, with respect to risk of causing significant effects on a nearby Natura 2000 area. This EIA can be performed separately or as part of the EIA for the mining permit (EC ch. 6. s. 36). Note, however, that legislation does not clearly stipulate when the Nature 2000-permit application should take place. According to EC legislation and case law, it should be made early on, which, in a Swedish context, means in relation to the mining permit. The mining company Boliden has challenged this notion by appeal, for the Laver mine (currently ongoing).

istrative board has a special consultative and coordinating function in the Swedish EIA system (e.g. EC ch. 6 s. 32). When the permit application and EIA report are sent to the permitting agency, rights-holders and the public are invited to make (written) comments on the EIA report (EC ch. 6 s. 39), as a part of collaborative governance. The agency that decides on the application (in this instance, the Mining Inspector or Government for the mining permit, and the Land and Environmental Court for the environmental permit) determines whether or not an EIA meets the minimum legal requirements (EC ch. 6 s. 42).

It is quite recently (January 2018) that corporate consultations in relation to the EIA for the mining permit have been undertaken as a mandatory part of the EIA process. ¹¹⁶ Pre-2018, most mining companies still undertook consultations on a voluntary basis. Many also developed a specific "reindeer herding impact assessment" to evaluate negative impacts on Sami reindeer herding. ¹¹⁷ In contrast to Finnish law (in Sami Homeland), Sweden lacks requirements of the State to consult *directly* with affected Sami reindeer herding communities and the Sami Parliament. ¹¹⁸

It is obvious that the regulatory framework under the Swedish Minerals Act was originally designed to fast-track mineral extractions, 119 constraining participation with rights-holders and blocking consultations with the larger public. That could be regarded as surprising, since mining developments often create tensions and conflicts locally and so would, instead, benefit from early dialogue and collaborative methods

between mining companies and stakeholders/rights-holders not only authorities. A few successive steps have changed these constraints during last decade.¹²⁰

Swedish forms of consultation within legislation are open and vary, but the concept "samråd" in Swedish typically denotes oral hearings or meetings, and consultation is to be done as early as possible (before the company locks in certain decisions and production methods). In addition, written information, statements, and other forms of collaborations may be accepted. The mining company also needs to report on the results of consultations and other collaborative means to the permit authority. On the whole, the first and second EIAs reflect the aims of collaborative governance, namely the mandatory corporate consultations with rights-holders, stakeholders, and NGOs, and within a timely manner. At minimum, one consultation with the concerned public is mandatory (EC ch. 6 ss. 29-31), and at least two consultations with affected stakeholders (see also ch. 6 s. 24). 121 It is more of a rule than an exception for a mining company to have successive consultations; it is viewed necessary so as to obtain local acceptance.

While there normally are years between the two permit applications and the corresponding EIAs, interim knowledge of the proposed facility, production methods, infrastructures, etcetera results in a second EIA with greater detail in regards to negative environmental impacts of

¹¹⁶ One of the stated reasons was to reduce appeals, see Prop. 2016/17:200, p. 158.

¹¹⁷ In a Sami rights context there are multiple problems attached to the normal EIA as well as the "reindeer herding impact assessment", see further e.g. Kløcker Larsen, Österlin & Guia 2018.

¹¹⁸ Allard 2018, p. 26, 31–35.

¹¹⁹ See also Michanek & Zetterberg 2017, p. 524.

¹²⁰ Prop. 2013/14:159 Bättre information och tydligare ansvar vid mineralprospektering; Prop. 2016/17:200.

¹²¹ Prop. 2016/17:200, p. 118. The preparatory works more or less presuppose that a company needs to hold several consultations, subject to conditions regarding the case at hand, and that well-conducted consultations may reduce the risk for changes and appeals later on. Specifically, affected rights-holders are singled out in the legal text where direct contacts and consultations are expected, whereas consultation with the wider local public can be dealt with in other (indirect) ways. See ibid., p. 119.

the proposed mine and infrastructure. However, Swedish case law has pushed the limits of the scope of the first EIA through the Norra Kärr case¹²² decided by the Swedish Supreme Administrative Court (SAC) in 2016. This case challenged the limited nature of the EIA required under the Minerals Act, and initiated due to potential negative impacts of a proposed mine on a nearby Natura 2000 area. The matter concerned whether it was lawful, under the Minerals Act, to limit the mining permit (and EIA) to the designated permit area, thereby excluding all activities and infrastructure necessary for operating a mine. As a result, related infrastructure (tailings, dams, transport corridors) must now be a part of the first EIA.

After the Norra Kärr case, the scopes of the first and second EIAs have converged, yet they still differ in some respects – particularly in terms of their geographical scopes. The second EIA also includes transports, dust, noise, emissions into water, etcetera that are further away from the mine area. Another difference is that only the first EIA provides information for assessment and prioritising with respect to public interests in the Environmental Code Chapters 3–4, including effects on "areas of national interest" such as relating to Sami reindeer herding and a mineral deposit.

3.4 Comparative viewpoints

With respect to aims of interactivity, transparency, and consultations, the Finnish and Swedish EIA systems are similar, with both reflecting a spirit of collaborative governance. However, the degree of motivation, therein, as well as the forms and quality of consultation, can significantly differ within and between the legal frameworks. In both countries, it is essentially up to a mining company to determine the forms

and degree of participatory engagements and influence regarding project planning. If the developer or/and other stakeholders only use the EIA to promote their interests instead of engaging in collaborative dialogue, then the potential effectiveness of an EIA as a tool of collaborative governance is easily weakened.¹²³

A significant difference between the two jurisdictions relates to the EIA's relationship to the permitting processes. Unlike in Sweden, the Finnish EIA process is carried out as a separate procedure. An early EIA (preceding permit procedures) often means that project planning is not developed in a manner that would exclude realistic dialogue on project alternatives. This enhances possibilities for genuine participation and collaborative governance. However, after the latest amendments to the Finnish Mining Act (2019), a mining company can initiate a mining permit procedure even if the EIA is substantially unfinished. This weakens the potential role of an EIA as a tool for effective participation in mining cases.

In the Swedish system, an EIA must be produced in two instances, since it is tied to the permit process. The first EIA takes place in the mining permit phase, and the second in relation to the environmental permit. The two EIAs have converged after recent case law development (Norra Kärr), but there are some differences notably, that the second EIA is more detailed, given that it is later in the process and much more is known about a proposed site and production options, etcetera, which also means that possible impacts of a mine can be better predicted. In addition, when a proposed mine is situated within a Sami reindeer herding area, the developer must assess negative impacts on the reindeer herding. Many companies do this in the form of a "reindeer herding impact assessment"

¹²² SAC 2016 ref. 21.

¹²³ See also Hokkanen 2007, p. 263.

that often goes beyond the legal minimum requirements. As is the case with municipal planning decisions, Swedish reindeer herding Sami have the same opportunities to be consulted and participate as other stakeholders have – Swedish EIA legislation does not regard reindeer herding Sami as indigenous rights-holders with special status.

4. Mining and environmental permits

4.1 Mining and environmental permit procedures in Finland

Mining and environmental permits, which can be applied for either in free order or simultaneously, are primary permit processes for mining in Finland. The main function of a mining permit decision is to determine the right to exploit minerals; it is also meant to be a tool for balancing various interests and preventing negative impacts of the mining activities. An ambitious objective of the Finnish Mining Act (sec. 1) is to simultaneously safeguard private and public interests, with particular attention to a) the conditions for mining, b) legal status of landowners and private parties sustaining damage, and c) the impacts of the activities on the environment, land use, and the economic use of natural resources. The aim of ensuring municipalities' opportunity to influence decision-making, and the opportunity of individuals to influence decision-making that affects them and their living environment, is also anchored in the Finnish Mining Act.

The environmental permit procedure is the most important tool for the environmental governance of mining in Finland. The objectives of the Environmental Protection Act (527/2014, EPA) include the aim of improving opportunities of citizens to affect decision-making regarding the environment. At the heart of the environmental permitting procedure is the prevention of environmental pollution and adverse effects of

waste. Case-specific permit conditions are key in permit consideration. A permit application can and must be rejected on grounds of significant environmental pollution or risk thereof only if the effects cannot be prevented by modifying the project and volume of its impacts through the conditions. Relevant issues in the environmental permit procedure for mining projects include waste management, protection of groundwater, surface water and soil, and noise and air emissions management. In mining projects, a water permit, in accordance with the Water Act (587/2011), is connected to the environmental permit, and it is granted by the Regional State Administrative Agency. Water permits address the managing of the use of water resources and water environment, as well as access and compensation issues related to water management projects.124

Both mining and environmental permit procedures provide participatory rights, including a) access to information (the parties affected must be informed of the permit application), b) the right to express opinions prior to decision-making (anyone can lodge comments on the permit applications), and c) access to justice. Parties concerned (whoever may have a right or interest in the matter) and NGOs (fulfilling criteria set in the Finnish Mining Act and EPA) can challenge the mining and environmental permit decisions before the administrative court. ¹²⁵

These rights support the transparency of the permit processes, broaden the information base for the decision-making, and enhance the implementation and enforcement of the legal requirements surrounding the mining activities. However, the mining and environmental permit

¹²⁴ Pölönen & Halinen 2017, 6–7.

¹²⁵ Pölönen 2012, p. 91–102. Before the reform of Finnish mining legislation in 2011, the Mining Act (from 1965) contained very few mechanisms for participation and environmental governance. Pölönen 2012, p. 80–81.

procedures cannot be characterized as interactive processes. Neither the Mining Act nor the Environmental Protection Act contain regulations on the interactive modes of participation, even if a case is conflicted.

When it comes to potential to influence, substantive norms - as in setting criteria the proposed activities must fulfill - play key roles in both procedures. Substantive norms can be considered as 'action-forcing' elements, transferring input from impact assessments and hearings (procedural norms) to decision-making. Scopes of the substantive norms frame legally relevant matters that can effect decision-making; this implies that effects caused by emissions, for example, are taken into account in environmental permitting. All relevant impacts of physical altering (e.g. to scenery), cannot be addressed in this procedure. This means that arguments presented in EIA and the participatory processes cannot be taken into account holistically in environmental permitting in Finland, although many key governance issues, including pollution control and impacts on Sami livelihoods (SAC 2020:124), are considered.

Finland's Mining Act provides a broad scope for permit consideration in terms of impacts, however the high thresholds of unconditional preconditions limit the possibilities to influence to the outcome of permits under consideration. Section 48.2 of the Mining Act is particularly relevant here;¹²⁶ it regulates that:

¹²⁶ With respect to developments within the Sami Homeland, it is stated in s. 50 that approval of permits (exploration, mining, gold panning) *must not* be granted if activities under the permit "alone, or together with other corresponding permits and other forms of land use would, in the Sami Homeland, substantially undermine the preconditions for engaging in traditional Sami sources of livelihood or otherwise to maintain and develop the Sami culture". According to the second paragraph, approval of a permit is still possible if it is feasible to remove such impediments through permit regulations.

"a permit shall not be granted if the mining activity causes danger to public safety, causes *highly significant detrimental* environmental impacts, or *substantially* weakens the living conditions *and* industrial conditions of the locality, and the said danger or impacts cannot be remedied through permit regulations". (emphasis added)

Finland's Water Act contains a similar provision, but it has only been applied once in its nearly 60-year history (in the case of the reservoir of Vuotos, SAC 2002:86). ¹²⁷ Due to high thresholds (unconditional preconditions) and vague wordings (including provisions on case-specific conditions) ¹²⁸, the role of the Act in the governance of environmental and social impacts of mines appears to be lesser than one would think, in light of both the objectives and the Act and Government Bill.

The first instances in which the Mining Act of 2011 was (partially) applied give the same impression as mentioned above. The Finnish mining authority (Tukes) has given very few case-specific conditions in these situations; instead, it has repeated flexible wording of the law, such as "Mining shall not give rise to significant harm to the public or the private interest nor infringement of public or private interests", in its decisions. This practice has been heavily criticized by both the Court and academics. In case SAC 22.11.2017 t. 6029, the Supreme Administrative Court overruled and returned the decision given by Tukes, in which provisions on permit conditions under the Mining Act of 2011 were applied to the Kuusamo gold mine. The Court clearly stated that the permit decision must concretize the applicable norms under the new Mining Act and not just repeat the general obligations of the Act. Along these same lines,

¹²⁷ On the case of Vuotos, see Koivurova 2004, passim.

¹²⁸ See Vihervuori 2019.

Similä and Jokinen have criticized that the permitting practice of the Finnish mining authority has run counter to the entire idea of permitting: "No one knows what this formulation [of permit conditions repeating the flexible text of law] means in concrete terms and yet permit holders may unwittingly violate its terms". 129

It remains to be seen how the mining authority will change the application of the Mining Act based on the ruling of the SAC and what type of concrete, case-specific conditions will be given. This change is not an easy task for the mining authority. One of the challenges is the complex relationship between the Mining Act and the Environmental Protection Act. The Mining Permit should not contain permit conditions that overlap with the case-specific permit conditions of the environmental permit procedure on emissions. At the same time, a mining permit typically precedes an environmental permit, and it can be difficult for the mining authority to predict forthcoming conditions of the environmental permit.

Another challenge in the consideration of a mining permit comes from the nature of mining itself. It can be argued that the ambitious aim of the legislator, to secure the conditions for mining and simultaneously tend to all other interests in a balanced way, can be an impossible mission in practice. An objective of balanced outcomes is very difficult to reach when mining activities are excluding other activities in relatively large areas (which can explain the stricter provision regarding obstacles to granting permits within the Sami Homeland). Due to the nature and characteristic of today's mines (increased sizes and volumes), large-scale impacts on land use, scenery, production of waste, and risks of water pollution can be limited only to an extent. If competing land uses, such as residential areas,

nature protection, and nature-based tourism, are sensitive to direct and indirect impacts of a mine, then the mining authority must prioritize the activities based on the preconditions within the Mining Act. In practice, the mining authority has the authority to fully reject a mining application only in exceptional cases.

Finnish mining legislation is currently under revision. Based on the first draft Bill for the Act Mining Act (published in Sep 2020), the revisions will be moderate. However, it is too early to predict what type of political processes will take place at the end of the drafting process and how this reform will change the state of mining law in Finland.

4.2 Mining and environmental permit procedures in Sweden

Few new mining developments in Sweden have, as of yet, been decided on beyond the granting of exploration permits.¹³¹ Several mining permit applications have been sitting with the Government for decision since at least 2017, signifying how delicate and politically sensitive these decisions presently are in Sweden. One could easily say that there exists a anti-mining movement in Sweden, and that it increases "when the state offers little or no real access nor influence to mining-sceptical actors in either policy formulation"

¹³⁰ On the revision process of the mining legislation, see the webpages of the Ministry of Economic Affairs and Employment: https://tem.fi/kaivoslakiuudistus.

¹³¹ E.g. the Land and Environmental Court of Appeal rejected an environmental permit application by Svenska Kaolin AB in 2019, case MÖD M 10717-17. Most applications for environmental permits regard expansions of already existing mines or infrastructure. See e.g. the Land and Environmental Court of Appeal case MÖD M 10031-14 from 2016 (Boliden was granted continued activity in Aitik); MÖD M 10355-17 from 2018 (LKAB was denied permit due to risk of damage on a Natura 2000 area); MÖD 2011:51 from 2011 (LKAB was denied permit of an extension, Gruvberget, because the application was too narrowly defined, and new and existing activities should be assessed simultaneously).

¹²⁹ Similä & Jokinen 2018, p. 164.

or in actual permitting processes.¹³² This correlates to the perceived lack of influence.

As in Finland, a mining permit in Sweden is applied for before an environmental permit, which is an order that follows logically from legislation. An approved mining permit establishes an exclusive right to access particular minerals within a designated permit area (Minerals Act ch. 5 s. 1), not the right to operate the mine. 134

Of the two permit applications, the mining permit is vital in that it establishes the permissibility of the project as a whole (a balancing of opposing public interests) and whether or not the applicant can proceed to apply for an environmental permit. The original preparatory works of the Swedish Minerals Act state that applicants will most likely be granted the rights to extract found minerals, 135 and, even if this was the case earlier, the picture has become increasingly complex in the last decade - in much part due to "areas of national interest" (Minerals Act ch. 4 s. 2 para. 4) and EU law. The balancing of existing public interests, especially "areas of national interest", that takes place in the mining permit stage is, in turn, binding in subsequent environmental permit decisions (ch. 4 s. 2 para. 4) and cannot be "reopened". 136 It is established by SAC in a case from 2012,137 where Vapsten reindeer herding community appealed the Government's decision regarding the Rönnbäcken mine, that where the "areas of national interests" are indeed incompatible, the permit authority (Government in this case) must prioritise one interest and state its reasons why.

Under the Swedish system, the Mining Inspectorate, as the designated mining authority in Sweden, determines both the designation of "areas of national interest" (valuable mineral deposits) and decides on a case-to-case basis the approval of mining permit applications. In general, this occurrence is a rare situation, and one in which all other permit processes related to environmental issues are concentrated into the environmental permit; it is a symbol of a permit process that is tilted in favour of mine development.¹³⁸ The design of the provisions on mining permits (ch. 4 s. 2) aids in the approving of a mining permit - namely, if the stipulated conditions are met, the Mineral Inspector must grant the permit;¹³⁹ which is, indeed, an unconditional precondition. Recently, EU law and an increased focus on indigenous Sami reindeer herding have seriously challenged this framework.

The county administrative board, which is tasked to safeguard regional interests, such as reindeer herding and biological diversity, can disagree on how the Mining Inspector balances or prioritises public interests. As a result, the permit decision cannot be made by the Mining Inspector but must, instead, be elevated to the Government for a decision (Minerals Act ch. 8 ss. 1–2). This explains why applications pile up at the Government, including appeals that the Government handles that concern mining permits decided by the Mining Inspectorate (ch. 16 s. 1); the legislator has manifested a political steering

¹³² Zachrisson & Beland Lindahl 2019, p. 10.

¹³³ Prop. 1988/89:92, p. 46.

¹³⁴ See also Bäckström 2015, p. 183.

¹³⁵ Prop. 1988/89:92, p. 56, 61.

¹³⁶ Prop. 1988/89:92, p. 57, 61.

¹³⁷ SAC 2012 not. 27: SAC repealed the Government's decision on approving the mining permit. The Government made a new decision prioritising the mineral interest. Vapsten appealed again and SAC held that the Government's decision did not include any errors this time, see SAC 2014 not. 65. Note that these cases include only a limited trial (Sw. *rättsprövning*).

¹³⁸ See also Pettersson et al. 2015, p. 240–244.

¹³⁹ The provision states that "A concession *shall be* granted if 1. a deposit has been found which can probably be utilized on an economic basis, and 2. the location and nature of the deposit do not make it inappropriate to grant the applicant the concession applied for." (our emphasis)

of "case law" regarding mining permits. 140 There are questions as to whether the Swedish provisions related to legal standing of concerned public are in line with the Aarhus Convention and the EIA directive. 141

In Sweden, collaborative governance during the environmental permit phase is traditionally more extensive than with mining permitting. A mining company needs to obtain a number of environmental permits under the Environmental Code and its by-laws, which normally are assessed simultaneously and include a permit for environmentally hazardous activity, 142 permits for adjoining activities and facilities, primarily sintering, and other processing, 143 and a permit to regulate impacts on water systems via dams or efferent of groundwater¹⁴⁴. These assessments are meant to mitigate negative environmental effects arising from the operation of the mine and its adjoining infrastructures, and conditions to the permits are also decided upon. 145 In Sweden, applications are handled by the Land and Environmental Court. Decisions can be appealed to the Land and Environmental Court of Appeal, and then on further up to the Supreme Court (by leave of grant). All affected rights-holders have legal standing, including environmental NGOs (Environmental Code ch. 16 s. 12–13), 146 and procedure consists of a complete trial, which means that access to justice in such a process is considerably better than that of a mining permit.

All in all, participation of stakeholders and rights-holders in permit decision-making, in Sweden, is broader, in the context of environmental permits, at the environmental courts. The Government, acting as both the permit authority and the appeal body, significantly restricts collaborative government for mining permits. Appeals are only possible via limited trials at the SAC, targeting possible procedural and margin of appreciation errors. Sami reindeer herding communities not directly connected to the immediate mining area have had difficulties gaining access to the appeal system, despite being affected by mining-related transport, facilities, etcetera, and, where they have had legal standing, their influence has been slim due to the limited nature of trials at the SAC.147 At the same time, environmental NGOs can appeal mining permits (Minerals Act ch. 16 s. 4 a). For both permit phases, the best possibilities to influence decisions happens mainly via the EIAs, since they are tightly connected to the permit procedures and assessments.

4.3 Comparative viewpoints

Environmental and mining permit procedures play a key role in the governance of mining in Finland and Sweden. The Finnish Mining Act, however, is more recent and attests to a more modern approach, given its stated objectives of balancing public and private interests while including rights-holders, including the protection of the environment as well as Sami culture within the Sami Homeland. Nonetheless, a mining permit has similar functions in both countries it determines the right to exploit minerals and how to balance opposing public interests. In Finland, the balancing of conflicting interests is a legal consideration, while Swedish law, with "areas of national interests" for differing purposes, leaves, explicitly, more room for steering - especially where the Government becomes the authority of first instance. In Sweden, if the county

¹⁴⁰ Prop. 1988/89:92, p. 69.

¹⁴¹ Darpö 2013, p. 497–499.

¹⁴² Environmental Code ch. 9 ss. 1, 6; Regulation on Environmental Examination (2013:251), ch. 4 s. 11.

¹⁴³ Regulation on Environmental Examination ch. 4 ss. 12, 14.

¹⁴⁴ Environmental Code, ch. 11 ss. 3, 9.

¹⁴⁵ Prop. 1997/98:90, p. 151–2.

¹⁴⁶ Prop. 1997/98:45, p. 485.

¹⁴⁷ Cf. SAC 2014 not. 65, referred to above.

administrative board involved disagrees with how the Mining Inspector aims to balance these public interests, the decision is then elevated to the Government. Important to stakeholders' and rights-holders' access to justice, the Finnish mining permit decision can be appealed to court for a full trial, where the Swedish legislator has retained a political steering of the permitting process with the Government as an important authority.

Another difference between the two countries' laws is the legislative technique used in the key provisions for permit consideration. In the Swedish Minerals Act, the provision (ch. 4 s. 2) stipulates that the authority *must* approve an application if the prescribed conditions are met (low threshold), whereas the Finnish legal text allows for both the conditions and hindering (impediments) of approval of a permit, leaving more room for balancing diverse interests by the competent authority.

In both countries, a key function of the environmental permit procedure is to determine mitigation measures for preventing and minimising environmental harm and risks. However, the Finnish environmental permit system seems to provide stronger environmental safeguarding; rejection of a permit application on environmental grounds is a real option, if significant environmental pollution risk is difficult to prevent through permit conditions. Swedish practice seems to emphasise the mining permit as a threshold decision, while the environmental permit procedure is important only for stating permit conditions so as to mitigate environmental harm.¹⁴⁸

In the Finnish permit process, procedures for participatory rights go beyond the minimum requirements of the Aarhus convention, but neither the Environmental Protection Act nor the

¹⁴⁸ See also Pettersson et al. 2015, 243–244 and 251.

Mining Act contain regulations on interactive modes of participation, which are close to conventional, top-down participatory models. In Sweden, the EIA, with its broad consultations, is integrated tightly into both the mining permit and environmental permit procedures. Therefore, Swedish permitting includes a wider range of tools for co-operative relations between a developer, governmental bodies, individuals, local communities, and NGOs. A relevant question, however, is whether or not consultation occurs too late for seeking consensus or preventing potential conflicts. If consultation takes place after crucial technical and financial decision-making, the room for collaborative governance can be small or even negligible, which is the situation regarding the weak level of influence Swedish Sami reindeer herding communities have.

5. Conclusions

The primary task of this article has been to highlight the relationships between collaborative governance and mining-related laws, with a comparative focus on Finnish and Swedish legislation. We first identified the differences between the two countries in the context of Sami rights. These rights play a very different role in Swedish permitting practices from the Finnish practices. Compared to Swedish law, Finland's Mining Act offers strong protection for Sami culture and livelihoods within the "Sami Homeland". Mining companies have refrained from seeking mining permits for areas within the Sami Homeland in Finland so far. The situation is nearly the opposite in Sweden where affected reindeer herding communities are often important right-holders and stakeholders in the permitting practices. The lack of substantial guarantees in Swedish legislation to restrict approval of permits (i.e. in case of significant impairment of the reindeer herding), combined with the absence of a direct consultation duty of the State and state authorities regarding the Sami as an indigenous people, signifies that the communities' potential to actually make a difference concerning the content of crucial decisions is slim.

Outside of Sami and reindeer herding rights, our analysis has focused on land use planning, environmental impact assessment, and mining and environmental permit systems. We found that the laws of land use planning and EIA systems, in both countries, have clear collaborative goals and potential. The laws support collaborative governance, and interactive processes are meant to exist where manifold expertise and views of stakeholders are shared and taken into account. Land use planning and EIA procedures provide sound frameworks for collaborative practices whereby various modes of collaborative governance (e.g. interactive meetings, working groups, and workshops) can be used, and they can be tailor-made to the characteristics of the case in question.

There are also clear differences between the jurisdictions. Specific land use planning prior to a mining permit is not mandatory in Sweden as it is in Finland, in most cases. In the Finnish system, especially the master planning has a critical role in the local governance regarding mining developments. As a rule, a planning decision is a precondition for the mining permit, and municipality-level planning can be used for designating areas for mines or restricting mining operations. In this respect, mines are not in a special position compared to other land use interests. The autonomy of municipalities in planning issues means that only in exceptional circumstances can the State force municipalities to start planning processes.

Swedish law lacks clear ties between planning decisions and the mining permit, and binding planning decisions are made in a late phase. The detailed plans, which are of importance in this context, are directed in the steering of infra-

structure, buildings, dams, and such, after the necessary mining and environmental permits have been obtained. Although a municipality may use detailed planning and building permit procedures for rejecting mine operations, the likelihood for doing so at such a point in planning is slim. New mines are typically planned for rural areas where only a non-binding comprehensive plan exists. While the Swedish comprehensive plan has similar steering functions as the Finnish master planning, it is not utilised for mineral developments per se. Instead of municipal plans, Swedish law relies on a set of broad land use and resource management provisions from within the Swedish Environmental Code for the balancing of public interests and regarding specific areas (such as areas with conservation interests, reindeer herding, mineral deposits, and wind energy). The provisions are to be applied, then, both in planning decisions by the municipality and in a mining permit assessment by the Mining Inspector or the Government.

It is noteworthy that in planning and EIA law neither in Finland nor Sweden is it required that the outcomes of the processes achieve broad support of the stakeholders/rights-holders; the laws only set broad frameworks for the participatory and collaborative processes. Collaboration in planning is heavily dependent on the planners' and municipalities' choices, while collaborative modes are developer-driven in an EIA. In both countries, the planning and EIA law enables a minimalistic approach from the perspective of collaborative governance; the process must include formal hearings, but genuine dialogue, negotiations, co-operation, and broad consensus can be absent and without legal consequences. On the whole, the planning and EIA legislation in the two countries have collaborative aims and characteristics, but they do not represent collaborative governance in a strict sense (joint decision-making or broad consensus on the crucial decisions).

When it comes to environmental and mining permit procedures in Finland and Sweden, both jurisdictions maintain provisions on hearings for the public, but, as for outcomes, only issues and values reflected by substantive provisions within sectoral statutes can be taken into account. In Sweden, permit assessment under the Minerals Act, which stipulates that a permit must be granted if certain conditions are fulfilled, has no consensus-seeking characteristics, while the Finnish Mining Act reflects the idea that the mining authority should provide a multitude of permit stipulations in the act of balancing various interests. In both countries, a permit application must be accepted or rejected based on the substantive requirements under the respective sector legislation - parties cannot just agree on the content of a permit decision, and also conditions for operation must be given irrespective of consensus or lack thereof.

Consequently, our legal analysis supports a collaborative-theories critique that meeting the demanding conditions of collaborative governance (in terms of deliberation and negotiation) is, in practice, highly difficult due to substantive provisions in legislation as well as power imbalances between actors and rights-holders. Legal norms do not always create incentives for developers or legal competence of authorities to negotiate or seek compromises. This can be the case, for example, if a developer anticipates that an application will fulfill the preconditions and a permit will likely be granted. Authorities also have a legal duty to grant permits irrespective of potential local resistance; they must abide by the law, and general principles of administrative law treat private parties alike.

Our analysis has identified both the manner and the timing of participatory procedures as key issues for successful collaborative practices. When participatory procedures are initiated alongside the technical development of a project by a mining company, a range of project alternatives can be open for collaborative considerations. Such a process supports co-operative designing of a project and enables efficient solutions in determining and addressing conflicting issues, in-line with collaborative governance. In this respect, there appears to be room for improvements in both countries but in different ways. Such improvements would mean a reconsideration of the timing of mining EIAs (both countries), and earlier legally binding land use planning prior to permit decisions (Sweden). In Finland, improvement would technically mean a simple change, such that a mining permit application must include an EIA report and reasoned conclusions (a return to the legal framework existing prior to the 2019 amendments of the Finnish Mining Act). In Sweden, improvement would call for more radical changes, both with respect to the planning instruments and to the structure of the Swedish EIA law. Under these conditions, an EIA, or part of it, would precede the mining permit procedure, and provisions would support utilising such an EIA more as a planning tool and early-phase participatory platform. This is something that needs close assessment for the Swedish legislation on mine developments; there may be other, more suitable and less far-reaching amendments to engage, as

At the same time, we consider that more rigorous and detailed regulation on the means of collaboration (e.g. requirements to use certain interactive methods) is not a panacea that would lead to better planning and genuine collaboration in the field of mining. Regulatory design regarding collaborative means requires holistic analysis, wherein both procedural and substantive sides of law are simultaneously considered.

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