Remote Sensing and Indigenous Rights in the Arctic: How the lack of remote sensing policies in the Nordic States interacts with Arctic governance

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Space capabilities have simplified the monitoring of climate change, military installations and security threats in the Arctic. Specifically, the images from space-based remote sensing provide a particularly clear view of sea ice melting. And yet, the policies and laws regulating remote sensing in the Arctic and elsewhere remain limited. While the Nordic countries' space policies, for example, consider the positive impact that space capabilities can have on the Arctic, not all Nordic space laws do specifically, and clearly extend to remote sensing; rather, they address only general space activities. This paper will argue that the lack of national laws and policies governing remote sensing capabilities in the Arctic can significantly affect the region's Indigenous population. Noting specifically the obligation of states to consult Indigenous groups that might be impacted by remote sensing activities. It will focus on the Nordic countries and other important governing bodies within that regional system, including Greenland, the Faroe Islands, the Saami Council, and the Inuit Circumpolar Council. It will analyse their Arctic policies, space policies, domestic Indigenous rights, and space laws. The paper is divided into three parts, the first looks at remote sensing regulation, the second at Indigenous Rights, and the last at Arctic and Space policies in the Nordic states.

Introduction

Monitoring from the ultimate high ground. Space-based remote sensing, or the ability to monitor any place on Earth from outer space, has truly changed Arctic governance. What began during the Cold War as reconnaissance using film and photographic prints has developed into a highly technical industry capable of capturing photos, and other data about the sensed part going beyond the Earths crust, up close from outer space (Madry, 2016). The benefits for Arctic states are easy to see. With increased remote sensing capabilities, which also aid weather monitoring (Devasthale, 2025), these states can monitor rising temperatures and their impacts in the Arctic. Pictures of melting sea ice are one example of states using remote sensing capabilities to monitor the Arctic climate (ESA, 2008). Furthermore, these capabilities have been shown to find and monitor natural resources without entering remote territories (Government of Canada, 2025). Likewise, in the

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current geopolitical climate, information on ongoing activities in the Arctic is arguably crucial to the Nordic states' defence preparations (KVA, 2022-2023). With the increase in security concerns in the Arctic, remote sensing activities can help states gain understanding and information about different military installations and other intelligence (Magdelenat, 1981).

And yet, even with so many benefits of remote sensing, questions remain. A state or space actor with these capabilities can monitor any place or actor on Earth depending on orbital constraints. Setting aside general privacy issues (see, for example, Kannegieter, 2023), there has been a longstanding debate on the abuse of such capabilities internationally (Christol, 1988). On the one side, mostly framed by developing countries, there is a concern about uneven power structures between the sensed and sensing states. These developing states have traditionally questioned the right to remotely sense from outer space, arguing that it encroaches on their sovereignty (Polter, 1976). On the other side, mostly purported by developed space states, Article 1 of the Outer Space Treaty sets out an unrestricted freedom to use outer space for these purposes. In 1986, the two sides reached a compromise in the technically non-legally binding Remote Sensing Principles (DeSaussure, 1989). The principles recognise the right of all states to remotely sense any place on Earth, specifically linking it to the Outer Space Treaty's Article 1 (OST, 1967: Art 1). However, the principles also grant the sensed state the right to access data generated about their state from these activities. That being said, Principle XII notes that the right to access the data on a non-discriminatory basis is on "reasonable cost terms," without defining what a "reasonable cost" is (41/65. Principles Relating to Remote Sensing of the Earth from Outer Space, 1986: Principle XII).

Similar questions of balance between the freedom to access and use space and protection against a foreign state sensing your lands and activities arise when considering remote sensing capabilities in the Nordic, including Greenland, Arctic. When discussing the North of the world, a place that to large parts is inhabited by Indigenous Peoples (Grid 2006), questions of encroachment of cultural activities, digital colonialism, and the extent of self-determination should be consistently raised. And yet, the legal debate on space-based remote sensing in the Nordic Arctic is arguably too silent on this question. While there is some debate about the impact of general space activities on Indigenous rights in the Nordic Countries, including Greenland, this debate mostly focuses on the impact of the Swedish spaceport on traditional reindeer grounds (Sheehan, 2018; Ojani, 2024; Thule, 2024).

In contrast, little has been written on the right to be consulted regarding licences for remote sensing activities in the Nordic countries, including Greenland. This article seeks to change that. It will be divided into three parts. The first will set out the current space laws as they relate to remote sensing. The second will consider the rights of the Sámi and Inuit populations within their respective countries, contrasting them. However, this part will focus on the implications of these rights for the question of being consulted regarding remote sensing activities, rather than on the rights themselves. The last will consider what is set within the Arctic and Space policies of the Nordic states. Here, the lack of information flow between the two disciplines discussed in this article is highlighted as a preliminary option to address the questions raised. However, the main argument of this article will be the need for further debate on the topic.

Current Space Laws in the Nordic Countries

While it is simple to see the benefits of remote sensing for Arctic climate change monitoring, its regulation has proven complicated. The regulation of remote sensing can be divided into two main

categories: domestic law and international regulation. This section will highlight how both categories are regulated, affecting the research question. It will begin by considering the international regulation and free access to outer space. It will then turn to domestic remote sensing regulation. Lastly, it will consider how, or how not, the Nordic countries regulate remote sensing activities specifically, separately from general space activities.

Starting with the latter, in international space law, remote sensing requires a balance between states' sovereignty and free access to outer space (Christol, 1988). Article I of the Outer Space Treaty contains the principle of free access to outer space (OST 1967). Through the adoption of the Remote Sensing Principles, this freedom has been argued not to be limited by considerations of the sovereignty of states to be protected against being sensed (photographed or otherwise, using technology to gain access to information about states from space) by a foreign, more developed, space State (Polter, 1976). As this could be considered a significant encroachment onto a state's territory, even if entirely legal under international law, mainly developing states started to protest against foreign, more developed space states' remote sensing activities (Magdelenat, 1981). In 1986, the two sides reached a compromise in the technically non-legally binding Remote Sensing Principles (DeSaussure, 1989). The principles recognise the right of all states to remotely sense any place on Earth, specifically linking it to the Outer Space Treaty's Article 1 (OST, 1967: Art 1). However, the principles also grant the sensed state the right to access data generated about their state from these activities. That being said, Principle XII notes that the right to access the data on a non-discriminatory basis is on "reasonable cost terms," without defining what a "reasonable cost" is (41/65. Principles Relating to Remote Sensing of the Earth from Outer Space, 1986: Principle XII).

The implications of international law on the topic at hand are twofold. First, no Nordic state has the right to prevent its Arctic territory from being sensed. As noted, Article 1 of the Outer Space Treaty grants states free access to outer space (OST, 1967: Art 1). Likewise, the Remote Sensing Principles, having been argued to have become customary international law (Ito, 2011: 55), reiterate this right. This clearly presents a complication against the right of Indigenous groups' protection against both national (this will be expanded upon in the next part) and international powers using outer space to monitor their territory. Second, since states do not have the right to prevent a foreign power from remotely sensing them, this is also not a right they can offer to any Indigenous group found within their territory. Especially this second argument needs to be kept in mind when further discussing the regulation of remote sensing activities in the Nordic Arctic territories.

Domestic regulation, compared with international regulation, focuses on balancing national security considerations with the commercial benefits of an open remote sensing regime. Because remote sensing operations can obtain highly sensitive information about military installations (Magdelenat, 1981), among other things, from outer space, states need to ensure that this information is not shared with unwanted third parties. This is especially evident in the fact that the main customers of remote sensing data are various intelligence agencies (Magdelenat, 1981). At the same time, commercial companies are consistently entering the market, improving on already existing technology (see, for example, Satellogic, 2026). Trading this information can lead to profits for both private actors and the state, as well as secondary scientific and humanitarian benefits, such as aiding disaster relief missions (under the Disaster Charter (Text of the Charter, 2026)) or monitoring climate change.

This balance between allowing commercial activities and protecting a state's national security is evident in various remote sensing-specific regulations. Canada, for example, in its Remote Sensing Space Systems Act, notes that one condition for granting the licence is that it does not affect Canada's national security (Remote Sensing Space Systems, 2005: Section 8). Furthermore, should an activity later be deemed a threat to Canada's national security, Canada retains the right to revoke the licence to operate it (Remote Sensing Space Systems, 2005: Section 10). What is interesting to note for both these regulations is the lack of general space laws in these states. Rather, Canada currently has only remote sensing regulations (noting they are currently drafting a general space law (Sheiner, 2026).

When it comes to the Nordic states, it can be held that all four states, Sweden, Norway, Finland and Denmark (excluding Greenland and the Faroe Islands, though (Lov nr. 409 af 11. maj 2016 om aktiviteter i det ydre rum; Kapitel 10)), have general space laws. However, only one of the states has clear laws regulating remote sensing data. Sweden's National Space Board (SNSB) notes that it has a mandate to regulate space data (Government Offices of Sweden, 2026). However, the SNSB's rights to regulate space data are not found in space law or in any additional regulation (Lag (1982:963); Förordning (1982:1069)). Likewise, the newly proposed space regulation from 2021 does not include special considerations for remote sensing governance in connection with Indigenous Rights (Government of Sweden, 2021). Norway's situation is similar to Sweden's. Norway recently passed its new Space Law in 2026, replacing the 1969 space law. While the new law specifically mentions remote sensing considerations in its commentary, but it does not provide specific regulations for remote sensing activities within the actual text of the law (Government of Norway, 2024-2025). That said the general obligations within the law would still cover remote sensing activities (Government of Norway, 2024-2025). As such, while both of these states technically regulate remote sensing, how and under which mandate they do so remain unclear.

Finland, in contrast, shows a different picture. Their statements at the 62nd session of the UNCOPUOS Legal Subcommittee indicate that they decided to amend their domestic space law to include specific remote-sensing considerations (UNOOSA, 2023). This amendment, which entered into force on 1 February 2023 and was subsequently followed by a decree on the same topic, includes, among other licensing requirements, specific technical limitations on remote sensing activities to protect national security (Finnish Government, 2023).

Denmark, for the sake of this article, likewise shows a different picture than the other Nordic countries. While Denmark has domestic space legislation that regulates space data, it explicitly excludes Greenland and the Faroe Islands from its scope (Lov nr. 409 af 11. maj 2016 om aktiviteter i det ydre rum: Kapitel 10). As such, when considering the regulation of remote sensing in Denmark, the semi-independence of these two regions significantly changes the regulatory picture. Looking specifically at Greenland's remote sensing regulations, the region of Denmark with the most Indigenous Peoples living in the Arctic, it is clear that there is a lack not only of regulation but also of clarity regarding who should regulate Greenland's remote sensing activities, if any. It should be noted at this stage that Greenland currently only has a telecommunications satellite in orbit (Arctic Today, 2026) but recently Denmark launched Bifrost for the specific purpose of observing Greenland (High North News, 2025). That being said, other publicly available platforms such as Copernicus also observe Greenland. While Greenland enjoys the right to self-governance, questions of national security are left to mainland Denmark to decide, in

coordination with Greenland (Act on Greenland Self-Government, 2009; The Prime Minister's Office, 2026). As such, an argument could be made that under the current Danish devolution, both Greenland and Denmark would be required to cooperate if they wish to regulate remote sensing activities. However, while interesting, the question of who should regulate Greenland's remote sensing activities, once it arises, is beyond the scope of this paper and the author's expertise. Rather, this paragraph was meant only to highlight the difficulties of regulating remote sensing in Greenland, which affect the rights of the Indigenous population there.

What this section was meant to show is two-fold. The first part highlights the right of foreign states to remotely sense the Arctic without prior consent, noting that this right is recognised in international space law and thus cannot be restricted by any of the states in question. While certain projects might have the agreement of the Arctic states, for example, Copernicus is an ESA program of which the Nordic states are part, this does not exclude the existence of other programs that sense the Arctic, or mean that Indigenous Peoples were consulted in the decision-making process. The second part highlighted the current lack of clarity regarding the remote sensing regulations of the Nordic states. While Finland, through a 2023 amendment to its space law, has clear regulations for Finnish remote sensing activities, other Nordic states are less clear. Sweden and Norway, for example, both potentially include remote sensing activities under their general domestic space law; however, this does not necessarily address all the considerations raised by such activities. Likewise, Denmark and Greenland have a complex framework for determining who should regulate such activities.

Before moving on to Indigenous Rights in the Nordic states and their relation to space law, a brief note is needed on the overlap between remote sensing and the European General Data Protection Regulation (GDPR). Arianna Vettorel highlights the overlap between remote sensing and privacy regulation in Europe (Vettorel, 2024: 81-113). She notes that the GDPR could also, in theory, be applied to space-based data. However, Vettorel also notes that the privacy rights protected under these regimes are limited (Vettorel, 2024: 81-113). GDPR would protect only the individuals living within the region, not the environment they inhabit and might want to protect (Vettorel, 2024: 81-113). As such, it becomes clear that GDPR cannot provide the protection to Indigenous Peoples discussed in this article.

Indigenous Rights in the Nordic States

While part one of this article discusses the general remote sensing regulation of the Nordic countries, the second part is the implications they have, or the lack of them, on the Indigenous population within the Nordic Arctic. In Nordic Arctic or Indigenous conversations, protections against remote sensing have emerged, but only in a specific context. This section will show both the ongoing debate in the literature and how the Sámi and Inuit, the two largest Indigenous groups in the Nordic countries, including Greenland, might benefit from raising similar questions. However, before starting this section, a note about the author must be highlighted. This author, while Nordic, is not part of any Indigenous group. Nor does she specialise in Indigenous rights. Rather, her focus is on space law and, as such, she will not debate the rights or wrongs of the protections nor speak as if she were the voice of Indigenous Peoples. Rather, she will use official sources from the Inuit Circumpolar Council, the Sámi, the United Nations, and other authors who have written on the subject as a basis for her arguments.

In North America, as a contrast to the Nordic states considered in this paper, there is currently a debate about the interaction between space activities and Indigenous Peoples. Hilding Neilson and Elena E. Ćirković, for example, argue that the Canadian Space Agency has an obligation to incorporate Indigenous rights and concerns into its mission planning (Neilson & Ćirković, 2026). These concerns go beyond GDPR considerations and are connected to the colonial history these groups have faced, with remote sensing activities having the potential to fall into a newer form of colonialism where remote sensing without prior informed consent can be considered an encroachment into Indigenous Peoples' sovereignty. Likewise, the ethical concerns of remote sensing activities used to study Indigenous communities were highlighted by Matthew C. Sanger and Kristen Barnett (Sanger and Barnett, 2021). Sanger and Barnett note that remote sensing activities need to be conducted with cultural sensitivity, awareness of the colonisation history of the Indigenous population and their rights to self-determination, and, lastly, with consideration of data accessibility and ownership (Sanger and Barnett, 2021). This last concern was also underscored by Brenda Reddix-Smalls, however, in connection with South American Indigenous groups. While there is a difference between Arctic Indigenous Peoples and other Indigenous groups, the argument raised by Reddix-Smalls in relation to data accessibility and ownership has also been highlighted by the Interpolar Inuit Council (ICC, 2010). Reddix-Smalls further notes that the use of remote sensing for data collection, owned by Western researchers, might encroach on both the human rights and the intellectual property rights of Indigenous Peoples (Reddix-Smalls, 2014).

Turning specifically to the Canadian Arctic similar questions have arisen regarding sea ice monitoring. Mia M. Bennett, discussing how data ownership confers power, notes that remote sensing data can be seen as a new form of digital colonialism, especially in remote regions such as the Arctic (Bennett, 2025). Likewise, Nancy G. Maynard et al. present the EALAT project for data collection among reindeer herders across the entire Arctic (Maynard et al., 2010). What all these discussions have in common is that they show how access to data generated by space-based remote sensing activities creates an uneven power dynamic against Indigenous knowledge systems and Indigenous groups. While the discussion of data sovereignty warrants a more in-depth examination. This article will only note when such rights are unclear within the Nordic regulations. As such, this debate was used to highlight one of the problems that arises in remote sensing activities in the Arctic.

This needs to be related to the current debate on Canadian sovereignty within the Arctic. There has been a long and arguably dark discussion in Canada over its sovereignty claim to remote Arctic territories (Morrison, 2006). The debate surrounding Canadian Arctic Sovereignty has recently shifted toward the use of remote sensing for surveillance of these territories, strengthening Canada's sovereignty claim over its Arctic territory by aiding in having control over these remote territories (Government of Canada, 2016). However, with increased space monitoring of these territories, the previously mentioned concerns also increase. Again, the debate surrounding the land claims that led to Canadian Arctic sovereignty is outside the scope of this article. Rather, what this article notes is the complication posed by Canada's increasing use of remote sensing in the Arctic to support its national security and sovereignty, in derogation of Indigenous data sovereignty, cultural claims, and privacy. As will be seen, the situation in the Nordic countries, albeit for different reasons, is similar to that in Canada. However, when it comes to discussing rights related to protection against remote sensing activities, the scholarly debate in the Nordic countries is more limited.

Turning our attention to the rights of Indigenous Peoples in the Nordic countries, the extent of these rights and their basis will be examined first internationally and then domestically. Internationally two specific international documents need to be highlighted.

The first international document that should be briefly highlighted is the International Covenant on Civil and Political Rights (ICCPR). Under the ICCPR Article 1, Indigenous Peoples have a right to self-determination. Furthermore, under Article 17 individuals enjoy the protection against "arbitrary or unlawful interference with his privacy." These provisions should be taken into account when authorising remote sensing activities, however, do not on the basis of the plain meaning of the text require consultation. However, there might be a potential argument to be made when connecting it to Article 27, which establishes an Indigenous Right to enjoy their own culture. The connection between Article 27 and the duty to consult can be seen in the Norwegian *Fossen* case, where the court established that the building of a wind park would encroach on the Sámis cultural right to reindeer herding (Norweigan Human Rights Institution, 2026). In connection to this case, the Norweigan Human Rights Institution made it clear that Article 27 contains a right for Indigenous Peoples to be consulted in a decision-making process that might affect their cultural rights (Norweigan Human Rights Institution, 2026). These need to be taken into account when issuing a remote sensing licence that might impact the right to privacy and culture of Indigenous Peoples.

Second, and arguably a bit clearer, the International Labour Organisation's Indigenous and Tribal Peoples Convention, 1989 (No. 169) (ILO 169 Convention). The ILO 169 Convention sets out specific obligations of governments to protect Indigenous Rights and integrity among other considerations (Article 2, ILO 169 Convention). Specifically important for this discussion are Articles 6 and 18. Article 6 establishes a states obligation to consult with affected Indigenous groups when applying the Convention. Paragraph (a) should be specifically highlighted as it notes that:

> (a) Consult the peoples concerned, through appropriate procedures and in particular through their representative institutions, whenever consideration is being given to legislative or administrative measures which may affect them directly;

This needs to be connected to Article 18 which notes that states need to establish appropriate penalties for "unauthorised intrusion upon, or use of, the lands of the peoples concerned" as well as gives states the obligation to prevent such encroachments. While it is difficult to argue that this provision directly envisioned remote sensing, such activities can be considered to be an "intrusion upon the lands of the peoples concerned" as they have the ability to directly monitor these lands. This provision however does not entirely prevent remote sensing into Indigenous Lands, but rather, when read together with Article 6, arguably establishes an obligation of states to consult impacted Indigenous Groups before issuing a remote sensing licence. Even clearer within the ILO Convention is Article 7, the right to "participate in the formulation, implementation and evaluation of plans and programmes for national and regional development which may affect them directly." A remote sensing licence for the Arctic region would clearly affect them directly, thus giving rise to the obligation of the state to consult in this process.

Domestically within Sweden, the Sámi have been recognised as an Indigenous group (Samer, 2026). It has been regulated by the Sametingslag since 1992, which recognises their right to self-determination (Sametingslag, 1992). According to the Institute of Human Rights in Sweden, the

right to self-determination includes the protection of their culture and language, the right to land, and the control over natural resources within the state's judicial framework (Institutet för mänskliga rättigheter, 2026). Since 2022, the Swedish state has also been obligated to consult with the Sami population on matters that directly concern their interests (Amnesty, 2026). These would arguably also extend to an obligation to consult when Sweden issues a remote sensing licence.

Internationally Sweden has not ratified the ILO 169 Convention, however they are parties to the ICCPR. The lack of ratification of the ILO 169 Convention raises questions about Sweden's protection of Indigenous Rights from an international standpoint, especially regarding the exploration of natural resources in the Arctic (Semb, 2012). That being said, their participation in the ICCPR could potentially make up for this shortcoming. Furthermore, even with a limited legal obligation within Sweden to consult the Sámi, there is a clear will to do so. This is specifically evident in Sweden's consultation with the Sametinget on the newly proposed space law (Government of Sweden, 2021: 60). That being said, there is a distinct lack of data sovereignty considerations in Swedish domestic law, which should be raised domestically, in connection to Sweden's responsibilities under the ICCPR.

Similar domestic rights also exist in Finland. In Finland, the recent reform of the Sametingslagen clarified the obligation of the Finnish state to negotiate with the Sámitinget in questions that would affect their rights (Justitieministeriet 2025). An example of this obligation can be seen in the Finnish environmental department's collaboration with Saamelaispaliskunnat ry, which is publishing its guidelines on negotiation and cooperation in reindeer herding (Statsrådet, 2026). However, questions again arise regarding the requirement to negotiate between the Sámitinget and the Finnish government to issue space-based remote sensing licences. And again, as in Sweden, questions about data sovereignty are unclear. Furthermore, like Sweden, Finland has not ratified the ILO Convention No. 169. Thus raising similar questions of legal obligations as in Sweden.

Compared with Sweden and Finland, Norway has ratified the ILO Convention No. 169 (Government of Norway 2020). This trickles down into Norway's domestic law, were there is a duty to consult with the Sámi on matters that fall under Sámi interests (Samidiggi, 2020). However, like the other Nordic countries, there is a question regarding remote sensing activities. The obligation to consult is phrased only in relation to those questions that are in the Sámi interests.

It is this latter concern that this article is looking to highlight. While an argument could easily be made that all three Nordic states mentioned have a legal duty to consult before issuing a domestic remote sensing licence, this duty is limited to be in the Sámi's interest to be consulted. When looking at the Sámetings Arctic policy, there is a distinct lack of interest in remote sensing and broader space activities, with neither mentioned. Rather, it focuses on, arguably, more pressing matters such as current infringements of Indigenous Rights and long-term sustainability and Indigenous Rights (Saami Council, 2019). It can, of course, be argued that the lack of consideration for space activities and remote sensing in this policy can be addressed by the other interests it highlights or by other policies. Likewise, it can be argued that the state nevertheless has a duty to consult with the Sámi, even if they have not declared these activities of interest to them. However, the clear absence of these activities in the policy shows a lack of regard for or knowledge of their impact on Sápmi and Indigenous rights.

This article argues that one way to mitigate this is for the states to properly inform the Sámiting about the consequences of certain space activities, such as remote sensing. From an outside

perspective, it is illogical for the domestic obligation to consult mentioned above to be interpreted as only covering what Indigenous Peoples have declared a specific interest in. While remote sensing activities can give a benefit to these communities, the Indigenous Peoples in this area should be informed about any planned project and be able to be involved in the decision-making process of the activity, as they clearly have an impact on them. This is especially clear for Norway, which is a member of the ILO 169 Convention; however, it can also be interpreted into Sweden and Finland's obligations as parties to the ICCPR. As will be seen in the next part, a first step would be to further combine the Arctic and Space policies where they overlap. However, even this first step would not solve the problem created by unequal data access and ownership, a major issue widely recognised in Arctic communities.

While the situation with the Sámi is similar across the mainland Nordic countries, it needs to be contrasted with the situation of the Inuit in Greenland. Arguably, the legal difference between the Inuit and the Sámi regarding the rights discussed lies in their systems of self-governance. Nearly 90% of Greenland's population is considered Inuit (Kaplan & LeMoine, 2026). Greenland, furthermore, as was seen, has the right to self-governance which includes vertical rights over its airspace (Act on Greenland Self-Government, 2009: List II). However, it should be noted that while the Greenland Self-Governance Act includes airspace rights, Greenland's upper airspace is managed by Canada and Iceland (Vanderklippe, 2026; Avians, 2026). Furthermore, it should be noted that it's not the Inuit themselves but rather Greenland that holds those rights. However, both the Self-Governance Act and Greenland's constitution closely link Greenland with the Inuit population (Nyberget, 2026). That being said, even with this extended right, given the international legal complications of remote sensing outlined in the previous part, questions about data accessibility and sovereignty remain.

Likewise, as noted above, Denmark might be an appropriate party to regulate their remote sensing activities (see discussion above). It should be noted that Denmark, as a party to the ILO 169 Convention, is also obligated to consult with the Inuit in Greenland regarding remote sensing activities that concern them (Nyberget, 2026). Lastly, compared to the Sámi, the ICC makes specific reference to general space activities and remote sensing activities in its Arctic policy. It notes on page 70 that the ICC should investigate potential uses of and access to remote sensing data for the benefit of the Inuit community. It further notes that potential abuses of this data should also be investigated. The ICC's Arctic Policy thereby highlights a difference in priority compared with the Sámi policy (Inuit Circumpolar Council, 2010). It should be noted that this article does not critique the differences in considerations or consider the reasons for them; rather, it seeks to note them as facts.

Arctic and Space Policies

The lack of clarity on the interaction between space law and Arctic Indigenous Rights is also evident in the policies of the Nordic states. The main problem in this regard is the lack of overlap between the Arctic Policies and the Space Policies. While the Arctic policies contain mentions of certain considerations of the benefits of space activities (Swedish Government, 2025; Norwegian Government, 2025; Finnish Government, 2021; Government of Greenland, 2024-2025), the lack of a clear plan or even a reference to the arguably clear plan found within the space policy is problematic. Likewise, the clear lack of Arctic considerations in space policies should arguably be addressed. This section will consider the interaction among Arctic policies, space policies, and

regulations within each Nordic State. It will then turn to argue that certain policy changes can better clarify the rights and limits of Indigenous Peoples in the Nordic Arctic.

The main problem this article sought to highlight was the lack of clear information about how remote sensing in the Nordic Arctic is regulated with respect to Indigenous rights. The Arctic policies of the Nordic countries highlight the interaction between the two areas, especially in remote sensing. Sweden's new Arctic policy, for example, includes an entire chapter on space activities in the Swedish North, noting that Space law applies to the area (Swedish Government, 2025). That being said, a direct link to their space policy is still missing. As such, the first comment about the Nordic policies is that the lack of clear interaction creates problems for interested people, who must be aware of and read both policies to gain a clear, comprehensive picture. As noted above, this should not create a problem for Indigenous Peoples right to be consulted in theory, however, might do so in practice when these people are not aware of their right. Furthermore, with the lack of conversation between the two policies, there might be conflicting goals within the different sectors. As such, the interaction between the different policies needs to be taken into account when considering whether the regulation aligns with the goals set in the policy, noting that Indigenous Rights might not be considered when making their space policy. Likewise, when making their Arctic policy, the states might not take into account their space regulations and policies. While this article seeks to bridge this gap, it should be noted that it will only scratch the surface of the problem, which requires much more debate from both the Arctic and Space law communities.

When it comes to Arctic policies, a clear goal shared by all Nordic countries is to mitigate climate change and monitor its impacts in the Arctic (Swedish Government, 2025; Norwegian Government, 2025; Finnish Government, 2021; Government of Greenland, 2024-2025). As was seen, space activities can readily support this, with neither the space laws nor Indigenous Rights within the Nordic states being at odds (see the discussion above on the right to monitor the Arctic remotely). The importance of Indigenous communities in the Arctic is also highlighted in the policies (Swedish Government, 2025; Norwegian Government, 2025; Finnish Government, 2021; Government of Greenland, 2024-2025). Norway, for example, notes that its Arctic policy is underpinned by its Indigenous Policy; no similar comment is made regarding its space policy (Norwegian Government, 2025). Here, a problem might arise regarding the rights of Indigenous populations in Norway and the lack of clarity in how Norway regulates domestic remote sensing activities. The problem with not having a clear licensing process for these activities is that interested groups lack a clear role in the consultation process.

This is especially highlighted within the Space policies, where the consideration of individual rights to privacy or Indigenous rights is limited (Government of Sweden, 2017; Norwegian Space Agency, 2019-2020; Government of Finland, 2025; Government of Denmark, 2021). Sweden, for example, does not even mention the Sámi (Government of Sweden, 2017). Furthermore, the consideration of data access for these Arctic communities is almost non-existent. As such, a potential conflict arises between the different laws and policies of the Nordic states. It was, however, noted in the previous part that there is a difficulty in arguing for Nordic Indigenous groups' right to prevent being sensed from outer space. As such, while it can be argued that the space policies of the Nordic states seem at odds with the mention of the Indigenous population in the Nordic Arctic in the

Arctic policies, they are not necessarily at odds with the regulations considered in this article (see discussions above).

However, the main factor this article highlighted was the lack of information between the two areas, both within Indigenous groups' policies and Nordic states' policies. This lack of information, this article argues, leads to problems for both the Sámi and the Inuit in enforcing their rights to be consulted on such matters (noting that space activities are not the only activities that might have an indirect connection to the Arctic, but are not directly addressed in Arctic policies). This could easily be solved by having the states, as required by law, take the initiative and consider whether a space-based remote sensing activity might affect the Indigenous community. Secondly, states should clearly link their different policies to simplify the finding of information for affected groups. This should not only be in form of a distinct overlap between the two policies, but also specific references to each other that makes it easier for interested parties to research more on the connected topics. However, such an answer requires changes both within the thinking of the State's governmental bodies and, more importantly, within the various academic communities and spaces, Arctic, Space, and Indigenous alike. This article can only scratch the surface of what is required for such a debate, highlighting the areas that require further development.

Lastly, it should be noted that linking the two areas together in their policies and licence decisions would not change the questions about data accessibility and sovereignty. It was mentioned in previous parts that Bennett argues that a large question for Indigenous Arctic populations, for example, in Canada, is that they have concerns about foreign data ownership, calling it digital colonialism. Remote sensing capabilities are a prime example of this problem. With no explicit right in Nordic domestic legislation and no legal authority to prevent international remote sensing activities over these lands, questions about data access and ownership require further discussion. Arguably, while the right to consult is a good first step, changes in the legislation, should this be something that the Sámi and Inuit want, should also be considered to make the data at the very least accessible to those groups of people. This does not matter whether it is international data, which the Nordic countries have the right to purchase on a "reasonable cost" basis, or domestic data.

Conclusion

A fitting conclusion for this article would be that there is a need for further discussion within the area. The article sought to highlight the problems posed by unclear regulations on remote sensing and the lack of cross-over considerations of Indigenous rights across the Nordic countries. While it was argued that all Nordic countries had an obligation to consult with the Indigenous population on matters of interest to these groups, there is a lack of clarity on how far this obligation would stretch outside their jurisdiction. Likewise, the last part highlighted that even with a right to be consulted for every domestic remote sensing licence that would cover their territory, this would still not ensure important access to, and ownership of the data created and used by non- Indigenous Peoples. As such, this article argued that there is a further need to discuss this topic both within academic communities and with the affected governments and Indigenous organisations.

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