

# Snus and snus-like nicotine products moving across Nordic borders: Can laws protect young people?

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## Abstract

**Background:** Use of snus and snus-like nicotine products is increasing, in particular among young people, in several Nordic countries and Estonia, while snus is legally on the market only in Sweden and Norway. Snus is available in a great variety of tastes and packaging particularly catering for young users. Recently, strong snus-resembling nicotine pouches have emerged on the market. This research investigates the regulatory means to counteract this development. **Methods:** European Union (EU) and national tobacco control legislation, case law of the European Court of Justice (CJEU) and relevant public health studies are analysed. **Results:** The research finds that the judgement of the CJEU relating to the sale of snus on Finnish ferries has not been enforced. Permitted large traveller imports for personal use have contributed to wide availability of snus in Finland. Even if the legislation in Sweden is in conformity with the exemption it obtained in the Accession Treaty, the public health impact of snus use for young people in its neighbouring countries has become considerable. Nicotine pouches, -which are not regarded as medical products in terms of medicine legislation, lack harmonised EU-wide regulation. Controlling smuggling across open borders is challenging. **Conclusions:** The legislation at the EU and national levels should be able to protect young people from new tobacco and nicotine products. It is urgent to harmonise regulation relating to new tobacco and nicotine products taking as a base a high level of protection of health as required in the Treaty on the Functioning of the EU.

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## Keywords

EU, oral tobacco, public health, regulation, tobacco control, tobacco law, tobacco law, young people

Although snus is not allowed on the market in the European Union (EU), except in Sweden and Norway of the European Economic Area (EEA) countries, the use of snus has increased among young people in countries neighbouring Sweden, especially in Finland (Figures 1 and 2). Concomitant smoking and snus use has become the most common form of tobacco consumption among Finnish schoolboys (Ollila & Ruokolainen, 2016), as well as among 15-year-old Norwegian children (Lund & Scheffels, 2016).

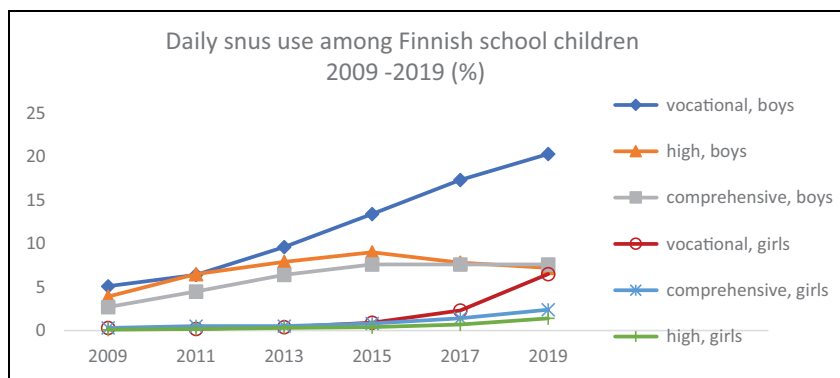
Snus use carries considerable health risks: it has negative effects on cardiovascular health, increases the risk of diabetes and metabolic syndrome, impairs oral health, as well as imposes risks both on the mother and the baby (European Commission, 2012; Folkehelseinstituttet, 2019; Scientific Committee on Emerging and Newly Identified Health Risks et al., 2008). Snus includes at least 28 carcinogens (IARC, 2018). Nicotine is highly addictive and it is harmful for health, especially for the developing body, including the brain (USDHHS, 2014; Viariso, 2015).

Snus as a product is continuously being developed towards brands with special appeal for young users, including a variety of flavours, slim sachets, white snus as well as packages with different shapes and colours (Scheffels & Lund, 2017). While even traditional snus produces higher plasma nicotine concentrations than cigarettes (Digard et al., 2013; Drug and Therapeutics Bulletin, 2014), more recently snus with nicotine concentrations of up to 40–50 mg/g has entered the market (Salminen et al., 2017).

The product development has more recently resulted in the emergence on the market of nicotine pouches, also called “nicotine snus”. They are snus-like products which, instead of

containing tobacco leaf, are filled with white nicotine-containing powder. Nicotine pouches come in a variety of flavours and packages attractive for young people, and at times extremely high nicotine content. The products contain nicotine salts known to enhance nicotine absorption. Independent testing of product constituents and research evaluating nicotine delivery is lacking (Robichaud et al., 2020). According to a major manufacturer of snus and nicotine pouches, the market for nicotine pouches is growing rapidly, in particular in Sweden, Norway, Denmark and the US, with expected growth also in Austria, Croatia, the Czech Republic, Estonia, Germany, Greenland, and the UK. While scientific research on users of nicotine pouches is still lacking, the Nordic consumption is more skewed towards female consumers and younger users according to an industry source (Swedish Match, 2020). Nicotine pouches have recently raised serious concern in Estonia (personal communication with Estonian Ministry of Social Affairs, 26 February 2020). Nicotine pouches with up to 120 mg/g of nicotine are on the Estonian market, the strongest coming from Russia (Miettinen, 2020). In Finland, nicotine pouches have become rapidly more common in 2020. Many are mailed from Sweden, Estonia and Latvia; a situation at least partly aggravated by the travel restrictions linked to the pandemic (personal email communication with Finnish Customs, 25 May 2020).

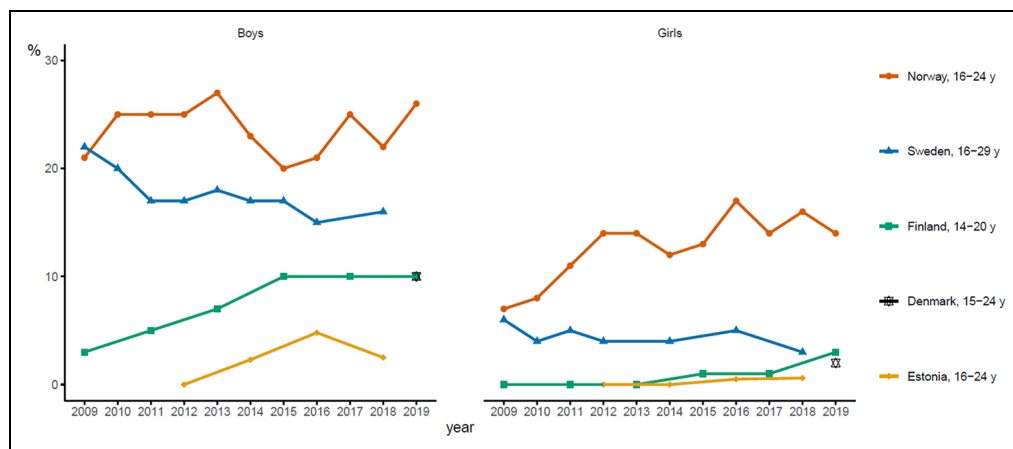
The EU Commission (Commission) impact assessment (European Commission, 2012), carried out as preparation for the revision of Tobacco Products Directive 2014/40/EU, highlighted how product development of snus on flavours has potential for attracting young people and risking concomitant use of snus and cigarettes. In consequence, the ban



**Figure 1.** Daily use of snus among Finnish school children 2009–2019 (%).

The average age of the respondents in 2019 was 15.3 years in comprehensive school (8th and 9th graders), 17.3 years in high school and 17.5 years in vocational school.

Source: Sotkanet Indicator Bank, n.d.



**Figure 2.** Trends in daily use of snus among young people in the Nordic Countries and Estonia 2009–2019 (%).

No reliable data for a timeseries were available for Demark; data for 2019 are from a Gallup survey with a relatively low response rate including, in addition to daily use of snus (85%), use of chewing tobacco (5%), and of both (8%). As the age-groups and research methods differ between countries, the prevalence of use between countries is not readily comparable; rather, the figure illustrates trends within each country.

Sources: Folkhälsomyndigheten, n.d.; Reile et al., 2019; Statistics Norway, n.d.; Sundhedsstyrelsen, 2020; Tekkel & Veideman, 2013, 2015, 2017; THL, 2019.

on placing snus on the market was upheld in the new Directive and a notification process for all new tobacco products was introduced. The impact assessment recommended that nicotine products above a certain nicotine

threshold should be subject to medicinal legislation.

This article investigates how snus, including strong snus and snus-like strong nicotine products, are regulated in the Nordic countries and

Estonia and how young people in the neighbouring countries of Sweden could be better protected from these products by regulatory means. Currently Denmark, Estonia, Finland and Norway are in the process of amending their tobacco laws and Sweden has started an investigation into regulating new nicotine products. The EU Commission is also preparing its first report on the application of Directive 2014/40/EU. In that report the Commission shall also describe the market developments concerning novel tobacco products as well as market developments which constitute a substantial change of circumstances (Art. 28.1 (b) and (c)). The ongoing legislative changes highlight the importance of the issues raised in this article. The emphasis is on Finland because of the more complicated legal situation of the Åland Islands and the effects thereof on the use of snus in Finland.

## Materials and methods

The methodology consists of analysing primary legal materials and case law relating to tobacco product regulation in Europe. We analyse the applicable international tobacco conventions, provisions relating to public health in the European Union founding treaties including the Accession Treaties of Finland and Sweden, the relevant tobacco directives and the published documents relating to their preparation as well as the subsequent country-related notifications to the European Commission. The EU-level analysis includes case law relating directly to snus as well as case law relating to the competence of the EU in the area of public health. The country-related national materials relate to regulating snus and nicotine pouches at the national level. With the exception of Sweden and Norway, regulations relative to traveller imports are also being analysed. Preparatory governmental documents relating to current and proposed tobacco legislation are utilised. For Finland, the case law of the highest administrative court relative to smuggling of snus is also analysed.

## Results

### *EU legislative framework for regulating tobacco products*

Tobacco products are regulated in the EU foremost in Directive 2014/40/EU and the Commission implementing regulation (EU) 2018/574 as well as in WHO Framework Convention on Tobacco Control (FCTC) of May 2003, the provisions of which are binding. The purpose of Directive 2014/40/EU is to facilitate the smooth functioning of the internal market for tobacco and related products while taking as a base a high level of health protection, especially for young people. This is in line with Council Recommendation 2003/54/EC, according to which Member States should be encouraged to prevent sales of tobacco products to children and adolescents, by adopting appropriate measures that lay down and enforce age limits.

The objective of protecting public health is firmly anchored in the foundations of the EU. According to Article 114.3 of the Treaty on the Functioning of the EU (TFEU) the Commission will, in any approximation of laws relating to health, safety, environmental protection and consumer protection, take as a base a high level of protection, taking particular account of any new development based on scientific facts. Furthermore, in relation to regulating tobacco products it is provided that since tobacco products are not ordinary commodities and in view of the particularly harmful effects of tobacco on human health, health protection should be given high importance, in particular, to reduce smoking prevalence among young people (Recital 8). It goes without saying that the prevention of snus utilisation by young people also falls within this category.

There is established case law in the EU that the objective of protection of health takes precedence over economic considerations. According to the Court of Justice of the European Union (CJEU) the importance of that objective, in particular, with regard to protecting young people is such that it justifies even

substantial negative economic consequences (Case C 221/10, Para. 99 and the case law cited).

Directive 2014/40/EU aims for a high level of public health protection, in particular for the protection of young people. It provides for strict limits to maximum levels of i.a. nicotine and other substances for tobacco and related products (Art. 3). It also prohibits placing on the market tobacco products with characterising flavours and certain additives (Art. 7). This does not apply to tobacco for oral use, snus (Art. 7). It also obligates Member States to introduce health warnings on packaging (Arts 8–13). Furthermore, the directive encourages Member States to prevent sales of tobacco products to young people by laying down appropriate measures (Recital 21, to be carried out in line with Council Recommendation 2003/54/EC).

The EU prohibited placing on the market of tobacco for oral use, hereinafter snus, first in Directive 89/622/EEC as amended by Directive 92/41/EEC and later in Directive 2001/37/EC. The ban did not, however, extend to chewing tobacco. This ban was then incorporated in Article 17 of the current Directive 2014/40/EU. Sweden was, however, granted an exception to the prohibition relating to the sale of snus in Article 151 of the Accession Treaty. The derogation was granted on condition that Sweden takes all measures necessary to ensure that snus is not placed on the market in other Member States. The Swedish exemption was justified by referring to the long tradition of snus use in Swedish society.

The Swedish tobacco industry has challenged the ban several times unsuccessfully. In the latest case the CJEU stated that, while it is true that the prohibition on the placing on the market of tobacco products for oral use constitutes a restriction, within the meaning of Articles 34 and 35 of the TFEU, such a restriction is clearly justified on grounds of protection of public health (Case C 151/17). Consequently, the prohibition of the sale of tobacco for oral use is being upheld by the CJEU.

In 2010, the Commission gave a report (European Commission, 2010) to the EU Council of Ministers as to whether the Swedish exception to the prohibition to place snus on the market has had any negative public health effects in other Member States, in particular relative to increased use of snus by young people. Such effect was reported at the time only in Finland where the use of snus by young people had increased significantly. Finland also reported that illegal importation, that is smuggling, of snus had grown considerably. The situation has since worsened (Figure 1 and Finnish Customs n.d.).

### *Regulation of snus in Sweden*

As a result of the exemption Sweden obtained to the Accession Treaty, snus can be manufactured and legally sold in Sweden. It cannot be offered for sale to users in other EU countries. This prohibition also covers distance selling. Exports to Norway are permitted subject to Norway's legislation. The prohibition does not apply to snus that travellers take with them for personal use or as a gift. Snus may also be offered to travellers for personal use before the journey ends in another EU country when the place of departure has been in Sweden (Decree 1994:1266). This means that selling of snus on Swedish ships is permitted before the ship reaches another EU harbour.

In Sweden, snus is regulated primarily in food legislation (Food law 2006:804, Sect. 3.2 (3)). Certain aspects of snus do, however, fall within the tobacco legislation. In connection with amending of the Tobacco Act in 2018 the tobacco committee proposed that regulation of snus should be brought completely under the tobacco legislation (SOU 2016:14). This proposal was, however, rejected by the government (Socialdepartementet, 2017).

Since Sweden is exempted from the prohibition relating to placing snus on the market, the decision to regulate the contents, e.g., flavours, perfumes and strength of snus, remains with Sweden in accordance with the principle of

subsidiarity (Directive 2014/40/EU, Recital 20). The prerequisite for exempting Sweden from the snus ban was that Sweden must take all measures necessary to ensure that snus is not placed on the market in other Member States. Now, given that the Swedish borders are leaking large amounts of snus, it can be asked whether the underlying conditions to this exemption hold anymore.

Marketing of snus, that is advertising of snus in Sweden, is forbidden outside of the place of sale. Internet marketing is permitted insofar as it relates exclusively to presenting products placed on sale at a certain specific establishment. General advertising of tobacco products is also prohibited on the internet. In practice this means that neutral marketing, for example, in the form of price lists relating to a particular place of sale, is also permitted on the internet (Socialdepartementet, 2017). However, unlike for other tobacco products, it is not prohibited to refer to taste, perfume or other additives in connection with snus packaging. In connection with the reform of the tobacco legislation it was proposed that referring to characterising flavours and perfumes on the snus package would be forbidden (SOU 2016:14), but this proposal was rejected by the government (Socialdepartementet, 2017). This policy has proven to be not very effective against *de facto* advertising, since, e.g., in Denmark young people have acknowledged the impact of advertising of smoke-free tobacco products by shops and supermarkets as well as on social media by influencers on their smoke-free tobacco purchases (Sundhedsstyrelsen, 2020).

### *Regulating snus in the neighbouring countries of Sweden*

Although placing snus on the market is prohibited in all of the neighbouring countries of Sweden except Norway, the countries nevertheless permit a certain amount of traveller imports for personal use. In Denmark, the tobacco legislation (law 608/2016) does not set any upper limit, but is interpreted to permit importation

of snus for personal use up to 750 g per approximately every three months. Snus imported beyond this amount is regarded by customs to be aimed for further distribution (Sikkerhedsstyrelsen, n.d.).

According to the Estonian Tobacco Act (2018), a natural person may bring for non-commercial purposes from another EU country a maximum of ten packages of smokeless tobacco products, the maximum package size being 50 grams of the product. From a third country it is possible to bring one package, maximum 50 grams of the product (Sect. §31.1). Moreover, it is prohibited to send smokeless tobacco products to Estonia by post or in another similar way. The same prohibition applies to distant sale (Sect. 31.2).

In Finland, placing smokeless tobacco products, i.e., snus and chewing tobacco, on the market is prohibited (549/2016). It was regarded to be necessary also to prohibit chewing tobacco in order to prevent the importation for distribution purposes of snus as chewing tobacco. In this connection, it should be mentioned that Austria and Greece have also forbidden placing on the market of chewing tobacco for the same reason (Notifications, Directive 2014/40/EU). In spite of the prohibition, a traveller can bring snus into Finland for personal use up to 1000 grams per 24 hours. Traveller imports have increased substantially over recent years, contributing to illegal distribution in Finland, as travellers admit bringing snus for other people (Ministry of Finance, Finland, 2020). The Finnish tobacco working group has proposed that the legal amount for travellers to bring snus for personal use per 24 hours should be reduced to 100 grams (Tobacco Working Group Report, 2018).

### *Sale of snus on ferries in traffic between Sweden and Finland*

Even if placing on the market of snus is forbidden in Finland, snus is nevertheless being sold on the daily ferries sailing between Finland and Sweden regardless of whether the ferries are

registered in Finland or Sweden. Because of this the EU Commission took Finland to the CJEU in order to make Finland implement Directive 2014/40/EU in relation to Åland, a Finnish autonomous island between Finland and Sweden. According to Finland the Commission was right and the CJEU stated in its judgement that Finland is ordered to implement the ban on placing snus on the market also on vessels registered in Finland (Case C 343/05). In its judgement the CJEU followed the United Nations Convention on the Law of the Sea according to which ships have the nationality of the State whose flag they are entitled to fly (Art. 91.1).

As a consequence of the judgement, Åland amended its tobacco statute to provide that the ban on the placing on the market of snus or other similar tobacco products applies also to ships registered in Åland with the exception of when they sail on Swedish waters (Tobacco Act 2007:101). In other words, according to the current Åland statute it is permitted to sell snus on Finnish ships registered in Åland when they are on Swedish seas. This is also the practice of the ferries trafficking between Finland and Sweden via Åland. So, instead of obeying the CJEU judgement to prohibit placing on the market of snus on ships registered in Åland, Åland has attempted to defer the problem by prohibiting the sale of snus only on Finnish waters, making it possible to continue selling tax-free tobacco products, including snus, on Swedish waters.

The background for this situation is that the Åland Islands have a special status provided for in Protocol 2 of the EC Accession Treaty, granting the islands two types of exemptions with regard to the EC Treaty. The relevant exemption relating to the sale of tobacco products is the one that grants Åland a status of a third country in terms of carrying excise and value-added taxes. It is stated that the purpose of the derogation is to maintain a viable local economy on Åland and it should not have any negative effects on the interests of the EU nor on its common policies. In this respect the Commission reserves the right to come back to the

exception if it considers that these provisions are no longer justified, particularly in terms of fair competition or in relation to own resources. The exemption permits ships passing through the Åland harbour to sell tax-free alcohol and tobacco products. This exemption relates to excise and value-added taxation only and has no bearing on other EU legislation, such as Directive 2014/40/EU. Consequently, the sale of snus on ships registered in Åland should have been banned just like it is banned on all other Finnish ships trafficking between Finland and other EU countries.

### *Smuggled snus*

Smuggling of snus is a problem in Denmark, Estonia and Finland (Figure 3), but is perhaps most acute in Finland. Snus enters Finland through traveller imports and through large-scale smuggling across open borders. Routes from Sweden to Finland are, in addition to (even to a greater extent than) the inter-country ferries, along the long northern land border with a substantial concentration of snus shops on the Swedish side of the twin cities of Haparanda-Tornio catering to Finnish customers (Salminen et al., 2017). Illegal snus business in Finland is currently estimated approximately at 50 million euros annually (personal communication with Finnish Customs, 9 April 2020).

Even if snus cannot legally be sold in Finland, it is nevertheless subject to excise tax applicable for other tobacco products, which is 60% of the sale price confirmed by the Finnish taxation authority. According to the Supreme Administrative Court of Finland it can be carried for illegal importation of snus for the purpose of placing it on the market even if snus is being confiscated at the border (KHO 2018:54). The tax can even be imposed on the person not importing the snus in case this person finances the smuggling operation (KHO 2019:92). In addition to the tax, the illegally imported snus products are being seized and destroyed by customs.





**Figure 3.** Snus confiscated by the Estonian and Finnish Customs 2014–2019 (kg).

Amounts of confiscated snus have increased in Finland. Approximately two thirds of the snus confiscated by the Finnish customs are linked to the northern border and one third to ferries (personal communication with the Finnish Customs, March 2020). As regards Estonia, legal trade with nicotine pouches has resulted in a declining snus market in Estonia (personal communication with Estonian Tax and Customs Board, May 2020). Corresponding data are not available from Denmark, but it is reported that since 2016, 332 cases regarding citizens importing oral tobacco have been reported to the police (personal communication with the Authority, March 2020).

In addition to the cases relating to carrying increased excise tax for smuggled snus the Supreme Administrative Court has condemned a fireman employed by the municipality to lose his governmental office as well as to two years four months of closed prison sentence in addition to paying to the government together with another person an amount exceeding 1 million euros (HFD 2012:77). In two other cases a restaurant keeper was condemned to lose his alcohol license in addition to paying fines for continuous selling of smuggled snus in his restaurant (HFD 2012:108) and in another case a shop keeper was, in addition to fines, ordered to lose his alcohol license for a restricted period (HFD 2012:107).

Traceability of snus products could aid in tracking the source of the snus smuggled over the border. At the international level this is established in Article 15 of the FCTC, which is applicable to all tobacco products (see also FCTC, 2012). At EU level the traceability provisions of Directive 2014/40/EU require

Member States to ensure in their national legislation that all unit packets of tobacco products are marked with a unique identifier as provided in the Directive. For products other than cigarettes and roll-your-own tobacco these provisions will apply as from 20 May 2024. Unfortunately, these provisions are not applicable to Swedish snus, since snus is regulated under Swedish food legislation. Traceability of ingredients in snus is provided in the Food Decree (Sect. 12) which provides that snus, chewing tobacco and all the ingredients they include must be traceable one step backward and one step forward at all stages of the production, processing and distribution channels, though not to the consumer.

### *New snus-resembling products: nicotine pouches*

Nicotine pouches, which do not contain tobacco – except in the version exported to



Norway – are rapidly emerging on the market in Europe. Directive 2014/40/EU does not regulate nicotine pouches. Regulating nicotine products was discussed in the preparatory documents of the Directive and it was proposed that nicotine products over a certain threshold of nicotine would be subject to medicinal legislation and the products containing less nicotine would be subject to labelling requirements and health warnings (European Commission, 2012). However, no specific regulation was introduced at the end and no common regulatory framework exists in the EU for nicotine products today. The general product safety directive 2001/95/EC applies to non-specifically regulated nicotine products.

In Sweden nicotine replacement products are regulated in the Medicines Act (2015:315) and smokeless nicotine products, which cannot be regarded as replacement therapies, are currently not subject to any regulation. The Swedish Food Agency has rejected their regulation under food legislation, because they do not fulfil the requisite of Article 2<sup>1</sup> of EU Regulation 178/2002. Because of this the Swedish Government appointed in February 2020 a special governmental investigator to analyse what eventual legislative changes would be required, i.e., for such snus-like products (Kommitteedirektiv 2020:09).

In Finland, nicotine pouches are regulated in Medicines Act (395/1987, Sect. 3 and 6) as nicotine replacement therapy. So far, only one product has been given marketing authorisation. The maximum amount of nicotine permitted in a pouch is 4 mg if sold without prescription. Nicotine replacement products may be sold in shops to persons over 18 years of age subject to a permission from the municipal authority (Sect. 54a).

In Estonia, nicotine pouches are defined in the law as products related to tobacco products (Estonian Tobacco Act, Sect. 3.1). Consequently, they are subject to excise taxation in terms of the Alcohol, Tobacco, Fuel and Electricity Excise Duty Act (RT I 2003, Sect. 56.6). According to customs the legal presence of nicotine pouches has contributed to the decline

of availability of illegal snus in Estonia (personal communication, Estonian Tax and Customs Board, 20 May 2020).

In Denmark, the new tobacco policy governmental action plan supported by political agreement (Aftale, 2019) proposes that nicotine products would be regulated under tobacco legislation. The sale of non-medicinal nicotine products would be restricted to persons over 18 years old and a display ban at the point of sale regarding all tobacco and nicotine products is proposed.

Direct advertising and indirect sponsoring would be prohibited with regard to all tobacco products, e-cigarettes and nicotine products, including on the internet. An exception in the Danish tobacco legislation with regard to specialised tobacco boutiques would be held. Nicotine products would be subject to health warnings but not plain packaging which is proposed for other tobacco products.

In Norway, it is currently prohibited to manufacture or bring into the country anything other than traditional tobacco or nicotine products. Traditional tobacco products are defined as cigarettes, cigars, cigarillos, smoking tobacco, chewing tobacco and snus (Decree (1044/1989). This has led to a situation where nicotine pouches are imported to Norway in a version which contains a small amount of tobacco in order to escape the import prohibition relating to nicotine pouches. However, with the transposal of Directive 2014/40/EU, it is currently being proposed that importing and distributing nicotine products in Norway would be possible subject to approval of the Ministry of Health. The application for the approval must be accompanied with scientific studies relative to the product and the Ministry will base its decision, i.e., on public health grounds and the possible impact of the product on young people (Horingsnotat, 2016).

## Discussion

A significant percentage of young people use snus in the Nordic countries. The emergence of

snus-like nicotine pouches with high nicotine levels may aggravate the problem. The tobacco industry is targeting young people in particular with its snus product development (European Commission, 2012; Mejia & Ling, 2010; Scheffels & Lund, 2017), including snus-like nicotine pouches. Because of failing border controls, snus is also widely available in neighbouring countries of Sweden and Norway.

It has been argued that it is less harmful for young people to use snus than to smoke. A systematic review found few primary studies investigating the possible association between snus and changes in smoking behaviour (SBU 2020). However, it is noteworthy that (1) snus may serve as a gateway for smoking, at least among Finnish adolescents (Araneda et al., 2020; SBU, 2020), (2) many school children end up as dual users (European Commission, 2012; FCTC, 2012; Felicione et al., 2020; Lund & Scheffels, 2016; Ollila & Ruokolainen, 2016), (3) nicotine is also harmful in itself, especially for the developing body, including the brain (Drug and Therapeutics Bulletin, 2014; USDHHS 2014; Viariso, 2015), and (4) that snus carries considerable health risks (European Commission, 2012; Folkehelseinstituttet, 2019; IARC, 2018; SCENIHR et al., 2008).

Current scientific evidence indicates that the potential public health impact of snus today is greater than what was anticipated when the ban on placing snus on the market in the EU was first introduced in 1989 or even in 2010 when the Commission reported on the impact of the Swedish exemption relating to placing snus on the Swedish market (European Commission, 2010). The CJEU has also highlighted the detrimental public health impact of snus in its case law (Case C 151/17). In light of the considerable negative health effects of the Swedish exemption in relation to its neighbouring countries, further measure should be considered to prevent the leaking of Swedish snus over borders. The detrimental health effects on young people are enforced by the product development of snus with emphasis on packaging and flavours appealing to the young and attracting

new users. Increased nicotine content in snus and snus-like nicotine products may further aggravate the negative health impact on young people. To counteract this, Norway introduced plain packaging for snus (law 2017-02-10-5) and banned the importation of snus-like nicotine products.

The large number of snus users in Finland can be attributed to a great extent to the failure of Finnish tobacco policy. Permitting bringing into the country up to 1000 grams of snus per 24 hours and the sale of snus on daily ferries between Finland and Sweden does not communicate to the public that use is discouraged. These obvious legal deficiencies in snus regulation should be corrected. The public health effect of reviewing the Åland Accession Treaty in terms of the exemption from excise tax and VAT would also be considerable. However, even if prohibiting or restricting tax-free importation of tobacco products is also recommended in the FCTC (Art. 6.2), this measure is highly unlikely for political reasons.

Effective prevention of smuggling of illegal tobacco and nicotine products over borders is difficult within the EEA. This is especially difficult on the long open border between Finland and Sweden with an abundance of snus retailers at the border. Traceability of snus could facilitate identifying the source of smuggled snus. However, none of these measures will eliminate high-volume supply chains of illicit trade due to challenges of enforcement at the open borders.

The reason for granting Sweden the exemption on the ban of placing snus on the market was the long tradition of snus use. Sweden also has powerful snus manufacturing industry, which has attempted to overthrow the ban at the EU level. However, the Swedish exemption should not undermine the objective of pursuing a high-level of protection of health as provided for in TFEU 114(3). Sweden should step up its measures to prevent the leaking of snus to consumers in neighbouring countries as well as consider regulating the ingredients and strength of snus. These measures could be the ones provided for chewing tobacco in Directive 2014/

40/EC, such as restricting the tastes and perfumes of snus in Sweden. Furthermore, the maximum amount of nicotine could be restricted in order to prevent extremely high nicotine containing snus entering the market. This would protect both Swedish and young people in neighbouring countries.

The boundaries between various tobacco and nicotine products are getting less clear, making it possible for the tobacco and nicotine industries to take advantage of the discrepancies in regulation. Snus has been sold as chewing tobacco, which has resulted in also banning chewing tobacco from the markets in Finland, Austria and Greece. Small amounts of tobacco are being added into nicotine pouches for the Norwegian market in order to be sold as snus. Nicotine pouches have entered the markets in a vast number of EU countries. Furthermore, the boundaries between products for tobacco replacement therapies and addictive and toxic nicotine pouches are becoming increasingly blurred.

A harmonised regulation of nicotine pouches and other emerging non-medicinal nicotine products, beyond notification processes, should be considered at the European level (see also Ollila, 2019). Given the toxic levels of nicotine contained in some products and the general addictiveness and harmfulness of nicotine, they could be banned under tobacco law or regulated under medicinal law. Packages should be introduced with health warnings and their sale should be subject to strict age limits as proposed in Denmark. Furthermore, nicotine level, ingredients, including flavours, packaging and marketing could be regulated. A distinction should be made in this respect in relation to regulating nicotine products as tobacco replacement therapies under medicinal law. At the general level, the regulative framework should be such as to be able to encompass the constantly emerging new innovations of tobacco and nicotine industries.

## Conclusions

Use of snus and snus-like products is increasing, in particular, among young people in

several Nordic countries and Estonia. Controlling the movement of snus and of nicotine pouches across open borders is challenging. Snus is legally on the market only in Sweden and Norway. Regulation of non-medicinal nicotine pouches is not harmonised at the EU level, and their regulation varies among the countries studied: they were either regulated by tobacco legislation, medicinal legislation or not at all.

The research found that the judgement of the CJEU relating to the sale of snus on Finnish ferries has not been enforced. Moreover, the relatively large amount of snus a person may bring into the country for personal use has contributed to the wide availability of snus in Finland (Ministry of Finance, 2020). Swedish snus is also widely available in Denmark (Sundhedsstyrelsen, 2020).

Even if the legislation in Sweden is in conformity with the exemption it obtained in the Accession Treaty, the public health impact of snus use for young people in its neighbouring countries is considerable. The availability of snus in a great variety of tastes and packaging particularly catering for young users highlights the larger public health impact of the Swedish exemption. This, together with the large-scale smuggling of snus, raises the question as to whether the exemption obtained by Sweden can today be justified from a public health and internal market point of view. Given that changing the Accession Treaty may be difficult, it should be considered how Sweden could be made to share the burden of preventing the illegal exportation of snus over its borders.

The emergence of strong nicotine snus and snus-resembling nicotine pouches on the market is alarming. The divergent regulative approaches between countries make enforcement difficult, and consequently contribute to the increasing negative health impact of these products on, in particular, young people. Legislation at the EU and national level should also be able to protect young people from new tobacco and nicotine products, which is why it is urgent to harmonise regulation relating to such products taking as a

base a high level of protection of health as required in the TFEU.

### Ethics approval

This research did not involve human subjects or animals. No ethical review is required under applicable law nor under ethical guidelines. Please, find linked the guidelines issued by the Finnish National Board on Research Integrity <https://tenk.fi/en/ethical-review>

### Author note

At the time of writing of the article Marjut Salokannel was working at the Cancer Society of Finland.

### Note

1. “Food” (or “foodstuff”) means any substance or product, whether processed, partially processed or unprocessed, intended to be, or reasonably expected to be ingested by humans.

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