Mutual evaluation of regulated professions

Overview of the regulatory framework in the health services sector – dental hygienists and related professions

Report based on information transmitted by Member States and discussion in the meeting of 30 April 2015

1. CONTEXT AND AIM OF MUTUAL EVALUATION EXERCISE

Already in June 2012, in its Communication on the implementation of the Services Directive, the Commission stressed the importance that the framework for professional services needs to remain fit for purpose. Directive 2005/36/EC on the recognition of professional qualifications[1] ("Directive 2005/36/EC"), amended in November 2013, address certain issues and lay the basis for a new strategy that requires each Member State to actively perform a review and to modernize their regulations on qualifications governing access to professions or professional titles.

Following the work plan presented by the Commission in its Communication of 2 October 2013[2] on evaluating national regulations on access to professions, and in particular the idea that Member States should not work in isolation when screening their legislation, but should be able to discuss with other Member States and compare their systems, this report presents an overview of the information communicated to the Commission by EU Member States, Iceland, Liechtenstein, Norway and Switzerland either through specific reports or through information uploaded in the database for regulated professions as well as of the discussions which took place during the meeting on 30 April 2015 on mutual evaluation dedicated to this sector[3].

This presentation is established with the aim to facilitate the mutual evaluation exercise and is therefore neither a comprehensive report on the sector nor on the specific profession. Whilst the following focuses upon the profession of dental hygienist, as an example for professions in the health and social services sector, the experiences and understanding gained from this discussion are meant to be understood across the professional landscape. Observations made may have a general or more meaningful application to the functions and consequences of regulation in other professions and it is hoped, in this way, to lead towards an overall better application of regulatory measures in the professions.

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1 Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications, OJ L 255, 30.9.2005, as amended by Directive 2013/55/EU of the European Parliament and of the Council of 20 November 2013 amending Directive 2005/36/EC on the recognition of professional qualifications and Regulation (EU) No 1024/2012 on administrative cooperation through the Internal Market Information System ('the IMI Regulation') OJ L 354, 28.12.2013.

2 Communication from the Commission to the European Parliament, the Council and the European Economic and Social Committee on Evaluating national regulations on access to professions COM(2013)676 final, 2.10.2013.

3 This report is based on information submitted by the MS to the Database on the Regulated Professions (http://ec.europa.eu/internal_market/qualifications/regprof/index.cfm?lang=en), on the national reports sent to the Commission in spring 2014 and on the discussions at the meeting of 30 April 2015; it is supplemented by some other clearly indicated sources.

In this context the Commission would like to recall that in order to improve access to professions and to facilitate the mobility of qualified professionals within the internal market as well as the cross-border provision of professional services, a more flexible and transparent regulatory environment in Member States should have a positive impact on the employment situation, in particular for young people, as well as enhancing economic growth.

Based on their conclusions of the review exercise, by 18 January 2016, Member States had to submit a report to the Commission in accordance with Article 59(6) of Directive 2005/36/EC.

2. ECONOMIC AND STATISTICAL INFORMATION

2.1. Introduction

In the NACE classification of economic activities[4], activities of dental hygienists are classified under Section Q, 'Human Health and Social Work Activities', division 'Human health activities' and included in the class of 'Other human health activities'. This is described numerically as Q.86.90, and also includes 'activities of dental paramedical personnel such as dental therapists, school dental nurses and dental hygienists, who may work remotely from, but are periodically supervised by, the dentist'.

The International Labour Organisation manages the International Standard Classification of Occupations (ISCO)[5]. In this classification the profession of dental hygienist is classified under Major Group 3 'Technicians and associate professionals', sub-major group 32 'Health associate professionals, minor group 325 'Other health associate professionals, unit group 3251 "Dental assistants and therapists". Examples of the occupations classified under 3251 category include dental assistant, dental hygienist, and dental therapist.

ISCO provides the following description of activities for the professions grouped in category 3251:

"Dental assistants and therapists provide basic dental care services for the prevention and treatment of diseases and disorders of the teeth and mouth, as per care plans and procedures established by a dentist or other oral health professional. Tasks include:

(a) advising communities and individuals on dental hygiene, diet and other preventive measures to reduce potential risks to oral health;

(b) conducting visual and physical examinations of patients' mouths, teeth and related structures to assess oral health status;

(c) identifying cases of patients with poor oral health or oral disease requiring referral to a dentist or other health professional;

(d) assisting dentists during complex dental procedures;

4 http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Statistical_classification_of_economic_activities_in_the_European_Community_(NACE)

5 http://www.ilo.org/public/english/bureau/stat/isco/isco08/index.htm

(e) providing fluoride treatments, cleaning and removing deposits from teeth, preparing cavities and placing fillings, administering local anaesthesia, and performing other types of basic or routine clinical dental procedures;

(f) preparing, cleaning and sterilizing dental instruments, equipment and materials used in the examination and treatment of patients;

(g) getting patients ready for examination or treatment including explaining procedures and correct positioning;

(h) taking impressions of the mouth and dental radiographs to support diagnosis and fitting of dental prosthetics."

2.2. Economic and statistical data

In the NACE classification of economic activities[6], there is not a specific NACE activity for dental hygienist because it is classified with other dental activities (dental paramedical personnel such as dental therapists, school dental nurses and dental hygienists) in the class of 'Other human health activities' (Q.86.90). In addition, Eurostat statistics are only gathered for the NACE activity sectors B to N, so statistics of dental hygienists are not gathered by Eurostat. Hence data from other sources must be used to capture a view of the sector.

In the International Standard Classification of Occupations (ISCO)[7], unit group 3251 "Dental assistants and therapists" also includes several occupations (dental assistant, dental hygienist, and dental therapist); here again dental hygienists are not classified in a unique group, which leads to data collection issues.

The Labour Force Survey (LFS) is managed by Eurostat and uses the ISCO classifications to draw up statistics by occupation. However, the LFS collects statistics at section and subsection level, but not at the fourth level which is 3251, that including dental hygienists, therefore no data is available from the LFS.

The above gaps in data collection mean that in order to get an overview of the size of the sector of professional hygienists in the European Union, the economic section in the Member State report is vitally important. Below is a table which includes all the economic data that has been submitted by Member States; but there remain many gaps.

Member States, which have provided reports but not economic data, include **Romania**, **Iceland**, **Liechtenstein** and **Norway**. Economic data is missing for **Belgium**, **Croatia** and **Greece**, because those Member States did not provide a report.

6 http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Glossary:Statistical_classification_of_economic_activities_in_the_European_Community_(NACE)

7 http://www.ilo.org/public/english/bureau/stat/isco/isco08/index.htm

Table 1. Data reported by Member States

Country	Self-reported No of dental hygienists	Monthly gross average wage €	No of training centres	No of students
Austria	350 (assistants)	1 600 per month		
Bulgaria		325 per month		
Denmark*	2109 (f), 87(m)	5 218(public), 5 780(private)		
Finland	2 505	2 669 (public), 1 994-2 045(private)		80-120 per annum
France	20 100 (assistants)	1 300 - 2 450 per month		
Germany	550 (249 000 assistants)			
Hungary	1 756			
Ireland	464 (56 in public sector)	new entrants (from 1 Jan 2011) €34,074 - €45,935 (12 point scale) existing €37,860 - €51,039 (12 point scale)		
Italy	7 000	1 450 (public) 2 000(private) per month		
Latvia	247			
Lithuania	671	431 per month	7	470
Netherlands	3 000	2 606-3 183 per month	4	300
Norway	1762	Approx. 39 000-45 000 per annum	4	Approx. 100 per annum
Poland	1 920 (public)			
Portugal	336 (registered in ACSS)	1 209 per month	3	84 per annum
Slovakia	222			
Slovenia	11			
Spain	7 000	15 176 per annum	85	2 436
Sweden	3 000	2 880 per month		
Switzerland	2 154	4 480-5 000 per month	4	70 per annum
United Kingdom	6 300		20	

* Data as of 31st of December 2012 (Bevægelsesregisteret).

In addition to the economic data from Member States, the Commission has gathered data from the websites of professional organisations, including the International Federation of Dental Hygienists (IFDH), the General Dental Council (GDC) and the Irish Dental Association (IDA), Maltese Associatio of Dental Hygienists (MADH), as well as Administração Central do Sistema de Saúde (APHO) in Portugal.

Table 2. Data from professional organisations

Country	source/year	Number of Dental Hygienists, Female / Male	Number of Dental Hygiene Schools / Students per year	Practicing Dental Hygienists: Full-time / Part-time	Number of Dental Hygienists in private sector / public sector	Number of Dental Hygienists practicing as Clinicians	Number of Dental Hygienists practicing as Educators
Austria	IFDH	10				10	2
Czech Republic	IFDH	885/ 11	9 schools / 80 students per year	69% / 31%	95% / 5%	0,82	0,03

Denmark	IFDH	1 600 / 60	2/110	1 200/400	70% / 30%	1 200 / 400	25
Finland	IFDH	2 200	4 / 80-100	35% / 65%	About 70	About 30	
Italy	IFDH/2014	4 400 / 1 100	33 / 700	65% / 35%	98% / 2%	99%	6
Malta	MADH	17/9	1/ average 4	18/0	3/15	19	3
Netherlands	IFDH/2013	2 850/150	4/300	2 100/900	n/a	2 600	100
Portugal	APHO/Dec 2015	628, 524/104	3/84 per year	75% FT	70%/30%	about 90%	12
Spain			85				
Sweden	IFDH	3 800 / 65	8 / 200	3 200 / 600	1 500 / 2 260	3 690	60
Switzerland	IFDH	2 200 / Some	4 schools 80 students	60% / 40%	95% / 5%	1 650	70
United Kingdom	GDC/IFDH 2013	6 373/244	21 / 330	2 500 / 4 500	6 295 / 350	6 645	130

The absolute number of dental hygienists by country ranges from 222 in **Slovakia** to 7000 in **Spain** and **Italy**. The mean dental hygienist to population ratio gives an indicator for the service accessibility for the population. A study in 2010 carried out in the EU/EEA countries found the mean ratio of population to dental hygienists is certainly very low in most countries, at that time 13,454:1. The corresponding ratio of dentist to population was 1500:1.[8]

The statistics also reveal that the average wage varies greatly and in accordance with general income levels in that country. The Scandinavian countries have the highest wages for dental hygienists and East European countries the lowest, see table above. The number of schools and students varies with population size with **Spain** having 85 training centres and **Ireland** two.

From the non-MS reported statistics, it would appear that dental hygienists are very much a female profession. In all countries female dental hygienists far outweigh the number of males. This is consistent with a 2009 comparative study of dental hygiene 1987 to 2006 which also noted the predominance of females in the profession.[9]

The balance between a dental hygienist working in either the private or public domain is mixed. In the **UK**, **Denmark**, **Switzerland**, **Czech Republic** and **Italy**, the dental hygienists work mainly in the private sector whereas in **Norway** and **Sweden**, the dental hygienists work predominantly in the public sector.

The OECD has carried out studies on unmet dental needs in OECD countries. 'Unmet needs' captures the concept that people need dental treatment but for various reasons do not get it. There are eight categories of reasons including cost, waiting lists, time and travel. This study also shows that gender, cost and income all affect unmet needs. Men are less likely to go for dental check-ups than women. Cost is a big factor in unmet needs and income is a significant determinant of unmet dental needs. Eurostat also publishes statistics for 'unmet' needs in the EU. The latest figures for 2013 show that **Latvia** (35%) and **Bulgaria** (20%) have the highest rates of dental unmet needs in the EU. The EU average is 9.6%.

8 Changes in dentist and dental hygienist numbers in the European Union and economic area. Int Dent J. 2010 Aug; 60(4):311-6.

9 Patricia M; Johnson, International profile of dental hygiene 1987 to 2006: a 21 nation comparative study; 2009; FDI/World Dental Press, Toronto, Canada.

See also the data on the dental hygienists provided to the Commission by the European Dental Hygienists Federation in Annex III of this report and the data collected by the Council of the European Dentists[10].

3. REGULATION IN MEMBER STATES

3.1. Number of regulating Member States

21 States report regulation of dental hygienist as a separate profession: the **Czech Republic**, **Denmark**, **Finland**, **Hungary**, **Iceland**, **Ireland**, **Italy**, **Latvia**, **Liechtenstein**, **Lithuania**, **Malta**, the **Netherlands**, **Norway**, **Poland**, **Portugal**, **Slovakia**, **Slovenia**, **Spain**, **Sweden**, **Switzerland**[11] and the **UK**.

8 Member States reported that they do not regulate the access to or the pursuit of the profession of dental hygienist by way of mandatory qualification requirements. This is the case in **Austria**, **Bulgaria**, **Cyprus**, **Estonia, France, Germany, Luxembourg** and **Romania**. In most of the non-regulating countries the activities in the field of dental hygiene are carried out by one or more of other related regulated professions, such as dental practitioners, specialised dental practitioners and/or dental assistants working under supervision of the former.

No sector reports are available from **Belgium**, **Croatia**, **Greece** and **Norway**. Information for **Malta** in the Database remains very limited.

3.2. Activities of dental hygienists

Based on the information provided by the Member States, activities of dental hygienists can be distinguished from activities of other dental professions by their primary focus on preventive dental care.

Core activities carried out by the dental hygienists in regulating Member States include:

- educational and promotional activities related to preventive oral health (e.g. counselling of the patients and giving instructions for prophylaxis of caries, erosion, periodontal diseases, infection in mucous membranes and good oral health);
- patient examination, diagnosis and provisions of preventive dental care and dental hygiene treatments (dental cleaning and removal of soft and hard deposits, polishing of teeth, application of topical fluorides, etc.).

In certain Member States, dental hygienists may also prepare and carry out **other dental procedures which may vary from country to country**, e.g.:

- trimming and polishing of tooth restorations (**Denmark**, **Norway**, **Portugal Slovakia**, **Spain, Switzerland**, the **UK**),
- administration of local anaesthesia (**Denmark**, **Ireland, Lithuania**, **Malta**, **the Netherlands**, **Norway**, **Slovakia**, the **UK**; in **Switzerland** after an apprenticeship in local anaesthesia),

[10] See page 46 of the EU Manual of dental practice 2015, available at http://www.eudental.eu/library/eu-manual.html

[11] In Switzerland, the profession is regulated by the cantons; at federal level only the education is regulated.

- application and removal of orthodontic appliances (**Denmark**, **Slovakia**),
- placement and removal of retraction threads (**Spain**),
- placement of topical treatment and fissure sealants (**Denmark**, **Ireland**, **Lithuania, Malta**, **Norway, Portugal, Slovakia, Spain, Switzerland**, **the UK**,),
- desensitizing agents to exposed (dentin) tooth necks (**Switzerland**)
- placements and removal of rubber dams (**Spain**, **Switzerland,** the **UK**),
- placements of temporary dressings and re-cementing crowns with temporary cement (the **UK**), emergency refitting of crowns (**Ireland, Switzerland**),
- taking impressions (**Portugal, Switzerland,** the **UK,**),
- oral cancer screening (the **UK**)
- care of implants and treatment of peri-implant tissues (**Malta, Norway, Slovakia, Switzerland,** the **UK**),
- work with ionising radiation, taking photographs (**Denmark**, **Lithuania**, the **Netherlands**, **Norway, Portugal**, **Sweden**, **Switzerland,** the **UK**),
- prescription of radiographs (**Denmark**, **Norway**, the **UK**),
- treatment of primary cavities (**Lithuania**, the **Netherlands**),
- prescription of certain medicinal products (**Sweden**),
- preparation and administration of certain medicinal products in connection with dental care (**Norway**, **Sweden, Switzerland**); applying medication into periodontal sacs (**Slovakia, Switzerland**),
- treatment of periodontal disease (treatment in periodontal sacs, treatments prescribed by dentists) (**Spain**);
- Marginal periodontitis, periodontal diagnostic, root planning (**Denmark**)
- use of anti-microbial therapy to manage plague-related diseases (**Denmark**, **Switzerland,** the **UK**),
- tooth whitening (**Switzerland**) with prescription of a dentist[12] (**Lithuania**, **Norway, Slovakia,** the **UK**),
- administering inhalation sedation (the **UK**),
- removal of sutures after the wound has been checked by a dentist (**Denmark**, **Norway, Portugal,** the **UK**),
- administering subcutaneous and intramuscular injections (**Lithuania**).

Other tasks may also include keeping the dental office ready for work, maintenance of equipment, performing administrative tasks and/or keeping the documentation (**Poland**, **Hungary**, **Slovakia,** and **Switzerland**). (See also Annex I for the description of reserved activities provided by each Member State in the Database).

Member States are invited to compare their systems of regulating activities reserved to dental hygienists with the approaches in other Member States and to assess them in the light of proportionality principles.

3.3. Related professions

Dental hygienists carry out their activities in close cooperation with other members of the dental team. Certain activities in the field of dental hygiene can be (partly or in full) performed by other members of the dental team, particularly dental practitioners

[12] It is to be noted that pursuant to the Cosmetic Product Regulations 2012 (implementing the Cosmetics Regulation 1223/2009 of the European Parliament and of the Council (Annex III, entry 12 (e)) tooth whitening products shall either be first used by dental practitioners (as defined under Directive 2005/36/EC) or under their direct supervision if an equivalent level of safety is ensured.

(dentists), specialised dentists (dental surgeons, periodontologists, orthodontists, etc.), and dental assistants/dental nurses.

Dental practitioner (dentist)

The profession of dental practitioner (dentist) is one of the 'sectoral' professions with harmonised minimum training requirements by Directive 2005/36/EC and is regulated in all Member States.

Pursuant to Article 36 of the Directive, the professional activities of dental practitioners include the activities of prevention, diagnosis and treatment of anomalies and diseases affecting the teeth, mouth, jaws and adjoining tissue.

According to ISCO classification, the tasks of dental practitioners may include not only diagnosis, treatment and prevention of diseases, injuries and abnormalities of the teeth, mouth, jaws and associated tissues by applying the principles and procedures of modern dentistry, but also the activities in the field of dental hygiene, e.g.:

- providing preventative oral health care such as periodontal treatments, fluoride applications and oral health promotion;
- educating patients and families on dental hygiene, nutrition and other measures to take care of oral health.

Therefore, the activities in the field of dental hygiene also fall within the scope of dental practitioners' practice; both in countries regulating dental hygienists separately and in non-regulating countries such as **Austria, Estonia** and **Luxembourg**.

It should be emphasised that Directive 2005/36/EC provides that the profession of dental practitioner shall be distinct from other general or specialised medical professions[13]. In this specific context, it requires that pursuit of the activities of a dental practitioner is contingent upon the possession of evidence of formal qualifications set out in Article 34 of the Directive (evidence of basic formal qualifications of dental practitioners)[14].

That said and based on the information available, in most Member States dental practitioners share certain activities in dental care with other dental professions, notably with dental hygienists and/or dental assistants (albeit with varying degrees of professional autonomy granted to the latter two professions).

Periodontologists

Periodontologist is a specialised dental practitioner dealing with the treatment and prevention of periodontal diseases.

Based on the information in the Database, **Hungary** specifically regulates access to the pursuit of this dental specialty apart from regulating dental practitioners. The tasks of periodontologists include the recognition, diagnosis and treatment of the mutations of the periodontium and its parts; also tooth scaling (including dental calculus removal below gingiva), teaching the effective oral care routine, removal or temporary correction of prostheses and dental fillings not being cleanable because of non-proper side-closure;

[13] This is in line with the well-established case-law of the ECJ (see, e.g. C-202/99, Commission v. the Italian Republic).

[14] Article 34 of Directive 2005/36/EC requires at least 5 years training including 5000 h of full-time study at a university level and comprising the training programme set out in Annex V, point 5.3.1 of the Directive.

restoration of dead tissues, taking part in the restoration of the chewing function. Therefore, in Hungary dental hygienists share certain activities in the prevention and early recognition of periodontal diseases with specialised doctors. Similarly, in **Spain**, dental hygienists perform periodontal disease treatments, prescribed by dentists. According to the Danish authorities, a similar regulation also exists in **Denmark**.

Dental assistant/dental nurse

Based on the information in the Database**, dental assistants** are regulated in **10** Member States: **Austria, Bulgaria,** the **Czech Republic, Greece, Hungary, Latvia, Lithuania, Poland, Slovakia, Switzerland,** and the **UK**.[15]

Dental assistants perform activities within treatment and diagnostic care in the field of dentistry under the professional supervision of a dentist. They prepare dental processes, take care of patients before the manipulations and assist dentists during manipulations, as well as clean up the working area after manipulation. Dental assistants may also perform certain educational activities in the field of dental prevention under the professional supervision of a dentist and/or a dental hygienist (e.g. this is the case in the **Czech Republic**).

In addition, **Austria** regulates dental assistants specialised in **prophylaxis assistance,** which are responsible for the performance of prophylactic measures to prevent diseases of the teeth, mouth, jaw and associated tissues on the orders and under the supervision of a dental practitioner. The profession of **prophylaxis assistant** is therefore closely linked to that of dental hygienists in other Member States.

In **Hungary**, dental hygienists are usually working as dental assistants, given that up until recently, the training as dental assistant was an entry level qualification before taking a course in dental hygiene, and because the tasks of dental assistants are considered as the primary activity in dental care, while dental hygiene tasks are built on or are linked to these tasks.

Based on the above, the activities in the field of dental hygiene may also fall within the scope of dental assistants' practice. This is the case, for instance, in **Austria** and **Bulgaria**, which do not regulate the profession of dental hygienists, as well as in some of the regulating Member States. No information is available from Greece, which notified regulation of dental assistants in the Database.

Dental technicians

Dental technicians generally work in dental laboratories and are responsible for preparing and correction of removable, fixed or combined prostheses; orthodontic appliances, dentures and implant superstructures, restorative appliances. In some countries (e.g. **the UK**) dental technicians may also have direct access to patients in order to repair dentures.

Thus, dental technicians typically would not work in direct interaction with dental hygienists and do not share activities in the field of dental hygiene.

[15] According to Belgian authorities, the Belgian Council of Dentists has also proposed creation of a profession of oral care assistant.

Across regulating Member States, activities in dental hygiene can be performed not only by dental hygienists, but also by other dental staff. However, in countries that do not regulate the dental hygienist profession, other dental staff is fully responsible for providing preventive dental care. This difference in the regulatory approaches may potentially constitute a barrier for mobility (in particular in cases where a dental hygienist moves into a non-regulating Member State where activities in dental hygiene belong to the remit of other dental professions).

In order to mitigate such potential difficulties of mobility, Member States (and in particular non-regulating countries), are invited to check whether the conditions for granting partial access to activities in dental hygiene are put in place.

In this context it should be noted that a derogation from the right to request partial access referred to in Article 4f(6) of the Directive applies only to individual professionals benefitting from automatic recognition, but not to the dentistry profession as such. Thus, pursuant to the Directive dental hygienists may request partial access to the activities in dental hygiene, provided that the required conditions of partial access are met.[16]

3.4. Types of regulation in Member States

6 Member States regulate professions in this field by way of *reserves of activities* (meaning that the profession cannot be exercised without a required qualification): **Italy**, **Liechtenstein**, **Lithuania**, **Poland**, **Portugal** and **Switzerland**.

Norway regulates through protecting the *use of the professional title without any reserve of activities*.

14 Member States apply regulatory approaches that *combine both*, i.e. protection of the use of professional titles as well as a reservation of certain professional activities to the holders of required professional qualifications: the **Czech Republic**, **Denmark, Finland**, **Hungary**, **Iceland**, **Ireland**, **Latvia**, **Malta**, the **Netherlands**, **Slovakia**, **Slovenia, Spain, Sweden** and the **UK**.

No information has been made available by **Belgium**, **Croatia**, and **Greece**.

Based on the information notified to the Commission and as explained in Section 3.2 above, there is a common pool of certain activities typically reserved to dental hygienists in the regulating Member States, which at the same time may be shared with dental practitioners and/or dental assistants, namely, activities related to education and promotion of good oral health as well as the examination, diagnosis and provision of treatments in the field of preventive dental care/dental hygiene.

On the other hand, Member States also show divergences regarding the reservation of activities in the provision of specific dental procedures to dental hygienists, such as the administration of local anaesthesia, treatment of primary cavities, prescription of radiographs and medicinal products, tooth whitening, etc.

[16] Pursuant to Article 4f (1) of the Directive the following conditions have to be fulfilled: a professional should be fully qualified, he/she cannot benefit from compensatory measures because the differences in training are too large, and it must be possible to objectively separate the activity concerned from other activities in the host Member State.

The activities reserved to dental hygienists equally differ as regards their scope of autonomy from other dental staff, notably dental practitioners.

(See Section 3.1 above and Annex I for more detailed information on the activities reserved to dental hygienists).

As noted in Section 3.2 above, in light of the proportionality principles and drawing from the examples in other regulating countries, Member States are invited to assess the scope of activities reserved to dental hygienists.

3.5. Autonomy of dental hygienists

Information provided by the Member States demonstrates that there are varying degrees of professional autonomy granted to dental hygienists across the regulating Member States.

10 Member States have specified that dental hygienists may carry out all or certain activities only under the direct supervision of dentists and/or based on authorisations from the latter. This is the case in the **Czech Republic, Hungary, Ireland, Italy, Latvia, Lithuania, Malta, the Netherlands, Poland, Slovakia,** and **Spain**.

For instance, in the **Czech Republic**, dental hygienists provide preventive dental care only based on a doctor's indications and may assist in preventive and curative dental care under the supervision of a dentist. Similarly, in **Poland** dental hygienists conduct preventive and medical activities, and perform initial dental examinations, prophylactic and medical procedures only under the supervision and by the order of a dental surgeon. In **Malta**, the rules on clinical supervision were recently amended (October 2014) to ensure that clinical guidance[17] may be provided at a distance where appropriate access is available to ensure that the dentist/dental specialist are available. Dental hygienists carry out dental work under the clinical guidance of a dentist who has examined the patient and formulated an overall dental care plan indicating the course of treatment to be provided. The administering of local anaesthesia remains under direct clinical supervision of a dentist in Malta. In **Spain**, only in the field of health promotion and dental health education dental hygienists may work autonomously. In **Ireland** and **Italy** dental hygienists also work pursuant to the instructions/supervision of a dentist. In **Hungary**, dental hygienists may perform a limited number of activities independently (oral cavity examinations, provide preventive dental care and dental hygiene treatments), while others can only be performed under the direct supervision of a dentist (e.g. preparing dental procedures and assiting in dental or surgical treatments). In the **Netherlands**, dental hygienists may carry out certain specific treatments such as applying local anaesthesia, performing X-rays and treating primary cavities under the instruction (order) of a dentist.[18] In **Norway**, dental hygienists may carry out certain specific treatments such as applying local anaesthesia, performing X-rays witout supervision from a dentist. In **Lithuania**, a dental prescription/consultation is required for certain, but not all, procedures incuding tooth whitening, sealing dental fissures, and performing x-rays. In **Latvia**, some activities (e.g. applying fissure sealants to teeth, teeth whitening) require dentist's prescription; others are performed under dentist's supervision.

[17] Clinical guidance may be provided at a distance provided appropriate access is available to ensure that the dentist/dental specialist is able to provide guidance and advice when required.

[18] In the Netherlands, dental hygienists have functional independency and direct access to patients since 2006. Direct access entails that patients do not require dentist's referral to visit a dental hygienist. Independency refers to the performance of certain reserved acts under prescription of dentists, but without their direct supervision or control.

In **the UK**, since 2013 dental hygienists may carry out treatments both directly to patients and under prescription from a dentist (in particular for tooth whitening). In **Slovenia**, patients may also seek the direct care of a dental hygiensist without prior referral from a dentist (dental hygienists may work independently and open private practice), however insurance financing requires referral by a dentist.

In all **Nordic countries** (Denmark, Finland, Norway, Sweden, Iceland) dental hygienists can work independently from dentists. In **Denmark** since 1996 all dental hygienist regardless of where they work may carry out treatments independently without prior referral from a dentist and examine the patients (albeit in practice the majority of them work in dental clinics[19]). **Iceland** has also reported in the meeting of 30 April 2015 that dental hygienists do not need to work under supervision of a dentist and do not require their prescription. In **Finland**, this is also the case, however insurance financing requires referral by a dentist. In **Norway** the dental hygienist can realise insurance financing for diagnosis and treatment of periodontitis depending on their qualifications without any referral from dentist.

In **Switzerland** dental hygienists can also be autonomous, however, as in most countries, in practice dental hygienists mostly work in dental teams.

Member States differ regarding the professional autonomy of dental hygienists from those allowing provision of services directly to the patients to those that require direct supervision by a dentist. Furthermore, in some countries, despite relatively high level of autonomy, a dentists' prescription is required for reimbursement of dental hygiene services.

While half of the regulating countries reported varying degrees of limitations on the autonomy of dental hygienist activities, Nordic countries stood out with a far less restrictive approach.

In view of these varying regulatory models and taking into account the proportionality principle, Member States are invited to consider whether restrictions on the autonomy of dental hygienists are justified and proportionate to the general interests pursued.

3.6. Qualification requirements

The *training requirements* in most cases include the completion of approximately 2-4 years post-secondary training programmes, which are in some cases followed by a mandatory traineeship, professional experience and/or state exam.

Table 3. Qualification requirements

MSs	Training duration[20]	ECTS/h	Training level	Traineeship/ experience	State exam
CZ	3 years	?	Bachelor's studies. or at least three years of study in a field for certified dental hygienists at post-secondary medical	☑	-

[19] According to the information from Danish authorities presented in the meeting of 30 April 2015, out of 1600 dental hygienists only 35 work fully autonomously in Denmark.

[20] Where the Member States provided information on the duration of training in ECTS, the corresponding value was used in the number of years, as set out at: http://www.studyineurope.eu/ects-system.

			schools, or a field of study for the preparation of general nurses and post-secondary specialised study of dental care		
DK	3 years	180 ECTS	Professional Bachelor Degree Programme	☑ 55 ECTS (during training)	☑
FI	4 years	240 ECTS	Vocational post-secondary	☑	-
ES	2 years	120 ECTS;	Higher technical education	☑	-
HU	2 years training as dental assistant + 0.5 years; or 4 years	360-440h	Post-secondary/vocational (after dental assistant training), or University level (from 2014)	?	?
IS	2-3 years	?	University level	-	-
IE	2 years	?	General or Vocational Post-Secondary Education	-	-
IT	3 years (+ 2 years MA, optional)	180 ECTS	University level	-	-
LV	2 years	?	Professional higher education	☑	☑
LI	3 years	?	Vocational post-secondary	☑	-
LT	3 years 4 years	180 ECTS 240 ECTS	Higher education (professional bachelor) University level (Bachelor)	☑ ☑	☑ ☑
NL	4 years	240 ECTS	Higher technical education University level (Bachelor)	-	-
NO	3 years[21]	180 ECTS	University level (Bachelor)	-	-
MT	3 years	180 ECTS	University level (Bachelor)	-	-
PL	2 years;	at least 1380 h	Second-secondary	-	☑
	3 years	at least 180 ECTS	University level	-	-
PT	3 years	180 ECTS	Higher education (university level)	24 ECTS during training	-
SK	3 years	?	Post-secondary or University level	-	-
SI	2 years	?	Higher education	☑ 9 months	☑
SE	2 years	?	University level	☑ during the training	-
CH	3 years	5400 h	Non-academic higher education	☑ 25% of the last training year	-
UK	2 years	?	University level	-	-

Taken from the Database on the Regulated Professions and Sector reports (29 October 2015)

The *training requirements* in the majority of cases (**12/21**) include completion of **3-4 years** of post-secondary training programmes, which may then be followed by a mandatory traineeship or professional experience. **7/21** countries require completion of shorter training programmes of **1-2 years** duration: **Spain**, **Ireland**, **Latvia**, **Poland**, **Slovenia,** and **the UK**. In **Sweden**, training programme for dental hygienist is currently two years, but most common is a third year of training. No information has been made available by **Belgium, Croatia**, **Greece** and **Norway**.

Mandatory traineeship is required in less than half (**10/21**) of regulating countries (the **Czech Republic**, **Denmark, Finland, Portugal, Spain, Slovenia, Latvia, Lithuania,**

[21] Source: The Norwegian Registration Authority for Health Personell, http://www.nokut.no/Documents/INVIA/Infoark/Tannpleier_EN_20.pdf

Liechtenstein and **Switzerland**); while state level examination was reported for only **5/21** countries (**Denmark, Latvia, Lithuania, Poland** and **Slovenia)**. No information has been made available by **Belgium**, **Croatia**, **Greece,** and **Hungary**.

Based on the information available, a majority of regulating Member States require 3-4 years of study at a post-secondary level for dental hygienists. Furthermore, some countries (e.g. **Hungary, Denmark, Norway** and **Spain**) have recently increased their level and/or duration of the training. Less than half of the regulating countries require completion of shorter training programmes of 1 or 2 years.

Member States are invited to consider whether such training requirements serve the attainment of the pursued objectives, an in particular whether they are necessary for the exercise of relevant professional activities (be it autonomous activities or activities supervised by other dental staff, as the case may be) and if they are necessary to guarantee the quality of the service provided.

3.7. Additional requirements

a) Mandatory registration with professional bodies

9 Member States report mandatory registration with professional bodies: **Finland, Hungary, Ireland, Malta, Lithuania, Latvia, Portugal, Slovakia,** and **Spain**. According to some Member States (e.g. Spain), they are regarded as best placed to carry out technical checks and controls of the code of practice, which cannot be performed by public administrations alone.

However, **12** regulating Member States do not require mandatory registration with professional bodies: **the Czech Republic**, **Denmark**, **Italy**, **the Netherlands**, **Poland**, **Portugal**, **Slovenia**, **Sweden,** the **UK, Liechtenstein, Iceland** and **Switzerland**. In most countries registration and/or supervision is carried out by state bodies (e.g. in Denmark – Danish Patient Safety Authority, in Liechtenstein – Office of Public Health, in Sweden – National Board of Health an Welfare and Health and Social Care Inspectorate, in Portugal – the Ministry of Health). In **Slovenia**, the requirement of registration in the professional register was introduced in 2013, but the process of registration has yet to begin.

No information has been made available by **Belgium**, **Croatia**, **Greece**, and **Norway.**

b) Continuous Professional Development(CPD)

Manadatory CPD is required in **9** Member States that provided information to the Commission: **Hungary**, **Italy**, **Lithuania**, **Latvia**, **the Netherlands**, **Slovakia**, **Slovenia**, **Spain** and **the UK**. According to the **Danish** authorities, CPD is a matter of employers and their employees, though generally dental hygiensts are expected to participate in the CPD activities.

c) *Professional indemnity insurance*

10 Member States communicated a requirement for professional indemnity insurance in *establishment* cases: **Hungary**, **Italy**, **Malta**, **Spain**, **Sweden**, the **UK**, **Norway**, **Iceland**, **Switzerland** and **Liechtenstein**. The same number (**7**) of Member States have reported that they do not require professional indemnity insurance for establishment in this

profession: **the Czech Republic**, **Ireland**, **Lithuania**, **Netherlands**, **Poland**, **Portugal**, **Slovakia**. No information has been made available by **Belgium**, **Croatia, Denmark**, **Finland**, **Greece**, **Latvia** and **Slovenia**.

For *cross-border provision* of services professional mandatory indemnity insurance is reported by **6** Member States: **Ireland**, **Italy**, **Poland**, **Spain**, the **UK** and **Liechtenstein**. A slightly higher number (**8**) of Member States do not require professional indemnity insurance for cross border provision of services: **the Czech Republic**, **Italy**, **Lithuania**, **Malta, the Netherlands**, **Portugal**, **Sweden** and **Iceland**. No information has been made available by **Belgium**, **Croatia, Denmark**, **Finland**, **Greece, Latvia**, **Norway, Slovenia and Slovakia**.

d) Other requirements

Member States that communicated information to the Commission did not report any *limitations as to the number of licenses being issued* to professions in this field or *prohibitions of joint practices*. **Liechtenstein** has reported corporate form restrictions and shareholder/voting rights restrictions (100%).

Member States that reported restrictions related to mandatory indemnity insurance or other additional requirements (limitation of the corporate form, shareholder/voting rights) are invited to assess them in the light of proportionality principles (and any relevant EU legislation, such as Directive 2011/24/EU on the application of patients' rights in cross-border healthcare). In particular, they should consider whether the current applicable rules do not go beyond to what is necessary to attain the general interest objectives. Member States should also evaluate the cumulative effect of such additional requirements.

4. RESULTS OF TRANSPARENCY/SCREENING EXERCISE

According to Article 59(3) of Directive 2005/36/EC, Member States must examine whether regulatory requirements are compatible with the principles of non-discrimination, necessity and proportionality.

4.1. Non discrimination

Member States should ensure that professionals can access regulated professions without being a national of the host country and without having to reside in its territory. The requirements under the national legal system can be neither directly nor indirectly discriminatory on the basis of nationality or residence.

Those Member States that communicated information to the Commission on this issue did not report any existing discrimination based on nationality or residence.

4.2. Justifications and proportionality

Under EU law, in order to be maintained, measures restricting access to a profession must not only be non-discriminatory; they must also be justified by overriding reasons of general interest[22], be suitable for securing the attainment of the objective which they

[22] For instance, on grounds of public policy, public security or public health. It should be noted that these are EU law concepts which stem directly from Article 52 of the TFEU. These concepts have been consistently interpreted by the Court of Justice of the EU in a narrow sense, meaning that there must be a genuine and serious threat to a fundamental interest of society and it is for the Member State

pursue and must not go beyond what is necessary in order to attain it. Therefore, one should also assess whether there are other less restrictive means than the measure in question capable to attain the same objective.

Member States were asked to report overriding reason(s) in the general interest which justified their regulatory frameworks. The most cited reasons were those related to protection public health and of consumers, in particular:

- *Public Health and patient safety*: the **Czech Republic**[23]**, Denmark, Finland, Iceland, Ireland, Italy, Liechtenstein, Lithuania, the Netherlands, Norway, Poland, Portugal, Slovakia, Spain, Sweden,** the **UK,** and **Switzerland** (**17/21** Member States).

- *Protection of consumers/recipients of services:* the **Czech Republic, Finland, Italy, Liechtenstein, the Netherlands, Portugal, Slovenia, Spain, Sweden, the UK** and **Switzerland** (**11/21** Member States).

Proportionality information is lacking in the Database on the Regulated Professions for several countries: **Hungary, Latvia** and **Malta**. Furthermore, sector reports are missing from **Belgium**, **Croatia**, **Greece** and **Norway**.

By invoking the justification of protection of *public health* Member States aim to guarantee the health of patients by requiring that professionals have the requisite specialist knowledge, skills and/or competences in providing dental healthcare. According to the Member States, regulation of this profession increases the benefits for patients by ensuring specialised professional care, minimising the risks of damage to the patient (e.g. through spreading of diseases through contamination, damage to teeth, mouth, tissues, lips, throat, jaws), preserving, protecting and promoting health, fostering collaboration with other health professionals (dentists). In addition, the regulation was said to increase confidence in health personnel, the healthcare system and governmental control.

By contrast, **Germany** has stated in the meeting of 30 April 2015 that regulated access to dentists is sufficient and that there is no need for regulating the profession of dental hygienists separately.

Spain has referred to scientific evidence showing connection of oral health and systemic diseases; in particular, certain groups of patients were considered as requiring highly skilled professionals who are continuously trained throughout their careers (examples were given concerning patients affected by cancer, transplants, medical complications, multi-pathologies, and the use of pacemakers or anti-coagulation medication).

Similarly, **Denmark** has provided figures showing that prevalence of cavities among children demonstrated massive improvement in oral health within the last 15-20 years. The education of Danish dental hygienists was established due to a focus on prevention

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invoking these public interest objectives to demonstrate the risks involved (see Case C-72/83 *Campus Oil* [1984] ECR 2727, paragraph 34; Case 348/96 *Calfa* [1999] ECR I-00011, paragraph 21; Case C-158/96 *Kohll v Union des caisses de maladie*, [1998] ECR I-01931, paragraph 51).

[23] The Czech Republic has also invoked a general interest of public security. However, it is to be noted that in principle the concept of 'public security' implies the existence of threats posed to the internal and external security of the State in terms of the continued existence of the State with its institutions and important public services, the survival of the population, foreign relations etc. It is therefore worth noting that this justification would not seem appropriate in the context of activities of dental hygienists.

and improving dental health. Danish dental hygienists were said to have played an important part in improving oral health due to their focus on health education and prophylactic approach (although this is of course not the only contributing factor to improved oral health). However, based on the information available, it is not clear what are the interlinks between these benefits and the regulation of activities of dental hygienists. The Danish authorities have only specified in this regard that various communities have individual regulations (e.g. an obligation to see a dental hygienist for children).

By invoking a justification of *protection of consumers* Member States aim to ensure that consumers are not mislead and have access to professionals with specific knowledge of oral health care (e.g. prevention actions, fluorinations and sealant application, cosmetic treatments).

According to Member States, public health objectives are pursued in a consistent manner, as in the case of other comparable health professionals.

Effects of the regulatory measures

Most countries did not provide concrete data justifying the effects of the regulatory measures (such as information on the differences in costs when the activity is carried out by dentists in contrast to when activities are performed by dental hygienists).

Spain has identified a number of benefits in relation to **improving health care** brought by regulation, namely that the number of workshops on dental healthcare addressed to children in schools, pregnant women and concerning the prevention of sexually transmitted diseases have increased. The dental hygiene of disabled patients has also improved; the numbers of fluorinations and sealings have increased as well as the presence of dental hygienists in multidisciplinary teams of dental specialists. However, based on the information available, the exact interlinks between these benefits and the regulation of activities of dental hygienists are not apparent (e.g. it is not clear if there is an obligation for dental hygienists to carry out a certain number of workshops, if the same tasks cannot be carried out to the extent necessary by other qualified dental staff, etc.?).

Spain has also cited the results of a Survey on oral health care in Spain from 1993 to 2010. The Study showed that the number of children with cavities in primary teeth (5 and 6 year olds) kept steady from 1993 to 2010, while the number of 12-year-old children with cavities decreased by 40% and in 15 year olds it decreased by 25%. This progression was kept until 2000, from then on data have been steady. In people aged between 35 and 44 cavities have been reduced by 36%. In people older than 65 cavities have been reduced by 30%. In view of these positive developments, the goal for 2020 includes even higher presence of dental hygienists and with bigger competences for identified key tasks. However, this data alone does not clearly reveal the relationship between these figures and regulation of dental hygienists' activities (for instance, Are these benefits brought by the regulation by way of mandatory qualification requirements or rather by the way the health care system is organised?). According to the Spanish authorities, the benefits are further supported by the fact that there has been a decrease in costs of services when provided by dental hygienists; and that dental hygienist services do save time for dentists and provides more accessibility to dental care. Overall, the Spanish authorities consider that regulation by way of qualifications, CPD and professional liability insurance are necessary for an efficient organisation of health system services.

Slovenia has also argued that regulatory measures concerning dental hygienists can strengthen preventive dental care in a country and so limit the pandemic proportions of periodontal disease, which affects most of the population. According to the Slovenian report, if the services of dental hygienists were performed in a proper way, it could be time saving for dentist and could facilitate accessibility to dental care.

Norway (a country that regulates dental hygienists by protection of the use of the title only) stressed the **effectiveness of supervision**; it has stated that their supervision authorities can ensure that services are provided in accordance with sound professional standards, deficiencies in provision of services are prevented, and resources are used in an appropriate and effective way. In support of this view, **Norway** provided statistics on the revocations of authorisations, which appear to be at the same level in 2012-2013[24].

The **UK** authorities have also referred to the increase in the total number of fitness to practice allegations across the dental sector, which demonstrates the continued importance of their supervisory role (and thus regulation). Furthermore, the UK authorities have informed us that they have contributed to a Department of Business, Innovation and Skills (BIS) / Queen Mary University of London project[25] which intends to provide an economic analysis of licensing occupations in the UK, and that they also conduct and commission research with the aim of improving their standards and regulatory processes.[26]

Similarly, **Finland** has provided statistics on increasing number of disciplinary cases since 2005. However, in view of the Finish authorities, this cannot be regarded as due to the inadequacy of the regulatory measures chosen. Instead, increasing numbers are rather due to increasing number of professionals and the lower thresholds at which people complain.

Therefore, the exact relationship between the increasing numbers of disciplinary cases/allegations and the level of regulation of dental hygienists' activities is not fully transparent from the information provided to the Commission. As in the case of **Finland**, such increase in numbers may also be due to other reasons, such as increase in the number of professionals.

Most Member States that impose several regulatory measures (such as qualification requirements, registration with professional bodies, mandatory insurance, etc.) and that have answered a relevant question in the Database on the Regulated Professions, have stated that they either have not specifically reviewed cumulative effects of such regulatory measures or considered them to be proportionate to the objectives pursued (albeit without being in a position to provide concrete evidence or data in support of this view). In this context it can also be observed that Member States also differ as regards the conditions for reimbursement of dental hygiene services (a need for dentist prescription may be required in some countries), which is a further requirement adding to

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[24] For instance, the Norwegian Board of Health opened 228 cases in 2013 aimed at health care workers of different regulated professions (in 2012 it opened 244 cases). 141 cases were closed without giving any reaction (compared with 95 in 2012). 93 health care workers lost a total of 98 authorizations in 2013 (against 96 in 2012). The main reasons for revoking the authorizations were substance abuse and other behaviour that was not in compliance with professional practice. This includes, among other things, theft of medication, drug crimes and violence against patients.

[25] https://www.gov.uk/government/publications/occupational-regulation-in-the-eu-and-uk-prevalence-and-labour-market-impacts

[26] Available at: http://www.gdc-uk.org/Newsandpublications/research/Pages/default.aspx

the cumulative effects of regulatory measures on the professional activities of dental hygienists.

Most Member States that communicated information to the Commission have chosen to maintain their current systems of regulation; only some envisage changes to the current systems (see Section 6 on reforms).

Member States are invited to assess the effects of their regulatory measures, including the cumulative effect of all additional requirements, in particular as regards the advantages and disadvantages of regulating dental hygienists alongside with other dental professions and in view of the differing degrees of autonomy.

5. VOLUNTARY CERTIFICATION SYSTEMS AND OTHER MECHANISMS TO PROTECT A GENERAL INTEREST

Almost no Member State has voluntary certification systems in place for this profession.

Estonia has reported a certification system run by the Qualifications Authority. Professional councils run by the Authority develop professional standards – including for dental hygienists (Level 6 or 7, according to the EQF: European Qualifications Framework), which are used for developing curricula in formal education and training, and also as the basis for issuing professional certificates in all sectors (based on education and/or experience). The aim of the system is for the market to see the professional certificate as a mark of quality.

The **Czech Republic,** in its preparation of the new Licensing act (2011), has rejected the idea of an alternative voluntary certification scheme. The discussion confirmed that the profession of dental hygienist belongs to a category with a high rate of personal and social responsibility and that it justifies a regulatory regime.

6. RECENT, ONGOING AND PLANNED REFORMS (FROM 2010)

There are several recent or ongoing/planned reforms that go towards giving more **autonomy** to this profession:

- In **the UK**, the General Dental Council has removed a requirement of prescription by a dentist for any dental hygiene treatment since 1 May 2013 (this is known as "direct access" decision)[27]. The decision was made after a detailed research into the evidence justifying direct access and patients' safety considerations, including stakeholder consultation, literature review, online survey, and full public consultation. Subsequent to this decision, changes were made to the training requirements and the guidance on the scope of practice, which sets out what various member of the dental team can do[28].
- In **Ireland**, the regulatory framework is currently under review. The following measures are being considered: mandatory registration, CPD, removing requirement

[27] The only exception is tooth whitening, which still must be prescribed by a dentist because of the Cosmetic Product Regulations 2012 (implementing the Cosmetics Regulation 1223/2009 of the European Parliament and of the Council (Annex III, entry 12 (e)).

[28] Significant changes for the UK dental hygienists included amendments taking account of direct access to patients, including being able to treat patients directly, carrying out clinical examinations and diagnosis within their scope of practice; the inclusion of the care of implants and treatment of peri-implant tissues in care skills.

to work under prescription within a defined scope, fitness to practice. Policy proposals were to be made to the Minister in 2015.

- **Spain** stressed that it is necessary to provide greater autonomy and more functions to dental hygienists in order to improve the habits of the population. More prevention should help to avoid reaching the phases of pathology or disease. This would also allow improving the quality of multidisciplinary dental teams.
- **Latvia** has revised professional standards in 2012, where it has defined more precisely the competences, knowledge, duties and tasks of dental hygienists.

A large number of recent or ongoing/planned reforms concern changes to the **contents or increasing the level of training** for dental hygienists:

- In **Hungary**, reforms were introduced in 2013, when the University of Szeged initiated at the Hungarian Accreditation Committee the insertion of dental hygienist profession as subspecialisation into the "Health care and disease prevention" BSc level training so as to establish an independent specialization at a university level. The permission was given to the University and the requirements of BSc training have been regulated by a ministerial decree since 2014.
- In **Denmark**, training requirements have been raised from 2.5 to 3 years of duration since 2011.
- In **Norway,** the training requirements have been raised from a 2 to a 3 years bachelor degree in 2002.
- **Spain** has also reported that currently the contents of higher technical education training programmes are being reviewed considering the possibility of turning them into a university degree (as other countries such as the UK, the Netherlands, Denmark or Finland require higher training levels and a further specialization degree).
- In **the Czech Republic,** the latest changes were brought by the new Licensing act (2011) that dropped a cumulative requirement of professional experience. Instead, higher requirements were placed on the required education, including life-long learning and professional conduct control. Professionals in practice were allowed to prove their qualifications by way of professional examination after one year of practice. The **Czech authorities** might discuss in the future the current education model to assess if it is sufficient for an immediate launch of practice (this is given the increasing numbers of graduates and alleged decreasing level of quality of training). Political discussions are also open concerning a need for a chamber for non-medical workers, such as dental hygienist.
- In **Lithuania,** the study programmes were amended in 2010-2012 in order to differentiate dental hygienists from dental assistants.
- **Slovakia** has introduced new conditions for the registration in chambers in 2010 in order to get an overview of further education and to ensure compliance with CPD requirements.

Member States are invited to assess the necessity and proportionality of increasing educational and other requirements, in particular to evaluate whether this is correlated with increasing scope of activities of dental hygienists and/or their greater professional autonomy.

- In **Poland**, the training of dental assistants will be gradually closed, as the professional activities are shared with and can be fully performed by dental hygienists. The last enrolment of dental assistants will take place in 2016/2017.

- **Austria** stated that it has started regulating the profession of dental assistant and 'prophylaxis assistant' since 2013. At the same time, a study on the necessity of regulating dental hygienists was elaborated, but it did not show a need for regulation.

- **Slovenia** noted that since 2014 an internal screening procedure due to implementation of Directives 2013/55/EU is ongoing. This relates to the health care legislation reform, which should be put in place by the end of 2015. The goal is to determine and simplify the procedures of registration and licencing, accreditation of CPD, content of CPD requirements, the knowledge of language of health professionals, set the rules on insurance for professional liability; there is also a debate about necessity of internship and the content of the state exam.

- Finally, **France** has enacted a law on the modernisation of the healthcare system on 26 January 2016. It recognizes that the profession of dental assistant is regulated as a health professional. The legislative provisions establish a general framework for this newly regulated profession. The type of regulation is a combination of reserves of activities and the protection of the use of professional title. Dental assistants will contribute to prevention and education activities in the oral health area under the supervision and the effective control of a dentist. Mandatory membership in the professional chamber is not foreseen. The details of the required training, the competencies and the reserved tasks will be provided through regulatory provisions.

- The **Swedish** government in 2013 has carried out the assessment and concluded that the training programme for dental hygienists should not to be extended.

7. CONCLUSIONS

Based on the information provided by Member States, it can be concluded that the overall aim is to protect the same general interest objectives, namely protection of public health and consumers.

The development of dental hygienist profession in regulating countries is part of the trend towards a more preventive and prophylactic oral care policy rather than corrective dental care. Different scopes of activities can be observed between various dental health professions (dental practitioners/dentists, dental assistants/nurses, dental hygienists), sometimes with shifting boundaries amongst them over time.

Several diverse regulatory approaches may be observed across Member States. A distinction could be made between countries that do not consider it necessary to regulate the profession of dental hygienists separately from other dental staff by way of mandatory professional qualification requirements (in total 8 Member States), those who regulate dental hygienist activities under close supervision of dental practitioners and those who allow for fully autonomous practice of dental hygienists. The Member States also differ as regards duration of trainings, additional requirements (such as registration with professional bodies, CPD, insurance) as well as the conditions for reimbursement of dental hygiene services (a need for dentist prescription).

The regulatory differences across Member States may potentially constitute a barrier for mobility, especially for dental hygienists moving to a country which does not regulate the profession of dental hygienist, defines the regulated activities differently or has distinct training or other additional requirements.

Member States are invited to reflect upon the effects of their system on the free movement of professionals and whether potential obstacles are justified and if they can be mitigated. For instance, potential barriers to mobility could be eased by further improving clarity and transparency of regulatory measures to professionals, aligning the training requirements with the scope of reserved activities and the level of responsibilities of dental hygienists, as well as by applying, within the limits of proportionality, the conditions for partial access.

It was also observed that most Member States demonstrated little enthusiasm to seek improvements and overall satisfaction with their current systems. Furthermore, based on the information available, several reforms, which tend towards an increase in training requirements are not always supported by a clear rationale or data as well as the relationship to the level of autonomy given to the dental hygienist profession.

As set out in the introduction to this paper, the reforms must ensure that the needs of professionals and consumers are best served and in the most effective manner possible.

Annex I							
Country	**Profession**	**Protected title**	**Reserved activities**	**Training duration & method to obtain qualification**	**Traineeship**	**State exam**	**Registration in professional bodies**
Austria	Not regulated						
Bulgaria	Not regulated						
Belgium							
Croatia							
Cyprus	Not regulated						
Czech Republic	Dental hygienist	-	☑ Non-medical healthcare professional who carries out educational activities in the dental prevention. Based on doctor's indications provides preventive care in the area of dental hygiene and under the supervision of a dentist assists in the provision of preventive and curative [?]	Vocational post-secondary: 3 years	☑	-	-
Denmark	Dental hygienist	☑	☑ Patient examination, removal of hard deposit and root planning, trimming and polishing of tooth restorations, including the removal of excess filling and administration of infiltration anaesthesia (local anaesthesia). Also instrumental removal of soft dental plaque and polishing of the teeth and the application and removal of orthodontic appliances	Professional Bachelor degree programme: 3 years/180 ECTS	☑	☑	☑
Estonia	Not regulated						
Finland	Dental hygienist	☑	☑ Dental hygienists maintain the public's dental health by providing preventive dental healthcare services and information	Vocational post-secondary: 4 years / 240 ECTS	☑	-	☑
France	Not regulated						
Germany	Not regulated						
Greece							
Hungary	Dental hygienist	☑	☑	Vocational post-secondary: 2 years training as dental assistant + 0.5 year/360-440h' or 4 years BSc (since 2014)	?	?	☑
Ireland	Dental hygienist	☑	?	Vocational post-secondary:	-	-	☑

				2 years			
Italy	Dental hygienist	-	☑ Conducts dental health education and participates in primary prevention projects, in scope of the public health system; collaborates in the compilation of the medical and dental records and provides the technical and statistical data collection; ensures ablation of tartar and root planning as well as topical application of various prophylactic means; ensures education on the various methods of oral hygiene and on the use of diagnostic tools suitable and highlight bacterial plaque and dental veneer justifying the need for periodic medical checks.	3 years	-	-	-
Lithuania	Dental hygienist	-	☑Investigation and assess of the state of the teeth; diagnostics, treatment plan, consultation / information, work with ionising radiation, application of local anaesthetics and treatment of primary cavities.	3 years (180 ECTS) professional bachelor 4 years (240 ECTS) Bachelor degree (university level)	☑	☑	☑
Latvia	Dental hygienist	-	☑ To carry out diagnosis, treatment and prevention of oral cavity diseases, as well as to educate different age patients on oral cavity health and hygiene.	2 years	☑	☑	☑
Luxembourg	Not regulated						
Malta	Dental hygienist	☑	☑ Perform scaling and polishing of teeth, perform comprehensive root surface debridement, administering of local anaesthetic using dento-alveolar infiltration techniques, assess and monitor periodontal disease, treat patients under conscious sedation or under general anaesthesia provided a dentist is present throughout the treatment, participate in oral health education on individual and community level[29].	3 years / 180 ECTS (Bachelor's degree)	-	-	☑
The Netherlands	Dental hygienist	☑	-	Bachelor in health: 4 years	-	-	-
Poland	Dental hygienist	-	☑ Conducting preventive and medical activities under supervision and by order of a dental surgeon as well as keeping the dental office ready for work and conducting health promotion activities, conducting dental health	Secondary: 2 years	-	☑	-

[29] Source: https://health.gov.mt/en/regcounc/cpcm/Documents/COPDentalHygiene - Amended April 2015.pdf

			education and health promotion in various environments, preparing the dental office and work station of a dental surgeon and maintenance of the equipment on a current basis, organization of works connected with providing dental services, performing administrative tasks and keeping the documentation connected with functioning of the dental office, performing the initial dental examinations, prophylactic and medical procedures under supervision and by order of a dental surgeon.	Bachelor: 3 years	-	-	-
Portugal	Oral hygienist	-	☑ Conducting activities to promote oral health of individuals and communities for epidemiological methods and actions of health education, providing individual care to prevent and treat oral diseases	Bachelor degree: 3 years/180 ECTS	20 weeks	-	-
Romania	Not regulated						
Slovenia	Dental hygienist	☑ (?)	☑ oral hygiene	Higher education	☑ 9 months	☑	-
Slovakia	Dental hygienist	☑	☑ Ultrasonic dental enamel cleaning, explaining the oral hygiene process and the use of recommended instruments.	3 years	-	-	☑
Spain	Dental hygienist	☑	☑ 1. Public health: Collection of data about the state of the oral cavity; actions addressed to individual or collective healthcare education; control of patients' prevention measures; oral health exams addressed to the Community. 2. Technical assistance: application of topical fluorides; placement and removal of retraction threads; placement of fissure sealants; polishing of fillings; placement and removal of rubber dams; removal of calculus, dental stains and tartar; polishing.	Vocational post-secondary (Higher technical education, VET): 2 years	☑	-	☑
Sweden	Dental hygienist	☑	☑ prescription of certain medicinal products for certain purposes; preparation and administration of medicinal products in connection with dental care	2 years	☑ (during the training)	-	-
United Kingdom	Dental hygienist	☑	☑ Dental hygienists are registered dental professionals who help patients maintain their oral health by preventing and treating periodontal disease and promoting good oral health practice. They carry out treatment direct to patients or under prescription from a dentist.	General post-secondary: 2 years	-	-	☑
Liechtenstein	Dental hygienist	-	☑ The implementation of dental hygiene diagnosis, the making of dental cleanings and the counselling of	Vocational post-secondary:	☑	-	-

			patients and the instructions for prophylaxis	3 years			
Iceland	Dental hygienist	☑	☑ A dental hygienist works with instruction, advice, organization of dental protection and the clinical work associated with dental health according his/her professional education.	General post-secondary (university level) 3 years	-	-	-
Switzerland	Dental hygienist	-	☑ The certified dental hygienist is the professional, who works in prevention, health promotion, non-surgical and maintaining periodontal therapy. Main activities are advice, information and instruction for maintenance of oral health. Dental hygienist works primarily as a member of the dental or medical teams or independently in her own practice. Other places include dental clinics, hospitals, homes, health centers and schools.	3 years (5400 h) Professional college degree after obtaining VET diploma, general certificate of education with healthcare option, federal vocational baccalaureate, academic baccalaureate of equivalent. The holders of an upper-secondary education, for example the Federal certificate as a health care assistant (3 years), can follow an education as a dental hygienist in 2.5 years instead of 3. In this case the total education is 5.5 years (3+2.5).	☑ 25% of the last training year	-	-
Norway	Dental hygienist	☑	-	3 years University level (Bachelor)	?	?	?

Taken from the Database on the Regulated Professions 29/10/2015 and Sector reports

Annex II								
Country	**Profession**	**Limits on number of licences granted**	**Corporate form restrictions**	**Shareholding / voter restrictions**	**Prohibition on joint practices**	**Indemnity insurance requirement**	**Cross-border insurance requirement**	**CPD**
Austria	Not regulated							
Belgium								
Bulgaria	Not regulated							
Croatia	Not regulated							
Cyprus								
Czech Rep.	Dental hygienist	-	-	-	-	-	-	?
Denmark	Dental hygienist	-	-	-	-	?	?	-
Estonia	Not regulated							
Finland	Dental hygienist	-	-	-	-	?	?	?
France	Not regulated							
Germany	Not regulated							
Greece								
Hungary	Dental hygienists	?	?	?	?	☑	?	☑
Ireland	Dental hygienist	-	-	-	-		☑	?
Italy	Dental hygienist	-	-	-	-	-	-	☑
Lithuania	Dental hygienist	-	-	-	-	-	-	☑
Luxembourg	Not regulated							
Latvia	Dental hygienist	-	-	-	-	?	?	☑
Malta	Dental hygienist	-	-	-	-	☑	-	-
Netherlands	Dental hygienist	-	-	-	-	-	-	☑[30]
Poland	Dental hygienist	-	-	-	-	-	☑	-

[30] In the Netherlands, CPD requirements exist in the non-mandatory private register for dental hygienists "KRM." At least half of the professionals is registered.

Portugal	Oral hygienist	-	-	-	-	-	-	?
Romania	Not regulated							
Slovenia	Dental hygienist	?	?	?	?	?	?	☑
Slovakia	Dental hygienist	-	-	-	-	-	?	☑
Spain	Dental hygienist	-	-	-	-	☑	☑	☑
Sweden	Dental hygienist	-	-	-	-	☑	-	?
UK	Dental hygienist	-	-	-	-	☑	☑	☑ 150h/ 5
Switzerland	Dental hygienist	-	-	-	-	☑	-	?
Iceland	Dental hygienist	-	-	-	-	☑	-	?
Liechtenstein	Dental hygienist	-	☑	☑ 100%	-	☑	☑	?
Norway	Dental hygienist	-	-	-	-	☑	-	-

Taken from the Database on the Regulated Professions 29/10/2015 and Sector reports.

Annex III - Overview of dental hygienists per country (source: European Dental Hygienists Federation)

EU PROJECT				*Population*	*Total number of dental hygienists* 3)	*Number of capita per dental hygienist*
				A	B	C
			Source	Eurostat 1)	(CECDO) 2)	C = A / B (EDHF)
AT			**Austria**	8 584 926	8 4)	1 073 116
BE			**Belgium**	11 258 434	0	n/a
BG			**Bulgaria**	7 202 198	0	n/a
CY			**Cyprus**	847 008 p	10 4)	84 701
CZ			**Czech Republic**	10 538 275	307	34 327
DE			**Germany**	81 174 000 e	600 4)	135 290
DK			**Denmark**	5 659 715	1751	3 232
EE			**Estonia**	1 313 271	33	39 796
ES			**Spain**	46 439 864 p	3000	15 480
FI			**Finland**	5 471 753	1768	3 095
FR			**France**	66 352 469 bp	0	n/a

GR			**Greece**	10 812 467 [ep]	0	n/a
HR			**Croatia**	4 225 316	?	n/a
HU			**Hungary**	9 849 000 [p]	2077	4 742
IE			**Ireland**	4 625 885 [e]	338	13 686
IT			**Italy**	60 795 612	4000 4)	15 199
LT			**Lithuania**	2 921 262	261	11 193
LU			**Luxemburg**	562 958	0	n/a
LV			**Latvia**	1 986 096	150	13 241
MT			**Malta**	429 344	21	20 445
NL			**The Netherlands**	16 900 726	2850	5 930
PO			**Poland**	38 005 614	2500 4)	15 202
PT			**Portugal**	10 374 822 [e]	380	27 302
RO			**Romania**	19 861 408 [p]	>100	?
SE			**Sweden**	9 747 355	4526	2 154
SI			**Slovenia**	2 062 874	27	76 403
SK			**Slovakia**	5 421 349	270	20 079
UK			**United Kingdom**	64 767 115 [ep]	5900	10 977
CH			**Switzerland**	8 236 573 [p]	1500	5 491
IS			**Iceland**	329 100	36	9 142

LI			**Liechtenstein**	37 369 [p]	5	7 474
NO			**Norway**	5 165 802	774	6 674
AL			**Albania**	2 893 005	0	n/a
BA			**Bosnia and Herzegovina**	3 825 334 [p]	0	n/a
BY			**Belarus**	9 480 868 [e]	0	n/a
MD			**Moldova**	3 555 159 [e]	0	n/a
ME			**Montenegro**	622 099	?	n/a
MK			**Macedonia**	2 069 172	?	n/a
RS			**Serbia**	7 111 973	?	n/a
TR			**Turkey**	77 695 904	?	n/a
UA			**Ukraine**	?	?	n/a

Footnotes

1) Data on the population on the 1st of January 2015 from Eurostat;
   b = break in time series;
   p = provisional;
   e = estimated.
2) Data extracted from the database of the CECDO (Council of European Chief Dental Officers). This CECDO data was last updated on the 26th of July 2012. CECDO data for Armenia, Azerbaijan, Israel and the Russian Federation have not been taken into consideration.
3) Number of registered dental hygienists (if register exists).
4) Estimated number of dental hygienists (if register does not exist).