ID 459 - An EU Common Training Framework for Landscape Architecture addressing the current needs of society

Abstract

The European Union (EU) Directive 2013/55/EC amends Directive 2005/36/EC on the recognition of professional qualifications. The 2013 amendment allows Member States to decide on a common set of minimum knowledge, skills and competences required to pursue a given profession through a Common Training Framework (CTF). Such a framework must combine training requirements formally documented by at least one third of the Member States. Qualifications gained under a CTF may be recognised automatically across the internal borders of the European Union, but in any case, an agreed CTF for Landscape Architects would usefully act as a benchmark document for both teaching and professional recognition in countries across Europe.

The backbone of the CTF for Landscape Architecture proposed by IFLA Europe and ECLAS is outlined in the body of this paper. The InnoLAND project organised a collaborative process for setting up this CTF as a basis for Landscape Architectural Training. Content is based on educational documents created by IFLA world, IFLA Europe and ECLAS and texts resulting from the EU-TEACH and the EU-LAND21 projects. Content also reflects evolving policies on urban and rural landscapes, higher education, and the needs of society for sustainable, biodiversity-rich landscapes and land uses, landscape democracy, health, and safety. Furthermore, this proposed CTF for Landscape Architecture responds to the United Nations Sustainable Development Goals (UNSDGs) that call for the explicit integration of thematic issues relating to life on earth, biodiversity, water, energy, climate, oceans, urbanisation, transport, science, and technology.

The CTF for Landscape Architecture is based on an Equivalence of Standards in education, training, qualifications, knowledge, skills, competences, and the professional conduct associated with practice. In addition, InnoLAND has identified 9 EU Member States that formally regulate the profession of Landscape Architecture and are able to meet Equivalence of Standards as required by the EU Commission. The profession is also regulated in the United Kingdom.

The creation of a CTF for Landscape Architects will support and contribute to the EU's goals of increasing professional mobility, safeguarding consumers, and ensuring an equitable distribution of skills and expertise across Member States. The content of the proposed CTF provides a template for national professional bodies and/or competent authorities to engage with the EU Commission.

Keywords

common training framework; equivalence of standards; EU directive 2013/55/EC; recognition of professional qualifications; landscape architecture education, European Qualification Framework.

Content

1. Setting the scene

1.1 The existing foundations for the Common Training Framework

IFLA Europe and ECLAS are developing a Common Training Framework (CTF) for landscape architecture. The aim is to have a common set of standards for professional qualifications that support the quality of the profession and education of landscape architects. The CTF is developed within the framework of the InnoLAND project.

The European Union (EU) Directive 2013/55/EC amends Directive 2005/36/EC on the recognition of professional qualifications (PQD). The 2013 amendment allows Member States to decide on a common set of minimum knowledge, skills and competences required to pursue a given profession through a CTF. Currently there is automatic recognition for architects, doctors, and nurses.

Qualifications gained under a CTF may be recognised automatically across the internal borders of the European Union, but in any case, an agreed CTF for Landscape Architects would usefully act as a benchmark document for both teaching and professional recognition in countries across Europe.

The European Landscape Convention has two main objectives: individual and social well-being, and the sustainable development based on a balanced and harmonious relationship between social needs, economic activity, and the environment. Landscape architects contribute greatly to these objectives. Contemporary landscape architecture can range from carrying out large scale landscape planning or design projects, such as developing landscape proposals for the future of whole regions or integrating infrastructure projects into the landscape and ameliorating their impacts on the environment, through the formulation of strategies for the provision of green space structures and urban nature conservation, to the detailed design of new housing or commercial areas, individual parks, urban public spaces and gardens. Equally landscape architects may be involved in the development of concepts for the long-term management of historic gardens and landscapes, recreation areas in the urban fringe or of national parks and protected landscapes (Sarlov Herlin, 2009).

The estimated number of landscape architects across the European Union (EU) that are members of national associations and/or chambers adds up to xxxxx [Numbers to be provided by IFLA EUROPE]. This includes researchers, practitioners, and civil servants, while many of these combine academic work (teaching and research) with professional practice. Their contribution continues to develop through research (including research by designing and participatory action research) and addressing the current needs of society for climate resilience, flood prevention, enhancing biodiversity, food security and inclusiveness of all members of the society. The competences of landscape are growing by technical advances, like applying nature-based solutions, and the increasing knowledge and skills of the practitioners.

The profession of landscape architecture falls in the “general system” of the Professional Qualifications Directive (PQD). A CTF must combine training requirements formally documented by at least one third of the Member States. Qualifications gained under a CTF may be recognised automatically across the internal borders of the European Union, which provides opportunities for the mutual recognition of qualifications for the estimated 600 professions in the “general system”. This helps catalyse a more rapid and equitable distribution of human resource and services across the Union, and supports individuals seeking unhindered professional migration across EU borders. Professionals who have gained their qualifications under a CTF will be able to have these recognised automatically without further ‘compensation measures’ being imposed.

An agreed CTF for landscape architects would usefully act as a benchmark document for both teaching and professional recognition in countries across the European Union and beyond.

Proposing the recognition of landscape architects is in line with the mission of the International Federation for Landscape Architecture Europe (IFLA Europe) and the European Council of Landscape Architecture Schools (ECLAS) and contribution in ensuring equitable, high quality, safe services across the European Union’s single market. ECLAS, that also carried out the Tuning Project for landscape architecture (ECLAS, 2010), and IFLA Europe, drew up joint advice for the EU Member States based on education, training, qualifications, continuous professional development, and professional conduct that it considered appropriate with the professional qualifications for landscape architecture. The preceding process is shown in Figure 1.

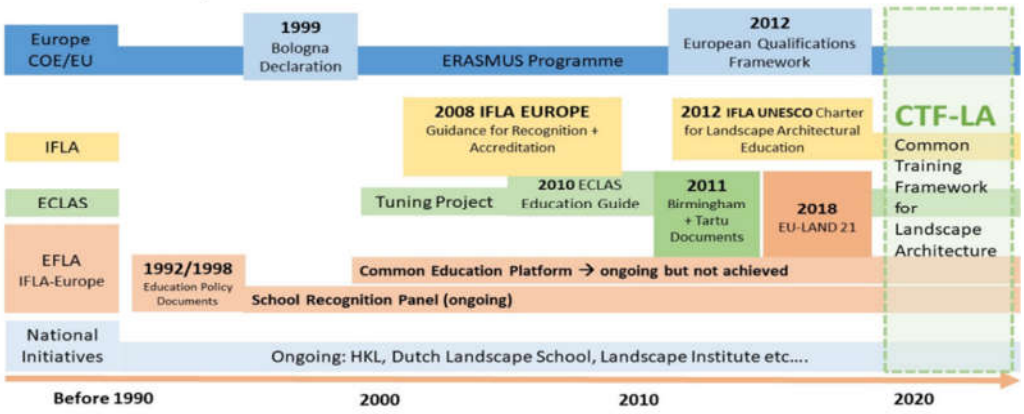

Figure 1. The European pathway to education guidance in landscape architecture (source E. Fetzer)

These foundation documents together with the expected knowledge, skills, and competencies for practicing as a landscape architect form the backbone of a proposed CTF which is outlined here. In setting the scene for the proposed framework first an overview is provided of landscape architects unique contributions and their demographic profile in relation to further stipulations laid down by the PQD for example on regulation status and adoption of professional titles. The proposed CTF aims to be approved by the IFLA and ECLAS and then will offer the EU Member States a template for submission to the EU Commission. The context of the Common Training Framework is presented in Figure 2.

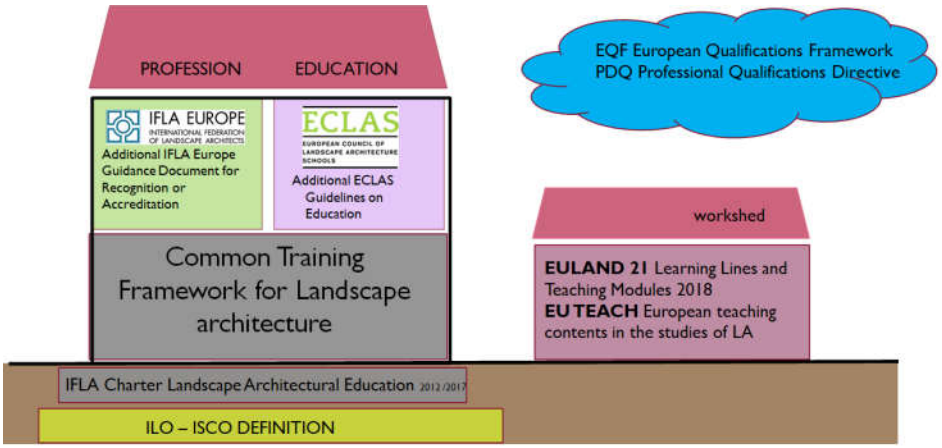

Figure 2. The context of the Common Training Framework for Landscape Architecture

1.2 New challenges and developments and actual needs of society

Landscape architecture as a field of professional activity and an academic discipline, is concerned with the shaping of landscapes at various scales. Core competences of landscape architecture centre on the process of intervention in landscapes to create new or revitalised places, by means of landscape planning, design, and management, as well as by project implementation. It aims are to create, enhance, maintain, and protect places so as to be functional, aesthetically pleasing, meaningful and sustainable and appropriate to diverse human needs and goals. Landscape architects must have a holistic knowledge and understanding of landscape in time and space, and the

pressures and driving forces to which landscapes are subjected; they involve not only specialist knowledge from a wide range of disciplines, but also the interests of the public.

European and EU policies

The European policies for which landscape architects have a role in the implementation cover a wide range of themes. A holistic and transdisciplinary approach is essential. In order to address complex challenges there is a trend for a harmonisation of policies and objectives (such as the integration of environmental and climate legislation between the Common Agricultural Policy (CAP) and the integration by the Green Deal and local policies). Figure 3 shows the impact of the main European policies related to landscape for landscape architecture competences.

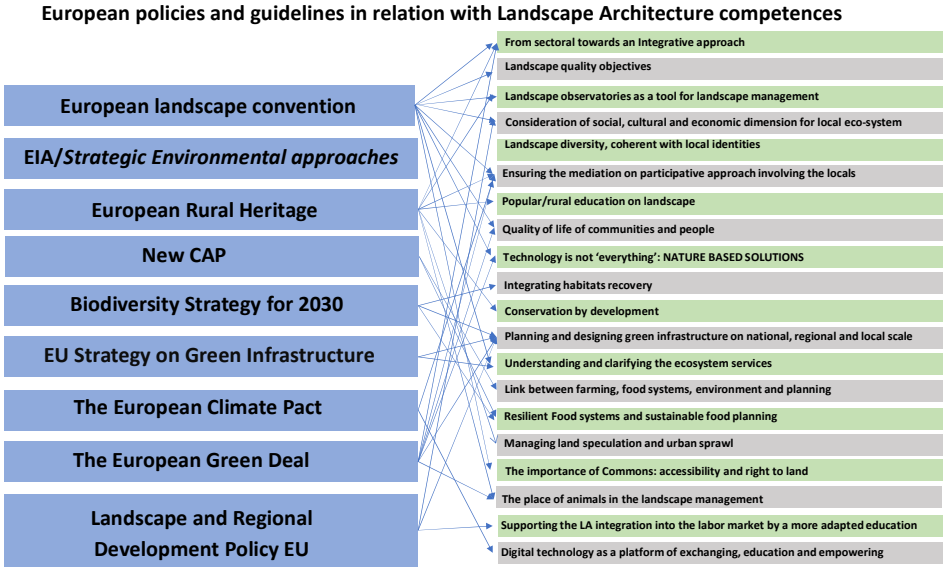

Figure 3. Impact of European and EU policies on competences of landscape architects (Triboi, 2021)

Landscape architects work together with other disciplines on the implementation of these policies by addressing the corresponding challenges in a holistic way, linking the ecological, social, economic aspects. For instance by fostering global health, strengthening ecosystem services, enhancing climate resilience, local and circular economy by inclusive and participatory approaches.

Sustainability goals (Fetzer, 2021, in preparation)

UNESCO has been promoting Education for Sustainable Development (ESD) since 1992. The first step for promoting ESD was the UN Decade of Education for Sustainable Development (2005-2014), followed by the Global Action Programme (GAP) on ESD (2015-2019). The GAP is currently in process of implementation at the national levels.

Figure 4. Overview of the Sustainable Development Goals, related to landscape layers. (Source: Stockholm Resilience Centre)

Each UN member state is following-up similar parallel processes in this field. In recent years, various educational scientists (de Haan, 2010; Wiek, 2011,2015; Rieckmann, 2012) have dealt with a definition of skills and competencies that could serve as a target framework for training in this context.

Arnim Wiek (2011, 2015) defined five key competences: Systems thinking, Futures thinking (or anticipatory) competence, Values thinking (or normative) competence, Strategic thinking (or action-oriented) competence, and Collaboration (or interpersonal) competence. The UNESCO report on Sustainability Competences (2017) adds three more to these: Critical thinking, Self-awareness and Integral problem-solving. Even if these key competences seem rather generic, they are very compatible with the identity of landscape architecture as a profession focussing on changing existing landscapes towards a better, more sustainable future.

2. The collaborative process of developing a CTF

2.1 Process and stakeholders

In 2020 and the first months of 2021 IFLA Europe carried out a survey on professional recognition and accreditation among the National Associations in all European countries. The survey aimed to identify: (1) the up-to-date problems for each country, regarding the state and procedures of landscape architect professional recognition and regulation, (2) any good practices or procedures regarding the process of achieving the professional recognition, or any good examples which help the professional accreditation and development, (3) the future trends of the profession, and (4) the obstacles or opportunities regarding the professional mobility.

From January until June 2021 a collaborative process was conducted within the framework of the InnoLAND project. Some 60 landscape architects from academia and professional practice took part, with representatives of 24 national landscape architecture organisations in the EU and of landscape architecture programmes across Europe. The participants are located in 24 EU-countries, 6 other European countries, and some colleagues from outside Europe.

2.2 Outcomes

The collaborative process resulted in a strengthened common understanding of the roles and competences of landscape architects. The participants developed a roadmap for updating the guidelines for landscape architecture education and the principles of recognition by IFLA Europe. It resulted in a draft CTF for landscape architecture

that will be presented to the general assemblies of the European Council of Landscape Architecture Schools (ECLAS) and IFLA Europe.

2.3 Discussion

[Here we will enter the main dilemma's and issues that were discussed in the period between the May and June 7, and also the results of the Padlets that were used from the April 16 until April 23]

3. The contribution of landscape architects to sustainable landscapes and healthy environments

3.1 Roles and responsibilities

[This section is based on Based on Some Thoughts on the Education and Training of Landscape Architects/ Tony Williams IFLA Europe and elaborated on the basis of the Collaborative Process for Drafting a CTF (Mural and Survey)]

The task and roles of landscape architects are developing and, in this context, a renewed definition proposed to the International Labour Organisation is approved by the IFLA World Council 2020. It states that: 'Landscape Architects plan, design and manage natural, rural and built environments, applying aesthetic and scientific principles to address the sustainability, quality and health of landscapes, collective memory, heritage and culture, and territorial justice. By leading and coordinating other disciplines, landscape architects deal with the interactions between natural and cultural ecosystems, such as adaptation and mitigation related to climate change and the stability of ecosystems, socio-economic improvements, and community health and welfare to create places that anticipate social and economic well-being.'

Whilst the scope of practice at specialist level varies across the EU Member States the overlap is considerable such that common roles and responsibilities can be drawn out as follows:

1. Developing new/ improved theories and methods, providing advice on landscape policies.
2. Provision of professional and scientific leadership to direct and determine the scope and organisation of planning and design that are appropriate for local landscapes and its inhabitants and stakeholders.
3. Working from an extensive, up to date knowledge to ensure best practice.
4. Ability to work in a professional planning and designing environment to guide landscape strategies, planning, design, and management.
5. Leading and supporting research and development: innovating and implementing new technologies; initiating, conducting, and evaluating research; delivering quality assurance programmes, undertaking continuous audit and evaluation, understanding of ethical, legal and governance considerations.
6. Participation in and/or leading teaching, education, and training programmes in landscape architecture.
7. Providing the landscape leadership that focuses on well-being, healthy environments, landscape aesthetics and contributing to the development of sustainable landscapes that foster biodiversity, climate resilience and that deliver ecosystem services and contribute to the well-being of people.
8. Evaluating and inspecting areas and sites, consulting clients, management, and other stakeholders to determine type, style, size of proposed constructions, landscape interventions, parks, public spaces, green infrastructure, roads, and other urban/rural outdoor spaces.
9. Compiling and analysing data on regional, local landscapes and project sites with community data (geographical, ecological features, landforms, soils, vegetation, hydrology, visual characteristics, human-made structures, stakeholder mapping) for land use and development recommendations, feasibility studies and environmental impact analysis.
10. Drawing up reports, strategic plans, site plans, working drawings, specifications, and cost estimates for landscape development, showing location and details of proposals, including ground modelling, structures, vegetation, and access.

11. Writing specifications and contract documents for use by builders and civil engineering contractors and calling tenders.
12. Making necessary contracts to ensure feasibility of projects regarding style, cost, timing, and compliance with regulations.
13. Identifying and finding best solutions for problems regarding function and quality of outdoor environments and making necessary designs, drawings, and plans.

3.2 The context of their contributions and the actual needs of society

In landscape conservation, management, and development, landscape architects must not only integrate specialist knowledge from a wide range of disciplines, but also the interests of the public. Society at large has a great concern for quality of life, safety, and functionality of rural and urban areas, and for biological and landscape diversity. Europe policies form a basis for a common strategy to improve conditions for people and their environment. These policies are implemented by national and regional laws and programmes. The European Landscape Convention (ELC, article 3) aims to promote landscape protection, management, and planning, and to organise European co-operation on landscape issues. It is by these activities that landscape architects, in a critical way, consider the implementation of policies aimed at high quality of life and high environmental quality. Important policies include the European Landscape Convention, and policies referring to cultural heritage, urban and rural development, climate change, biodiversity, soil protection, water management and flood risk prevention, and to all policy regarding sustainable development. This variety of subjects calls for integrated and, at the same time, critical approaches to teaching, learning, and research. Examples of important policies and programmes that have a direct link to territorial development and landscape architecture are included in the box below.

Knowledge, skills, and competencies arm the landscape architects to provide solutions to ever changing demands. In part these demands are predicated by individual member state priorities but, increasingly, common themes merge in the provision of sustainable landscapes for communities.

The needs of society are met by landscape architects' responses include the following tasks:

a) Integral Planning and designing Green Infrastructure that provides Ecosystem Services for urban, peri-urban and rural landscapes.
b) Integral planning and designing of urban open space that provides safe, healthy, inclusive environments for people.
c) Integral planning and designing of landscapes for reducing flood risks, improving climate resilience and biodiversity.
d) Making plans and designs for the conservation and sustainable development of heritage sites and landscapes with heritage value, such as cultural landscapes, UNESCO/ICOMOS protected areas and sites and modern heritage.
e) Making plans for productive landscapes that provide ecosystem services, fulfil the aims of the new Common Agriculture Policy and foster sustainable development of food production and energy.
f) Empowerment of communities by co-creation and democratic design of environments in order to provide in inclusive public spaces and other landscapes.

4. The demographics of the profession and higher education

This overview of the profession of landscape architecture in Europe is based on the survey on the "Professional recognition in IFLA Europe countries: Problems and opportunities at national level" carried out by IFLA Europe. The

data were collected during the period from July 2020 till March 2021 and 25 national organisations who are member of IFLA Europe sent their answers.

From the countries where the profession is not regulated these were Belgium, Denmark, Spain, Portugal, Greece, Sweden, Croatia, Romania, Finland, Norway, Lithuania, Latvia, and Poland. From the countries where the profession is regulated: Germany, Italy, Hungary, Czech Republic, Luxemburg, France, Slovenia, Israel, Turkey, Estonia, Austria, the Netherlands.

[After the conclusions of the PRA survey are finalised, table 1 will be adapted and completed]

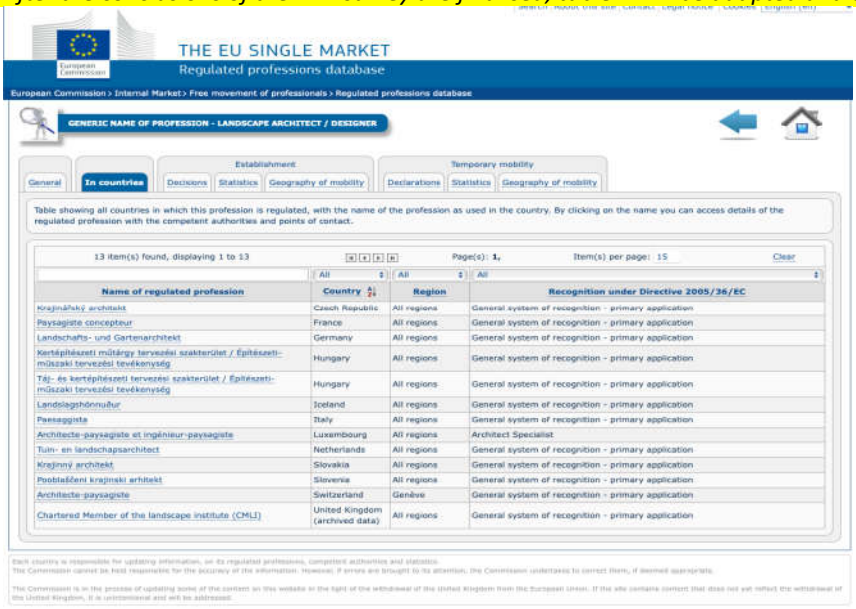

Figure 5. Overview of countries where landscape architecture is a regulated profession. Source:

Table 1. Overview of aspects of landscape architecture profession and education

Country	Regulation	Type of recognition	Number of LA's	Number of LA HEIs & main types of faculties	xx	Xx
Austria						
Belgium						
Bulgaria						
Croatia						
Cyprus						
Czech Republic						
Denmark						
Estonia						
Finland						
France						
Germany						
Greece						
Hungary						
Ireland						
Italy						
Latvia						
Lithuania						
Luxembourg						
Malta						
Netherlands						
Poland						
Portugal						
Romania						
Slovak Republic						
Slovenia						
Spain						
Sweden						

[Conclusions to be added on the basis of information by IFLA Europe]

4.2 Problems that landscape architects encounter in their work across and in EU countries

[Here the conclusions of the PRA-survey will be added after May 7, 2021]

5. The shape of the common training framework

5.1 An equivalence of standards of practice amongst the EU member states

The frameworks of ECLAS and IFLA Europe define the key elements of the standards according to the principles of the 1999 Bologna process:

- Defines successful graduation of 4 years as minimum training period concluded by a master degree or equivalent qualification (EQF level 7); in combination with of followed by a professional practice period (approximately 2 years) with an approved exit qualification/certificate by the national organisation responsible for this.
- Includes expectations for education and training in landscape architecture to follow the ECLAS/IFLA Europe Guidance that identifies the competences required to plan, design, and manage sustainable landscapes of various scales.
- Requires landscape architects to be included in a professional register (if available) in their home country and to maintain their competence and knowledge base through participation in Continuous Professional Development activities.

5.2 The expected base of knowledge, skills, and competences

Throughout training and education, the objective is to develop the knowledge, skills, competence, attitudes, and behaviours consistent with a master level in landscape architecture. This is the equivalence of EFQ level 7.

The key elements of the programme are based on the existing framework (IFLA Europe, ECLAS 2010) and updated during a collaborative process in 2021.

These include core competences, subject-specific competences, generic competences. The generic ones comprise transversal, instrumental, interpersonal, and systemic competences.

Core competences

Core competences of landscape architecture centre on the process of intervention in landscapes to create new or revitalised places, by means of landscape planning, design, and management, as well as by project implementation. Two interdependent core competences of landscape architecture (ECLAS, 2010) are:

- Knowledge, skills and understanding of planning, design, and management, to create new or conserve existing landscape situations, tightly integrated with an
- holistic knowledge and understanding of the nature of landscape and the ways in which it is perceived in time and space, and the pressures and driving forces to which landscapes are subjected.

Subject specific competences

[The subject specific competences are renamed in order to make the contribution of LA more clear, the relation with the IFLA Europe and ECLAS guidance ones can be found in Appendix 1]

The subject specific competences are:
A1 Carrying out research for, on and through design and participatory action research
G1 Analysing landscape systems, processes, patterns with their characteristics, meaning and challenges

B1 Designing aesthetic, functional and meaningful landscapes

B2 Developing strategies, scenarios and visions for sustainable landscapes
B3 Developing strategic, tactical and operational landscape management plans

C1 Creating and developing policies for sustainable urban open spaces and systems
C2 Conserving and developing cultural and heritage landscapes
C3 Conservation and management of parks and gardens
C4 Planning and design for infrastructure projects taking into account their landscape impacts

D1 Implementing landscape designs by hard landscaping and planting
D2 Restoring habitats and vegetation establishment
E1 Applying of Geodesign, Geo Information Systems and ICT in landscape architecture
F1 Acting as an professional landscape architect: entrepreneurship and ethics.
I-1 Organising participation and co-creating inclusive, democratic landscapes.
I-2 Including the perception, values and interaction of individuals, social groups and society as a whole with their landscapes.
I-3 Creating productive landscapes with sustainable food production and renewable energy.

These subject specific competences are elaborated in the ECLAS/IFLA Europe guidance reports *[updated version, this calls for an update of the existing documents].*

[DISCUSSION: Specialisations or focus of programmes?? We could tell which competences should be fully mastered by all and which competences can be mastered at a lower level, while some schools may have a focus on these and excel in that field]

Generic competences: transversal, instrumental, interpersonal and systemic

The transversal competences of landscape architects are: systems thinking, anticipatory competence, normative competence, strategic competence, collaboration competence, critical thinking, self-awareness, and integral problem-solving. The content of these competences can be seen in the table below.

Table 2. Transversal competences for landscape architecture	
Systems thinking competency:	the abilities to recognize and understand relationships; to analyse complex systems; to think of how systems are embedded within different domains and different scales; and to deal with uncertainty.
Anticipatory competency:	the abilities to understand and evaluate multiple futures – possible, probable, and desirable; to create one's own visions for the future; to apply the precautionary principle; to assess the consequences of actions; and to deal with risks and changes.
Normative competency:	the abilities to understand and reflect on the norms and values that underlie one's actions; and to negotiate sustainability values, principles, goals, and targets, in a context of conflicts of interests and trade-offs, uncertain knowledge and contradictions.
Strategic competency	: the abilities to collectively develop and implement innovative actions that further sustainability at the local level and further afield.
Collaboration competency:	the abilities to learn from others; to understand and respect the needs, perspectives, and actions of others (empathy); to understand, relate to and be sensitive to others (empathic leadership); to deal with conflicts in a group; and to facilitate collaborative and participatory problem solving.
Critical thinking competency:	the ability to question norms, practices, and opinions; to reflect on own one's values, perceptions, and actions; and to take a position in the sustainability discourse.
Self-awareness competency:	the ability to reflect on one's own role in the local community and (global) society; to continually evaluate and further motivate one's actions; and to deal with one's feelings and desires.
Integrated problem-solving competency:	the overarching ability to apply different problem-solving frameworks to complex sustainability problems and develop viable, inclusive, and equitable solution options that promote sustainable development, integrating the abovementioned competences.

Instrumental competences

Instrumental competences are capacity for organisation and planning; grounding in basic knowledge of the profession: Spatial (3D) thinking; Ability to take the dimension of time into account; visual, oral and written communication; knowledge of a second language; ability to explore, organise and support participatory processes and co-creation; ability to work with digital data, digital tools such as virtual representations; understand the possibilities of Artificial Intelligence; knowledge of technology in interaction with nature or led/driven by nature; ability to apply Nature Based Solutions; and drawing and visual representation skills.

Interpersonal competences

The interpersonal competences are ability to accept criticism and to take it into account; ability to work in an interdisciplinary team; ability to communicate with experts in other fields; ability to work in an international context; ability to work with communities and stakeholders; understanding of natural diversity; and understanding and appreciation of physical, psychological requirements and desires of an diverse multi-/intercultural society.

Systemic competences

The systemic competences are: capacity for applying knowledge in practice; research skills; capacity to adapt in new situation; capacity to generate new ideas; ability to work autonomously; project design and management; initiative and entrepreneurial spirit; concern for quality; will to succeed; capacity of argumentation, abstraction, project management, to set priorities; and ability to act as a critical and committed citizen.

Level and duration of landscape architecture education

EQF level

The level of competence is in accordance with level 7 of the European Qualification Framework. This entails that the qualified landscape architect:

- Explores and defines the context him-/herself and can support others in this.
- Defines problems fields and assignments, and advises commissioners or group of stakeholders in defining these.
- Studies and works as professionals seeking feedback from peers and experts.
- Has an excellent overview of the professional field and can define their position in it.
- Innovates methods and approaches of the discipline, including research and entrepreneurial competences.

To acquire all competences needed to be a landscape architect a master degree in landscape architecture (MA in landscape architecture, MSc Landscape Architecture, MLA) is thought to be the entrance level for professional recognition as a landscape architect in Europe. According to the developments in different countries the length of the courses could be temporarily shorter. First cycle programs should be at least 180 ECTS to acquire the basic competences (defined by knowledge, skills and attitude) for landscape architecture. The second (masters) cycle should be at least 120 ECTS. Part of the competences may be acquired by doing a trainee- ship or year-out at a landscape office. After successful graduation of a master a two year training period is required to be recognized as a landscape architect.

Graduates of first cycle programmes in neighbouring disciplines - such as architecture, ecology, engineering, urban and regional planning, geography or biology – who already have acquired a range of competences that are relevant for landscape architecture can qualify themselves by completing a conversion master. It is worth noting, however, that there are different interpretations of the term ‘conversion master’. What is generally understood as a conversion master in continental Europe involves students with bachelor degrees from related disciplines being assigned a personal menu of bachelor level course units to be taken during the course of a ‘conversion year’. This is intended to provide them with the necessary background to enter what is, in fact, a consecutive master programme alongside students who have completed the associated bachelor programme in landscape architecture. The alternative interpretation, which is the form familiar in the English speaking world, involves a complete and independent master programme designed exclusively for students from related disciplines. As such it covers the aspects of landscape architecture which will not have been covered in their different bachelor

programmes, and would therefore be unsuitable for students who already have a landscape architecture bachelor. In this form of a conversion master, significance is placed on achieving an, as far as possible, balanced cohort of students from a range of different disciplines, who are therefore in a position to support each other in the fields where they lack background knowledge.

Candidates who have acquired competences outside a formal education system, can be assessed by examination committees which are competent to provide access to national registers and/or chambers for landscape architecture.

5.3 An expected code of ethics and professional conduct

The code of ethics and professional conduct ensures that professionals conduct themselves in a manner that does not bring into disrepute the discipline and the profession of landscape architecture. They shall seek to establish the highest standards on landscape professions, and seeks to protect, conserve, and enhance the natural and built environment for the benefit of the public and sustainable development within the framework of the Sustainability Development Goals. They shall value integrity, impartiality and respect for persons and strive for landscape justice, inclusive landscapes, and landscape democracy. Taking account of their obligations under the law, they shall hold the interest and welfare of clients and users of the landscapes alike.

The principles for this code are defined in the IFLA World Code of Ethics (IFLA World, 2014) and the General Assembly of IFLA Europe approved the European Code of Ethics and Professional Conduct (further referred to as 'the Code'). The national associations and chambers where landscape architects are registered defined their national codes.

5.3.1 Conduct, values, ethical standards.

IFLA EUROPE (2014) places a strong emphasis on the integrity, competence, and professionalism of its members, and therefore encourages the member associations to adopt this 'Code of Ethics and Professional Conduct' and requires all IFLA EUROPE members to conduct themselves in accordance with this Code within their professional and business life.

This Code f Ethics and Professional Conduct should be considered central to the professional life of any IFLA EUROPE landscape professional not only as a source of ethical guidance, but also as a common-sense indicator to principles of good practice. This Code lays down standards of professional conduct and practice expected of all landscape professionals of IFLA EUROPE, whatever their category of membership. Members are expected to be guided in their professional conduct and work as much by the spirit of the Code as by its express terms. The purpose of the Code is to promote the highest professional standards, rather than constitute a basis for undertaking disciplinary actions.

The code contains 32 standards for (1) Professional Attitudes, (2) Professional Competences and (3) the Landscape and the Environment.
[DISCUSSION: should we include all the 32 standards here?]

The last section contains the following codes:
Standard 30. To recognize and protect the cultural and historical context and the ecosystem to which the landscape belongs when generating design, planning and management proposals.
Standard 31. To develop, use and specify materials, products and processes which exemplify the principles of sustainable management and landscape regeneration.
Standard 32. To advocate values that support human health, environmental protection, and biodiversity.

5.3.2 Compliance to the code of conduct

[Here something on the mechanism of compliance by IFLA Europe members, we could mention a method of internet based compliance in which landscape architects can show that they comply with the code]

5. Discussion

In line with three key conditions of the PQD that need to be fulfilled for being subject to a CTF, landscape architects:
a) can be identified as a regulated profession and/or a profession whose training is regulated in at least one third (33%) of the EU member states,
b) are not already subject to automatic recognition as a sectorial profession nor to another level CTF
c) would possibly have their professional mobility enhanced with the adoption of a CTF

The PQD has been modified an amended since 2005. Within the trend of de-regulation the EU has set further conditions for regulated professions, as is outlined in .

The proposed CTF builds on EU guidance [12] for a 'bottom up' approach in which professional organisations or competent authorities from at least one third of the Member States may submit suggestions for a framework to the Commission. Such an approach is meant to ensure that proposals respond to real needs felt by the profession and benefit from the in-depth knowledge and understanding of the area concerned. At the time of writing xx of IFLA Europe's affiliated national societies in the EU highlight their country's ability to meet the federation's standards for recognition, the expected level of knowledge, skill and competency, and the code of conduct. *[DISCUSSION: can we state this or should be tune this down?]*

Amongst these xx Member States 9 are also able to meet the requirements of the proposed CTF in that the profession and/or training is regulated, and their national qualification frameworks are formally linked (referenced) to the European Qualifications Framework for lifelong learning, a further EU Commission requirement for submission of the framework.

In progressing a submission the opportunity arises for the EU Commission to adopt a CTF by "delegated act" (a delegation granted in the text of an EU law such as the Professional Qualifications Directive that allows consideration of a suggested framework by delegated authorities within the Commission) followed by an implementing act to list the national professional qualifications and national titles that benefit from automatic recognition under the adopted CTF. However, whilst landscape architecture has established key building blocks for the mutual recognition of its specialist practitioners' qualifications a current 'a priori' challenge across the EU is determining the 'proportionality' of the professional regulatory frameworks held within the individual member states which may have been built up and/or modified over many years (EU, 2018). The uneven scrutiny of the regulation of professions across the EU has been deemed to have a negative impact on the provision of services and the mobility of professionals in a single EU market - the need for a mutual evaluation exercise facilitated by the Commission was identified within EC Directive 2013/55/EC to ensure greater transparency and justification [16]. Within the exercise Member States provide a list of their regulated professions, the activities reserved for them and a justification of the need for regulation. The subsequent 2018 Proportionality Directive supplements provisions within the 2013 Directive and now requires Member States to review existing regulations of professions or when proposing new ones.

6. Conclusions

Through the engagement of professional organisations of xx EU Member States have been identified as candidate signatories to a CTF for Landscape Architects. Achieving recognition is an ongoing project in part dictated by external timelines and jurisdictions but crucially also by professional organisations and competent authorities who recognise the effect the PQD brings to harmonising the education and training that enhances the development of

sustainable landscapes that support well-being, climate resilience, and. This supports the free mobility of landscape architecture professionals across country borders.
Whilst CTFs do not replace national programmes unless a Member State decides otherwise the updated guidelines by ECLAS and IFLA Europe will provide a solid base for recognition of programmes and qualifications. Pending progress with achieving proportionate professional regulation and further guidance from the EU Commission the onus is on national societies and competent authorities to capitalise on opportunities to submit suggestions for a CTF as and when they arise.

In turn the framework supports and contributes to the Directive's enabling goals for increasing professional mobility, supporting the implementation of sustainability goals and EU-landscape policies. It also can help to ensure a more equitable distribution of skills and expertise across the Member States.

6.1 Outlook: next steps

Proposing the Key Changes to ECLAS GA and IFLA School Recognition panel (or IFLA Europe Education).
Wider consultation of neighouring disciplines, stakeholders?
Updating ECLAS Guidance and the IFLA-E's criteria for recognition of programmes.
Further communication with DG GROW the arguments for why the EU should adopt a CTF for landscape architecture – why the profession is important! This is where the Landscape Convention could come in. The need to collect arguments and describe the central importance of the profession, and thus the need for professional regulation of landscape architecture could be the conclusion: there is no need to devise a high quality education if anyone can come along and claim to do the same job without a professional qualification!

References

[PM Still to be updated and edited]

Corbari, V. 2019. **Landscape architecture education in Europe: Searching for common ground**. In: Proceedings ECLAS Uniscape Conference. p263-265

De Haan, G. 2010. The development of ESD-related competencies in supportive institutional frameworks. **International Review of Education**, Vol. 56, No. 2, pp. 315–328

De Kraker, J., Lansu, A. and van dam Mieras, R., 2009. '**Competences and competence- based learning for sustainable development**', in de Kraker, J., Lansu, A. and van dam Mieras, R. (eds), Crossing Boundaries. Innovative Learning for Sustainable Development. Frankfurt a.M.: VAS, 103–14

ECLAS (Bruns, D. et al). 2010. **ECLAS Guidance on landscape architecture education.** The Tuning Project, ECLAS - LE:NOTRE

EFLA&ECLAS. 2012. **Birmingham Declaration on the Minimum Requirements for European Landscape Architecture Studies to Qualify for Professional Recognition by EFLA and ECLAS**

EHEA. 2020. **Rome Ministerial Communique on Higher Education, of the European Higher Education Area**, November 2020, accessed at: http://ehea.info/Upload/Rome_Ministerial_Communique.pdf

EULand-21 (Bell, S., ed). 2017. **Guidelines on Revising and Developing Study Programmes in Landscape Architecture', internal publication EULAND21**: https://ec.europa.eu/programmes/erasmus-plus/projects/eplus-project-details/#project/2016-1-LT01-KA203-023219

EULand-21 (Stauskis, G. & Vries, J. de., ed). 2018. **Output 02 - Peer learning methods on the development of a curriculum.**

European Union, 2005. **Directive 2005/36/EC of the European Parliament and of the Council of 7 September 2005 on the recognition of professional qualifications**.
https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32005L0036 [online 23.5.2018]

European Union, 2018 **Directive (EU) 2018/ of the European Parliament and of the Council of 28 June 2018 on a proportionality test before adoption of new regulation of professions** (europa.eu). https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018L0958&from=EN

Fetzer, E. 2021, pm, in Bruns…..

IFLA, 2008. **IFLA Charter for Landscape Architecture Education**. Addenda to IFLA Charter for Landscape Architectural Education When Implemented In the European Region. 2008. www.iflaonline.org [online 6.4.2018.]

IFLA, 2012**. IFLA-UNESCO Charter for Landscape Architecture Education**. www.iflaonline.org [online 6.4.2018.]

Rieckmann, M. 2012. Future-oriented higher education: Which key competencies should be fostered through university teaching and learning? **Futures**, Vol. 44, No. 2, pp. 127–135

Triboi, R. 2021. Impact of European Policies on the competences of landscape architects. Internal document InnoLAND project.

UNESCO, 2017. **Education for Sustainable Development Goals: Learning Objectives**. UNESCO Education Department. Paris. ISBN 978-92-3-100209-0

Wiek, A., Withycombe, L., Redman, C.L. 2011. **Key competencies in sustainability: a reference framework for academic program development**. Sustainability Science, Vol. 6, No. 2, pp. 203–218

Wiek, A., Bernstein, M., Foley, R., Cohen, M., Forrest, N., Kuzdas, C., Kay, B., & Withycombe Keeler, L. (2015). Operationalising competencies in higher education for sustainable development. In: Barth, M., Michelsen, G., Rieckmann, M., Thomas, I. (Eds.) (2015). **Handbook of Higher Education for Sustainable Development**. Routledge, London. pp. 241-260

Websites

The Bologna process and the European higher education area:
https://ec.europa.eu/education/policies/higher-education/ bologna-process-and-european-higher-education-area_en

European Qualification Framework:
http://ecahe.eu/w/index.php/Framework_for_Qualifications_of_the_European_Higher_Education_Area, consulted on April 24, 2021.

UN Sustainable Development Goals
https://sdgs.un.org/goals, The United Nations Sustainable Development Goals, consulted on the 7th of December 2020.

UNESCO education for sustainability:
https://www.unesco.de/sites/default/files/2018-08/unesco_education_for_sustainable_development_goals.pdf

http://www.ehea.info/

https://ec.europa.eu/jrc/en/digcomp/digital-competence-framework

https://ec.europa.eu/jrc/en/entrecomp

IFLA world code of ethics:
http://iali.or.id/jabar/wp-content/uploads/2014/02/IFLACodeofEthics.pdf

IFLA Europe, 2018 Code of ethics and professional conduct
(https://www.iflaeurope.eu/assets/docs/150218_IFLA_Europe_Code_of_Ethics_CBr.pdf, 2014)

IFLA EUROPE INTERNATIONAL FEDERATION OF LANDSCAPE ARCHITECTS	ECLAS IFLA EUROPE INTERNATIONAL FEDERATION OF LANDSCAPE ARCHITECTS	ECLAS	INNOLAND

IFLA Europe Areas of knowledge for recognition	**Areas of knowledge, skills and understanding Birmingham&Warsaw documents**	**Blocks of competences ECLAS 2010 / EULAND21 / new InnoLAND**	**Proposal of subject specific competences in the CTF**
Cultural and natural systems	1.physical landscape as well as the natural systems and processes	G1 Landscape architecture foundation, background and supporting competences	G1 Analysing landscape systems, processes, patterns with their characteristics, meaning and challenges
Theory and methodologies in design and planning		A1 Research, Theory and Methodology in Landscape Architecture	A1 Carrying out research for, on and through design and participatory action research
Landscape design, management, planning and science at all scales and applications Public policy and regulation	5. The legal, political, institutional and policy frameworks 6. Approaches, methods and techniques for representing and analysing the landscape 8. Practical planning, management and design principles and skills for landscapes	B1 Landscape Design	B1 Designing aesthetic, functional and meaningful landscapes B2 Developing strategies, scenarios and visions for sustainable landscapes B3 Developing strategic, tactical and operational landscape management plans
		B2 Landscape Planning	
		B3 Landscape Management	
Landscape design, management, planning and science at all scales and applications	3. development, morphology and function of urban settlements, in particular related open space structures	C1 Urban Open Space Planning (and Policy)	C1 Creating and developing policies for sustainable urban open spaces and systems
	2. typical patterns of vernacular cultural landscapes	C2 Interpretation and Conservation/Management of Cultural Landscapes	C2 Conserving and developing cultural and heritage landscapes
	7. historic and contemporary parks, gardens, planned and designed landscapes, landscape	C3 Conservation/ Management of Parks and Gardens	C3 Conservation and management of parks and gardens
		C4 Planning/Design for Infrastructure Projects (and Landscape Impacts)	C4 Planning and design for infrastructure projects taking into account their landscape impacts

IFLA EUROPE INTERNATIONAL FEDERATION OF LANDSCAPE ARCHITECTS	ECLAS IFLA EUROPE INTERNATIONAL FEDERATION OF LANDSCAPE ARCHITECTS	ECLAS	INNOLAND

IFLA Europe Areas of knowledge for recognition	**Areas of knowledge, skills and understanding Birmingham&Warsaw documents**	**Blocks of competences ECLAS 2010 / EULAND21 / new InnoLAND**	**Proposal of subject specific competences in the CTF**
Site engineering including materials, methods, techno-logies, construction docs	9. The materials, both living and inert, and techniques relevant for landscape projects	D1 Materials and Construction Techniques	D1 Implementing landscape designs by hard landscaping and **planting**
Plant material and horticultural applications		D2 Vegetation Establishment and Plant Materials	D2 Restoring habitats and vegetation establishment
Information technology and computer applications		E1 Information Technology in Landscape Architecture	E1 Applying of Geodesign, Geo Information Systems and ICT in landscape architecture
Ethics and values related to the profession	10. The professional practice of landscape architecture, including the development & role of the professions, professional ethics	F1 Professional Practice of Landscape Architecture & Entrepreneurship	F1 Acting as an professional landscape architect: entrepreneurship and ethics.
Communications and public facilitation		INNO-1 Landscape Democracy	I-1 Organising participation and co-creating inclusive, democratic landscapes.
	4. perception of individuals, social groups and society as a whole and how they value and interact with their landscapes	INNO-2 People in space	I-2 Including the perception, values and interaction of individuals, social groups and society as a whole with their landscapes.
		INNO-3 Productive landscapes	I-3 Creating productive landscapes with sustainable food production and renewable energy.
Ethics and values related to the profession		INNO-4 Landscape ethics and sustainability	Goes to the professional aspect and is further included in the transversal competences.
History of cultural form and an understanding of design as a social art			Is related to B1