

REVIEW PAPER

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BOJAN BIJELIĆ¹ TONI VOJNESKI² EVICA JOVANOVIĆ³

^{1,3}University of Niš, Faculty of Occupational Safety, Serbia ² State Labor Inspectorate, North Macedonia

> ¹bojan.bijelic@znrfak.ni.ac.rs ²toni.vojneski@dit.gov.mk ³evica.jovanovic@znrfak.ni.ac.rs

CERTIFICATES FOR OCCUPATIONAL SAFETY AND HEALTH PROFESSIONALS

Abstract: Professional certification in Occupational Safety and Health (OSH) serves as a critical mechanism for ensuring that practitioners possess the necessary competencies, knowledge, and skills to manage workplace safety and health risks effectively. While certification frameworks are typically regulated at the national level, global efforts have been made to harmonize standards and promote cross-border recognition of professional credentials. This paper reviews the contributions of key international organizations such as INSHPO and ENSHPO, in standardizing certification criteria and provides an analysis of OSH certification in the United States, the United Kingdom, the European Union, Canada, Australia, and Serbia.

Keywords: occupational safety and health; professional certificates; continual professional development.

ORCID iDs:	Bojan Bijelić	https://orcid.org/0000-0001-7662-9217
	Toni Vojneski	⊙ N/A
	Evica Jovanović	https://orcid.org/0000-0003-0359-7474

INTRODUCTION

Professional certification constitutes a structured and standardized process by which individuals are formally recognized as possessing the requisite competencies, knowledge, and practical skills to perform duties within a specific professional domain. This validation is conducted by an independent certifying body, ensuring objectivity and adherence to predefined competency frameworks. Certification is widely utilized across numerous professional sectors, including medicine, architecture, engineering, finance, and notably, occupational safety and health (OSH).

Within the OSH field, professional certification plays a critical role in safeguarding the integrity and effectiveness of safety management systems. It serves as a key mechanism for ensuring that practitioners meet uniform standards of practice, which is crucial for preventing occupational injuries, illnesses, and fatalities.

Terminological variations exist globally concerning both the designation of the field itself and the professional titles assigned to individuals working within it. As such, we may encounter slight variations, for example, "occupational safety and health," "occupational health and safety," just "safety," or "safety and health at work," etc. Job titles in this field also vary significantly and may include terms such as "engineer", "professional", "technician", "practitioner", "officer", "adviser", or "manager" (Hale, Hudson, & Pryor, 2020).

In the context of the Republic of Serbia, legislative and institutional advancements related to OSH professional certification have been observed in recent years. However, systemic gaps and inconsistencies persist, indicating a need for further harmonization with

international best practices. This paper aims to analyze the current framework governing the certification of OSH professionals in Serbia and compare it with established models in other countries.

PROFESSIONAL CERTIFICATION IN OCCUPATIONAL SAFETY AND HEALTH

Professional certification in the OSH field is regulated at the national level, with each country establishing specific criteria that candidates must fulfill to obtain certification. These criteria typically encompass formal education, relevant professional experience, continuous professional development, and exams for assessing knowledge of national OSH legislation and regulatory frameworks.

In pursuit of harmonizing certification processes globally, international organizations have been established with the primary objective of addressing this challenge and promoting standardization in the field. The two most prominent organizations focused on developing unified frameworks for safety and health at work professionals' certification are the International Network of Safety and Health Professional Organisations - INSHPO and the European Network of Safety and Health Professional Organizations ENSHPO. INSHPO undertook the task of establishing a global framework for the occupational health and safety OHS profession, titled Occupational Health and Safety Professional Capability Framework: A Global Framework for Practice (Pryor, Hale, & Hudson, 2019). OHS Professional Capability Framework: A Global Framework for Practice was published with the main goal of clearly defining the role, functions, and

competencies of OHS professionals (INSHPO, 2017). On the other side, ENSHPO is more focused on a regional level, specifically the EU market (Hale, 2019). Both INSHPO and ENSHPO have a substantial number of members, with some organisations belonging to both networks. Members of INSHPO are the following professional associations: American Society of Safety Professionals - ASSP and Board of Certified Safety Professionals - BCSP from United States of America USA, Health and Safety Professionals Canada - HSPC and Board of Canadian Registered Safety Professionals - BCRSP from Canada, Australian Institute of Health and Safety - AIHS from Australia, New Zealand Institute of Safety Management - NZISM and New Zealand Safety Council - NZSC from New Zealand, Association of Occupational Health and Safety Specialists - AEPSAL from Spain, Korea Occupational Safety and Health Agency - KOSHA from South Korea, Singapore Institution of Safety Officers - SISO from Singapore, National Examination Board in Occupational Safety and Health - NEBOSH and Institution of Occupational Safety and Health - IOSH from United Kingdome UK, Institution of Occupational Safety and Health Management - IOSHM from Mauritius, while the following are associated member: Board of Global EHS Credentialing from USA, Health & Safety Association of New Zealand - HASANZ, and Royal Society for the Prevention of Accidents -ROSPA from UK.

Full members of ENSHPO are: Association of Occupational Health and Safety Specialists - AEPSAL from Spain, Italian Environment and Safety Association - AIAS from Italy, Umbrella Organization for Occupational Health and Safety Professionals -AM-PRO from Denmark, Safety Professionals Association - DPALV from Latvia, Cyprus Safety And Health Association - CYSHA from Cyprus, , Society of Safety Engineers - DVJ Ljubljana from Slovenia, European Society of Occupational Safety and Health -ESOSH from Ukraine, Institute for Risk Management, Occupational Health and Safety - IMRSS from Romania, Institution of Occupational Safety and Health - IOSH from UK and Ireland, Hungarian Occupational Safety and Health Academy - Association for Safety Culture Development - MMA from Hungary, Malta Occupational Safety & Health Practitioners Association - MOSHPA from Malta, National Irish Safety Organisation - NISO from Ireland, National Association of Occupational Health and Safety Service Workers - OSPSBHP from Poland, Portuguese Society of Occupational Safety and Hygiene - SPOSHO from Portugal, Royal Flemish Association for Prevention and Protection - PREBES from Belgium, Association for Safety, Health and Environmental Protection at Work - VDSI from Germany, and The Centre for Occupational Safety from Finland, as a professional member.

Serbia

Under the Occupational Safety Law that was in force in the Republic of Serbia until 2005, occupational safety duties could be performed by a worker with at least a higher education degree in occupational safety or another relevant higher education qualification, depending on the company's industry (Occupational Safety Law, 1998).

When the old Occupational Safety Law was replaced in 2005 by a new law, the name of the field was changed to "Safety and Health at Work". The Safety and Health at Work introduced the requirement to pass a professional exam in practical competence for performing safety and health at work duties, which represented small progress forward in certifying these professionals in Serbia. This law states that individuals designated by the employer as Safety and Health at Work Officers are required to have successfully passed the corresponding professional examination.

A few years later, the Decree on Occupational Safety and Health at Temporary or Mobile Construction Sites introduced two additional types of professional certification: the Safety and Health Coordinator during the execution phase, and the Safety and Health Coordinator during the design phase. For both roles, passing specialized professional exams was required. Interestingly, for the coordinators' professional exams, mandatory preparation was also introduced, although in a limited scope of only 40 classroom hours (Rulebook, 2015).

The most recent Safety and Health at Work Law, adopted in 2023, introduced further changes for professionals in this field. This law introduced new roles in the field of OSH in Serbia in the form of advisors and associates for safety and health at work, which essentially replaced the function of previous safety and health at work officers. For these two roles, there is a process of acquiring professional certificates. Individuals who want to work as either Safety and Health at Work Advisor or Associate must meet specific qualification criteria set by the Safety and Health at Work Law. To qualify for the Health and Safety at Work Advisor certificate in Serbia, candidates must (Safety and Health at Work Law, 2023):

- Hold a degree (at least 240 ECTS credits) in academic or applied studies in the educationalscientific field of technical-technological sciences and natural-mathematical sciences in the following areas: biological sciences, environmental protection sciences, physical sciences, physicchemical and chemical sciences, and
- Pass Health and Safety at Work Advisor exam.

To qualify for the Health and Safety at Work Associate certificate in Serbia (Safety and Health at Work Law, 2023), candidates must:

- Hold a degree (at least 180 ECTS credits) within the educational-scientific field of technicaltechnological sciences, natural-mathematical sciences, medical sciences, or social and humanistic sciences, and
- Pass Health and Safety at Work Associate exam.

For certificate renewal, Health and Safety at Work Law requires continuous professional development (Safety and Health at Work Law, 2023). However, this issue still needs to be further elaborated through secondary legislation.

The fundamental difference between an advisor and an associate lies in the specific branches of industry in which they are permitted to work. For example, employers in industries like construction, agriculture, forestry and fishing, mining, manufacturing, electricity, gas, steam and air conditioning supply (trade in electricity and gas via the gas pipeline network are excluded), water supply, wastewater management, waste disposal process control, wholesale trade, transport and storage and similar activities, and health and social care services must hire a Health and Safety at Work Advisor, while employers in other industries can hire either Advisor or Associate (Safety and Health at Work Law, 2023). Employers in health and social care services are granted a specific exception, allowing them to appoint an advisor with at least 240 ECTS credits from academic or applied studies in the field of medical sciences (Safety and Health at Work Law, 2023).

The following section will examine similar certificates in the OSH field from the USA, the UK, the EU, Canada, and Australia. Some certification programs, although originally designed as national qualifications, are recognized and accepted beyond their countries of origin, reflecting their broader relevance and credibility in the international context.

USA

The Certified Safety Professional - CSP is one of the most widely recognized and respected certifications in the world, regarded as a top professional credential in the field of occupational safety and health. This certificate is issued by the Board of Certified Safety Professionals - BCSP from the USA and is recognized far beyond the US borders, especially in Asia. Requirements for CSP are a minimum bachelor's diploma, 4 years of safety experience, some BCSP Qualified Credential like CRSP, NEBOSH diploma or similar, and passing the CSP exam. The Associate Safety Professional - ASP is another certificate issued by BSCP, on a lower level than CSP. Requirements for ASP are a bachelor's degree in any field or a college degree in safety, health, or environment, one year of safety experience, and passing of ASP exam.

For both certificates, there is a renewal process every five years by collecting enough points through attending conferences and seminars, becoming a member of professional organisations, taking safety-related courses, or by BCSPpro testing (BCSP, 2025).

UK

NEBOSH certificates are considered comparable to CSP certifications and are issued by the National Examination Board in Occupational Safety and Health, a leading global organization that awards qualifications in occupational safety, health, and environmental management. NEBOSH offers 21 different qualifications, categorized into four levels: Awards, Certificates, Diplomas, and Masters.

Awards and Certificates are entry-level qualifications, mainly representing an introduction to OHS, and serve as a stepping stone to some of the more advanced qualifications like NEBOSH's Diplomas and Masters. The International and National General Certificates in Occupational Health and Safety are among the most popular certificates issued by NEBOSH. The main difference between the two is that the National certificate is based on UK health and safety legislation, therefore intended for safety professionals working in the UK, while the International certificate is recognised globally, and intended for safety professionals working international companies. The International General Certificate in Occupational Health and Safety has been very popular among Serbian safety professionals in recent years.

Like many NEBOSH certifications, these do not have specific educational prerequisites. They typically involve approximately two weeks of training, followed by an examination. Upon successful completion, candidates are awarded a certificate that does not have an expiration date or require renewal. The only stated requirement is proficiency in the English language.

NEBOSH's Diplomas and Masters are among some of the most valued professional certifications in the world and are recognised by many professional associations like the Board of Certified Safety Professionals, Institution of Occupational Safety and Health (IOSH), etc.

Another significant type of certification comes from the Institution of Occupational Safety and Health (IOSH), a global organization in the field of OSH based in the United Kingdom. IOSH is one of the largest global organizations that brings together OSH professionals, with over 50,000 members from 130 countries worldwide (IOSH, n.d.). The organization offers two professional certifications: the IOSH Level 3 Certificate in Occupational Safety and Health Principles and Practice, which serves as the entry-level qualification, and the IOSH Level 6 Diploma in Occupational Safety and Health Leadership and Management, which is intended for more experienced OSH professionals. Both certificates issued by IOSH are recognized globally. The IOSH certificate has no formal prerequisites, just to attend an IOSH level 3 course and pass an exam, while for the IOSH diploma, it is required to have prior qualification in OSH, like an IOSH or NEBOSH certificate, and work experience in OSH.

EU

In the European Union, efforts have been underway since 2001 to unify the certification process for health and safety at work professionals across all member states. For this purpose, the European Network of

Safety and Health Professional Organizations ENSHPO was established within the European Agency for Health and Safety at Work EU-OSHA. There are two certificates offered within this framework: European Occupational Safety and Health Manager EurOSHM and European Occupational Safety and Health Technician EurOSHT. To get the EurOSHM certificate individual must meet the following requirements (ENSHPO, 2013a):

- Bachelor's or equivalent as a minimum;
- OHS training courses (250 h);
- OHS functions experience of 2 years and experience after OHS training; and
- Membership in a national association that is part of ENSHPO.

The EurOSHT certificate requirements are the following (ENSHPO, 2013b):

- Secondary education as a minimum;
- OHS training courses (120 h);
- OHS function experience of 4 years for secondary education and 2 years for higher education, and experience after OHS training; and
- Membership in a national association that is part of ENSHPO or employment in a company that is a member of a national association.

The recertification process of ENSHPO requires certified holders to meet Continuing Professional Development goals in three years.

Australia

The Australian Institute of Health & Safety - AIHS is responsible for the certification of health and safety professionals in Australia. Since AIHS is a member of INSHPO, its certification process is in line with INSHPO's OHS Professional Capability Framework. A health and safety professional in Australia can get one of the following three certificates: Certified OHS Practitioner, with the following requirements: diploma or advanced diploma of OHS and 3 years as OHS practitioner; Certified OHS Professional with the following requirements: Bachelor of OHS, graduate diploma of OHS or master of OHS and 3 years as OHS professional; and Certified Chartered OHS Professional with the following requirements: master of OHS and 10 senior OHS role. Certified Practitioners/Professionals have to pass a capability assessment by using an online self-assessment tool, so there is no real exam. AIHS requires that all OHS roles complete Continuing Professional Development in three years for recertification.

Canada

The Board of Canadian Registered Safety Professionals - BCRSP is an organisation responsible for the certification of health and safety professionals in Canada. Two types of certificates can be acquired from BCRSP: Canadian Registered Safety Professional – CRSP with the following requirements: minimum

bachelor with sufficient professional diploma development in occupational health and safety or a 2year diploma in occupational health and safety, 4 years of experience in occupational health and safety roles and passed CSRP exam; and Canadian Registered Safety Technician - CRST with the following requirements: 1-year occupational health and safety certificate or 2-years in any discipline, or a 2-year diploma in occupational health and safety, 1-year work experience with at least 35% OHS duties, candidates with 2-year OHS diploma are not required to have work experience, candidates with non-OHS diplomas must demonstrate professional development in OHS, and passing CRST exam. Recertification is done every 5 years with mandatory participation in a professional development program.

CONCLUSION

Compared to other countries, OSH professionals in Serbia are not required to have work experience before they can get an Advisor or Associate for Safety and Health at Work certificate. Instead, candidates must satisfy formal educational criteria and successfully pass the corresponding certification examination. Although this constitutes progress relative to previous regulatory conditions, it is anticipated that Serbia will progressively seek alignment with the ENSHPO standards concerning professional roles within the OSH system. A notable advancement is the introduction of mandatory continuous professional development for **OSH** practitioners. However, the regulatory mechanisms governing this requirement remain to be fully defined through subsidiary legislation. Furthermore, the practical implementation and efficacy of continuous professional development programs warrant further observation.

In jurisdictions reviewed, a significant degree of harmonization exists regarding occupational titles within the OSH domain. Typically, certification eligibility is contingent upon the acquisition of a defined period of professional experience. Continuous education programs exhibit substantial consistency, with variability primarily observed in the recertification intervals, ranging from three to five years across different countries. An unexpected observation pertains to the NEBOSH certification, a highly regarded international credential, which does not impose formal educational prerequisites. Instead, emphasis is placed on training completion and proficiency in the English language.

The regulatory framework in Serbia inadequately addresses the roles of individuals with lower levels of formal qualification. Specifically, individuals lacking tertiary education are precluded from obtaining any form of certification in the OSH field, indicating a potential area for policy development to ensure inclusivity and professional development pathways for a broader range of practitioners.

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