



## 1. Rationale and justification

Health, safety and well-being at work have gained high priority in a growing number of countries around the world in recent years. Nonetheless over 2.78 million workers die every year<sup>1</sup> and hundreds of millions are injured or fall ill from work-related causes. In addition to these overwhelming human losses, the lack of adequate prevention also costs an estimated 4% of GDP, on average. For decades, the response of competent national authorities for occupational health and safety (OH&S) has primarily focused on the regulation of risks through legislation and inspection, both necessary but insufficient to address the diversity of OH&S challenges successfully. Beyond regulation, it is well-understood that expert knowledge and information on risks and preventive measures are key drivers of prevention effectiveness.

That primary focus has now extended from regulating business practices to ensuring the availability and qualifications of experts, professionals and technicians who are supporting employers and workers making prevention a daily reality in workplaces. Experts such as safety engineers, occupational physicians, toxicologists, ergonomists, industrial hygienists and others are required to collaborate in providing quality OH&S services. However, international organizations and experts around the world are raising concerns about critical shortages of expertise in OH&S that are hindering OH&S policies, systems and programmes from achieving prevention in practice.

Corollary to this phenomenon, and key issue at stake, is the mistaken belief that academic institutions are mechanically adjusting their programme offer in order to supply the changing societal needs and demand for OH&S expert knowledge and services. Without such adjustment, the supply of competencies and skills may no longer meet the national requirements in health and safety at work. In fact, the role education of OH&S personnel play in the overall functioning of a national OH&S system is too often underestimated and thus, planning national OH&S workforce development is overlooked while attention tends to be given to more pressing issues. The side effect is the inevitable erosion of operational capacity to prevent occupational injuries and diseases.

Past experiences in tackling this issue have predominantly consisted of making inventories of educational programmes (supply) without thoroughly assessing country needs and demand for key competencies in OH&S.<sup>2</sup> Indeed, most references to shortages are typically made without providing evidence-based data that would allow to engage informed policy dialogue in search of suitable, affordable and sustainable solutions. Nonetheless, some countries have taken up the challenge of undertaking a comprehensive analysis of their OH&S workforce with the view of supplying the labour market with an adequate number of qualified professionals.

Institutions and workplaces need qualified professionals. This project aims specifically to support countries wishing to engage voluntarily into an OH&S workforce planning and development process as a first practical step to ensure the availability of professionals having the right set of competencies and skills to tackle risks at work in the years to come.

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<sup>1</sup> New global estimates released in September 2017.

<sup>2</sup> It is well understood that offer and supply are different concepts just as needs and demands are. The project will notably aim at addressing these differences.

## 2. Project strategy

Improving health and safety at work is effort-driven and requires a strong engagement into the development, strengthening and integration of the key elements of the national OH&S system. It also requires an inclusive governance framework to articulate a combination of relevant policies and programmes covering health, labour, social security and other aspects, as well as the mobilization of experts from relevant disciplines to deliver OH&S services to workplaces. Expert knowledge and intervention capacity are needed to solve OH&S problems at the source.

The attention of international organizations and policy-makers is increasingly brought on shortages of qualified OH&S professionals and the urgency to invest in developing capacity in OH&S, both from a quantitative and qualitative perspectives. Important gaps are known to undermine the delivery of OH&S services to workplaces. They translate in terms of the limited percentage of workplaces and workers covered by prevention services; incomplete scope of services effectively performed; and shortages of qualified professionals limiting both the availability of expertise and the content of services required to cover the multidisciplinary nature of risks at work.<sup>3</sup>

There clearly is a need to support and prepare the current and forthcoming generations of OH&S practitioners, generalists and specialists, from complementary disciplines who will contribute improving health and safety in workplaces in the coming decades. However, given the scarcity of resources, it is paramount for countries to carefully plan and organize OH&S workforce development by building on the current situation while also engaging into a prospective thinking exercise to determine the required competencies and skills that will be needed in view of national development plans, the changing world of work and foreseeable adjustments to the labour market.

Not surprisingly, engaging a comprehensive OH&S workforce planning exercise is perceived by national stakeholders as a daunting task, notably in countries where inter-ministerial collaboration in OH&S remains challenging (e.g. labour, health, social security, education). The preliminary review of national experiences informs that only few countries are known to have undertaken a robust OH&S workforce foresight analysis. It is usually addressed from the supply of educational and training programmes without providing thorough evidence-based information on needs or demand for competencies and skills in OH&S. Both perspectives are necessary to support policy dialogue and plan investments in strengthening educational capacities to prepare the OH&S workforce.

The substantial preparatory work undertaken to date for this project could not identify an off-the-shelf or ready-to-use methodological guidebook to specifically plan and develop the OH&S workforce, but valuable lessons are drawn from some countries and various existing models and tools for workforce planning and projections that can be adapted and used for the purpose. The project implementation strategy described in the following paragraphs builds extensively on those models, including guidelines from WHO and cumulated ILO experience in the area of national OH&S system development. From its inception, the project will spare no effort to prepare a comprehensive literature review and conduct an extensive search for relevant country experiences in order to identify additional intervention models and tools for national workforce planning and projections.

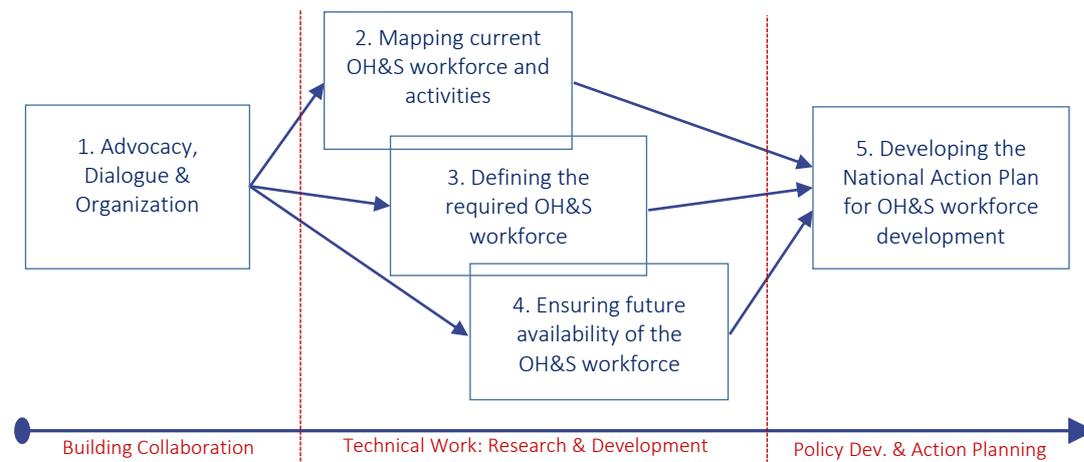
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<sup>3</sup> Rantanen J., Lehtinen S. and Iavicoli S., (2013), Occupational health services in selected International Commission on Occupational Health (ICOH) member countries, *Scandinavian Journal of Work, Environment and Health – online first*. Doi: 105271/sjweh.3317, downloaded from [www.sjweh.fi](http://www.sjweh.fi) on February 04 2013. See also Rantanen and al., (2018), Occupational health services for all – A global survey on OHS in selected countries of ICOH members, ICOH, 80 p.

### Key elements of the project

The proposed project implementation strategy follows three interrelated, complementary and mutually supportive phases. Strategic OH&S workforce planning requires the mobilization and collaboration of key stakeholders and extensive consultation with concerned institutions, including OH&S professional associations and representatives of employers' and workers' organizations. It also involves in-country research work and regional exchanges aiming at documenting both the current and required OH&S workforce in a foreseeable future, as well as identifying the capacity of academic institutions to supply qualified professionals. Lastly, it calls for informed policy dialogue, decision-making and action planning. *Figure 1* illustrates the foreseen project implementation phases and the five immediate objectives.

*Figure 1: Project implementation phases.*



### Phase I. Building collaboration

#### *Objective 1. National stakeholders collaborate on national OH&S workforce planning*

From the project start, efforts will aim at building collaboration and momentum through advocacy and organization of inclusive dialogue on OH&S workforce planning among the concerned stakeholders. Early consultations with the responsible authorities for health, labour, social security and education in each participating country will aim to secure their commitment and support for the project.

A national consultation meeting will be organized in each country wishing to participate in the project in order to inform key stakeholders on the objectives and discuss the proposed implementation strategy. The meeting will aim at building a consensus on the priority focus of the project and scope of technical coverage. From there, the project will contribute setting-up and supporting the functioning of a national steering committee (NSC) to provide institutional oversight and guidance on a regular basis throughout the project duration. In each country, a detailed project implementation plan will be prepared and submitted to the NSC for approval, and will be used for monitoring and evaluation purposes.

#### *Key outputs and activities (in each participating country)*

- National consultation meeting on strategic OH&S workforce planning.
- National steering committee (NSC).
- Detailed project implementation plan.
- Periodic NSC meetings to oversee project implementation.

## ***Phase II. Research and Development***

The second phase is constituted of research and development work. It pursues complementary objectives: the first consists of establishing the profile of the current OH&S workforce; the second takes the form of a prospective thinking exercise to outline the future needs for OH&S competencies and skills; and the third considers the capacity of education and training institutions to prepare OH&S professionals for the labour market and opportunities to mainstream OH&S in business administration, engineering, agriculture, forestry and other academic programmes. The outcomes of the second phase will allow to detect current and foreseeable shortages in expertise, and identify the means that are already available and those to mobilize to address these possible shortages strategically.

### *Objective 2. OH&S workforce profile is used as baseline for strategic planning*

An important effort will aim at mapping the current OH&S workforce in each participating country, including activities, qualifications and working conditions of relevant professional categories (health, technical, managerial). A multidisciplinary research team will be constituted and tasked to survey the current OH&S workforce and establish profiles by category of personnel. The research teams of each participating country will benefit from technical guidance and support of renowned experts in this area that will be mobilized by the ILO within the framework of the project.

In each country, progress on research work, achievements and forthcoming activities will be shared periodically with the project NSC so as to ensure transparency and ownership of process and outcome. Upon completion, the consolidated report on the national OH&S workforce profile will be presented and discussed with the relevant stakeholders in a national workshop involving the ministries, institutions and organizations for labour, health, social and employment injury insurance, as well as higher education. The event will aim to validate its content and build a shared understanding on the current situation.

In addition, national stakeholders will be invited to join regional stakeholders' meetings bringing together international experts and members of national steering committees and research teams from participating countries. Three meetings will offer an opportunity to 1) learn from previous and ongoing OH&S workforce planning experiences; 2) discuss progress on national workforce planning efforts; and 3) share findings and explore options for enhanced regional collaboration in OH&S knowledge and capacity development.

Where appropriate and requested, the project will also support an in-depth analysis of the national OH&S system to provide the data necessary for setting national priorities for action towards the progressive and continual improvement of workplace health and safety, including action to develop and organize the OH&S workforce.

#### *Key outputs and activities (in each participating country)*

- Multidisciplinary research team to survey the current OH&S workforce and activities (Health; Technical / Engineering; HR / Management).
- Report on the OH&S workforce profile.
- National stakeholders' workshop to validate the report on OH&S workforce profile.
- Regional stakeholders' meetings (#1, #2).
- National profile of the OH&S system (where opportune).

*Objective 3. The required competencies and skills of the OH&S workforce are defined*

Towards completion of the current OH&S workforce mapping exercise, an international symposium will be organized to reflect on the qualifications needed of the OH&S workforce in the foreseeable future, and to explore the possibility of developing a harmonized framework for core competencies and skills of the OH&S workforce in the Baltic Sea region.

Discussions will notably be informed by the results of the mapping exercises conducted in the participating countries and by a complementary analysis of the changing nature of work covering trends in economy, demography and migration that characterize the labour market and have implications for the delivery of OH&S services.

The results of this international symposium will allow research teams in participating countries to assess potential gaps between the current and required OH&S workforce in the future.

*Key outputs and activities*

- Trends analysis on the changing nature of work and implications for the delivery of OH&S services in the Baltic Sea region.
- International symposium on defining the required qualifications of the OH&S workforce needed in the future.
- Follow-up reports on the required OH&S workforce in participating countries.
- (possibly) Regional working group working on the harmonization of core competencies and skills requirement of OH&S personnel in the Baltic Sea region.

*Objective 4. Capacity development needs of education and training institutions are acknowledged*

An analysis will be undertaken to document the current capacity of educational and training institutions to prepare OH&S professionals in the participating countries. The analysis will cover academic program delivery modalities and challenges faced by universities in the recruitment and retention of students in OH&S related professions. The country situations will be cross-analyzed with the view of identifying key challenges related to academic capacities in OH&S in the region.

This analytical work should provide evidence of possible gaps between the required OH&S workforce (objective 3) and the capacity of education and training institutions to prepare OH&S professionals from the relevant disciplines (health, technical and managerial). Results of the analysis will be presented in a report by country and OH&S profession. These reports will be presented and discussed at the NSC and during the third regional stakeholders' meeting.

In addition, regional workshop bringing together universities and specialized training institutions will be organized to share the results and explore areas for supporting and facilitating collaboration between universities. Suggested topics that may be discussed cover the harmonization and/or specialization of academic curricula; enhancing distant learning opportunities; development of quality assurance mechanisms; and other possible ways to provide continuing education in OH&S and simultaneously prepare the next generation of professionals while achieving economies of scale by making full and productive use of available resources. Discussions should identify possible investment opportunities in some

programs and explore the possibility of bringing young talents in the OH&S field through scholarships.

*Key outputs and activities*

- Reports on the provision of education and training of the OH&S workforce (health, technical and managerial) in participating countries, including a cross-cutting analysis.
- Report on the gap analysis between the required OSH&S workforce and the capacity of education and training institutions to prepare OH&S professionals.
- Regional stakeholders' meetings (#3).
- Regional workshop for universities and specialized training institutions on preparing the next generation of OH&S professionals.

**Phase III. Policy Development and Action Planning**

*Objective 5. OH&S workforce development needs are reflected in national action plans:*

Building on existing collaboration and outcomes of the research and development phase, the project will support inclusive policy dialogue in each participating country towards the formulation and adoption of a national action plan for OH&S workforce development. The plan should provide details on implementation strategy, activities, responsibilities, costs and timeframe. Efforts will aim at fully integrating the plan into the larger national programmatic framework. Upon adoption, the project will engage resource mobilization efforts as a means to fund the implementation of national action plans. Where needed, training will be provided to interested national stakeholders on strategic planning, including monitoring and evaluation.

*Key outputs and activities (in each participating country)*

- National stakeholders' workshop on strategic planning, monitoring and evaluation.
- Series of meetings of the NSC to formulate and adopt the national action plan for OH&S workforce development.
- National action plans for OH&S workforce development

**4. Partnerships**

This project will be implemented in partnership with the Scientific Committee on Education and Training in Occupational Health of the International Commission on Occupational Health (ICOH) The project will notably mobilize technical experts from OH&S knowledge agencies, institutions and organizations in relation with the ILO.<sup>4</sup>

Regional activities will be organized in collaboration with the Baltic Sea Network on OH&S (BSN), with the OH&S Expert Group of the Northern Dimension Partnership in Public Health and Social Well-being (NDPHS OSH EG), and with the World Health Organization Regional Office for Europe (WHO/Europe). It is expected that regional collaborative arrangements in specific domains of expertise (e.g. occupational medicine, network of universities, others) may be identified and invited to in activities during the project implementation.

In participating countries, the project will engage collaboration with one (or more) national OH&S knowledge agency, institution or organization that will become the project technical implementation partner(s). The terms and conditions of collaboration will be detailed in

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<sup>4</sup> Partial list can be found on INTEROSH, the ILO database of OH&S knowledge agencies, institutions and organizations, [www.ilo.org/interosh](http://www.ilo.org/interosh)

formal agreements between the implementation partner, the ILO and the designated competent authority for OH&S. The ILO will outsource country specific research and development work to the implementation partner who will coordinate activities in the country according to the project implementation plan, in coordination with the competent OH&S authority and under the overall technical guidance and administrative oversight of the ILO project manager. A key role for the implementation partner will consist of constituting the multidisciplinary research team and ensuring the quality and timely delivery of technical outputs, including survey and analysis reports. In addition to maintaining an ongoing working relation with the ILO, the implementation partner will liaise directly with the national stakeholders for organizing national and regional meetings and events.

## **5. Priority beneficiaries**

The project will benefit the participating countries directly as they will have enhanced capacities in strategic OH&S workforce planning through inclusive dialogue. The national stakeholders will share a common understanding of national OH&S workforce development needs and existing systems for the delivery of OH&S services. They will also have evidence-based data to make informed decisions, and therefore will be better prepared to take on forthcoming workplace risks in a context of in-depth changes in the world of work. In addition, they will have had opportunities to share experiences, learn from one another and collectively engage efforts to make the best possible use of available resources for prevention. The outputs of the project will inform the larger national policy dialogue in OH&S, and the end result captured in the national action plan for OH&S workforce development will provide a framework for mobilizing supplementary resources where needed.

## **6. Indicative budget**

The detailed budget remains to be estimated. In principle, the project will provide the practical means necessary for all direct project expenditures including technical activities such as surveys and studies, national and regional stakeholders' meetings and related operational costs. The budget will also provide for two international events, including venues and logistic costs as well as travel expenditures for international experts, project staff and implementation partners. The budget will cover the cost of coordination in each participating country, of a regional project manager and an administrative and programme assistant (ILO staff) who should be based in one of the participating country.

## **7. Timeframe**

It is estimated that the project duration will vary between two and four years, longer in countries where conditions for successfully engaging strategic OH&S workforce planning first require efforts to consolidate inter-ministerial collaboration, notably.

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