
CDIP/34/INF/4
ORIGINAL: ENGLISH
DATE: APRIL 8, 2025

Committee on Development and Intellectual Property (CDIP)

Thirty-Fourth Session
Geneva, May 5 to 9, 2025

EXECUTIVE SUMMARY OF THE SCOPING STUDY ON THE INTERSECTION BETWEEN OCCUPATIONAL SAFETY AND HEALTH AND INTELLECTUAL PROPERTY

prepared by Mr. Antony Taubman

1. The Annex to this document contains the Executive Summary of the Scoping Study on the “Intersection between Occupational Safety and Health and Intellectual Property”.
2. The Scoping Study has been undertaken in the context of the Development Agenda (DA) Project on “Reducing Work-Related Accidents and Occupational Diseases through Innovation and Intellectual Property” (document [CDIP/29/11](#)). It was prepared by Mr. Antony Taubman, IP Expert, Director, International IP Pty Ltd.

3. The Committee is invited to take note of the information contained in the Annex to this document

[Annex follows]

Executive Summary

Intersection Between Occupational Safety and Health and Intellectual Property

1. Introduction and Context

This study, prepared in the context of the Development Agenda (DA) Project “Reducing Work-Related Accidents and Occupational Diseases Through Innovation and Intellectual Property”, maps out intersections and points of mutual support between policies and programs for Occupational Safety and Health (OSH) and the Intellectual Property (IP) system. As required, it primarily aims to consider how IP tools can contribute to creating safer working environments and reducing the significant global burden of occupational accidents and diseases. The study surveys the global OSH landscape, reviews international and domestic regulations, sets out key statistics, outlines the role of technology, and sets out the specific contributions of specific categories of IP, with a particular focus on four pilot countries, namely: Cameroon, The Gambia, the Islamic Republic of Iran and Tunisia. It concludes with recommendations on enhancing the contributions of the IP system to OSH management and on tackling the impact of counterfeiting on workplace health and safety.

2. The Scale and Scope of OSH Challenges

Workplace health and safety represent a major burden for public health. The right to a safe and healthy working environment has its roots in fundamental human rights and is the object of a number of conventions and recommendations established by the International Labour Organization (ILO). The nature of the challenge for programs to address OSH is illustrated by the ILO Global Strategy on Occupational Safety and Health 2024–30 and the plan of action for its implementation, which are based on improved national frameworks, strengthened coordination, partnerships, investment, and enhanced management systems.

Key actions include international standards and instruments, knowledge development and dissemination, promotion, awareness raising and advocacy, technical assistance, and multilateral cooperation. The international layer of policy development and program delivery leaves considerable latitude for tailored domestic policies, but there is a strong and consistent emphasis on training, awareness-raising and capacity building as critical elements of effective OSH management strategy.

While statistics per capita show a general global decline in deaths and disability-adjusted life years (DALYs) since the year 2000, set against population growth this still represents an absolute increase and a major burden for public health. Hence, annually, millions of workers die from work-related factors, and hundreds of millions suffer non-fatal injuries. The leading causes of occupational deaths globally include exposure to long working hours (leading to stroke and heart disease), exposure to particulate matter, gases, and fumes (causing chronic obstructive pulmonary disease), occupational injuries, and exposure to substances such as asbestos and silica. While occupational injuries account for a significant portion of disability-adjusted life years (DALYs), non-communicable diseases stemming from workplace exposures are the primary cause of death.

A review of the international framework for workplace health and safety illustrates how effective OSH management requires a comprehensive, integrated, and continuously improving approach. This involves robust national policy frameworks, legislation, monitoring,

enforcement, data collection, research, worker consultation and participation, training, and international cooperation. While **international frameworks provide general guidance**, significant scope exists for national governments to adapt their policies to local contexts.

3. The Technology Dimension and IP Intersection

Technology plays a dual role in OSH. While it can be a source of workplace hazards it also serves as a vital tool for predicting, detecting, monitoring, and protecting against risks in the workplace. Applying a typology of technologies also used by WIPO in a parallel patent landscaping report, the study considers relevant technologies according to three broad categories: prediction (for instance, AI-driven risk analytics), detection (for instance, toxic gas monitors and asbestos detectors), and protection (for instance, personal protective equipment (PPE), fall prevention mechanisms, and ergonomic design for workplaces). However, technology is not a standalone solution for the management of OSH risks. Its effectiveness, and therefore the contribution of the IP system, depends on its integration into broader programs of OSH management, focusing on: (a) the prediction and monitoring of workplace risks; (b) interventions to prevent or to minimize risks; and (c) training in the effective use of technological solutions.

Several categories of IP have potential contributions to OSH management; to take a particular focus on the technological dimension, their roles can be summarised as follows:

- **Patents** support innovation and dissemination of a diverse array of OSH technologies. As a vast repository of technical information, patent databases enable for technology landscaping, monitoring new developments and identifying potential solutions, assessing freedom to operate and providing a framework for licensing technology relating to the prediction, monitoring and prevention of OSH hazards. In view of the territorial nature of patent rights, and given typical filing patterns, much of the relevant patented technology, even the most recent, is in the public domain in many developing countries. Expert patent analytics may help determine freedom to operate for such technologies.
- **Trademarks and certification marks**, by distinguishing goods and services in the marketplace, have a role in assuring compliance with safety and quality standards. Certification marks provide a direct mechanism for regulators and for users to verify compliance with standards relevant for OSH, and to combat counterfeits. For instance, the well-known N95 standard for respiratory protection (facemasks) is the subject of registered certification marks held by the US agency NIOSH. Additionally, Morocco's "Salamatouna" mark provides a relevant case study for using certification marks to overcome counterfeiting and hence to enhance safety and traceability.
- **Suppression of unfair competition**, complementary with trademark law, provides means to take legal action against misleading, deceptive and other dishonest business practices, including consumer deception, providing a mechanism to deal with false or misleading claims about the safety and compliance with standards of a product, such as a tool or PPE, used in the workplace. The overlapping fields of **confidential information** and **data privacy** may come into play given the need for protection and respect for some sensitive information that may be collected in the course of monitoring OSH phenomena in the workplace.

4. Practical takeaways

- IP tools and training should be integrated into OSH management rather than treated as separate topics.
- Patent databases are valuable sources for identifying existing and emerging OSH technologies, and many of which may already be in the public domain in developing countries. Training stakeholders (through programmes such as WIPO TISCs) in the use of patent information will enhance its value for OSH. OSH programmes themselves may yield patentable inventions, raising the possibility of managing the resulting IP portfolios.
- Certification marks are powerful tools for verifying compliance with OSH standards (such as PPE standards) and building trust. National standards bodies and IP offices can collaborate to promote their use.
- Counterfeit, substandard, and falsified products (PPE, tools, materials) pose severe OSH risks. Addressing this requires a multi-pronged approach:
 - Awareness and Training: Educating procurement officers, managers, and workers to recognize signs of counterfeits (poor labelling or packaging, inconsistent numbers, missing or invalid certification, poor build quality or functionality).
 - Due Diligence: Integrating checks for authenticity and compliance into procurement and OSH management systems.
 - Inter-agency Cooperation: Enhancing collaboration between OSH regulators, IP offices, customs, police, and standards bodies.
 - Using trademark and certification mark enforcement, border measures, and unfair competition laws in a complementary manner to monitor and suppress counterfeits that potentially cause OSH risks.
- IP awareness and practical skills (use of patent information, use of trademarks and certification marks, responses to counterfeits) should be integrated into the existing OSH training and awareness raising programs that are already mandatory in many countries. This will provide greater relevance and efficiency, more so than treating IP as a specialist area to be considered in isolation. General training and awareness- raising programs and materials can be adapted for this purpose, but content should be tailored to specific audiences depending on their roles (for instance, policymakers, standards authorities, enterprise managers, and workers) and key sectors that experience significant levels of OSH risk (e.g., agriculture, construction, manufacturing). This is best achieved through concrete case studies and examples that highlight the practical applications of IP in OSH, reinforcing its relevance and impact.

5. Recommendations

- i. **Adopt an Integrated and Reciprocal Approach:** Foster stronger, practical links between OSH and IP domains. Integrate IP awareness into OSH programs and OSH considerations into IP training and policy.

- ii. **Coordinate with Existing OSH Programs:** Align IP-related initiatives with established national and international OSH frameworks (on the model of the ILO Global Strategy) and utilize existing structures for communication, training, and consultation to ensure relevance and efficiency. Emphasize on worker participation.
- iii. **Develop Tailored IP Content for OSH Training:** Adapt existing WIPO and other IP training materials (covering patent information, technology licensing and transfer, accessing public domain materials, certification marks, and measures against counterfeits) by incorporating specific OSH contexts, examples, and case studies relevant to target audiences and high-risk sectors, such as agriculture, construction, manufacturing, and mining, that employ large numbers of workers in the pilot countries.
- iv. **Promote Inter-Agency Coordination:** Strengthen collaboration nationally and internationally between OSH authorities, IP offices, standards bodies, customs, police, industry associations, and worker representatives.
- v. **Integrate the IP Dimension into OSH Management:** Frame IP tools within the broader context of OSH objectives, avoiding standalone IP programs where integration is more effective. Develop specialist IP modules for targeted training. (e.g., patent search, certification mark use).
- vi. **Develop and Promote Specific IP Tools for OSH:**
 - **Technology Surveying:** Train relevant experts in the use of patent information including with the support of WIPO TISCs.
 - **Technology Acquisition:** Adapt existing tools and guidance on freedom- to- operate analysis and licensing negotiation with OSH-specific examples, recognizing the public domain status of many technologies in developing countries.
 - **Managing Innovation:** Apply existing IP management policies within enterprises and educational or research institutions to cover OSH-related innovations developed internally.
- vii. **Prevent and Combat Counterfeits:** Implement targeted awareness, training, and enforcement measures against counterfeit, substandard, and falsified products impacting OSH.
 - Integrate checks into OSH management and procurement.
 - Train key players (customs, managers, workers) to identify red flags (poor labelling, faulty certification, inconsistencies with documentation).
 - Promote the use of certification marks by standard-setting authorities.

The full Scoping Study will be made available at:

https://dacatalogue.wipo.int/projects/DA_1_10_19_30_31_45_1

[End of Annex and of document]