



INTERNATIONAL CONFERENCE ON

Ensuring Industrial Safety

*The role of government,
regulations, standards
and new technologies*



UNITED NATIONS
INDUSTRIAL DEVELOPMENT ORGANIZATION



International Conference on Ensuring Industrial Safety

The role of government, regulations,
standards and new technologies

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For reference and citation, please use: United Nations Industrial Development Organization, 2019. *International Conference on Ensuring Industrial Safety: The Role of Government, Regulations, Standards and New Technologies*. Vienna.

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ABBREVIATIONS

IAEA	International Atomic Energy Agency	UNECE	United Nations Economic Commission for Europe
ILO	International Labour Organization	UNIDO	United Nations Industrial Development Organization
ISO	International Organization for Standardization	UNISDR	United Nations Office for Disaster Risk Reduction
LDCs	Least developed countries	UNODC	United Nations Office on Drugs and Crime
OHS	Occupational health and safety	UNOOSA	United Nations Office for Outer Space Affairs
OSHA	Occupational Safety and Health Administration (United States)	WHO	World Health Organization
SDGs	Sustainable Development Goals		
SMEs	Small and medium-sized enterprises		
UNDRR	United Nations Office for Disaster Risk Reduction		

ACKNOWLEDGMENTS

This report on the International Conference on Ensuring Industrial Safety: The Role of Governments, Regulations and Standards, held in Vienna, Austria, on 30–31 May 2019, was prepared by Olga Memedovic, Chief of the Business Environment, Cluster and Innovation Division (BCI) in the UNIDO Department of Trade, Investment and Innovation (TII). The conference was organized by UNIDO and the Federal Environmental, Industrial and Nuclear Supervision Service of the Russian Federation (Rostekhnadzor) and funded from the Voluntary Contribution of the Russian Federation to UNIDO Industrial Development Fund.

Oliver Authried, Iana Iakovleva and Jamie Sandhu helped organize the conference.

Linda Lampel, Brigitt Roveti, Jamie Sandhu, Ekaterina Seteykina and Christi Thomas transcribed the proceedings of the conference and provided

background research and made other valuable contributions.

Oliver Authried and Evgeniia Samuseva also provided background and support materials.

Guidance and overall support were provided by Dmitry Chachelov, Deputy Head of International Relations Department, Rostekhnadzor, and Irina Sokolova, Head of International Relations Department, Rostekhnadzor.

The report benefited from the contributions of conference keynote speakers and panelists.

We are grateful to the team at Communications Development Incorporated—led by Bruce Ross-Larson and Meta de Coquereaumont and including Joe Caponio, Mike Crumplar, Peter Redvers-Lee and Elaine Wilson—for editing and designing this publication.

FOREWORD BY LI YONG, DIRECTOR GENERAL, UNIDO

Industrial safety is often an overlooked attribute of well-being that is important for achieving the 2030 Agenda for Sustainable Development and its associated Sustainable Development Goals (SDGs). Industrial processes, equipment and factories have the potential to create hazards that can harm individuals, the environment and industrial assets.

At the same time, natural hazards, political instability, sabotage and cybercrime can cause massive damage to entities of the industrial sector. These natural and human-caused hazards can affect the social, economic and environmental pillars of sustainable economic development. When governments and companies alike ignore industrial safety, along with the prospects of damage from climate change, that neglect will be reflected in lower productivity, competitiveness and resilience, posing a serious threat to realization of Agenda 2030 and the SDGs.

Because industrial activities will never be entirely free of risk from natural and human-caused hazards, it is essential to understand these risks as thoroughly as possible to inform supervisory authorities and to take suitable risk-mitigation mea-

mind. In addition to these precautionary steps to ensure the safety of workers and the environment, there is also a need to consider security. Machines can be deliberately exploited for nefarious purposes—for instance, during cyberattacks—and that possibility should be taken into account when implementing or redesigning production systems.

Developing countries, especially the least developed countries (LDCs), are more vulnerable to hazards at industrial sites than developed countries. We can attribute this to a number of factors, such as a lack of safety standards and compliance, poor land planning and, in general, a low degree of safety awareness, education and training.

In many developing countries and LDCs, industrial facilities are commonly built on inappropriate geographic sites, making them dangerously susceptible to natural hazards. Natural hazards can occur virtually anywhere, but some locations are more vulnerable than others since they are more prone to floods, earthquakes and other extreme events that call for special measures. And climate change will exacerbate the economic damage stemming from natural disasters. Therefore, mapping hazardous

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