

## National strategies mapping

### Country Overview

## POLAND

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<b>1. Basic information</b> Name. link and time frame	<p><b>Polish document:</b>  <b>PROGRAM WIELOLETNI „Poprawa bezpieczeństwa i warunków pracy” - III etap (2014-2016), IV etap (2017-2019)</b></p> <p>Strategy document:  <b>National programme „Improvement of safety and working conditions” – phase III (2014-2016), continued as phase IV (2017-2019)</b></p> <p>All documents and for more information see the CIOP-PIB-website<sup>1</sup>,</p>
<b>2. Background and the perceived problem</b>	<p>Quote: “Phase III is the continuation of the national programme „Improvement of safety and working conditions”, with phase I (execution 2008-2010) established by resolution 117/2007 of the Council of Ministers of 3rd July 2007, and phase II established by resolution 154/2010 of the Council of Ministers of 21st September 2010 (execution 2011-2013). The results of phases I and II were positively evaluated by the Ministry of Labour and Social Policy, and the Ministry of Science and Higher Education. It is expected to significantly add to the reduction of occupational risk related to exposure to harmful, dangerous and onerous factors at workplaces. It will also influence the opportunities to extend the professional activity age with good health.</p>
<b>3. Main characteristics and objectives of the OSH-strategy (activity plan)</b>	<p>Quote:</p> <p>“The Programme’s main objective is to develop innovative technical and organisational solutions, aiming at development of human resources, new products, technologies, and management methods and systems whose application will help reduce the number of workers exposed to harmful, dangerous and onerous factors, and reduce the related number of work accidents, occupational diseases and resulting economic and social losses.</p> <p>For this aim, a new challenge is the extension of professional activity age, according to the 2012 revision of the act on pensions and disability benefits from the Social Insurance Fund.</p>
<b>4. Details of the strategy and activity plan</b> Axis description <sup>2</sup>	

<sup>1</sup>[http://www.ciop.pl/CIOPPortalWAR/appmanager/ciop/pl?\\_nfpb=true&\\_pageLabel=P26800385591408696399667&html\\_tresc\\_r](http://www.ciop.pl/CIOPPortalWAR/appmanager/ciop/pl?_nfpb=true&_pageLabel=P26800385591408696399667&html_tresc_root_id=21639&html_tresc_id=21642&html_klucz=21639&html_klucz_spis=)  
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[https://www.ciop.pl/CIOPPortalWAR/appmanager/ciop/en?\\_nfpb=true&\\_pageLabel=P26400121511406886174136](https://www.ciop.pl/CIOPPortalWAR/appmanager/ciop/en?_nfpb=true&_pageLabel=P26400121511406886174136)

<sup>2</sup> In our descriptions we stuck to the original structure of the strategic document, because a categorisation of measures according to the four axes would not have been adequate to the structure and content of the strategy documents. Many activities and measures could not simply be assigned to one axis, but were overlapping.

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<b>Detailed objectives</b>	<ul style="list-style-type: none"> <li>▪ Creating opportunities for fulfilling the requirements of new strategic documents from the EU</li> <li>▪ Developing and improving solutions for improvement and preservation of work ability in order to prevent labour market exclusion, particularly for elderly people</li> <li>▪ Developing methods and tools for preventing and reducing occupational risk in the working environment, including new and emerging risks</li> <li>▪ Widening the knowledge on causes and results of work accidents and occupational diseases, and on profitability of preventive actions on societal and enterprises level</li> <li>▪ Shaping and promoting a safety culture by improving OSH management and developing a modern system of educating and informing the society</li> </ul>
<b>Activities</b>	<p><b>Tasks related to the services of the state</b></p> <ul style="list-style-type: none"> <li>▪ Establishing standards in OSH</li> <li>▪ Developing methods and tools for preventing and reducing occupational risks in the working environment.</li> <li>▪ Developing a system of testing machinery and appliances, tools and personal and collective protection equipment</li> <li>▪ Developing a system of OSH education, information and promotion.</li> </ul> <p><b>Research and development tasks</b></p> <p>The research and development programme includes projects within the following main research areas:</p> <ol style="list-style-type: none"> <li>1. Developing and preserving working abilities.</li> <li>2. New and emerging risks related to new technologies and work processes.</li> <li>3. Material engineering and science, and new technologies for OSH purposes</li> <li>4. Shaping a safety culture.</li> </ol>
<b>Details of the activity plan</b>	
<b>Examples of projects</b>	<p><b>Project titles (Selection)</b></p> <p>Rating speech intelligibility and directional hearing ability of workers over the age of 50 years</p> <p>Rating exposure to low-frequency vibration having general impact for selected physiological functions of the body worker</p> <p>Research nuisance and noise exposure, including to low-frequency noise emitted by turbines and wind turbines</p> <p>The study of sound propagation and methods of shaping the acoustic conditions in rooms for activities requiring concentration of attention</p> <p>The method of preventing the reduced level of alertness of employees aged 55+ by exposure to different color and intensity of light</p> <p>Research on the influence of torque hand-held machines for the formation of the burden of the musculoskeletal system operators</p>

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	<p>Mechatronic support system rehabilitation segments of the musculoskeletal system of the upper limb in the fingers and wrist</p> <p>The use of virtual reality techniques to support the professional activation of older people</p> <p>Rules for the use of techniques for monitoring places of residence of the worker-high-speed communications technology (UWB) to ensure the safety of the use of machinery</p> <p>Simulate touch sensations associated with the interaction of the control components and manipulated objects in the environment of virtual reality for training in the safe use of production machines for metal</p> <p>Toxicity in vitro studies of selected compounds on senescent cells</p> <p>The rating methods in vitro potential remote effects of exposure to selected ceramic nanomaterials</p> <p>Study the spread of the nano-objects in the air space work</p> <p>Modelling distribution of ventilation air in the environment emission sources associated with the processing of nanomaterials</p> <p>Identifying risk groups associated with exposure to carcinogens typed</p> <p>The rating methods in vitro harmful effects of second generation biofuels obtained in the transesterification of fats waste</p> <p>Examination of the distribution of concentrations of carcinogens in fractions of fine particles emitted during the operation of motor vehicles</p> <p>Research flammability and explosiveness of thermostable plastics in the context of prevention of major industrial accidents</p> <p>Study of the sources and pathways of harmful microbiological agents in the working environment with the use of biochemical methods and gene profiling</p> <p>Evaluation of the possibilities of using fiber aerosol transport and elimination of harmful microbiological agents from the environment</p> <p>Evaluation of the impact of professional and non-professional factors on the ability of people to work with chronic diseases</p> <p>Performing work under time pressure and the load on the eyesight of employees of different ages</p> <p>Explore the possibility of physical and psychomotor skills of older workers in terms of extension activity</p> <p>The static load of the lower extremities of the position during operation and the occurrence of chronic venous insufficiency, depending on age.</p> <p>Lifestyle and psycho-physical working conditions as determinants of ability to work</p> <p>Identification of individual and organizational determinants of motivation of older people to continue working</p> <p>The impact of stereotypes on the functioning of the professional employees 50+</p> <p>Type of employment contract and the welfare of employees and attitude toward work requirements</p>

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	<p>Requirement profile psychological conditioning efficiency and safety of professional drivers over the age of 55</p> <p>Innovative device for local cooling of personnel operating theaters, taking into account the specificity of selected procedures</p> <p>Modelling and assessment of electromagnetic hazards in the working environment for users of personal medical devices (OUM) to support the vital functions of the body</p> <p>Experimental and modelling human exposure to the indirect impact of electromagnetic fields of small and medium frequencies</p> <p>Investigation of ergonomic gloves using surface electromyography</p> <p>Model organic vapor sensor based on thin films of carbon nanotubes</p> <p>Polymer hybrid materials involving nanoparticles for use in plant protection</p> <p>Bioactive nonwoven filter for use in respiratory protection equipment reusable</p> <p>Active clothing materials with shape memory (SMM) to protect workers against heat</p> <p>Develop a model to estimate the thermal insulation using artificial neural networks to design clothing Heat</p> <p>Developing a model material with marked paths for implementation in smart clothing</p> <p>Development of a model of an optical filter, variable rate transmission in the visible range, for use in eye protection measures positions risk of hazardous infrared</p> <p>Development of methods for designing components safety footwear and facial masks and respirators using digital mapping anthropometric measurements</p> <p>Development of the system architecture monitoring and management of occupational health and safety with regard to advanced technologies and solutions in the field of intelligent working environment</p> <p>Age management in terms of shaping and working conditions of its effectiveness</p> <p>Innovative methods of communication in the management of health and safety</p> <p>The use of the concept of adaptability (resilience) in the management of health and safety</p> <p>The role of organisational factors in shaping behaviors and attitudes of employees of different ages against risks to safety and health</p> <p>Examination of the relationship between the level of safety culture and the economic results of enterprises</p> <p>The effectiveness of postgraduate studies in the field of ergonomics, safety and health at work</p>
<b>Expected results</b>	<ul style="list-style-type: none"> <li>▪ Increased efficiency of activities for prevention of occupational hazards, taking into account the need for ability to work in the extended period of professional activity</li> </ul>

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	<ul style="list-style-type: none"> <li>▪ Improved quality of OSH management in enterprises, taking into account age management</li> <li>▪ Ensuring a modern approach to the OSH and ergonomics issues in teaching curricula on all levels, and improvement of competences of specialists</li> <li>▪ Widening the offer of Polish manufacturers of PPE, and therefore improved safety of their users by making available new, improved products</li> <li>▪ Continuation of legislation and standardization work in view of ensuring the compliance of Polish law with EU regulations on OSH, as well as implementing respective EU standards in Polish OSH standards</li> <li>▪ Development of a national system of conformity assessment of products and services with EU directives</li> <li>▪ Ensuring Poland's active participation in European and international research cooperation, as well as exchange of best practices in OSH and ergonomics</li> <li>▪ Improving the efficiency of promotion and information actions in OSH, including development of the activities of the National Focal Point of the European Agency for Safety and Health at Work.</li> </ul>
<b>5. Actors and stakeholders</b>	<ol style="list-style-type: none"> <li>1. All tasks related to the services for the state are executed by CIOP-PIB - the main programme performer and coordinator. The research part of the Programme is executed by 17 scientific institutions – universities and research institutes, by the Polish Academy of Sciences, cooperating with enterprises, government bodies and labour supervision bodies. These institutes are:</li> <li>2. AGH University of Science and Technology, Faculty of Mechanical Engineering and Robotics</li> <li>3. Koźmiński University w Warszawie</li> <li>4. Academy of Special Education</li> <li>5. Central Institute for Labour Protection – National Research Institute (CIOP-PIB)</li> <li>6. Nencki Institute of Experimental Biology</li> <li>7. Nofer Institute of Occupational Medicine in Lodz</li> <li>8. Institute of Occupational Medicine and Environmental Health</li> <li>9. Institute of <i>Rural</i> Health in Lublin</li> <li>10. Oil and Gas Institute</li> <li>11. Białystok University of Technology, Faculty of Electricity</li> <li>12. Łódź University of Technology, Faculty of Material Technologies and Textile Design</li> <li>13. Warsaw University of Technology <ul style="list-style-type: none"> <li>○ Faculty of Electronics and Information Technology</li> <li>○ Faculty of Mechatronics</li> </ul> </li> <li>14. Industrial Research Institute for Automation and Measurements</li> <li>15. Warsaw School of Economics</li> <li>16. Medical University of Silesia in Katowice</li> <li>17. Medical University in Lodz</li> </ol>

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	<p>18. Military Institute of Hygiene and Epidemiology</p> <p>The following Ministries, institutions, social partners and business associations cooperate in disseminating and implementing the program results:</p> <ul style="list-style-type: none"> <li>▪ Ministry of Family, Labour and Social Policy</li> <li>▪ Ministry of Science and Higher Education</li> <li>▪ Ministry of National Education</li> <li>▪ Ministry of Development and Finance</li> <li>▪ Ministry of Infrastructure and Construction</li> <li>▪ Ministry of Maritime Economy and Inland Navigation</li> <li>▪ Ministry of Health</li> <li>▪ Ministry of Sport and Tourism</li> <li>▪ Ministry of Energy</li> <li>▪ National Labour Inspectorate</li> <li>▪ State Sanitary Inspection</li> <li>▪ State Fire Service</li> <li>▪ Polish Committee for Standardization (PKN)</li> <li>▪ Office of Technical Inspection (UDT)</li> <li>▪ State Mining Authority (WUG)</li> <li>▪ Transportation Technical Supervision (TDT)</li> <li>▪ Polish Social Insurance Institution (ZUS)</li> <li>▪ Agricultural Social Insurance Fund (KRUS)</li> <li>▪ Polish Engineering Association (NOT)</li> <li>▪ Polish Craft Association</li> <li>▪ NSZZ “Solidarność” National Commission</li> <li>▪ All-Poland Alliance of Trade Unions – OPZZ</li> <li>▪ Trade Unions Forum</li> <li>▪ Polish Confederation Lewiatan</li> <li>▪ Employers of Poland</li> <li>▪ Business Centre Club – Employers’ Association</li> <li>▪ Polish Association of OSH services Employees</li> <li>▪ Network of OSH Experts (48 members)</li> <li>▪ Network of Regional OSH Centres (16 centres)</li> <li>▪ Safe Work Leaders Forum (109 companies)</li> <li>▪ Polish Association of Personal Protective Equipment Producers and Distributors (35 companies)</li> </ul>
<b>6. Resources and timeframe</b>	No information identified
<b>7. Evaluation/lessons learned</b>	<p>The programme is monitored and evaluated by the Coordination Board composed of representatives of ministries and other public bodies, organizations of employers and employees, representatives of institutions interested in implementing the results of the Programme as well as scientific experts. The Coordination Board meets once a year in order to monitor the progress and evaluate the outcomes of tasks related to the services of the state and research projects. The Coordination Board can suggest some modifications, however without altering the main objective of the Programme.</p>

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<b>Ex ante indicators for the years 2015 to 2020</b>	The programme continues as phase IV (2017-2019) and the following strategic indicators have been adopted: the reduction in the number of persons employed in hazardous conditions, the reduction in the number of fatal accidents at work and in the number of severe accidents at work.
<b>8. Relation to EU Strategic Framework</b>	There is a direct reference to the EU-OSH Strategic Framework made. Due to the broad approach there are relations to all aspects of the European Strategic Framework.