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Promoting occupational safety and health research in the EU

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1. INTRODUCTION

In 2004, the European Commission asked the European Agency for Safety and Health at Work to produce a short report⁽¹⁾ identifying future EU research needs in the field of occupational safety and health (OSH). The Commission intended to use this report as input into its preparations for the seventh research framework programme (FP7). The Commission also asked the Agency to organise a series of seminars with two main, interrelated aims:

1. to reach a consensus on the main priorities for OSH research, so that a clear message could be presented by the OSH research community during FP7 consultation; and
2. to stimulate networking amongst the major OSH research institutes in Europe, and provide them with practical information to help identify relevant funding opportunities that may become available under FP7.

The first seminar took place in Bilbao on 1 and 2 December 2005, and brought together representatives from eight European OSH research institutes and from UNICE, ILO, the Research DG, the Employment, Social Affairs and Equal Opportunities DG and the Agency. The two-day seminar was structured around two sessions. The aim of the first session was to elaborate a consensus list of top OSH research priorities for the next five years on the basis of the above mentioned report and of expert forecasts on emerging OSH risks carried out by the Agency and its Topic Centre⁽²⁾ (3). The second session provided the opportunity to bring together representatives from existing EU-wide networks

(1) European Agency for Safety and Health at Work, *Priorities for occupational safety and health research in the EU-25*, Luxembourg, 2005. ISBN 92-9191-168-2. <http://osha.europa.eu/publications/reports/6805648>

(2) European Agency for Safety and Health at Work, *Expert forecasts on emerging physical risks related to occupational safety and health*, Luxembourg, 2005. ISBN 92-9191-165-8. http://riskobservatory.osha.europa.eu/risks/forecasts/physical_risks/

(3) Draft results of expert forecasts on emerging chemical, biological and organisational, social and human risks related to OSH. Reports will be published in 2006.

(such as New OSH ERA, PEROSH, and the Agency's Topic Centres) to explore ways of achieving closer cooperation in order to promote the inclusion of OSH issues in FP7 and coordinate possible actions under that scheme.

This *Forum* publication summarises the presentations made during the seminar and the round table discussions that followed.

2. RESEARCH PRIORITIES

2.1. OSH needs and priorities for the EU-25

Eusebio Rial González, Sarah Copsey, Pascal Paoli and Elke Schneider (European Agency for Safety and Health at Work, EU)

At the Commission's request, the Agency prepared a short report⁽¹⁾ identifying future EU research needs in the field of OSH as input into the seventh research framework programme (FP7). The report made use of various national, EU and international resources, and was sent for consultation to the Agency's expert networks. The report is structured around four thematic areas: the psychosocial work environment, musculoskeletal disorders (MSDs), dangerous substances and OSH management. It should be noted that the division into these themes is primarily for ease of reference, and it is not meant to indicate fixed boundaries between topics. Many OSH problems are interrelated and, therefore, best treated in a holistic manner.

Psychosocial work environment

The far-reaching changes that have been occurring in work organisation and design, and in contractual relationships at work, are associated with the emergence of psychosocial problems. There is growing concern about the negative effects this may have on employees' health and well-being, the quality of work, and the creativity and innovation needed by organisations in current markets. Therefore, there is a need to prioritise the following issues:

- the 'changing world of work' and its impact on health and safety (including work-life balance issues);



Lift for handling of persons in the healthcare sector, Berufsgenossenschaftliches Institut für Arbeitsschutz, Germany



- organisational interventions to improve the psychosocial work environment (especially work-related stress, and physical and psychological violence);
- the interaction between MSDs and the psychosocial work environment;
- the role of psychosocial and organisational factors in accidents and errors.

Musculoskeletal disorders (MSDs)

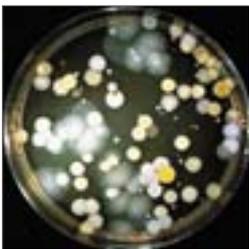
MSDs have been consistently identified as a priority for preventive action by the Member States' OSH authorities. They are the most commonly reported work-related health problem, and surveys suggest that the problem is increasing in some respects. Reducing musculoskeletal risks is part of creating quality jobs, by enabling workers to stay in employment, and ensuring that work and workplaces are suitable for a diverse population. The main priorities in this field have a very practical focus:

- developing tools to assess the total load/overload on the body's musculoskeletal system;
- developing assessment/evaluation methods, intervention methods and prevention measures in relation to certain gaps in knowledge: some overlooked MSDs (such as standing work and other static work); specific high-risk sectors (e.g. provision of care in people's homes); a diverse workforce; new sources of risk (e.g. good design for new technology such as multi-screen workplaces);
- approaches to including ergonomics at the design state.

Dangerous substances

An increasingly large number of chemicals are present in workplaces. The chemical industry is Europe's third largest manufacturing industry, but exposure to dangerous chemicals may also occur at many workplaces outside the chemical industry, e.g. in agriculture or construction work. According to the third European survey on working conditions (2000), 16 % of employees in the EU handle or are in contact with dangerous substances for at least one quarter of their working time. There are three main research priorities in this field:

- validation and improvement of models of assessment for worker exposure to chemicals: including identifying exposure reduction needs and methods; defining exposure-response relationships in epidemiological studies (longitudinal studies);
- specific groups of chemical substances: e.g. nanoparticles and ultrafine particles, carcinogens, reproductive toxicants;
- exposure assessment to biological agents in the workplace (especially assessment of occupational risks arising from global epidemics).



Mould on exhaust air filter, Berufsgenossenschaftliches Institut für Arbeitsschutz, Germany

OSH management

The nature and organisation of work are changing, becoming more client- and knowledge-driven. The workforce has also been changing; it is ageing, less male-dominated, more precarious and more difficult to monitor, as it has spread out into small companies. As a consequence, health issues have become more complex and there is a need to find new ways to improve OSH in this context of profound changes. The focus should be on:

- the economic dimension of OSH (overall cost of social non-quality, impact of quality of work and employment on overall economic performance, development of management and accounting tools integrating the OSH dimension);
- life expectancy and work (longitudinal research to identify the work-related factors in the burden of disease);

- managing an ageing workforce (analysis of the relationship between age and work, identification of policies aimed at preventing age-related exclusion from work).

As indicated earlier, the future of OSH research is in cross-disciplinary research, since many OSH problems are interrelated, e.g. the relationship between psychosocial factors and musculoskeletal disorders, or adapting to an ageing workforce from different perspectives. Therefore, they should be treated in a holistic manner. Additionally, many work-related issues 'spill over' into non-work domains, and therefore should be mainstreamed into other policy (and research) areas. This was already highlighted in the Commission strategy 2002-06:

Well-being at work cannot be brought about simply by way of health and safety policy: there are strong links with the way work equipment is designed, with employment policy, with policy on disabled people, and with other policies like transport and, of course, health policy in general, whether it be preventive or curative.

2.2. Expert forecast on emerging risks related to OSH

Dietmar Reinert, Emmanuelle Brun and Eva Flaspöler (BG Institut für Arbeitsschutz, Germany)

Working environments are continuously changing under the influence of new technologies and of shifting economic, social and demographic conditions. In this context, the Community strategy 2002-06 called on the Agency to 'set up a risk observatory' and 'anticipate new and emerging risks, whether they be linked to technical innovation or caused by social change'. In 2002, the Agency commissioned its Topic Centre on Research Work and Health (TCWH) to identify emerging OSH risks.

An 'emerging risk' has been defined as any risk that is both new and increasing. New means either that:

- the risk was previously non-existent; or
- a long-standing issue is now considered to be a risk due to a change in social or public perceptions, or to new scientific knowledge.

The risk is increasing if:

- the number of hazards leading to the risk is growing; or
- the likelihood of exposure to those hazards is increasing; or
- the effect of the hazard on workers' health is becoming stronger.



Material processing with laser beam creating ultrafine particles, Berufsgenossenschaftliches Institut für Arbeitsschutz, Germany

The expert forecasts on emerging OSH risks were reached through questionnaire-based surveys following the Delphi method. The Delphi method is based on an iteration process in which the results of the previous rounds are fed back to the experts for new evaluation. This method was chosen so as to reach a broad consensus and to obtain scientifically founded options. For the rating of potential emerging OSH risks, a five-point Likert scale was used. A literature review for the top emerging risks agreed by the experts was also carried out.

The experts who participated in the studies mainly had a research or policy background. They were proposed by the TCWH members and the Agency's focal points. Selection criteria were defined so as to ensure a broad coverage of qualified expertise across Europe. The experts had to have at least five years' experience in the relevant field. The Delphi surveys were carried out on physical risks (2002-04); organisational, social and human risks (2003-05); chemical risks (2004-05); and biological risks (2004-05). In total, 520 experts from 27 countries and one international organisation were invited to participate in the surveys. Answers were received from 188 experts from 24 countries and one international organisation (average response rate: 35 %).

The top emerging risks highlighted in the expert forecasts show that multi-factorial issues are a growing concern.

Top emerging physical risks^(*)

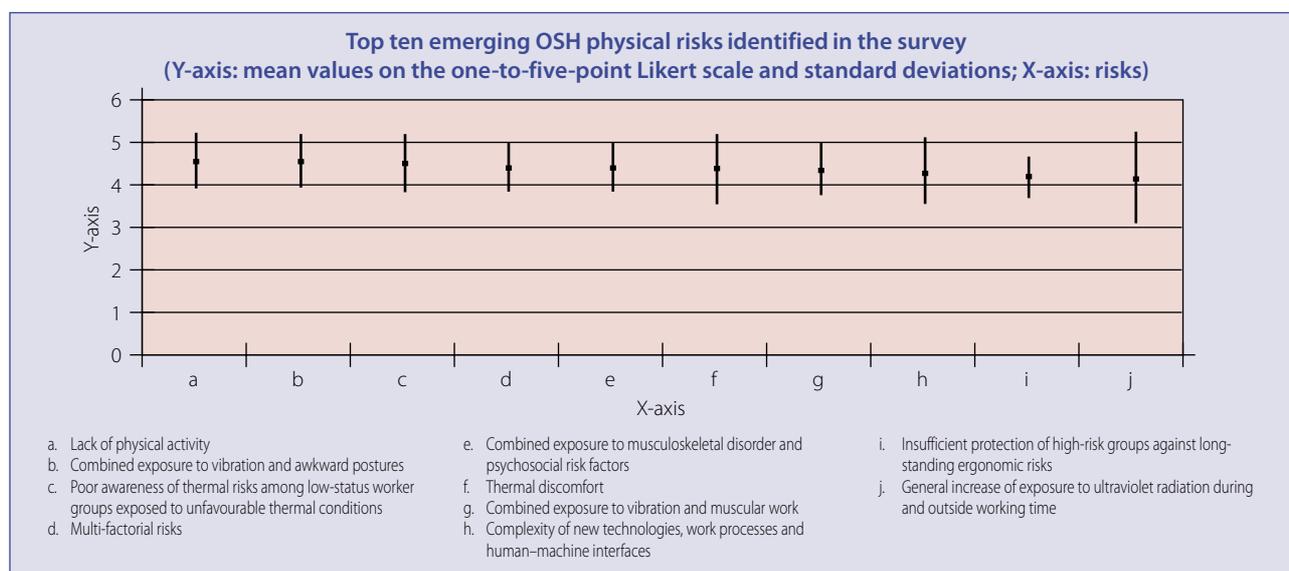
- Lack of physical activity (e.g. prolonged sitting at the workplace, during business trips, or due to use of automated systems);
- combined exposure to vibration and awkward posture;
- poor awareness of thermal risks among low-status worker groups exposed to unfavourable thermal conditions (e.g. migrant workers in agriculture and construction, working long hours in hot/cold areas such as greenhouses/cold stores);
- combined exposure to MSD risk factors and psychosocial risk factors (e.g. fear of future, insecurity);
- multi-factorial risks (e.g. in call centres: combined effects of poor ergonomic design, poor work organisation, mental and emotional demands);
- combined exposure to vibration and muscular work;
- thermal discomfort;
- complexity of new technologies, new work processes and human-machine interfaces leading to increased mental and emotional strain;
- insufficient protection of high-risk groups (older workers, low status workers, foreign workforce, etc.) against long-standing ergonomic risks;
- general increase of exposure to UV radiation (during leisure time, occupational outdoor activities, new UV technologies at the workplace) increasing the sensitivity to UV radiation at the workplace.

Top emerging chemical risks

- Nanoparticles and ultrafine particles: emerging risks due to increasing (new) industrial applications creating nanoparticles (e.g. laser treatment of material), lack of knowledge on toxicity of ultrafine particles leading to inappropriate or insufficient protective measures, to poor risk assessment and unfavourable workplace design and environment;
- poor risk control of chemical substances in SMEs;
- outsourcing (e.g. for cleaning and maintenance activities) performed by sub-contracted companies with poor knowledge of chemical risks;
- increasing problems concerning the use of epoxy resins, i.e. in the construction of wings for windmills as power generators or big aircraft cabins, and their increasing use in construction sites;
- dermal exposure leading to skin diseases;
- exposure to dangerous substances (dust, micro-organisms, endotoxins, etc.) in waste treatment activities (including industrial, medical and municipal sectors);
- exposure to diesel exhaust;
- isocyanates leading to allergic reactions: the exposure not only occurs at the production stage, but also during further processing;
- man-made mineral fibres (e.g. refractory ceramic fibres, carbon/graphite fibres or composites) lack of knowledge on health effects of (new) fibre substitutes for asbestos, whose use is increasing; potential health effects: respiratory diseases, cancer;
- exposure of poorly qualified workers to isocyanates in the construction sector.

Top emerging biological risks

- Global epidemics of old and new pathogens, e.g. severe acute respiratory syndrome (SARS), avian flu, viral hemorrhagic fever, tuberculosis, human immunodeficiency virus (HIV), hepatitis C, hepatitis B. The groups particularly at risk are staff involved in producing, processing and transporting livestock, airport staff and air crews, and staff involved in border controls, policing, and staff in the healthcare sector, public transport and public services;
- poor or difficult assessment of biological risks;
- general increased use of antibiotics for human health care and for animal breeding in the food industry, leading to the apparition of drug-resistant pathogens such as methicillin-resistant



(*) European Agency for Safety and Health at Work, *Expert forecast on emerging physical risks related to occupational safety and health at work*, Luxembourg 2005. ISBN 92-9191-165-8. http://riskobservatory.osha.europa.eu/risks/forecasts/physical_risks/full_publication_en.pdf



staphylococcus aureus (MRSA), tubercule bacillus (TBC) — increase in hospital staff infected with MRSA; increasing antibiotics resistance of livestock farmers and in the general population;

- lack of information on biological risks in various workplaces (e.g. offices, agriculture);
- poor maintenance of air-conditioning (whose use is increasing) and water systems (e.g. legionella, aspergilosis in hospitals);
- inadequate training, poor knowledge of OSH or even poor basic risk awareness among municipal staff (e.g. sewage, excavations, waste collection, etc.);
- biohazards in waste treatment plants (e.g. selective sorting, manufacture of compost);
- bioaerosols and chemicals, whose combined effects are under-researched but lead to allergies: better knowledge may uncover multi-factorial causes of symptoms for which mono-causal explanations have been made so far;
- endotoxins: high concentrations in various industrial settings such as workplaces exposed to organic materials (straw, wood, cotton dust), waste treatment, poultry houses, swine confinement buildings;
- moulds in indoor workplaces due to new construction methods and materials, due to inappropriate heating, ventilation and air conditioning practices (aimed at saving energy), and due to lack of maintenance.

Top emerging organisational, social and human risks

- New forms of employment contract, including temporary and precarious work and outsourcing associated with the emergence or aggravation of psychosocial problems and related health effects: the working conditions of precarious workers are generally poorer than those of permanent workers;
- feeling of job insecurity in the context of globalisation and unstable labour market, affecting workers' health and workers' safety behaviour at work;
- increasing work-related stress and difficulty in balancing work and life due to, for example, work intensification and growing complexity of tasks, and increase of working time schedules with irregular and less predictable working hours;
- the ageing workforce and how to achieve a better fit of jobs to an ageing workforce;
- violence and bullying.

The results of these forecasts are the first step in a process of debate and consolidation that forms part of the programme of work of the Agency's Risk Observatory⁽⁵⁾. Further forecasting studies are envisaged in order to monitor the constant technical and societal changes that may lead to emerging risks with implications for occupational safety and health.

2.3. Top OSH research priorities for the next five years — conclusions of the seminar 'Promoting OSH research in the EU' (Bilbao, 1 and 2 December 2005)

This summary of the main priorities for research in occupational safety and health (OSH) was elaborated during the seminar by the representatives from the main European OSH research institutes and from the EU social partners, the Research DG, The Employment, Social Affairs and Equal Opportunities DG, the ILO and the Agency. It represents the result of an extensive

⁽⁵⁾ Risk Observatory website available at: <http://riskobservatory.osha.europa.eu>

⁽⁶⁾ European Agency for Safety and Health at Work, *Expert forecasts on emerging physical risks related to occupational safety and health*, Luxembourg, 2005. ISBN 92-9191-165-8. http://riskobservatory.osha.europa.eu/risks/forecasts/physical_risks/

⁽⁷⁾ Draft results of expert forecasts on emerging chemical, biological and organisational, social and human risks related to OSH. Reports will be published in 2006.

consultation process, starting with the forecast of emerging risks⁽⁶⁾ ⁽⁷⁾ — which involved the surveying of almost 190 experts — and a short report identifying future OSH research needs in the EU⁽⁸⁾. All these publications benefited from the feedback from the Agency's expert networks.

Context

The priorities identified below should be set within a general framework for the improvement of safety and health at work that emphasises three key elements:

- creating a culture of prevention as the sustainable basis for achieving a healthy workforce;
- emphasising the positive approach: improving the work environment improves health and performance;
- mainstreaming OSH into other relevant research and policy areas.

Priorities

The division into four themes, below, is not meant to indicate fixed boundaries between them. Many OSH problems are multifactorial and therefore best treated in a holistic manner. This is emphasised in the last section, which outlines some important cross-over areas.

Psychosocial issues

- research on creating a positive work environment to prevent the occurrence of psychosocial problems;
- psychosocial risks associated with organisational changes, and the understanding of the underlying causes of health-related outcomes that may be related to them, such as cardiovascular disease;
- interaction of psychosocial risk factors and musculoskeletal disorders.

Musculoskeletal disorders (MSDs)

- improving the understanding of the cause-effect relationships, for example, by means of intervention studies;
- developing tools for assessing and managing MSD risks;
- MSDs and the diversity of the workforce, especially the gender and age dimensions.

Dangerous substances

- Specific substances:
 - engineered nanoparticles and ultrafine particles,
 - biological hazards, such as fungal spores in moisture-damaged houses, infection of staff in hospitals (MRSA), pandemics (avian flu, SARS),
 - emerging risks as a result of new technologies, work processes or substances (e.g. bioengineering implemented in SMEs which do not control the potential health risks);
- specific health problems caused or made worse by dangerous substances: work-related cancers, cardiovascular diseases, and reproductive health disorders.

OSH management

- Develop risk assessment and holistic risk management tools for SMEs, which are both user-friendly and based on sound research, especially for the prevention of the major priority risks identified here;
- research on how to make better use of the knowledge and experiences available from stakeholders, especially workers and their representatives, OSH prevention services and labour inspectorates;
- research into the relationship between OSH and competitiveness at micro-, meso- and macro-levels;

⁽⁸⁾ European Agency for Safety and Health at Work, *Priorities for occupational safety and health research in the EU-25*, Luxembourg, 2005. ISBN 92-9191-168-2. <http://osha.europa.eu/publications/reports/6805648>



- management of a diverse workforce, including the age and gender dimensions;
- research to improve the design of work and workplaces in order to recruit and retain workers with disabilities or chronic illness;
- OSH management in the public sector, which should play an exemplary role in its various functions (employer, regulator, enforcing authority, etc.).



Complex human-machine interface

Cross-overs: multifactorial risks

Combined exposure to multiple risk factors in the work environment, including physical, chemical, psychosocial, biological, ergonomic issues, for example:

- work organisation and workplace design issues, such as the lack of physical activity in the workplace leading to multiple health problems (such as MSDs, varicose veins, obesity);
- physical and cognitive ergonomics of human-machine interfaces and their impact on stress and MSDs, such as:
 - complex automated systems and machinery,
 - high-technology devices (e.g. in-cab devices such as multi-purpose control joysticks in heavy trucks and earth-moving machinery),
 - mobile video display unit (VDU) workplaces (such as laptops in maintenance vehicles in the telecommunication sector), teleworking and home workplaces;
- combined exposure to noise and ototoxic substances;
- impact of stress on the occurrence of MSDs.

3. DEVELOPING NETWORKS

3.1. Towards the seventh EU research framework programme, 2007-13

Marc van Achter (European Commission — Research DG)

The seventh research framework programme (FP7) aims to support European research so that it is competitive on the international stage. This can only be achieved through integrated transnational efforts and a more coherent approach of European research. The Commission wishes to ensure continuity across successive FPs, with the more ambitious aim of not considering Community funding in isolation, but linking it to industry-sponsored research, and public-private partnerships.

What's new in the FP7 compared to FP6?

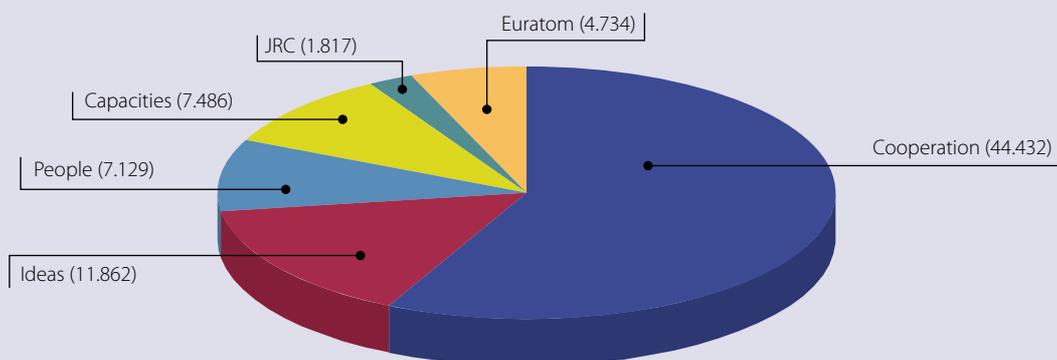
- duration increased from five to seven years;
- annual budget doubled (from EUR 5 billion to 10 billion);
- more basic research (~EUR 1.5 billion per year);
- flexible funding schemes;
- Joint Technology Initiatives and Article 169 (interaction of national programmes);
- simpler procedures;
- logistical and administrative task — external structures;
- new structure: cooperation, ideas, people, capacities.

FP7 is divided into four basic modules (aside from the Joint Research Centre and Euratom):

- cooperation — collaborative research;
- ideas — frontier research;
- people — human potential;
- capacities — research capacity.

The **cooperation** module is the largest, traditional block in the programme. The aim is to achieve a leading position in key scientific and technological areas by supporting cooperation between universities, industry, research centres and public authorities across the EU. The goal of the **ideas** module is to promote excellence by supporting frontier research and providing support to individual teams. For **people**, the focus is on the needs of researchers themselves: their training, mobility, life long learning and career development. The **capacities** module targets the strengths of EU research, such as research infrastructures and research for the benefit of SMEs.

FP7 budget breakdown, 2007–13 (in EUR million)



Several funding schemes will be available within FP7:

- collaborative projects: consortia with participants from different countries; new knowledge, technology, product or common resources for research; size, scope and internal organisation of projects can vary;
- network of excellence: joint programmes of organisations integrating activities in a given field; longer term cooperation; formal commitment to integrate resources
- coordination and support actions: networking, exchanges, transnational access to research infrastructures, studies, conferences, etc.;
- training and career development of researchers;
- research for the benefit of specific groups (in particular SMEs);
- large-scale initiatives from multiple sources: joint implementation of national research programmes; joint technology initiatives; new infrastructures of European interest.

Further information is available from:

- EU research: <http://osha.europa.eu/comm/research> and http://osha.europa.eu/comm/research/future/index_en.cfm
- FP7 website at: <http://www.cordis.lu/fp7/faq.htm>
- 'RTD info' magazine: <http://osha.europa.eu/comm/research/rtdinfo>

3.2. Promoting OSH research in the EU

Marc van Achter (European Commission — Research DG, EU) and *Anne Degrand-Guillaud* (European Commission — Employment, Social Affairs and Equal Opportunities DG, EU)

The most relevant module in FP7 for OSH research is **cooperation**, which contains nine thematic priorities. OSH research is most likely to fit under three of these priorities, although others are not excluded:

- health;
- nanosciences, nanotechnologies, materials and new production technologies;
- socioeconomic sciences and the humanities.

Thematic priority: health

The three objectives for **health** research are:

- improving the health of European citizens;
- increasing the competitiveness of European health-related industries and businesses;
- addressing global health issues including emerging epidemics.

The three activities (pillars) of health research are:

- biotechnology, generic tools and technologies for human health;
- translating research for human health (applied research);
- optimising the delivery of healthcare to the European citizen.

The aim of the third pillar, 'optimising the delivery of healthcare to the European citizen', is to provide the necessary basis for evidence-based decisions with regard to policies on health systems, and for more effective strategies of health promotion, disease prevention, diagnosis and therapy. The activities for this pillar are:

- enhanced health promotion and disease prevention: life style — health determinants;
- translating clinical research into clinical practice: pharmacovigilance, patient safety;
- quality, solidarity and sustainability of health systems.

The most relevant activity for OSH appears to be the 'quality, solidarity and sustainability of health systems', which seeks to provide a basis for countries to adapt their health systems in the light of others' experiences, taking into account national contexts and population characteristics (ageing, mobility, migration, education, socioeconomic status and the changing world of work, etc.). Focus will be on organisational, financial and regulatory aspects of health systems, their implementation (best practice) and their outcomes: effectiveness, efficiency and equity. Special attention will be paid to investment issues and human resources.

Cooperation: collaborative research — nine thematic priorities

1. Health
2. Food, agriculture and biotechnology
3. Information and communication technologies
4. Nanosciences, nanotechnologies, materials and new production technologies
5. Energy
6. Environment (including climate change)
7. Transport (including aeronautics)
8. Socio economic sciences and the humanities
9. Security and space

Thematic priority: nanosciences, nanotechnologies, materials and new production technologies

The overall objective of this theme is to improve the competitiveness of EU industry (including SMEs) and ensure its transformation through:

- effective transition from a resource-based to knowledge-based industry;
- generation of breakthrough, applicable knowledge;
- strengthening EU leadership in nanomaterials and production technologies;
- emphasis on integrating different technologies and disciplines across many sectors.

With this theme, the Commission hopes to increase and support the take-up of knowledge generated in this revolutionary field for all industrial sectors. Topics include interface and size-dependent phenomena; material properties at nanoscale; self-assembly; metrology; new concepts and approaches; impact on health and safety; convergence of emerging technologies.

The Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR) recently adopted an opinion on 'the appropriateness of methodologies for assessing the risks of nanotechnologies'. According to them, nanotechnologies are very beneficial to individuals and organisations, and these new materials provide radically different properties through functioning at the nanoscale. They may, however, have potential implications for safety and health that must be investigated.

Thematic priority: socioeconomic sciences and the humanities

The aim of this theme is to generate an in-depth, shared understanding of the complex and interrelated socioeconomic challenges with which Europe is confronted, such as growth, employment and competitiveness, social cohesion and sustainability, quality of life, education, cultural issues and global interdependence. Its main aim is to provide an improved knowledge base for policies in these fields.

There are several activities in this topic related to OSH research. One of the main aspects is 'combining economic, social and environmental objectives in a European perspective' to improve the basis for sustainable development. Another aspect is 'major trends in society and their implications'. The aim here is to understand and assess the implications of particular key trends in European society that have major consequences for citizens, for their quality of life, and for policies, and thus to provide an underpinning for many policy areas. It is important to highlight the importance of OSH in both of these aspects.

Under each theme in the **cooperation** module there will be sufficient flexibility to address both 'emerging needs' and 'unforeseen policy needs'. Dissemination of knowledge and transfer of results will be a key element in all thematic areas.

3.3. New OSH ERA

New and emerging risk in OSH — anticipating and dealing with change in the workplace through coordination of OSH research

Kai Savolainen and Katalin Sas (Finnish Institute of Occupational Health, Finland)

Quality work environments are essential for the healthiness of the European workforce and for EU competitiveness. To this end, the cohesion, resources and focus of national OSH research programmes in the EU need to be improved. The idea of establishing an ERA NET consortium was raised by several OSH research institutes within the EU. The thrust behind this idea was striving for a more effective OSH research networking, and building a strategic alliance to promote the inclusion of OSH research in FP7, which has been largely missing in FP6.

The Finnish Institute of Occupational Health (FIOH) was proposed to coordinate the activity, and a core group consisting of FIOH, BAuA (Germany), CIOP-PIB (Poland), DLR (Germany) and the European Agency for Safety and Health at Work (EU) prepared the proposal. Further institutions were invited to join. The current consortium includes 18 leading public agencies, ministries and research organisations funding or managing OSH research in close collaboration with stakeholders from science, the economy and society.

The strategic objective of New OSH ERA is to support the systematic exchange of information and stepwise integration of OSH research programmes in the EU. The main goal is to promote cooperation in joint OSH research activities. The focus of these activities is on:

- complex interactions between work environments, organisation of work and occupational stress factors;
- new and emerging risks in different industry sectors;
- incorporation of innovative approaches to research programmes;
- developing broad coalitions to promote sustainable research collaboration.

The foreseen activities to be carried out within the project, as well as future actions that will be undertaken beyond the scope of the project, will have a direct impact on various aspects of OSH in Europe, and particularly on OSH research activities:

- development of the European Research Area (ERA) in the field of OSH;
- establishing a sustainable European network for cooperation in joint research activities between key research institutes and other actors in the field;
- strengthening links between national and European policy-makers and the OSH research community;
- establishing effective dissemination and promotion structures aimed at improvement of OSH in the enlarged European Union;
- development of European and national strategies and establishing priorities in OSH research and other prevention activities.

The development of New OSH ERA will be divided into two main parts: 'programme management approaches' and 'OSH research thematic approaches'. The first part is concerned with how New OSH ERA members will work together in recognising and preventing new and emerging risks by exchanging information on programme management and preparing arrangements and agreements for a wide range of joint activities. The second part is focused on creating synergistic and coordinated research activities in the field of the identification and prevention of new and emerging risks based on a common vision and joint strategies. These activities will contribute to the policy goals announced at the Lisbon summit, and go hand in hand with those of the Community strategy for OSH.

4. CONCLUSIONS AND NEXT STEPS

As indicated in the introduction, the two interrelated aims of the seminar were to reach a consensus on the main priorities for OSH research, and to stimulate networking amongst the major OSH research institutes in Europe. Both aims are closely related to the need to make those research priorities more visible within the forthcoming seventh framework programme. The seminar had two positive and practical outcomes.

First, the summary list of priorities agreed in Bilbao was later circulated for comments to all the experts invited to the seminar, including those who could not attend. The final shortlist is, therefore, the result of an extensive process of consultation, starting with the emerging risks forecasts, and the 'EU-25



research priorities' document circulated to the Agency's networks. It is hoped that the shortlist will be a useful tool to present policy-makers and funding bodies with a concise and clear view of the current OSH research priorities.

Second, the seminar participants had a chance to discuss how the existing OSH research networks (such as New OSH ERA, PEROSH and the Agency's Topic Centre) could work together to persuade policy-makers and the Commission of the need to make funding available for the research priorities identified in the shortlist. It was agreed in Bilbao that a second meeting would be organised in 2006 in order to stimulate further collaboration and to foster preparation of research projects of excellent quality in response to European calls for proposals. In the meantime, the representatives of several institutions participating in the seminar volunteered to coordinate contacts with representatives of the Research DG. The seminar also highlighted the need to establish close collaboration with the research institutes' national representatives at the EC programme committees on research. This collaborative work between researchers and EC and national representatives is a key element in the preparation of work programmes in the three thematic priorities which are identified within FP7 (health, nanotechnologies and socioeconomic sciences).

Shortly after the seminar took place, the Commission signalled its interest in OSH priorities by launching a call for proposals that included the topic of 'new knowledge of burden of work-related stress including physical and psychological violence such as harassment, bullying, and mobbing'. It is clear that the Commission has mechanisms to support possible bids from research institutions, but, in turn, the OSH research community needs to make concerted efforts both to persuade funding bodies of the importance of these issues, and to prepare strong bids when calls for proposals are published.

In summary, the seminar has highlighted how important it is that existing OSH research networks cooperate in order to improve the health and safety of European workers. International and multidisciplinary collaboration is the essential feature of successful research, and the European Agency for Safety and Health at Work will continue to support the initiatives arising from the OSH research community in this respect.

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