Promotion and Support of Implementation of Directive 2010/32/EU on the prevention of sharps injuries in the hospital and health care sector

Report of third regional workshop

Vienna, 16 April 2013

Contents

With the support of the European Commission

1 Introduction

This document provides the report from the third regional workshop of the joint EPSU-HOSPEEM project on the Implementation of Directive 2010/32/EU on the prevention of sharps injuries in the hospital and healthcare sector (see http://www.epsu.org/r/629), which was held in Vienna on 16th April 2013 (see http://www.epsu.org/a/9116 and http://www.epsu.org/a/9393).

1.1 Background of the project

A framework agreement on the prevention from sharps injuries in the hospital and healthcare sector was signed in July 2009 by the European sectoral social partner organisations – the European Public Services Union (EPSU) and the European Hospital and Healthcare Employers' Association (HOSPEEM). The social partners requested the Commission to submit the agreement to Council for a decision, in accordance with Article 155(2) TFEU. In 26 October 2009, the European Commission issued a proposal for a Council Directive containing the full social partner agreement as an annex. On 11 February 2010 the European Parliament supported the proposed Directive in a resolution and on 8 March the Council reached political agreement on its adoption. The Directive was published in the Official Journal as Council Directive 2010/32/EU of 1st June 2010 (L134/66). Member States have to implement the Directive by the 11th May 2013.

The Directive aims to achieve the safest possible working environment for employees in the sector and protect workers at risk, as well as patients, including prevention of injuries to workers caused by all types of sharp medical objects (including needle sticks). The Directive proposes the setting up of an integrated approach to assessing and preventing risks as well as to training and informing workers.

Clause 11 of the agreement concerning its implementation stipulates that the interpretation of the framework agreement could be referred by the Commission to the signatory parties, i.e. EPSU and HOSPEEM, for them to give their opinion. The European sectoral social partners also included the possibility to review its application five years after the date of the Council decision if requested by one of the parties to the agreement, an option which also supports the idea of an early and timely follow-up to allow for an informed decision making at a later stage. There is finally a formal obligation by the European and national sectoral partners to engage in and stay involved in appropriate follow-up activities including awareness-raising, monitoring and assessing the implementation process, participation in relevant committees and bodies responsible for the transposition.

Having in mind that the deadline of implementation approaches shortly, the aim of the project is:

a) To gather information on the transposition and implementation of the Directive at the national level;

b) To gather and exchange information about existing guidance and toolkits at the national and local level to help with the implementation of the agreement at the organisational level:

c) To learn about the practical issues being raised at the organisational level in the implementation of the agreement; how to deal with these issues and to learn from good practice.

1.2 Participating countries

The third regional workshop was held in Vienna on 16th April 2013 with the participation of over 100 representatives of sectoral social partner and health care provider organisations from Austria, Bulgaria, Croatia, the Czech Republic, Germany, Hungary, Latvia, Poland, Romania and Slovakia. Representatives from Belarus, Kosovo, Moldova and Russia also attended at the invitation and with the financial support of EPSU. Further information on the event, including a full set of presentations can be found on http://www.epsu.org/9396.

1.3 Purpose of the report

The goal of this report is to summarise the discussions of the workshop.

2 Sharps injuries: a significant risk in the health care sector

There are 21 million workers active in the hospital and healthcare sector in Europe[1]. It is estimated that 1 million needle-stick injuries occur annually.[2] The number of other accidents with medical sharps is not known because they are even less likely to be recorded. It is not just medical professionals who are at risk. While hospital nurses and doctors working in acute medical situations are identified as being at the highest risk, many other workers have the potential to sustain these injuries such as nurses working in the home care sector, social workers (working with drug addicts for example) and ancillary staff, for example cleaners, waste managers or laundry staff. A particular issue identified was that such ancillary staff is often not afforded the same protections, particularly where such services are contracted out and/or delivered by temporary or agency work staff.

Reliable national data was available for few countries attending the seminar. As had also been pointed out at previous regional seminars held under this project (for reports on the seminars in Rome and Dublin see http://www.epsu.org/a/9393 and http://www.epsu.org/a/9264 respectively), there are a number of issues affecting the availability, completeness and reliability of data. Firstly, not all incidents are reported. There are a number of reasons for this:

- Staff blame themselves for sustaining an injury or they fear to be blamed by others;
- They do not see a reason to report it if the perceived (or the real) risk of infection is low as the sharps injury itself is minor;
- Processes of reporting are bureaucratic or time-consuming (e.g. in some cases blood tests cannot be taken at the same hospital, which can mean that even where this would be vital, early prophylaxis cannot be delivered);
- Staff are discouraged from reporting injuries because they consider that nothing will change;
- Some staff (e.g. ancillary staff, see above) is not aware of associated risks and the processes for reporting.

Although the most significant concern relates to under-reporting of injuries, it was also mentioned that in some cases incidents are reported which could not (and did not) lead to injury, let alone infection, as they happen with medical sharps not carrying the risk of infection.

The importance of taking account of national reporting requirements and provisions regarding the recognition of occupational injuries was also emphasised. Although in most countries there are workplace level requirements to report occupational accidents, these are only reported to the national level where they are associated with absences from work of more than three consecutive days, which is rarely the case with respect to sharps injuries. Similarly, in some countries illnesses and infections (or indeed psychological trauma) sustained as a result of a sharps injury are not recognised as occupational illnesses and are therefore not reported to national authorities (e.g. occupational accident insurance companies).

Many organisations/facilities, however, have their own internal reporting system of sharps injuries in place, and/or adhere to reporting in CIRS (Clinical Incident Reporting System) as part of their own risk management[3].

[1] Data from the Eurofound Report, 'Employment and industrial relations in the healthcare sector', February 2011, Dublin, accessed at: http://www.eurofound.europa.eu/eiro/studies/tn1008022s/index.htm
[2] Estimate from the European Agency for Health and Safety at Work, EU-OSHA), https://osha.europa.eu/e n.
[3] In the Vienna Hospital Association a lot of experience is being gained through the project "*Erfahrungsdrehscheibe*".

As indicated in previous regional seminars, the main risks of infection relate to patients carrying HIV, Hepatitis B and Hepatitis C infections. The level potential risk associated with exposure to patients carrying such infections varies from country to country. In Austria, for example, it was noted that the level of such infections in the patient population is relatively low and therefore the risk of contracting such infection through a sharps injury was considered to be relatively minimal. Other factors also affect the potential risk associated with infection, particularly in relation to Hepatitis B. In many countries including Austria and Germany, health care staff is routinely vaccinated against Hepatitis B on entering the profession. Unless there are proven counter-indications against such vaccination at the individual level, such vaccination programmes are often compulsory, and significantly reduce the risk of infection. Obviously no such vaccinations are available to protect against infection with HIV or Hepatitis C, but these are also less widespread in the patient population.

It is interesting to note that budgetary factors are playing a role in this important area. It was noted by a Romanian representative of EPSU, from SANITAS, that a vaccination programme against Hepatitis B which had been available to health care staff had been cancelled in recent years for cost reasons (and is now only available to those in areas where the risk of infection is considered to be high).

Research commissioned by the Czech Association of Nurses (based on a poll of around 1,400 nurses carried out in 2009 and 2010) found that 83% of respondents had experienced a sharps injury at some point in their career[4]. Transmission of an infectious disease resulted in around 2.5% of cases (mainly hepatitis). In 95% of cases, this infection was subsequently recognised as an occupational illness.

Most of these sharps injuries occurred during the preparatory stages for using a medical sharp, followed by incidents during the storage or disposal of sharps equipment in a waste container. Every fifth sharps injury occurred during blood collection. Significantly, the vast majority of workers responding to the survey considered the injury to be their own fault. In just over half of cases, stress was considered to be an important factor in the causation of the injury.

[4] It is important to note that such surveys can draw more responses from individuals affected by the problem which is being investigated.

3 State of Play of Transposition

As part of the project, ICF GHK is carrying out a survey among social partner organisations. Among the answers received to date[5], five Member States have transposed Directive 2010/32/EU already, namely Austria, Bulgaria, the Czech Republic, Germany, the Netherlands and Sweden. Denmark and Latvia are likely to implement the Directive prior the 11th of May 2013, while France, Italy, Ireland, the UK and Finland are most likely to implement it by the deadline. The competent government administrations in countries such as Spain, Cyprus and Estonia are not certain of the implementation date.

Social partner involvement for the transposition was ensured in most of the countries that responded to the survey. Most of the Member States chose to implement the Directive via legislation and supplement it with specific guidelines (or collective agreement) at a later date. The Netherlands is an exception, as a national Guideline for the prevention of sharps injuries is in place since 2007; the transposition of the Directive was done via this Guideline. It is now up to the hospitals and health care sector to implement these guidelines at organisational level.

In 8 of the 12 EU Member States where responses are so far available, the level of change required to existing legislation is considered to be either moderate or significant, with the main alterations to existing legislative texts revolving around issues such as the ban on recapping, requirements for more specific risk assessment and the provision of preventative vaccination. In the remaining 4 Member States, changes required were considered to be of a low order or insignificant.

Challenges perceived to implementation revolved around the cost of implementation during times of austerity and the different interpretations applied regarding the scope of application of the Directive (e.g. which staff is covered).

The majority of countries already have existing guidance on the prevention of sharps injuries and most countries where such guidance is not yet available plan to issue it as part of the transposition and implementation of the Directive. In the framework of the project existing guidance across Europe is collected and shared on webpage http://www.epsu.org/a/9157.

[5] By 16 April 2013, 22 responses had been received from 14 countries, of which 12 from EU MS: Austria, Cyprus, Denmark, France, Finland, Ireland, Italy, Latvia, Netherlands, Spain, Sweden, UK; Belarus, Ukraine). Until early May additional replies were received from Bulgaria and Germany, but they are not yet included in the analysis presented.

4 Good Practice and Challenges for Transposition and Implementation

The workshop mainly discussed progress in the transposition of the Directive, outstanding issues and relevant practice in the implementation of the provisions of the legislation at organisational level.

4.1 Key elements of good transposition

The following elements below are at the centre of good transposition:

- Clear involvement of social partner organisations in the transposition of the Directive.
- Setting up of a monitoring body/ data surveillance body at national level – to ensure standardised reporting of injuries and control compliance of legislation. This should go beyond the mandatory reporting of injuries leading to an absence of more than 3 days.
- Involvement of trade unions and employee representatives in risk assessment and prevention planning.
- Basis for transposition: risk assessment
- Standardised training for all types of health care workers regarding knowledge of sharps injury prevention and reporting.
- Development of a no-blame culture which encourages the reporting of all incidents.
- Banning of recapping.
- Free vaccination of affected workers.
- Standardised minimum requirements for safety devices (should be developed in the long term) and policy for safe working procedures.
- Creation of a national working group including social partners, health and safety bodies, healthcare and social work representatives, producers of safety devices, training providers, researchers – working groups could as well be created at local/municipal level – to work on guidelines for risk assessment, safety products and safe working procedures, best practice exchange.

4.2 Transposition and implementation experiences

The following presentations held at the workshop highlighted current challenges of transposition of the Directive and experiences with the reporting and prevention of sharps injuries.

4.2.1 Austria

Austria is one of the four Member States in which the Directive has already been transposed into national legislation, through the so-called 'needlestick regulation' (*Nadelstichverordnung, NastV*[6]). The regulation was published on 3 January 2013 and enters into force on 11 May 2013. It makes specific reference to the Directive and to EPSU and HOSPEEM as the negotiating parties behind the framework

[6] See BGBl. II, 16/2013, http://www.ris.bka.gv.at/Dokumente/BgblAuth/BGBLA_2013_II_16/BGBLA_2013_II_16.pdf

agreement. The regulation covers health care sector workers and makes specific reference to the fact that any ancillary staff (for example in sub-contractors supplying laundry facilities) must also be informed and covered by its provisions.

Overall, the number of sharps injuries in Austria – and more specifically, the resulting number of occupational infections – were considered to be rather low by a speaker from the hospital association of Salzburg (*Salzburger Landesklinken, SALK*). This was partly due to the relatively low underlying level of Hepatitis and HIV infections in the patient population in Austria.

Using the example of SALK, it was demonstrated that many measures aimed at preventing sharps injuries have already been in place for a number of years. These include:

- Risk assessment to establish existing risk levels and to take relevant steps to prevent or eliminate these;
- Hepatitis B inoculation;
- Training and awareness raising;
- Internal reporting procedures;
- Introduction of safety engineered devices where appropriate.

At SALK, a number of safety engineered devices were introduced since 2008 including gripper micros, safety butterflies (both in 2008), safety lancets (2010), safety system for blood tests (2011) and safety venflon (2012). In each case, the process of sourcing and commissioning is time-consuming, involving a group of experts, call for tenders and relevant training during the introduction of new equipment. It is particularly important to note that at SALK the purchasing department and the department for occupational medicine work closely together: only devices which have been tried and tested by the department for occupational medicine are being ordered for use within SALK.

In 2011 there were 277 needlestick injuries reported at SALK of which 73 occurred during disposal. According to the statistics on where and how the injuries occurred, it is considered that 30% of these are preventable. Since 2009, SALK has seen a reduction of needlestick injuries from 334 to 275 in 2012. However, when looking at the different safety engineered devices, it is important to note that not all are equally effective in reducing incidents of sharps injuries: for example, following the introduction of the use of the safety butterfly, the number of injuries in fact increased. This is partly the result of staff finding it more difficult to work with such equipment (or getting used to it), but also demonstrates that some of the causes of such injuries are difficult to prevent with safety engineered devices alone. In fact, many “safety devices” available at present are found not to be usable for the intended treatment to be performed. Thus they rather pose a risk for causing unnecessary injuries and potential infections.

Some injuries are attributed to patients being distressed and restless and moving about during procedures. Such situations are more likely to require additional staff or calmer environments (or reduced stress among staff) to manage them.

In relation to sharps (rather than needlesticks) it can prove more difficult to replace these types of instruments and to manage injuries. While it is possible to source retractable scalpels, it is found that most injuries occur during surgical procedures themselves which cannot be prevented with safety engineered devices.

On the whole, it was considered that the most effective steps to prevent occupational injuries and illnesses arising from contact with medical sharps are:

- Hepatitis B inoculation
- Wearing of personal protective equipment (gloves etc)
- Skin protective creams when performing operations involving presence of blood

- Sharps disposal containers within ready reach
- Training and the presence of well trained staff in high risk procedures
- Whenever possible, reducing time pressure when performing the procedure

In terms of costs associated with the 277 needlestick injuries arising in 2011, these are considered to include around 45,000 Euros for laboratory testing of patient and staff blood samples; an additional 100,000 Euros for safety engineered devices and around 10,000 Euros associated with the cost of additional disposal containers. Nothing is known about the additional cost of the increased waste arising from safety devices. In this context it is notable that there have not been any contaminations associated with needlestick injuries since 1994.

4.2.2 Germany

Germany has also completed its discussions about the implementation of the Directive, with relevant legislation and regulations due to come into force in May 2013. Transposition via amendments of the legislation on biological agents (*Biostoffverordnung*), in itself part of the transposition of EU legislation (Directive 2000/54/EC) and the regulation on prevention in occupational health (*Verordnung zur arbeitsmedizinischen Vorsorge*[7]) which relates to preventative injections for (medical) staff. In addition, there are a number of specific technical regulations such as TRBA 250[8] for the health care sector and TRBA 400[9] on risk assessment.

In Germany, the social partners and the relevant ministries, in particular the Federal Ministry of Labour and Social Affairs (*Bundesministerium für Arbeit und Sozialordnung*, BMAS), collaborated closely in the transposition of the Directive and welcomed its integrated approach with a strong emphasis on risk assessment and prevention, training and reporting to help improve processes.

In addition, a pilot project has been carried out to assess practice at organisational level and how this can best be improved. The project *STOP Nadelstich*[10] (Security through training, organisation and selection of products (to prevent needlestick injuries) involved one hospital, four surgeries and one ambulance service.

The project began with 'data collection' on current procedures and levels of injury, which involved project staff to understand as well as to observe existing procedures. At this stage, many shortcomings were identified. There followed an 'intervention' stage during which different types of services were offered including:

- Training
- e-learning
- Sample case (containing different types of safety engineered devices to be tried with instructions)
- Practical aids (such as a small memo-card on safe processes which can be carried in a pocket)

Subsequently, processes and results were again assessed and observed and these showed significant improvement in practices among direct health care staff. However, gaps in implementation were also evidence among sub-contracted staff in laundries, cleaning and catering services in particular, where a significant number of sharps injuries occurred. The pilot project sought to involve relevant staff but this proved not to be possible as the relevant sub-contracted employers refused to co-operate in the project.

[7] http://www.bmas.de/DE/Service/Gesetze/ArbMedVV.html
[8] See http://www.baua.de/de/Themen-von-A-Z/Biologische-Arbeitsstoffe/TRBA/TRBA-250.html
[9] See http://www.baua.de/en/Topics-from-A-to-Z/Biological-Agents/TRBA/pdf/TRBA-400.pdf;jsessionid=F53EFEDA43B84849BC63A58EF1B1EF4C.1_cid389?__blob=publicationFile&v=2
[10] Pilot project *STOP Nadelstich*: http://www.stopnadelstich.de/Home.html

Apart from the involvement of all affected staff, the key lessons drawn for different stakeholders were as follows:

All existing procedures should be reviewed on a regular basis and all staff should be aware of what to do in case of an injury occurring.

Employers should be encouraged to involve staff in the development of relevant processes as well as the selection of safety engineered devices where they are deemed to be appropriate. In addition, all staff should be involved, including those who might be worked in contracted out services.

The recommendation was also made the industry – in co-operation with healthcare professionals – needs to develop more suitable tools, provide better training and thus increase the acceptance of such devices.

A representative of ver.di speaking at the conference identified the following deficits when it comes to the implementation of safe processes at work:

- Information deficits
- Lack of awareness of the issue
- Lack of attentiveness in carrying out work processes
- Incorrect use of sharps equipment
- Cost issues
- High work load/stress

Implementation at the organisational level will therefore be the real test of the success of the Directive.

He also presented the webpage "*Sicheres Krankenhaus*[11]" ("Save Hospital"), built up by the Occupational Accident Insurance Fund in North-Rhine Westphalia (*Unfallkasse Nordrhein-Westfalen*) and the (*Berufsgenossenschaft für Gesundheitsdienst und Wohlfahrtspflege, bgw*). It is still "under construction" and contains information on occupational safety and health in hospitals, also covering the topic of prevention from injuries with medical sharps.

4.2.3 Czech Republic

This Czech Republic has transposed the Directive through existing legislation contained in the Labour Code which was most recently amended in 2006. In addition, the year 2011 saw the introduction of new Occupational Safety and Health Regulations for health care workers (372/2011 and 373/2011). A further amendment in the area of OSH, relevant to the transposition of the Directive comes into force in 2013 (79/2013). The law on hazardous waste already stipulates that medical sharps have to be disposed of in a safe manner.

Transposition was the responsibility of the Ministries of Labour, Health and the Environment.

In relation to the implementation at the organisational level, the first step is always risk assessment, with specific assessments being carried out in different workplaces/activities and for different categories of staff. It is important that such assessments, a responsibility of the employer according to the Czech Employment Code, are (to be) regularly updated to take account of changing work practices and staffing. This regulation stipulates that priority should be given to technical and collective measures, to be supplemented on the individual level by the use of protective equipment and modifications in the working arrangements. There is also a comprehensive set of provisions on information and awareness raising on identified risks and measures that need to be provided by the employer.

[11] *Sicheres Krankenhaus*: http://www.sicheres-krankenhaus.de/

All accidents at work have to be documented at workplace level (with clear duties to report for worker and employer), but only accidents and injuries leading to an absence of more than 3 working days are reported at the national level. In future more data will need to be reported to the national level.

Health care staff receives mandatory inoculation against Hepatitis B, which they cannot refuse (otherwise they would be considered to be 'unfit to work' and not be covered by insurance). Staff also receive every two years (in areas with higher risks) or every 3 to 5 years (depending on the age) a medical check up with the cost for these covered by the employer.

In some areas, the use of safety-engineered devices has been widespread for some time (for example pre-filled needles etc). However, injuries continue to occur and high workloads and associated stress factors play and important role here.

4.2.4 Bulgaria

The Directive has already been transposed under the participation of the social partners. Alongside this, a National Programme for the Safety and Health in the Workplace is being implemented to achieve a reduction in the number of occupational illnesses and workplace injuries and making provisions for legislative, organisational and technical preventive measures to maintain safe and healthy working conditions. It operates based on annual work programmes of the Healthy Working Conditions and Workplace Safety Strategy. This aims a clear reduction of occupational injuries and illnesses.

As outlined in the Framework Agreement, the first step in the prevention of sharps injuries is risk assessment. In Bulgaria guidance is in place is which allows risk to be assessed into different categories, with high risk areas of work being singled out for priority treatment in order to make effective use of scarce resources. As many organisations in Bulgaria are currently experiencing frequent re-organisations, it is important to repeat such risk assessments in time a re-organisation of work and work places takes place. The speaker underlined that when managing occupational risks, particular attention should be paid to introducing an effective risk monitoring and assessment system.

This is followed by the drawing up of prevention measures which need to be outlined in a plan at organisational level.

Trade unions and employees should be involved both in risk assessment and prevention planning. The risk assessment is organised as a multi-step procedure. In Bulgaria the recommendation is that workers should be involved in this risk assessment process through Working Conditions Committees on the level of the relevant healthcare institution. These committees in addition have the duty to i.a. receive information about the way in which the risk assessment process is organised and participate in the identification of persons performing the relevant tasks, report changes which have occurred at their workplace or work together with their employer to maintain the safety of the working environment. The speaker also presented possible measures to reduce the risk of injuries with medical sharps to occur, e.g. based on an Action Plan, and steps jointly agreed and implemented by employers and employees to underpin a general prevention strategy such as training programmes or the proper use of containers for used sharps.

When an accident takes places, it is important to report causation and effect clearly to allow for the planning of improved processes where required. This can only take place of there is a no-blame culture, all accidents are reported and steps are seen to be taken to address any risks identified.

Staff is further protected through preventative inoculation against Hepatitis B. The speaker presented the trade union's demand to offer immunisation free of charge for all workers and students involved in the provision of medical care and related activities in the workplace.

A seminar of various stakeholders from the employees' bench to help promoting the implementation of the directive took place on 24 November 2012 in Sofia.

4.2.5 Poland

In Poland there are an estimated 700,000 individuals in the potential patient population carrying infectious diseases such as Hep A, Hep B and HIV/AIDS. When assessing the risk to health care staff it is important to bear in mind that in Poland nurses are entitled to perform tasks which only doctors and other specialists are allowed to carry out in other EU countries. Similarly, it should be noted that cleaning and laundry staff are also at risk, but as such services are increasingly outsourced, it is becoming more difficult to prevent risk and monitor injuries. Around 28,000 sharps injuries are reported per annum and of these injured staff around 3,000 develop infections. It is estimated that the actual number is higher as many incidents are not reported.

The government only opened a dialogue with the social partners in the transposition of the Directive in December 2012. In the first draft text not all staff is covered (e.g. trainees and temporary workers were excluded). A conference to discuss the situation and the implementation of the Directive was subsequently held and the social partners received a revised draft of the implementing legislation on 5 April 2013. This draft covers all health care workers and provides that employers must ensure safe working conditions. The discussions on a final text are ongoing.

4.2.6 Romania

The Directive is not yet transposed in Romania. The health care sector faces significant challenges as a result of budgetary cuts. This includes the cessation of mandatory inoculation of healthcare staff against Hepatitis B which is now only offered in areas considered at highest risk. All other healthcare workers have to pay to receive the injection.

4.2.7 Hungary

The majority of the provisions foreseen in the Directive are already implemented in Hungary. The main issue relates to enforcement which proves difficult both for budgetary reasons but also as a result of shortcomings on the part of hospital management. Not many safety engineered devices are in use in Hungary, however, protection from Hepatitis B infection is ensured as all over 15 year olds are inoculated.

Transposition of the Directive is under way with the key debate currently focussing on which body should be responsible for inspection (currently it's the Labour Inspectorate). Guidance has been elaborated by the National Center for Epidemiology addressing themes like vaccination, post-exposure prophylaxis, prevention, assessing the probability of transmission, disinfection, waste treatment, and prohibiting recapping.

4.2.8 Non-EU countries

Of the non-EU countries presenting the Vienna workshop, Croatia (whose accession is scheduled for 2013), Kosovo and Belarus, the latter has a well developed system of legislation on risk assessment and prevention in place.

In Belarus this arises from legislation on health protection and prevention of infectious diseases as well as regulations on the use of personal protective equipment. This legislation provides for preventative inoculations against Hep B for all health care workers in training. There are detailed provisions for reporting of work accidents that also applies to injuries with medical sharps. Training on risks with biological agents is part of the study programme or of professional training programmes of a range of health care professions (doctors; nurses; paramedics). However, according to the speaker of the main health care worker trade union, improvements are possible, including the greater involvement of employees in risk assessment and prevention planning as well as the greater use of safety engineered devices.

Croatia is also in process of transposing the legislation as part of the adoption of the *acquis communautaire* in the run up to accession.

A short description of some features relevant for the topic was given by the colleagues from Kosovo and Russia.

5 Forthcoming Events

A closing conference will take place in Barcelona on the 20th of June 2013.

A report has been prepared following each event, see http://www.epsu.org/a/9264 (for the regional seminar 1 in Dublin), http://www.epsu.org/a/9393 (for the regional seminar 2 in Rome and http://www.epsu.org/a/9396 (for the regional seminar 3 in Vienna).

A final report will be published at the end of the project and uploaded to page http://www.epsu.org/a/9543.