



## EUExNet Project/EUExcert Association Meeting in Riga 14-15 April

The following participants were present at the third EUExNet project meeting, a meeting that turned into the first meeting of the EUExcert Association.

- Mara Battocchio, Nitrex, Italy
- Ken Cross, IExpE UK
- Milos Ferjencik, University of Pardubice CZ
- Roberto Folchi, Nitrex, Italy
- Carlos Jose Gois, LEDAP Portugal
- Ashley Haslett, Irish Industrial Explosives Ireland
- Janis Jakuss-Kreituss, Ministry of Interior Latvia
- Andris Melkers, Ministry of Interior Latvia
- Olga Muter, University of Latvia
- Erik Nilsson, KCEM Sweden
- Hanne Randle, KAU Sweden
- Jörg Rennert, Sprengschule Dresden Germany
- Sigmund Sofienlund, Nammo A/S Norway
- Ingo Valgma, TTU Estonia
- Hans Wallin, KCEM Sweden

Some highlights from the EUExNet project meeting:

- The interim report is now approved from Lifelong Learning Programme, at The Education, Audiovisual and Culture Executive Agency (EACEA)
- The partnership now will focus on making the National EUExcert Nodes operative and well known to the stakeholders in the explosives sector and legislators in each country
- The National nodes are responsible for dissemination on the local language

- National websites are now established in most countries
- National points of contacts are to be appointed and can be reached through the website.

• The framework for the EUExcert association is based on the European commission's ideas of making lifelong learning a reality for all citizens, which is defined as:

*"All learning activity undertaken throughout life, with the aim of improving knowledge, skills and competence, within a personal, civic, social and/or employment-related perspective."*

• Lifelong learning can also be defined more specifically towards vocational training, which is defined as: *"All learning activity undertaken throughout life, with the aim of improving knowledge, skills/competences and/or qualifications for personal, social and/or professional reasons."*

Directly after the EUExNet project meeting an inaugural meeting for the EUExcert Association was held with the main task of formally setting up the Association.

The EUExcert Association will be registered in Sweden with Erik Nilsson, KCEM, as chairman of the board. The members will be all the national nodes. The next board meeting is planned in September in connection to the next EUExNet meeting in Portugal.



From behind, left: Andris Melkers, Ken Cross, Sigmund Sofienlund, Hans Wallin, Olga Mutere, Jörg Rennert, Ashley Haslett, Mara Battocchio, Hanne Randle, Erik Nilsson, Ingo Valgma, Roberto Folchi, Milos Ferjencik and José Gois



## Formation of National nodes - one step closer to implement ECVET

Europe 2020 is the EU's growth strategy for the coming decade aiming at a smart, sustainable and inclusive EU economy. Concretely, the Union has set five ambitious objectives: employment, innovation, education, social inclusion and climate/energy.

In order to facilitate trans-national mobility all member states are recommended to promote the ECVET (European Credit system for Vocational Education and Training).

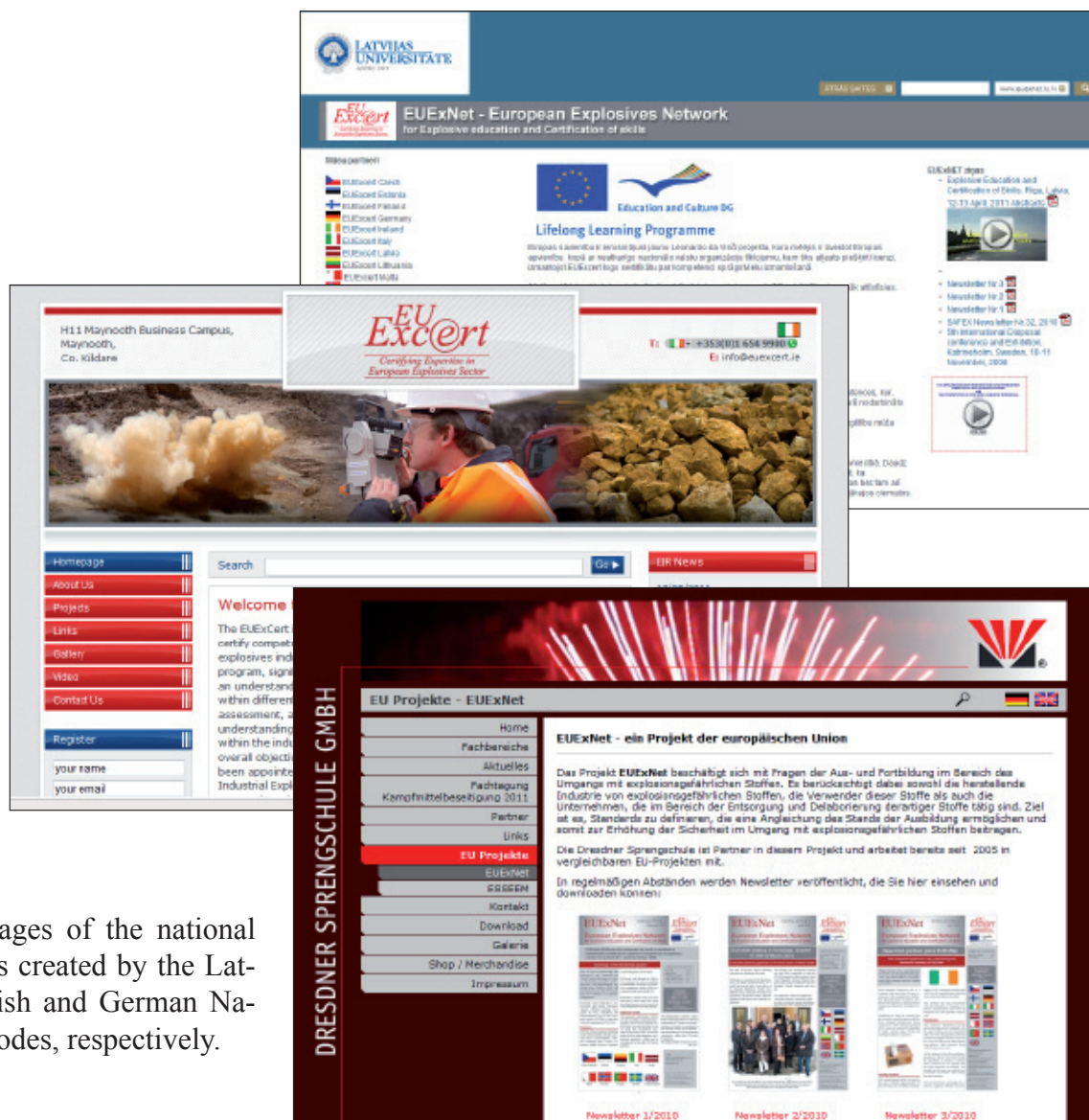
The states should create the necessary conditions and adopt measures, so that as from 2012 it is possible for ECVET to be gradually applied to VET and used for the purpose of the transfer, recognition and accumulation of individuals' learning outcomes.

All member states are also recommended to support the development of national and European partner-

ships and networks involving institutions and authorities responsible for qualifications and diplomas, VET providers, social partners and other relevant stakeholders.

By creating the international network EUExNet and the National Nodes as formal parts of the European EUExcert Association several steps have been taken towards the implementation of ECVET within the explosives sector.

By choosing the National Occupational Standards (NOS) developed in United Kingdom a stable firm fundament and framework also is available as a tool for competence, skill and career planning (see more about NOS p.5)



Front pages of the national websites created by the Latvian, Irish and German National nodes, respectively.

## **The ambitions in the EUExcert Association are:**

1. Lift the status of workers in the explosives sector in order to
2. Attract younger people to work in the sector, in order to
3. Respond to the effects of demographic changes in the ageing workforce, and to
4. Introduce trajectories for career paths for workers, and to
5. Encourage individuals to continually improve their abilities, skills and competencies, where
6. Recognition of competencies can lead to develop a competitive European explosives sector and employable workers, and thus
7. Creating a learning environment and thereby realising the overall ambitions in the ideas of lifelong learning
8. Contributing to a safe and competitive European Explosives Sector

## **Articles of Incorporation for the EUExcert Association (§ 1-6)**

### § 1. The name of the association

The name of the association shall be EUExcert Association.

### § 2. The purpose of the association

The purpose of the association shall be to:

- Strive to develop safe working conditions based on an employable and skilled work force
- Promote and manage exchange programmes for specialists and students in the Explosives sector
- Promote cooperation for transnational education and training in the Explosives sector
- Own the rights to the EUExcert certificate and delegate authority to the nations awarding bodies
- Promote and maintain EUExNet, the European network of Explosives experts
- Manage and update the glossary on terminology for the Explosives sector
- Support the European Commission and national regulators with expert advice
- Promote and license the EUExcert trademark
- Strive to include all European nations in the EUExcert legal association
- Strive to strengthen the competitiveness of the European explosives sector
- Search for international cooperation

### § 3. The registered office of the association

The registered office of the association shall be Karl-skoga, Sweden

### § 4. Membership

Members of the association are those national nodes which have formally agreed to act within the purpose of the association and undertake to follow and obey the Articles of Incorporation of the association.

### § 5. Membership fees

Each member shall pay to the association the membership fee, which is yearly established by the yearly general meeting of the EUExcert association.

### § 6. The board

The board of the EUExcert Association shall consist of a chairman and a minimum of four and a maximum of seven board members plus a maximum of five deputy members. Chairman, board members and deputy members shall have a period of tenure of two years and be elected at the annual general meeting as set forth in § 10 for a period until the close of the next annual general meeting.

All the in total 16 Articles are found at:

**[www.euexcert.org](http://www.euexcert.org)**





**The Partners in the EUExcert association has made an application for a new project “EU-ExVet” and we hope to have an approval during summer**

**The rationale for this application is described below.**

The European explosives sector is small but a necessary part of the modern society and for the commercial and military sector.

The two earlier EUExcert projects have already clearly demonstrated that there are needs for transnational cooperation within the explosives sector in Europe in order to avoid loss of competency and prevent accidents.

The work has then continued with EUExNet, with the aim to establish a European network between national stakeholders. The project was built on occupational standards, recommended by the earlier projects. Through use of the standards competencies will also become transferable and transparent.

The EUExNet project also aimed to establish a European association which after the end of the project will be self financing. Among other things the association will promote mobility of students, teachers, professionals and workers in the explosives sector in the European Union. Forming of the association and the network will also strengthen the competitiveness of the European explosives sector.

During the process a core of transnational cooperation has been created which easily can be expanded to incorporate all European nations and also be a core for worldwide cooperation where EU takes the leading role.

The EUExcert projects have clearly shown that it is an advantage to work transnationally and sectorially, addressing all workers who are professionally involved in the handling of explosives. The project EUExNet is the basis for such European cooperation.

EUExNet promotes the professional standing of those whose work involves explosives, and its related engineering, science, research and logistics facets. It will also promote the introduction of systematic lifelong learning based on vocational standards.

EUExNet will also maintain and enhance the professional standing of the newly formed EUExcert Association, and thus secure sustainability of the organisation.

The improved possibilities for lifelong learning created by EUExNet nodes makes it possible to facilitate mobility of workers through the European cooperation between VET providers and companies and ensure a competent and employable workforce and ensure a safe and sustainable explosive sector in Europe.

This means that the new EUExNet (EUExVet) can strengthen the link

between education and training and the labour market. But to come that far the sector needs to implement a validation system of learning outcomes acquired through experience instead of formal learning.

The education will be built on a transnational cooperation and it should not matter if the training is gained in another member state.

Recognition of previous learning, either through informal or formal education; supplemented by continuous training and education are the basis for lifelong learning and necessary components in the overarching ambition to develop and maintain sustainable employability.

In this new EUExVet project ECVET will be introduced and implemented to the European Explosives Sector.

ECVET is a new European instrument to support lifelong learning, the mobility of European learners and flexibility of learning pathways to achieve qualifications.

Following its adoption by the European Parliament and by the Council (18 June 2009)<sup>1</sup>, ECVET is now in a phase of progressive implementation.



## The EECS Conference in Riga April 12-13

The EECS 2011 conference in Riga attracted more than 50 delegates from across the Explosives sector worldwide.



The conference was organised by the University of Latvia, Association of Experts and Specialists for Highly Energetic Materials "Faville" (Latvia), as well as KCEM (Sweden).

EECS 2011 provided a forum for experts in the explosives sector, represented civilian and military sector, as well as researchers from Belgium, Estonia, Finland, Israel, Italy, Latvia, Norway, Portugal, Sweden, UK.

Opening speeches by Prof. I. Muiznieks (University of Latvia) and Ms. Ilona Drege (Ministry of Defence, the Republic of Latvia) introduced conference delegates with the current situation with explosives education at the University of Latvia and military sector.

The key themes of the conference were the education of explosive specialists in different countries and sectors, new technologies and training systems, demilitarization and ecological problems.

The conference programme included 16 presentations, as well as a workshop chaired by Denise Clarke (UK), covering the topic on the competence-based qualifications for the UK explosives industry.

Most speakers provided abstracts of their presentations. The Book of Abstracts was distributed during the conference. It will be available also at [www.euexnet.lu.lv](http://www.euexnet.lu.lv).



Denise Clarke (UK)

Photo and video materials made during the conference, will also be available at this site.

The live video streaming of the conference was supported by Andis Janovs and Toms Grinbergs from the University of Latvia.

### Visit in ex-soviet bunker in Ligatne



The delegates visited ex-soviet bunker in Ligatne, located 9 meters underground, which was declassified only in 2003.

It was constructed in the 1980s for the needs of the political and power elite for governing the state in the case of a nuclear war.





### Voice from the conference

“The conference provided an excellent opportunity to meet experts from both – military and civilian sector and to discuss the challenges that Explosives community is facing.

It was interesting to hear about transformation of explosives education and reassessment of qualifications to adapt to the modern situation.

Sharing of this experience helps to build a good network at the same time stimulating development in a national level”

- told Delegate Agnese Krauze

(see also result from Questionnaire from the conference on page 11)



Agnese Krauze,  
State Centre for Defence Military Sites and  
Procurement, Latvia

### Acknowledgement

We would like to thank the members of the steering group: Hans Wallin, Erik Nilsson (KCEM, Sweden), Hanne Randle (Karlstad University, Sweden), Janis Jakuss-Kreituss (Ministry of Interior of Latvia State Police), administration of the University of Latvia for hosting, the Ministry of Interior of Latvia State Police and Ministry of Defence of the Republic of Latvia for supporting the conference.

We are particularly grateful to our conference chairs, Erik Nilsson and Hanne Randle for chairing two days and encouraging wide ranging debate.

Dr.Biol. Olga Muter  
Senior Researcher  
Institute of Microbiology  
& Biotechnology  
University of Latvia







Hans Wallin  
Project leader EUExNet

## **Competence and qualification**

The manufacture and use of explosives, propellants and pyrotechnics underpins a significant part of the European Union economic and industrial activity.

They are fundamental tools for building our modern society in various areas such as blasting, construction, mining and oil exploitation, airbags in cars, medicine, fuels, devices for space rockets and satellites, emergency rockets/signals and for defence materiel.

An understanding of explosives science and technology is central to maintaining European explosives capability, national security and a competitive European industry. Much of EU safety legislation calls for “competent people”. In the case of explosives this will be called for in all stages of life:

- laboratory work
- manufacturing
- storage
- transportation
- use
- disposal

In 2002 the Copenhagen Declaration set up steps to improve transparency in competences and qualifications. By recommendation of the European Parliament and of the Council of 23 April the European Qualifications Framework (EQF) for Lifelong Learning was established in 2008.

In 2003 Sweden, United Kingdom, Norway, Finland and Italy started the pilot project EUExcert within Leonardo Da Vinci programme to develop a comprehensive framework which describes and categorises the competences of all workers engaged in the manufacture or use of explosives.

Later Germany, Portugal, Czech Republic, Lithuania, Latvia and Malta joined the project. In 2008 EUExcert programme was expanded and a network and cluster are formed on EUExNet.

## **Environmental responsibility**

The necessity to preserve our world from ecological disasters has induced a strong ecological trend among inhabitants on our planet.

Large efforts are made to create a long-term sustainable society based on renewable energy, recycling and reuse of resources.

The world of today must also learn to react quicker to the fact that almost all post-conflict environments from the last 100 years contain a substantial risk for unexpected detonations from explosive residues, threatening public safety.

Explosive wastes cannot, however, be handled like ordinary wastes from society.

Due to their ability to explode or detonate, and additionally often also being toxic to both man and the environment, they constitute a

very dangerous type of waste.

Historically the use of explosives started with the Black Powder era which lasted 1,500 years and left very small environmental problems since the ingredients - charcoal, nitrates and sulphur - easily lost their explosive properties when exposed to water.

Modern military explosives are synthetic, have very stable properties and are often toxic. They must therefore be recycled, detonated, burned or chemically decomposed as normally they will not lose their explosive properties with time.

Modern warheads, mines and other explosive articles spread out and remaining uncontrolled in the environment therefore present a serious risk for accidents and death to all living! The most obvious threats are mines and UXO that kill and hurt many thousand people each year, most of them children or young males.

But also other types of “lost” explosives, such as AXO, turn up as dangerous pollutants in the environment.

## **Necessary remediation**

The need for a broad and international remediation activity is obvious and resources urgently required.

In this context EUExNet can contribute through building a strong Network and Cluster for European Individuals and Organisations who work within this field.

The following article (p.9) written by M.sc Agnese Krauze, one of the participants at the EECS conference in Riga, clearly demonstrates the size of the problems with polluted territories only in Latvia.



# Remediation of territories polluted by unexploded ordnance

M.sc. Agnese Krauze, Senior desk officer, Environment Department  
State Centre for Defence Military Sites and Procurement, Latvia



The geopolitical situation of Latvia and the history of World War 1 and World War 2 with the presence of Nazi and Soviet armies have left Latvia with legacy of unexploded ordnance.

Unexploded ordnance disposal is one of the tasks of National Armed Forces (NAF). Explosive ordnance disposal (EOD) specialists are busy all year round.

For example:

In 2010 the National Guard received 858 calls. They neutralised 4 739 explosive objects:

- 2 586 artillery shells,
- 1 532 mortar mines,
- 427 grenades,
- 64 missiles,
- 49 aviation bombs,
- 46 anti-tank bombs,
- 20 anti-tank mines,
- 15 anti-personnel mines

6 097 explosive objects were neutralised in the year 2009 and 7 973 in 2008.



National Guard (the Zemessardze) 54th Engineer Battalion EOD Company in operation in Džūkste municipality in April 2009  
(Photo by Recruiting and Youth Guard Centre)



Map of Latvia displaying the territories polluted by explosive ordnance.

The Naval Forces dispose of approximately 80 unexploded ordnance items at sea when operating both alone or within the Baltic Naval Squadron every year.

After the retiring of the Soviet army, the Ministry of Defence took over only some portion of abandoned military areas. Unexploded ordnance faces local municipalities and private owners with a big challenge.

It is not the task of NAF and they have no capacity to search all the territories. They dispose of unexploded ordnance when it is found.

In 2008 the Cabinet of Ministers regulations were elaborated with an aim to offer a solution for those land owners who are willing to deal with the problem.

Paragraph 441 of Law "On Pollution" sets the requirements for investigation and remediation of territories polluted by explosive items of military nature and unexploded ammunition.

The Cabinet of Ministers regulations No.671 and No.672 of August 25, 2008 define the procedure of remediation of territories polluted by explosive items and unex-

ploded ordnance and the procedure of certification of specialists and licensing of companies to allow them to do the remediation.

According to the Regulations the civil companies can do the investigation, search, identification and collection of unexploded ordnance leaving the NAF with the task of neutralisation.

The Ministry of Defence Licensing and Certification Commission has issued certificates and licences on investigation, search, identification and collection for neutralisation of unexploded ordnance.



Disposal of explosive ordnance found in Džūkste municipality in April 2009 (Photo by Recruiting and Youth Guard Centre)

In September 2010, Irish Industrial Explosives Ltd. was appointed as the Irish Partner for the EUExCert project.

Initial focus by the Irish Partner was on identifying the stakeholders within the Irish explosives market and informing them of the EUExCert project. To enable the information to be easily accessible, the [www.euexcert.ie](http://www.euexcert.ie) website was established.



**Left to right - Standing:** Henry O'Shea (SIPTU), Gerry Clear (Tara Mines), Paddy McConnell (Tara Mines), Roy Wallace (Orica BQS), Pat Wade (FAS), Se Purcell (Black Powder Monkeys),  
**Seated:** John Guinane (Dept. of Justice), Brian McQuaid (Carlow IT), Deirdre Shiels (Irish Industrial Explosives), Ashley Haslett (Irish Industrial Explosives),

**Missing from photograph:** David Denieffe (Carlow IT), Manus Tiernan (Health & Safety Authority), Sean O' Shea (Dept of Defence), John Fitzpatrick (Exsol), Keith Foran (Irish Mining & Quarrying Society)

The first meeting of the stakeholders was convened on 25th November 2010, with 7 organisations represented. The initial meeting enabled additional stakeholders to be identified such that they could be invited to the second meeting held on 20th January 2011, when 11 organisations attended.

It was agreed that for the development / adoption of explosives competence Standards into Ireland, a greater understanding of the existing UK Standards by the stakeholders was necessary.

As Homeland Security Qualifications has been instrumental in the

drafting of these Standards, Denise Clarke was invited to brief members as to how they are constructed and used.

This took place at the 3rd meeting which was on 11 March 2011, when all stakeholders formally agreed to establishing EUExCert Ireland as an association.

Representation includes Regulators, Defence Forces, manufacturers, explosives users, fireworks, trade unions, employer and employee groups and training organisations.

The forth and final meeting to date

was held on 12th May 2011, during which the size of the explosives sector in Ireland was discussed and which roles and Standards should be focused on initially to implement within Ireland.

A Working Group shall be established after the next meeting to progress a program of work of Standards approval.

Future focus shall be on furthering the aims of the newly formed EUExCert Association by building the explosives network and commencing work on adoption of the UK explosives competence Standards into the Irish qualifications system.

### National Occupational Standards (NOS)

EUExcert Association has chosen to use the National Occupational Standards developed in United Kingdom as base for the work to establish a stable firm fundament and framework for vocational education of people in the European explosives sector.

Training and education institutions as well as social partners now have

a tool for competence and career planning. The National Occupational Standards are available on Internet:

<http://www.ukstandards.co.uk/Pages/index.aspx>

or the EUExcert website

[www.euexcert.org](http://www.euexcert.org)





## An appreciated EECS conference in Riga according to questionnaire

The EECS (Explosive Education and Certification of Skills) conference at the University of Riga, 12-13<sup>th</sup> of April was evaluated by Dr. H. Randle at Karlstad University, Sweden.

18 participants completed a questionnaire about their impression of the conference in Riga.

All 18 participants agreed on the following four statements:

- My overall impression is that the conference program met all of my expectations

- I have learned more about the field of Explosive Education and Certification of Skills, by taking part in this conference

- I had the opportunity to share my experience and knowledge with others

- I had the opportunity to meet people that I would otherwise not have met

Most of the participants were also happy with the conference program (15/18) although some participants wished there would have been some more time for discussions and dialogue.

Summing up, it is clear that the conference was very much appreciated by the conference delegates.

The conference gave them opportunities to learn more about education and training in the field of explosives.

The evaluation also shows that it is important to add time for discussions in the programme as well as to plan for social activities where delegates can get plenty of opportunities to develop their networks which is essential for knowledge sharing.

## Welcome to the next EUExNet conference in Lisbon, Portugal!

The 4th EUExNet meeting will be held in Lisbon, Portugal

**September 22-23, 2011**

In connection to the project meeting The 2<sup>nd</sup> International Conference on Explosive Education and Certification of Skills (EECS) is arranged September 21.

The overall objectives of the conference are to contribute to the harmonization of training and qualification of personnel in explosives sector for the development of a transferable certificate of Explosive Competences.

The conference addresses all people occupied and active in the sector of explosives (explosives, propellants and pyrotechnics) from Governmental Agencies, Education Institutions, Employers and Employees Societies, Public and Private Companies in Military and Civil areas



### Main topics of EECS in Portugal

- Education and vocational training in explosives sector
- Legislation on qualifications and certification competencies in explosives sector
- Evaluation and assessment of competence development
- Health & Safety programs in explosives sector
- Applications of information and communication technologies in education and training
- Understanding stakeholders' roles in explosives sector



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