



European Economic and Social Committee



Lifelong
Learning

GT VET

Greening Technical VET – Sustainable Training Module for the European Steel Industry

Antonius Schröder

***Final Conference
20th of February 2013
European Economic and Social Committee Building***

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Conference Programme (I)

10.00 **Registration and welcome coffee**

10.30 **Opening of the Conference** *Enrico Gibellieri*

(Member of the Consultative Commission on Industrial Change - CCMI)

Introduction to GT VET and its project partners

Antonius Schröder (TU Dortmund / sfs)

11.30 **Green Skills Training Module for the Steel Industry**

Dean Stroud (Cardiff University), Wojtek Szulc (Instytut Metalurgii Żelaza)

Comments from the Industry Partners:

Veit Echterhoff (ThyssenKrupp Steel Europe)

Mirosław Motyka (ArcelorMittal Poland)

Genoveffa Bottino (Acciai Speciali Terni)

Damon Tweedie (Tata Steel)

“Demystifying Green Skills in Construction”

Richard Bayliss (ConstructionvSkills)

Discussion

13.00 **Lunch**



Conference Programme (II)

- 14.00 **Policy Recommendations for Short-term Implementation Models of New Skills**
Antonius Schröder (TU Dortmund / sfs)
- 14.15 **Green Skills Relevance for the Competitiveness of the European Industry**
Panel discussion - Moderation: *Enrico Gibellieri (Member of the CCMI Bureau)*
Cristina Martinez (Organization for Economic Co-Operation and Development- OECD)
Alison Crabb (DG EAC " Vocational education and training; Leonardo da Vinci")
Peter Kerckhofs (European Foundation for the Improvement of Living and Working Conditions)
Fernando Vasquez (DG Employment, Social Affairs and Inclusion, European Commission)
Bart Samyn (European Trade union - industriALL)
Bertrand de Lamberterie (EUROFER/ESTEP)
Jean Lambert (Member of the European Parliament, Greens/European Free Alliance)
- 16.00 **The GT VET Module: A Role Model for Collaborative HR Development?**
Rudolf-Carl Meiler (Chairman ESTEP Working Group 5 "People")
- 16.30 **End of the Conference**



Introduction: GT VET and its Project Partners

Antonius Schröder (TU Dortmund / sfs)



Abstract of GT VET

- Vocational education and training (VET) aims to equip people with skills and competencies in order to fulfill a specific profession (skilled workers).
- The increasing relevance of environmental issues in steel production requires appropriate skills and competencies from workforce members - particularly from skilled technical workers.
- The project evaluates how national systems of VET meet the future requirements of sustainable “*green*” competencies and awareness in the European steel industry and bridges the gap by developing a European training module.



Background of GT VET

Developments and Trends:

- Sustainable environmental protection is important for the European steel industry.
- Increasing effects on steel companies from EU-wide environmental legislation.
- Harmonization of legislation in Europe seeks to prevent pollution and secure occupational health and safety.



GT VET Objectives

- identify impacts of environmental legislation in everyday work on skilled workers in the steel industry.
- match demands of steel industry with the VET system.
- investigate the scope for the development of ongoing and responsive training pathways.
- develop a model of an industry-driven European training module, focusing on skills for environmental sustainability (for electric/electronic and mechanical technicians).
- adapt and test the module in four steel companies and member states.
- use the example of electric/electronic and mechanical technicians to transfer results to other professions.
- use the example of the steel industry to transfer results to other production industries.



Project assumptions

There is a need for a European training module to empower green awareness and green skills in technical apprentices and skilled workers, because we assume

- greening of steel production will remain a mega-trend.
- similar skills required for steel workers, irrespective of the system and pathway of vocational training.
- in future national training systems for blue collar workers must comprise green skills.



Relevance of GT VET

- in line with **European politics**:
 - lifelong learning strategy
 - new skills for new jobs initiative
 - EU 2020 strategy
 - Lisbon strategy
- in line with **EU environmental directives** (IPPC, GHS, REACH, ...), national and company guidelines and recommendations
- in line with current steel **industry requirements**: recruitment and training
- improving **European and national VET-systems**.



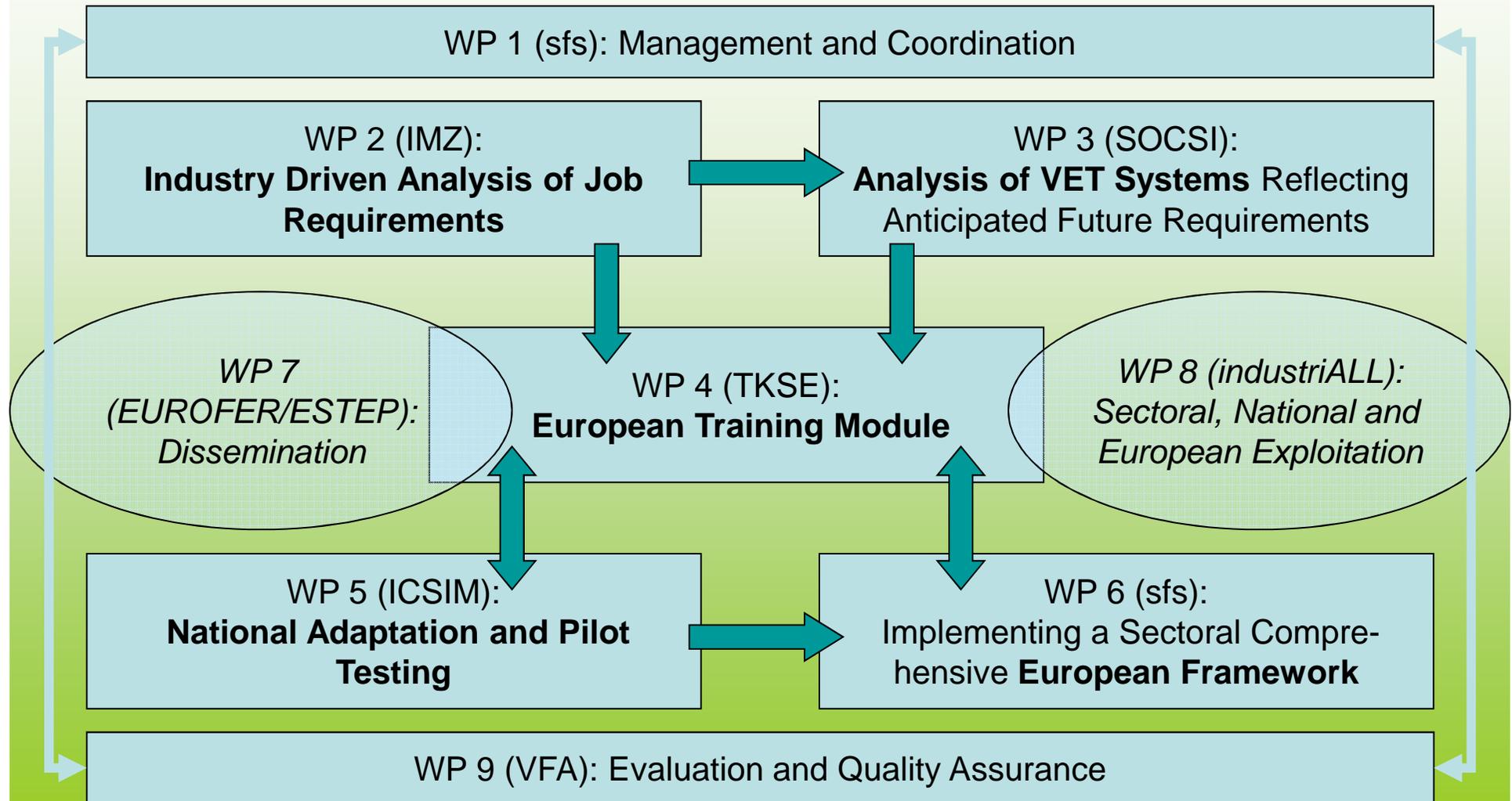
Partnership: Steel Companies and Research Institutes

- **Germany:**
TU Dortmund / sfs (Coordinator)
ThyssenKruppSteel Europe AG, Duisburg
- **Poland:**
Instytut Metalurgii Żelaza IMZ, Gliwice
ArcelorMittal Poland S.A., Dabrowa Górnicza
- **Italy:**
Istituto per la Cultura e la Storia d'Impresa ICSIM, Terni
Acciai Speciali Terni AST, Terni
- **UK/Wales:**
Cardiff School of Social Sciences, Cardiff University
Tata Steel UK, Port Talbot
- **Strategic Partners (Dissemination and Valorisation):**
European Steel Association EUROFER, Brussels
industriALL, Brussels
- **External Evaluation:**
VFA – Development and Innovation Consultants, Athens
Jean-Claude Charbonnier (Consultant)





Consecutive Work Plan





Green Skills Training Module for the Steel Industry

Dean Stroud (Cardiff University)

Wojtek Szulc (Instytut Metalurgii Żelaza)



Comments from the Industry Partners

Veit Echterhoff (ThyssenKrupp Steel Europe)

Mirosław Motyka (ArcelorMittal Poland)

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Policy Recommendations for Short-term Implementation Models of New Skills

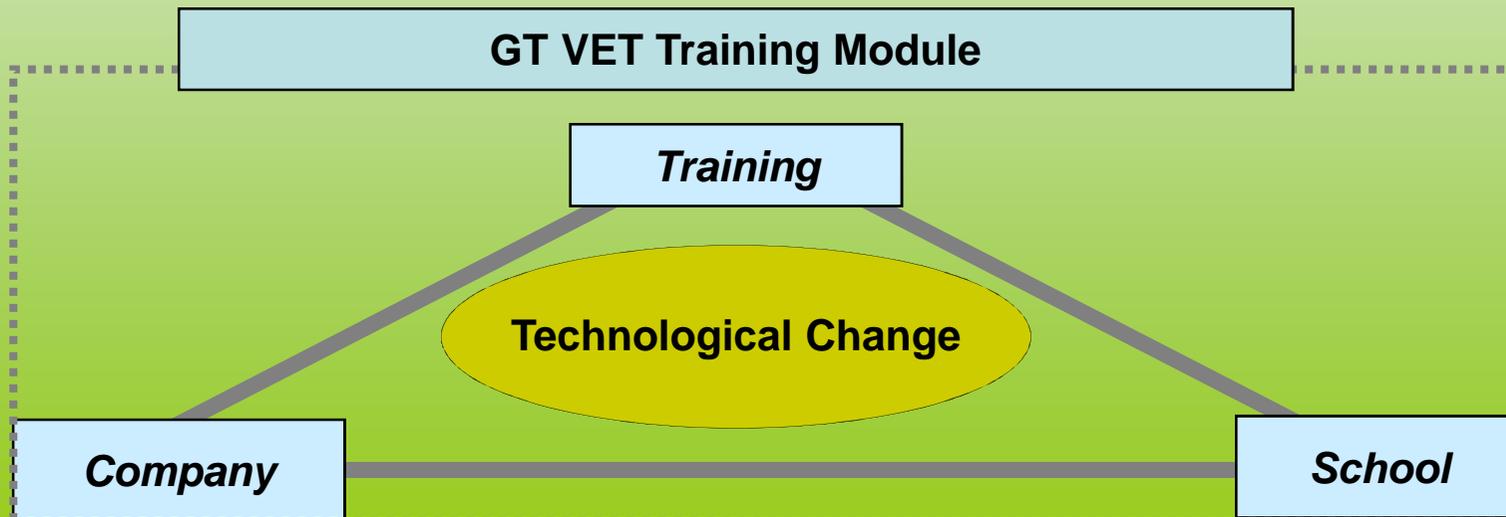
Antonius Schröder (TU Dortmund / sfs)



General Assessment

The sub-modules fit to the training program of the companies and schools and create a clear added value:

- The module improves through its activity based approach the awareness and skills for self-reliant work and reduction of resources and saving of money.
- The trainees would like to have these kind of modules integrated in their traineeship.
- The trainers (steel company) and teachers (schools) will use (parts of) the training module in their regular training program.
- The developed GT VET training module is seen as a link for short-termed reaction to technological changes.





Policy Requirements



- From the industry perspective there is a evident demand of **flexible and updateable training modules** with a high contingent of learner activities (**self-reliant tasks and projects**) with **concrete relation to the shop floor and production** within the company.
- **Flexible ways and leeway to include** industry driven **modules** of VET.
- **Overarching European wide learning objectives** based on an industry related **European definition of green skills**
- ECVET as a **European wide and accepted certification** of the training modules.
- **Cooperation and involvement** of companies and vocational schools **at the regional level**, where people live, work and learn
- Production industries should be considered in **European advanced manufacturing** activities and strategies much more.



ECVET



| GT-VET definition | Derived contents | basic information | background and coherences | professional knowledge/ competencies | process know-how | |
|--|---|-------------------|---------------------------|--------------------------------------|------------------|------|
| Save and reduce input of resources | Energy | 10% | 20% | 30% | 40% | 100% |
| | | 1 | 2 | 3 | 4 | 10 |
| | Raw materials | 10% | 20% | 30% | 40% | 100% |
| | | 1 | 2 | 3 | 4 | 10 |
| Prevent and reduce emissions, pollution, noise | Noise | 10% | 20% | 30% | 40% | 100% |
| | | 1 | 2 | 3 | 4 | 10 |
| Utilize store and dispose of waste materials | Handling of Hazardous Substances | 10% | 20% | 30% | 40% | 100% |
| | | 1 | 2 | 3 | 4 | 10 |
| | | | | | | |

6-10 credit points and about 10 to 20 training days per sub-module, to be integrated in a 3 years apprenticeship (200 days a year = 60 credit points)



Panel:

Green Skills Relevance for the Competitiveness of the European Industry

Moderation: *Enrico Gibellieri (Member of the CCMI Bureau)*

Cristina Martinez (Organization for Economic Co-Operation and Development- OECD)

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The GT VET Module: A Role Model for Collaborative HR Development?

Rudolf-Carl Meiler (Chairman ESTEP Working Group 5 "People")



The GT-VET Module: A Role Model for Collaborative HR Development?

Starting Point:

- European, national and company regulations and directives, new technologies and insufficient awareness of the workers lead to industry training demands for green skills on the shop floor.
- On this background green skills have to be continuously up-scaled, capabilities and awareness of the workforce have to be raised and upgraded.

Why Collaboration:

- Effective human resources development has to be done in close cooperation between the companies and the VET system: to combine practical demands and knowledge with formal (and non-formal) vocational education and training.

The Future:

- Flexible VET systems giving responsive pathways between industry and vocational schools, training institutions.
- Industry driven European Training Modules on common industry demands and specific themes.



The GT-VET Module: A Role Model for Collaborative HR Development?

Collaboration is the Basis of HR Development:

- Industry driven and flexible training modules are necessary to continuously upscale the skills and to raise awareness of the workforce.
- Human resources development has to be managed in close cooperation with companies, schools and public institutions.
- In particular at regional level, a close cooperation between companies and schools has to be established starting from early childhood education on (kindergarten, primary, secondary, vocational schools, universities).
- VET systems have to be flexible and give more leeway for industry driven demands and training modules.
- The GT VET module shows that this kind of collaborative HR development is a clear win-win situation (for the company, the workers and the schools / VET systems).
- The GT VET module is generic in away that can easily be transferred to other industries (like process, automotive, chemical industry).



The GT-VET Module: A Role Model for Collaborative HR Development?

Outlook of the Conference / Proceedings:

- The module is expected to be accepted by the European Steel Industry, already (partly) integrated in the training programme of the steel companies involved .
- The steel companies involved will distribute the module to other sites and coordinate the integration in and the cooperation with the VET system at regional level.
- EUROFER/industriALL will distribute the module to their members:
 - EUROFER: other steel companies
 - industriALL: other industry sectors
- The module will be continuously developed and run by WG5 / ESTEP:
 - Transfer of innovation projects:
 - SME´s, smaller steel companies in south-east Europe
 - GREEN STAR (automotive) → already submitted proposal
 - German association of cement producers
 - Transfer to other professions (system mechanics).
 - Transfer to other themes (health and safety).
 - Updating the module and distribution via website.



If you are interested in more details...

...please visit our website: www.gt-vet.com

Greening Technical-vet.com

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