

Member Newsletter

Issue 5, July 2010



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Word from the Secretary General

In 2003, the European Council called for strengthening of the European Research Area, by creating the ETPs, the European Technology Platforms.

ESTEP was one of the first ETPs created, and Jean-Claude Charbonnier was associated at the very beginning of this process. After more than one year of active preparation, ESTEP was officially launched in March 2004 by Commissioner for Research Philippe Busquin. ESTEP brought together the steel industry, research centers, universities, trade unions, the European Commission as well as other European institutions and Member States. The Strategic Research Agenda was endorsed



Secretary General
Bertrand de Lamberterie

in 2005. Jean-Claude Charbonnier was officially nominated Secretary General in 2006. He worked actively for the platform growth: implementation plan in 2006, contribution to the long term R&D steel programme and the annual RFCS priorities, roadmap publications during the last four years, and new initiatives within the recovery plan to contribute to the low-carbon economy. Last but not least, Jean-Claude widely contributed to the programme ULCOS; after the success of ULCOS I, the ULCOS II phase was launched in 2009 with the setting –up of pilots and demonstrators to be installed in the coming years. After 40 years in the steel industry, including 7 years within ESTEP, Jean-Claude Charbonnier has decided to step down for retirement. During our last steering committee held in March 2010, ESTEP’s chairman Michel Wurth addressed thanks and warm congratulations to Jean-Claude Charbonnier for the huge work he has accomplished for the creation and the growth of ESTEP.



Steering participants say goodbye to Jean-Claude Charbonnier, March 3 2010, Luxembourg

Steering Committee of March 3rd 2010

As usual, all ESTEP's stakeholders attended or were represented for the annual Steering Committee held in Luxembourg, including a high level



Chairman
Michel Wurth

representation of the EU Commission and Member States. The meeting was chaired by Michel Wurth.

ULCOS II. The progress of the different sub-projects of ULCOS II were presented. The ULCOS- BF will start with a pilot plant in Eisenhüttenstadt (Germany) to validate the TGR-BF concept and explore a wide range of setting points. The full industrial size demonstrator is planned in Florange (France) with TGR-BF and CCS. A proposal will be submitted in the second half 2010 as an industry CCS project within the NER-300 instrument.

The Hisarna is a pilot to achieve the direct reduction of iron ore into hot metal in a unique vessel for reduction and smelting. The pilot (8t/h) is under construction in Corus Ijmuiden and will start by the end of 2010.

ULCORED is an experimental direct reduction pilot, planned by LKAB in Lulea. A RFCS project will be proposed in 2010. ULCOWIN and ULCOSYS are laboratory pilots to produce iron by electrolysis. A new RFCS project, launched in 2010 will test these technologies with two small pilots. A French ANR project is also launched in 2010 to flesh out the basic

fundamental understanding of the ULCOWIN process.

Steel solutions for energy. The steering committee approved the orientations of the WG6 for the development of steel products & solutions for energy. The updated roadmap covers the applications for powerplants, oil and gas transport, wind and solar energy.

New initiatives. The steering committee approved the main new orientations proposed by ESTEP for 2010:

- Reacting on evolving priorities of the new commission,
- Creating a R&D network of Energy Intensive Industries
- Contribution to the SET-Plan (Strategic Energy Technology Plan)
- Enlargement of cooperation with the relevant ETPs.

Follow up of the Steering Committee/ Energy initiatives

Further to the Steering Committee recommendations, a roadmap will be produced in order to address the main challenges for steel energy efficiency. It is decided to launch a new working group on steelmaking energy efficient production; This WG will report to the support group. Members will be energy experts from steel companies and steel research centers. The objectives are

- To propose a simple and efficient methodology for quantifying energy use, energy recovery and data collection for all the steps of production and for the 2 routes BF/BOF and scraps/EAF.
- To analyse the existing results on a representative year of production.
- To identify the existing energy savings technologies, including BAT, for each step of production.

- Duration: start Sept 2010, till end of 2011.

WG1-Profit

Three meetings organized since the beginning of 2010 as well through face-to-face meeting as by web and teleconference. A very good audience for each meeting.

The main aspects that were discussed and for which actions have been engaged are:

- The evaluation of the results of the 2009 RFCS call and the launching of new proposals in line with the 2010 ESTEP priorities for the RFCS programme,
- The introduction by VAI-Siemens of proposals related to the item "Thermal energy recovery" that could be candidates for demonstration projects supported by the European Commission. The WG members would be the relay towards potential industrial and R&D partners,
- The selection of WG experts to be appointed in the setting up of an Energy Efficiency working group to support the initiatives for the Set-plan and other European programmes.
- The follow-up of the efficient work done by the sub WG "Intelligent Manufacturing" dealing with the preparation of the roadmap on this item now completed, with the definition and the building of a large European proposal connected to the frame "Factories of the Future" and with the proposal of appropriate criteria to support the selection of RFCS projects related to "intelligent Manufacturing". This ad-hoc sub-group has completed its mission, but its continuation has been approved and validated by the Support Group with a new adapted mission.



WG1-Chairman
Christian Marique

WG2 Transport

Work done in the WG 2 (Transport)
– Proposals in preparation/under consideration

First WG meeting on May 27, 2010
Support Group Meeting on June 16, 2010



WG2-Secretary
Ingo Wonneberger

1. List of Priorities of WG 2 to promote the usage of steel on international levels, not only for passenger cars, but also for trucks and other transport vehicles. One example is the "approach to small and low cost car technologies", under the proposed headline "Fit for purpose steel and optimization of design." New design guidelines in combination with steel grades with reasonable prices can help to keep steel instead of non ferrous materials also in electro cars. Another approach is "Life Cycle Assessment (LCA)". Focus is on "low carbon production" at the steel sites to support the LCA.
2. Work should be done to implement again steel research in future research programmes on the EU level. A written statement could be a good way to influence future research programmes. This statement could follow the brochure "From a strategic research agenda to implementation" dated 2006, the updated ESTEP Paper "Strategic Research Agenda" from 2009 or the upcoming ERTRAC paper.
3. The WG wants to develop project ideas and form project teams, including OEMs, to be successful in the future.

Next WG 2 Meeting will take place on September 20, 2010

WG3 Construction

3 projects will be resubmitted for RFCS 2010 call:



WG3-Chairman
Tim Hurd

LEAST, INGRESS and ZEMUSIC.

BUILDING UP. WG3 was successful to be part of this FP7 2010 CSA (Coordination & Support Action) project. Tim Hurd represents ESTEP via Corus. The purpose is to produce a roadmap to overcome the technological and non-technological barriers towards more energy-efficient buildings and districts. It is a good opportunity to establish new cross platform collaboration areas.

FP7 2011

For buildings activities, the workprogramme 2011 will be focused on the PPP “ Energy-Efficient Buildings”. A lot of opportunities to put steel in and get involved with the CSA or CP (collaborative projects), matching up with the proposed calls(still a draft version with official call end of July). WG3 will participate in the E2B PPP info day on July 9, 2010. This event will include a brokerage session offering opportunities to exchanges with potential partners for future projects submissions.

WG4 Environment

The first 2010 meeting took place in March, in Saint Denis, France. It gave the group the opportunity to welcome the new General Secretary of ESTEP, Bertrand de Lamberterie.



WG4-Chairman
Jean-Pierre Birat

WG4 first analyzed the rate of success of the various FP7 and RFCS proposals related to environmental issues. Regarding FP7, all recent proposals were rejected even if some of them passed the first phase:

- LOTTERY (Low TemperaTurE heat RecoverY) answering the Call ENERGY 2010.8.1-1 and coordinated by ArcelorMittal Spain is still awaiting the final decision of Brussels.

- A project called CSTORE and related to CCS, with ArcelorMittal and BRGM as participants (and the storage part of the ULCOS demonstrator at the background) was rejected at phase II of the submission process.

15 RFCS projects have been accepted, are in a negotiation phase or on the reserve list.

A brainstorming session was also organised:

- to collect the corner stones for a new Roadmap regarding the new calls still to be made in FP7 by DG Energy, DG Research, on the SET-Plan focusing on Energy efficiency and CO2-lean processes, and on Energy Intensive Industries
- and to produce a series of calls on these subjects, with the constraint of including non-steel sectors in the programs.

The point is to start discussions later this year with other energy intensive industries and then with the Commission on the basis of these documents.

The roadmap and the calls are being finalised.

The following subjects for these calls have been selected:

- Waste heat energy to be used as heat and also electricity (heat pumps, ...)
- Use of process gases (CO, H2, CO2, dust issues...)
- IT, intelligent manufacturing and holistic modeling
- Use of waste material (e.g. slag)
- New burner concepts
- Use of renewable Energies in energy intensive industries
- Social value of materials (SOVAMAT) and sustainability footprint of industrial activities

WG5 People

The working group "People" deals with human resources topics and aims to develop and transfer solutions to reach a European added value. In the last years we dealt mainly with



WG5-Chairman
Rudolf-Carl Meiler

attracting, recruiting and training issues. Additionally, we started to care for health and safety issues this year. In each of these areas we intend to exchange experiences, to discuss best-practices, to do research and to develop solutions for the European steel industry. The main objective is to secure sustainable human resources management for the European steel industry. The working group "People" consists of representatives from European steel companies, universities, steel federations and research institutes. Subsequently the major initiatives and projects of the working group "People" which are currently running will be outlined.

One dominant megatrend for all European industries is the demographic change – accompanied by various effects depending on specific conditions. Populations as well as labour forces decline, some regions and specific industries are hit more than others. Therefore strategies are needed to attract and recruit young people to industry.

Against this background of the demographic change the working group People evaluated the current status of activities and initiatives in order to attract and recruit young people into the European steel industry. Therefore a questionnaire was developed and distributed to the "major companies" in the European steel industry. From the analysis conditions for successfully attracting and recruiting activities could be identified. One constantly recurrent success factor is e.g. to organise activity oriented initiatives. Internships and visits are much more effective than advertisements.

These kinds of initiatives as well as activities to retain and develop talents will be discussed at a public European conference called "Talent Management in European Steel Companies and Universities" on the 11th November 2010 in Düsseldorf, Germany. The concept "Talent Management" comprises strategies, methods and measures to ensure sustainable business success by optimal personnel placements. The public conference with its high-class speakers and contributions is targeted at students, professors, graduates, the steel industry, unions, press, public authorities, European Commission, and state agencies.

As Europe is poor in iron ore reserves and has relatively high labour costs, European steel companies need advantages in technology to gain sustainable value added. Therefore qualifications of whole workforces must be continuously improved. In European steel companies skilled workers are the backbone of the workforce. Consequently, we developed and submitted a proposal in order to a further development of industrial apprenticeships. The different European systems of vocational education and training (VET) should be evaluated in terms of sustainable components. It is envisaged to expand the industrial apprenticeships in a sustainable way. The proposal is titled "Greening technical VET".

Besides attracting and recruiting and training issues the working group "People" decided recently to tackle health and safety issues. In July 2010 will be a first workshop at ThyssenKrupp Steel Europe in Duisburg, Germany to explore these issues in depth. European safety experts will identify common future challenges and define a road map to improve working conditions in the European steel industry.

WG 6 Energy

Well in advance of the deadlines (September 2010 for RFCS, July 2010 for the FP7) the



WG6-Chairman
Pietro Gimondo



WG6 group starts already the discussion about the preparation of new proposals. Many EoI were exchanged among the members. The EoI proposers have extensively presented their ideas and the WG6 members well appreciate such an early approach.

Concerning the RFCS proposals not retained for funding in the evaluation 2009, it has been decided that all will be submitted again after having improved the technical content and whenever possible also the partnership. Among others SARCO2, *the proposal on Plastic deformation of pipes, and the one on Wind Farm gear box as well as that on Steel with high creep resistance.*

- one running project from the WG with some feedback on the work done and results achieved so far

In the line with the steel application for the Wind Farm some projects have been financed by the EC. Among them the one on structures entitled "Develop tailored manufacturing Safe methods for wind Towers erected in remote areas based on an integrated tower concept and optimal use of high strength steels". The project intends to study new manufacturing solutions for wind steel towers using High Strength Steels (HSS) already used in other applications and newly developed ones. Thus, the project aims to prove that modular, field-assembled panel tower design eliminates transportation restrictions and therefore allows for a much more efficient tower design and steel use.

ESTEP WGs / RFCS TGs meeting, December 16 2009

Last December a meeting was organized between the representatives from the 6 ESTEP Working Groups and the 9 RFCS Technical Groups. Around 40 persons attended this meeting. The main objective was cross-exchanges about the ESTEP's working groups' activities and the RFCS/TGs running projects. During the morning, the short presentations of the different working groups showed good connections between the respective groups both for steel process and product development. In the afternoon, parallel workshops sessions between relevant WGs/TGs enabled to elaborate the future needs. During the conclusion the updated R&D steel priorities were presented with relevance to the RFCS programme. The 12 priorities (7 for processes and 5 for products) will be used for the preparation of the next 2010 RFCS call. Considering the success of this meeting, it was decided to repeat such a meeting by the end of 2010.

EFFRA General assembly, July 8th 2010

On July 8, the European Factory of the Future Research Association organized its 2nd General assembly. The aim of this association is to put into practice the Factory of the Future (FoF) Public Private Partnership (PPP) which is a key element of the European Recovery Plan. During 4 years (2010-2013) a global budget of 1,2 B€ will be devoted to this initiative, half of which will be European funding. EFFRA has been funded at the initiative of MANUNET, the Manufacturing European Platform. A lot of different actors are associated e.g. ESTEP, the Steel Technology platform and Suschem the Sustainable Chemistry platform. A Strategic roadmap for FoF has been issued. The priorities for the annual calls are defined on this basis by the Industrial



Advisory Group (IAG). The ESTEP representative in this association is Luc Chefneux from ArcelorMittal. He highlighted at the General assembly the fact that the roadmap initially written for discrete manufacturing (downstream manufacturing) has been well adapted to the continuous process industries, such as steel, glass, bulk chemistry... (upstream industry) and that the composition of the board of directors should be adjusted to include this basic part of the European industry.

ESTEP Membership

One of the most frequent questions for the ESTEP secretariat: How can I join ESTEP?

When ESTEP started, the whole European steel industry in EUROFER joined forces with steel research institutes and these formed the basis for the platform together with the European Commission and Member States. Machine builders and representatives from universities (time) and universities have been invited to join the platform. However these "founding fathers" are not the exclusive members of ESTEP. ESTEP is open to any organisation with activities linked to steel research and technology. As a platform we want to be a forum for steel dialogue in the steel sector and relevant public organisations. The main request is that new participants not only join but become really active members to participate in the day to day activities of the working groups: setting up roadmaps, defining priorities, formulating proposals and setting consortia, communicating with relevant bodies over common themes. Any application will be handled in principle through the respective working group. A definitive decision on participation is after a few meetings to assess whether membership is useful for both sides. In this way the membership has changed over the years. ESTEP has now also members from outside the EU.

Events 2010

SET-Plan workshop on Iron and Steel	
E.Commission	15 January 2010
Support Group meeting	
ESTEP, Brussels	19 January 2010
Steering Committee	
Luxembourg	3 March 2010
ETPs Annual conference	11, 12
Brussels	May 2010
Implementation Group	
ESTEP, Brussels	15 June 2010
Support Group	
ESTEP, Brussels	16 June 2010

Forthcoming

European Industrial Technologies Conference	
Brussels	7,8,9 September 2010
Meeting ESTEP WG4	
ESTEP, Brussels	15 September 2010
Meeting ESTEP WG2	
ESTEP, Brussels	20 September 2010
Meeting WG1	
ESTEP, Brussels	6 October 2010
Meeting WG6	
ESTEP Brussels	14 October 2010
Mirror Group	
Brussels	
Meeting WG3	
ESTEP Brussels	20 October 2010
Meeting WG Implementation	
ESTEP, Brussels	26 October 2010
Support Group meeting	
ESTEP, Brussels	27 October 2010
Meeting WG6	
ESTEP, Brussels	
Talent management in the steel industry	
Dusseldorf	11 November 2010
International conference on Energy efficiency	
Dusseldorf	27 June 2011 – 1 July 2011
Steering Committee	
Brussels	March 2/3 2011
1st steel spring school	
	2011

Colophon

The ESTEP Member Newsletter is issued on a regular basis by the ESTEP Secretariat to the ESTEP members. The editorial panel consists of Bertrand de Lamberterie, N. Remoy and Wim Moonen.

Contributions for the newsletter can be sent to the ESTEP secretariat.

C/o EUROFER

Avenue Ariane 5, Third floor

B-1200 Brussels

Tel +32 2 738 79 43

Fax: + 32 2 738 79 56

Email: secretariat@steelresearch-ESTEP.eu