SUSCOMTEC - a Good Example for International Cooperation in the field of Practice oriented Engineering Education

Felipe L. Penaranda-Foix, Márta Zs. Mészáros, Birgit Graf and Dr. Lutz Michael Buechner
Table of Contents

- **IP: Intensive Program**
- **SUSCOMTEC**
  - Some historic facts
  - Application: partners
  - Events
    - Where
    - Contents
    - Visits
- **The future**
IP: Intensive Program

• ¿What is an IP?
  – “… a short course curriculum that lasts from ten days up to six weeks. The participants, teachers and academics, should come from at least three different countries and at least one of them should be member of EU. An IP theme should be innovative and not contained within the undergraduate course curriculum of the partner Institutions. The appropriate number of ECTS credits is awarded according to the student workload”
  – Important points:
    • Novelty
    • Complementarity between the participants
    • Reasonable duration (2 weeks in our case)
When did it start?

- In 2004 ESM (European Students Meeting) was born
- ESM editions:
  - San Petersburgo (2005)
  - Leipzig (with the topic “Next Generations Network”, in 2006)
  - Lille (with the topic “Optical Telecommunications and Mobile Telecommunications” in 2007)
  - Zilina (also with the topic “Optical Telecommunications and Mobile Telecommunications” in 2008).
  - Sofía (with the topic “Optical Telecommunications” in 2009)
  - Gyor (with the topic “Telecommunication and ICT management” in 2010)
  - Opatija (2011)
SUSCOMTEC

• IP-SUSCOMTEC application
  – PArtners:
    • 1) University of Zagreb: experts in innovation in ICT and policy in ICT.
    • 2) HfT Leipzig: experts in intelectual property and sustainability in ICT.
    • 3) University of Debrecen: experts in e-learning and new services in ICT (remote assistance, etc.).
    • 4) Technical University of Košice: experts in mobile communications.
    • 5) University P.J.Safarik, in Košice: experts in management and human resources.
    • 6) University of Oradea: experts in regional sustainability and ICT policies in the EU.
    • 7) HCTP, Sofia: experts in ICT business and optical applications.
    • 8) Telecom Bretagne: experts in multiculturality and ethic perspective.
    • 9) Telecom Lille: experts in multicultural and interpersonal relationship.
    • 10) Dublin Institute of Technology: experts in the reduction of electric energy consumption.
    • 11) Széchynyi István University: experts in ICT and entrepreneurship.
    • 12) University of Zilina: experts in ICT technology transfer and logistics.
    • 13) Universidad Politécnica de Valencia: experts in EM industrial applications.
    • 14) Technical University of Sofia: experts in ICT new generation systems.
    • 15) St. Petersburg State University of Telecommunications: experts in ICT multimedia.
• Solicitud IP-SUSCOMTEC
  – Steering commitee:
    • HfT Leipzig
    • Széchnyi István University
    • Universidad Politécnica de Valencia
  – Application discussed and aproved by the partners in March 2011
    • Title: INTERCULTURAL KNOWLEDGE TRANSFER IN ENGINEERING FOR A SUSTAINABLE GLOBAL ICT COMMUNITY
    • Porposed places:
      – 2012: Valencia
      – 2013: Debrecen (Hungria)
      – 2014: Sofia
  – IP approved in July 2011
### SUSCOMTEC numbers:

- **May 2012: Valencia**

<table>
<thead>
<tr>
<th>Students</th>
<th>Lecturers</th>
<th>Invited local lecturers</th>
<th>Aprox. Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>19</td>
<td>5</td>
<td>38000€</td>
</tr>
</tbody>
</table>
SUSCOMTEC

- SUSCOMTEC numbers:
  - May 2013: Debrecen

<table>
<thead>
<tr>
<th>Students</th>
<th>Lecturers</th>
<th>Invited local lecturers</th>
<th>Aprox. Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>49</td>
<td>19</td>
<td>5</td>
<td>28000€</td>
</tr>
</tbody>
</table>

Györ, February 3rd, 2015
SUSCOMTEC

- SUSCOMTEC numbers:
  - April 2014: Sofia

<table>
<thead>
<tr>
<th>Students</th>
<th>Lecturers</th>
<th>Invited local lecturers</th>
<th>Aprox. Budget</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>15</td>
<td>5</td>
<td>26000€</td>
</tr>
</tbody>
</table>
• Contents
  – Technical visits
    • Valencia: UN facilities
    • Debrecen: Antennas for broadcasting, IT Systems, National Instruments and University Supercomputer
    • Sofía: Liebherr
  – Turistic vistis
    • Valencia: City Hall, guided visit to Valencia and Oceanogràfic (aquarium)
    • Debrecen: City Hall, guided visit to Debrecen, a National Park and water facilities
    • Sofia: Guided visits to Sofia and Plovdiv
• Contents
  – Group work
    • Groups of 4 or 5 students
    • One topic per group
    • Work group started about 4 weeks before the event
  – Invited talks
    • Local Police and City Hall in Valencia
    • TELEKOM talks: Sustainability at Deutsche Telekom
    • IT SYSTEMS talks
    • Telefónica talk: Green ICT in Telefónica
    • Talk and work about enterpreneurship
    • Talk about “CSR and sustainability-an strategic approach”
  – Multiculturality work
• Contents
  – Technical talks
    • Sustainable computing
    • Social networking as enabler of social responsibility and sustainability
    • Intercultural Communication
    • Sustainability in ICT: traffic/energy reduction
    • Quo Vadis Mobile Networking
    • Next-Generation Networks (NGN): IP Multimedia Subsytem (IMS) Architecture
    • Selected technological trends in communication networks facilitating their sustainability
    • Microwaves made sustainable
    • 3D Optical Data Storage
    • …
THE FUTURE

• New EU frame: ERASMUS+
  – KEY ACTION 1: MOBILITY OF INDIVIDUALS
    • Staff mobility
    • Students mobility
    • Mobility for Joint Masters
    • HE mobility for EU students and third countries
    • Young people Exchange
  – KEY ACTION 2: COOPERATION FOR INNOVATION AND THE EXCHANGE OF GOOD PRACTICES
    • Next slide
  – KEY ACTION 3: SUPPORT FOR POLICY REFORMS
    • Knowledge about the education field
    • Initiatives to help the EU policies
    • Support to the EU tools
    • Support of policy promotion, international meetings, etc.
THE FUTURE

• New EU frame: ERASMUS+
  – KEY ACTION 2: COOPERATION FOR INNOVATION AND THE EXCHANGE OF GOOD PRACTICES
    • Strategic partnerships in the field of education, training and youth
      » Developing basic and transversal skills
      » Enhancing digital integration in learning, teaching, training and youth work at various levels: promoting access to and learning through Open Educational Resources (OER); supporting ICT-based teaching, training and youth work, as well ICT-based assessment practices
    • Informatic platforms (EYP, e-Twinning, EPALE)
    • Cooperation with EU countries to enforce the capabilities
1st INTERNATIONAL WEEK on Practice Oriented Higher Education at Széchenyi István University

SUSCOMTEC - a Good Example for International Cooperation in the field of Practice oriented Engineering Education

Felipe L. Penaranda-Foix, Márta Zs. Mészáros, Birgit Graf and Dr. Lutz Michael Buechner