ESO INDUSTRY DAY

PORTUGUESE INDUSTRIAL PARTICIPATION

email: emir.sirage@fct.pt
1. FCT activities related to ESO in context

- Industrial Liaison Officer role in Scientific Facilities as part of the Portuguese delegation
- Representation at ESA and other ESA Governing bodies

*Integrated approach towards industry and academia (meetings, events, procurement opportunities,...)*

- Space
- Accelerators
- Astronomy
2. Industrial Liaison Officer – ILO mandate

- Support the promotion of PT companies with relevant capabilities to ESO admin/ and technical staff
- Ensure a positive and sustainable Industrial Return to PT
- Identify and announce “as deemed possible” tender opportunities to PT companies
- Create active network with PT Industry, technical dep. & PT staff at ESO
Some of ESO technology needs
(source: ESO list of needs)

- Electronics (...control systems, PCBs fabrication)
- IT (...Software & Hardware)
- Optics (...systems, manufacturing)
- Civil and Mechanical Engineering (...large structures for telescopes, civil works)
- Infrastructure (Electrical power equipment and systems, heavy handling machinery)
- ...
4. PT@ESO - Advanced training in today’s Knowledge economy

+- 1% for Portugal
(Scale of contribution vis-à-vis other Member States)

HR working at ESO (PT nationality)

Advanced training for young engineers (paid by FCT) = 15 until date

(Right) Staff members by nationality — 31 December 2010.
5. PT@ESO – Access to world class Astronomy, projects and technology

(1) - Echelle SPectrograph for Rocky Exoplanet- and Stable Spectroscopic Observations

(2) - Adaptive optics assisted, near-infrared VLTI instrument

(3) - (multi-object spectrograph for VLT, Phase A

Instr.: CAAUL-FCUL
6. PT@ESO – Industrial Return (2009-2010)

More than 2.5M€ purchased to PT in the above period (2009-2010)

- Software verification & validation
- Design adaptive-optics (Opto-mechanics)
- Quality & Product assurance services
- Electrical cables – power system (HV, MD...)
- LPG Gas Storage Infrastructure
- ActiveSpace Technologies
- Critical
- iSQ
- SolidAl
- ASM Group
7. PT@ESO – Industrial Return 2009

Industrial Return Coefficient:

Ratio between the percentage of expenditure in PT

PT percentage contribution to the overall ESO budget
8. PT@ESO – Industrial Return 2010

Escala de RI

Finlândia 0,10
Dinamarca 0,14
República Checa 0,17
Áustria 0,26
Bélgica 0,36
Holanda 0,64
Espanha 0,82
Itália 0,91
Reino Unido 1,04
França 1,08
Portugal 1,11
Suíça 1,22
Suécia 1,24
Alemanha 1,41

Estados Membros do ESO
9. To retain messages for the event

- Access prime information on opportunities from across ESO scientific and technological Programme (inc. the E-ELT)
- Make yourself known to ESO executive and discuss
- Leverage the discussion at the parallel sessions in order that ESO can understand they can do business with you
- Take the opportunity to network together (industry and academia) to...
  ...open new collaborations to win contracts from ESO in the medium and long-term
EVENT LOGISTICS
## 10. Programme

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Speaker</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:45 – 10:00</td>
<td><strong>Introduction to ESO</strong></td>
<td>Rowena Sirey</td>
<td><em>Head of External Relations, ESO</em></td>
</tr>
<tr>
<td>10:00- 10:30</td>
<td><strong>ESO Technology Needs</strong></td>
<td>Roberto Tamai</td>
<td><em>Head of Technology Division, ESO</em></td>
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<tr>
<td>10:30- 10:45</td>
<td><strong>Coffee break &amp; networking</strong></td>
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<tr>
<td>10:45- 11:15</td>
<td><strong>Upcoming Opportunities - The E-ELT project</strong></td>
<td>Alistair McPherson (replaced by Roberto Tamai)</td>
<td><em>E-ELT Project Manager, ESO</em></td>
</tr>
<tr>
<td>11:15- 11:45</td>
<td><strong>Instrumentation Programme at ESO</strong></td>
<td>Mark Casali</td>
<td><em>Head of Instrumentation, ESO</em></td>
</tr>
<tr>
<td>11:45-12:15</td>
<td><strong>Securing ESO Contracts - The procurement process</strong></td>
<td>Yves Wesse</td>
<td><em>Head of Contracts and Procurement, ESO</em></td>
</tr>
<tr>
<td>12:15- 13:45</td>
<td><strong>Lunch break</strong></td>
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</tbody>
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### Parallel Sessions – 14:00 until 16:00

**Session 1  Engineering  and Control**

- **Roberto Tamai**  
  *Head of Technology Division, ESO*

**Seminar: Instrumentation**

- **Mark Casali**  
  *Head of Instrumentation, ESO*

**Seminar: Civil and mechanical engineering opportunities in the E-ELT**

- **Alistair McPherson** (replaced by Yves Wesse)  
  *E-ELT Project Manager, ESO*
Programme breaks

- 10:30 -10:45) – Coffee and networking (outside in the hall)

- (12:15 – 13:45) – Lunch break (restaurant available in hall of Pavilhão do Conhecimento) or around you may find many restaurants available.

- (14:00) – Start of parallel sessions - panels with posters signal the rooms for the sessions

  - Session 1 : Engineering and Control (Chair: Emir Sirage)
    - Speaker ESO: Roberto Tamai
    - 3min oral presentation: all

  - Session 2 : Instrumentation (Chair: Mário Amaral)
    - Speaker ESO: Mark Casali
    - 3min oral presentation: all

  - Session 3 : Civil and Mechanical Engineering (Chair: Luís Serina)
    - Speaker ESO: Yves Wesse
    - 3min oral presentation: all

- (16:00) – Expected hour of closure of event