



Uma Rede de Tecnologia e Qualidade

C3P Solutions for Environmental Issues



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National Aeronautics
and Space Administration

C3P and NASA Technical Workshop

Consortium

- C3P – Center for Pollution Prevention Program:
 - ITB (International Trade Bridge)
 - INEGI (Instituto de Engenharia Mecânica e Gestão Industrial)
 - ISQ (Instituto de Soldadura e Qualidade)



C3P Background

- NASA and Portuguese Ministry of Urban Affairs, Planning and Environment, agreed jointly to explore ways to prevent Environmental Pollution
- Lisbon September 18th, 2002, USA Ambassador (on behalf of NASA) and Portuguese Minister of Environment, signed a joint statement regarding cooperation in the field of Environmental Pollution Prevention (P2)



C3P Background

- Specific areas of P2 interest:
 - Integrating Environmental, Safety, and Occupational Health considerations in Acquisition, Manufacturing, and Maintenance Processes;
 - Information sharing on integrating Environment, Safety and Occupational Health considerations into Life Cycle Analysis;



C3P Background

- Use of existing Information Networks for Environmental Purposes;
- Information sharing Programs on US and EU Regulations and their potential impact on Manufacturing and Maintenance Processes and their impacts on Operational Capability.



Other Institutions and Companies

- OGMA (Portugal)
- TAP (Portugal)
- TWI (UK)
- BAE Systems (UK)
- INASMET (Spain)
- ANIMEE (Portugal)
- SETCOM (Portugal)
- ILTAM (Israel)



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Main Meetings (Workshops)

- **2002** – Workshop in London, US Embassy. **Lead Free Soldering**, with participation of US and EU companies and Institutions (200 participants)
- **2003** – Workshop in Lisbon. **Integrating Common Problems for Shared Solutions** (100 participants)
- **2004** – Workshop in Cape Canaveral, NASA. **International Pollution Prevention** (200 participants)
- **2005** – Workshop in Lisbon, Universidade Católica. **Partnering for Shared Solutions to Common Environmental Problems.**



Other Events

- During the last four years bilateral and other events were held:
 - Establish Contacts with Potential Partners;
 - Develop Projects;
 - Analysing Results;
 - Search for Stakeholders;
 - Contacts with Authorities and Foundations (e.g. FLAD)



Methodology Used for Developing Projects

- Analysis of Industrial Sectors;
- Set Up of Audits and Visits;
- Select Common Problems;
- Define Project Objectives;
- Define Project Programs;
- Develop Projects;
- Analysis of Results;
- Operations Set Up.



Ongoing Projects

- Cr_{VI} Free Coatings in Aircraft Assets;
- Lead Free Soldering (JG – PP / EU interaction);
- Low VOC Processes;
- Polymers Concrete (INEGI, C3P);
- Screen Printing Alternatives.



Future Objectives

- Develop and Disseminate:
 - Sustainable Development Concepts;
 - DfM / EcoDesign;
 - Social Responsibility.



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Future Actions

- Finish Running Projects;
- Replicate Successful Results to Other Areas;
- Interact EU / US Programs to Develop Common Projects;
- Search for New Stakeholders.





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Thank You!

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