



ARCADIA

A Strategic Activity of COST – ICT

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COST What is COST ?

- Multigovernmental Agreement
 - Created in 1971
 - 9 Scientific and Technical Domains
- Participation
 - 35 COST Countries
 - European Commission
 - International Organisations
 - Organisations from Non-COST Countries on Mutual Benefit Basis
- COST Actions
 - Coordination of research funded otherwise
 - Pre-competitive and bottom-up
 - A tool for networking researchers

COST How to participate?

- COST Countries:
 - "Open Call" with collection dates
 - (September 30th, 2007)
 - Membership is open to all countries within 12 months of Action approval
 - Just contact your CNC
 - After that, approval of MC is required
- Non-COST researchers:
 - Should directly contact Chair of the Action
 - If "mutual benefit" then official membership
 - MC Approval, DC recommendation, CSO approval

COST ARCADIA Strategic Activity

- Advanced Research in Communications for Distributed Interconnected Applications
- Focus:
 - Internet of the future
- Aims:
 - Help bridge activities between FP6 and FP7
 - Contribute ideas to FP 7 Work-Programme
 - Produce White Paper on Fundamental Experimental Research
- Outcome:
 - Helped focus institutional research on IoF
 - Close collaboration with FET (now F4), D1, and NSF
 - Leverage for subject and for researchers working on it

COST ARCADIA Events

- 1st meeting in Turin - August 2006
- 2nd meeting in Lisbon - December 2006
- This Workshop
- White Paper
 - Preliminary version available from www.cost.esf.org/index.php?id=989



Diverging views from Arcadia and other related fora

- Bottom line for researchers in networking:
 - Internet is broken
 - More funds are needed to fix it
 - How to build a body of research results that
 - Have practical impact
 - Have a larger 'scientific' aura
- Bottom line for Industry:
 - What's in it for us?
 - Services innovation is at the edge anyways
 - DON'T TOUCH THE ROUTERS!



ARCADIA

Preliminary Recommendations

- New models and benchmarking tools
 - More software virtualization and routing/computing fusion
 - Delay-Tolerant Networks and other emerging networking paradigms
 - Multi-level Multi-polar experiments
- Paradigm shift
 - From Simulation to Scientific Experimentation



Towards Communications for Distributed Interconnected Applications in Future

- Real impact will come from Fundamental Scientific Research in the area
 - Experimental but Reproducible
 - Likely disruptive
 - Multi-disciplinary
- New, heterogeneous, multi-level infrastructures are required to experiment
- *Future* is a key-word
- Industrial consortia will not touch the Holy Grail
 - If it ain't broken, don't fix it
 - They'll stay at the edge - user related

COST Provocative wish-list

- Internet is not broken yet
 - Why will it break?
 - When will it break?
 - What will make it break?
 - Where will it break?
 - How will it break?
 - Who will benefit/suffer from the breaking?
- What's Internet?

COST Information points

- **ARCADIA**
 - <http://www.cost.esf.org/index.php?id=989>
- **COST ICT**
 - <http://www.cost.esf.org/index.php?id=27>
- **Open Call**
 - <http://www.cost.esf.org/index.php?id=721>
- **Me**
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