Moverim Consulting



European COoperation in Science and Technology

COST – a flexible research networking tool

La missione di COST

Rafforzare l'Europa nella ricerca scientifica e tecnologica per scopi pacifici attraverso il supporto alla cooperazione e alla interazione tra i ricercatori

Il programma COST rappresenta una modalità di lungo periodo e di successo per diffondere la consapevolezza e costruire networks tra i ricercatori europei;

Il programma evidenzia la dimensione umana della scienza, aiutando i ricercatori a condividere non solo i risultati del loro lavoro ma anche i loro scopi e metodi di ricerca.



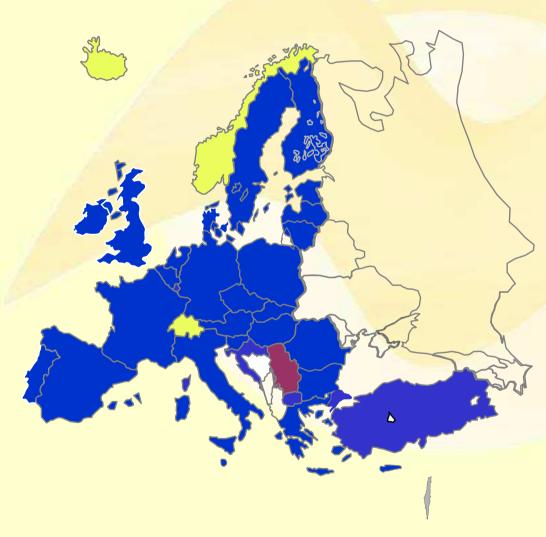
Caratteristiche di COST

- Coordinamento attraverso il networking
- Pan-European
- Multi-disciplinary
 - "Non competitivo" (pre-normative; public utility)
- Finanziamenti nazionali di ricercatori e progetti a responsabilità nazionale

- Bottom-up
 programmi non fissati
 precendentemente
- Partecipazione flessibile unirsi se interessati
- "Interdisciplinary Exploratoria"
- Focus sui giovani ricercatori
- Aperti ad ampie collaborazioni



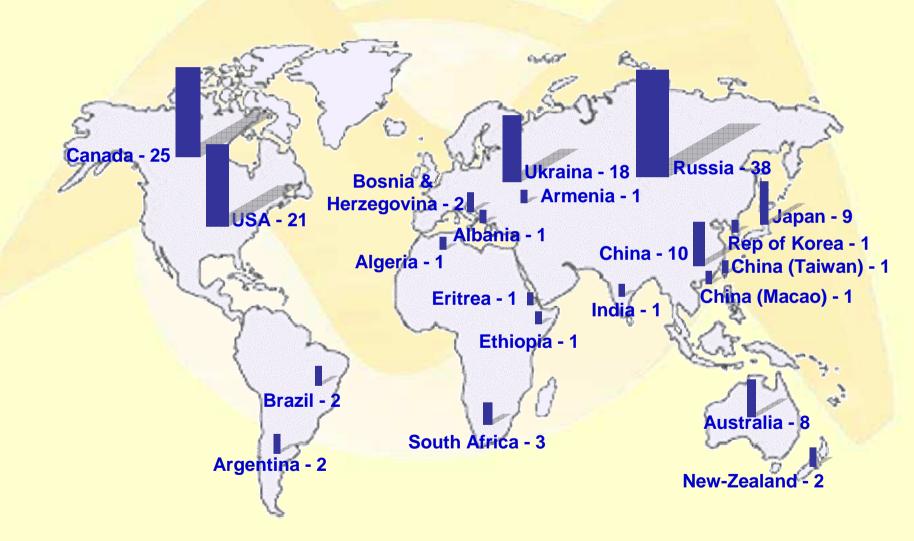
Paesi COST



- ◆ I 27 Stati Membri EU
- Stati EFTA
 - Iceland
 - Norway
 - Switzerland
- **♦ Paesi Candidati**
 - Croatia
 - ► FYR of Macedonia (FYROM)*
 - Turkey
- ◆ Altri Paesi
 - ▶ Republic of Serbia
- **♦ COST Co-operating States**
 - Israel

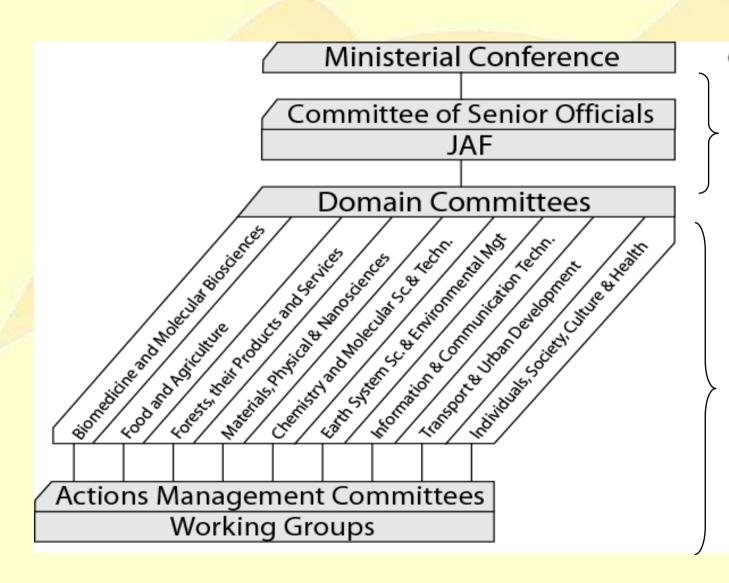


Azioni COST: Partecipazioni globali





COST governance



COST Secretariat
General
Secretariat of
the Council of
the EU

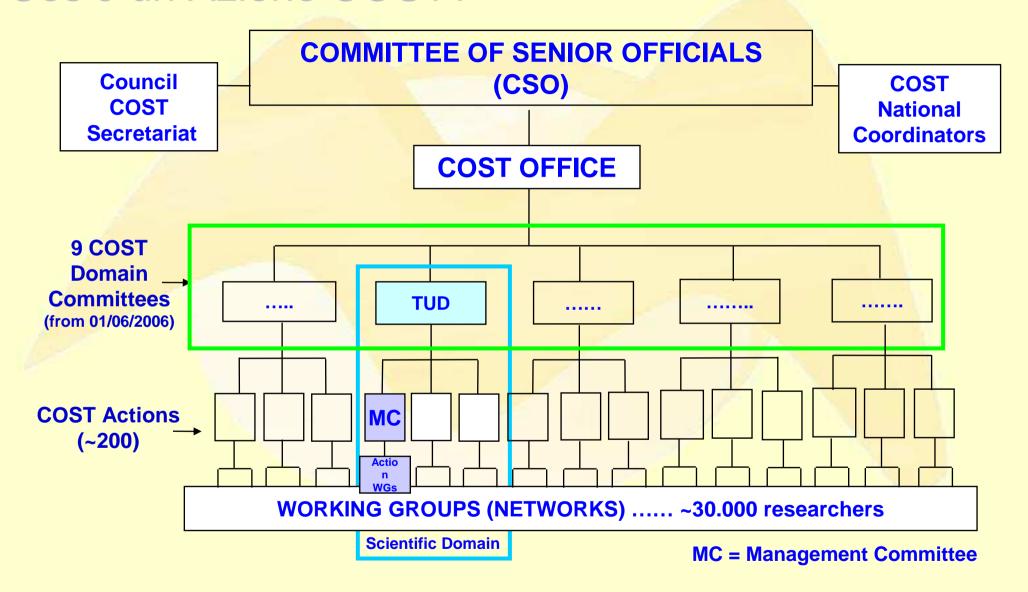


COST Office Scientific Secretariat

European Science Foundation



Cos'è un Azione COST?





Cosa è finanziato da COST?

Azioni COST: Progetti finanziati a livello nazionale (min. 5 paesi partecipanti) con un programma congiunto ricevono finanziamenti per:

- Incontri per Science management
- Workshops e seminari scientifici
- Short Term Scientific Missions (STSMs)
- Scuole di formazione e conferenze nell'ambito della ricerca
- Diffusione

Finanziamento medio 100.000 € per anno per Azione

Workshops Strategici: per esplorare le necessità future in campo scientifico e sociale

Come seleziona le Azioni COST?

- Sistema di Open Call
- COST pubblica le Open call permanenti e divise per tematiche per migliorare la trasparenza, assicurare qualità e introdurre la competitività per la selezione delle nuove azioni
- Particolare riguardo è riservato ai giovani ricercatori nell'intento d'incoraggiare gli sforzi congiunti per portare un riconoscimento sempre migliore dei risultati
- I criteri di selezione sono pubblicati
- Previste 2 scadenze annuali per la presentazione di progetti (prossima deadline 26 marzo 2010)
- 2 stadi di valutazione attraverso un peer review



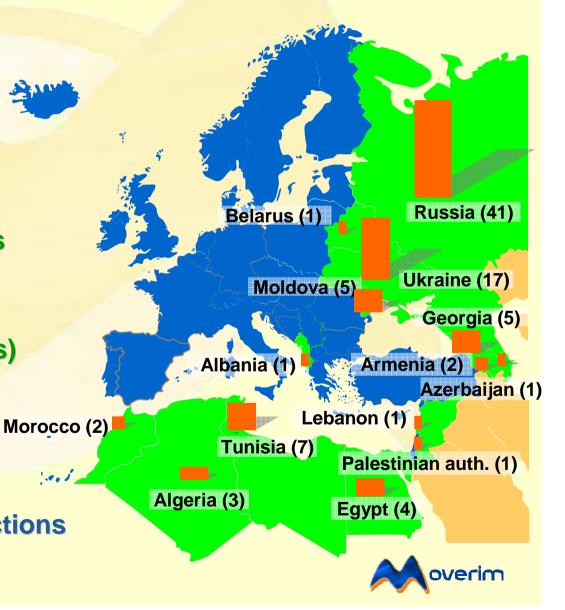
Conclusioni

- Le Azioni COST promuovono la creazione di conoscenza e gli scambi in Europa e non solo
- Networks d'eccellenza (in particolare per giovani scienziati) sono uno degli obiettivi principali per incentivare le interazioni a livello globale nella scienza
- La cooperazione internazionale all'interno di COST potrebbe essere allargata: gli scambi con i paesi non COST e il loro coinvolgimento potrebbe essere favorito



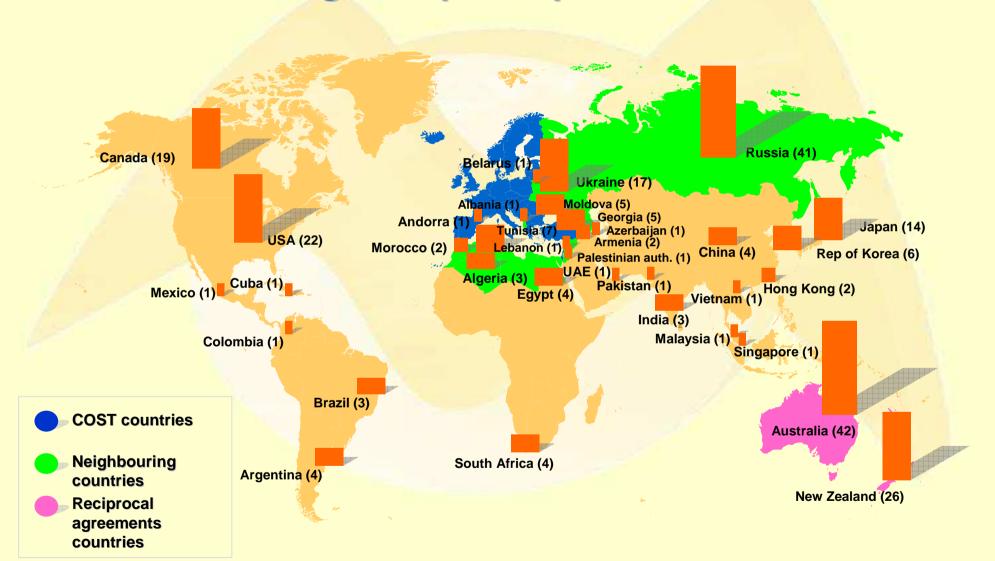
COST and the Neighbouring Countries

- COST countries
- COST neighbouring countries
- Special budget line in the COST system to facilitate collaborations
- Specific exchange activities
 (Short Term Scientific Missions, focus on Early Stage Researchers)



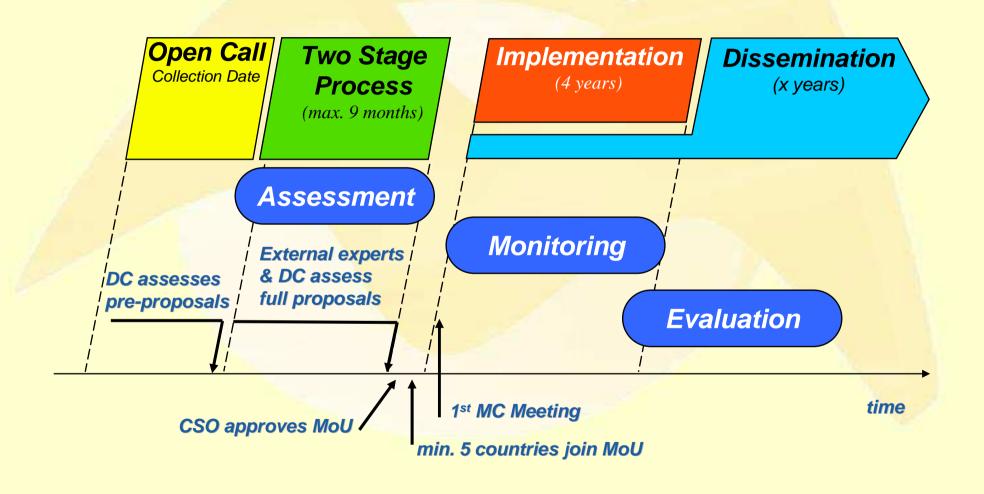
In 2009: 90 participations in 45 Actions

COST Actions: global participation (status: May 2009)





COST Action life cycle

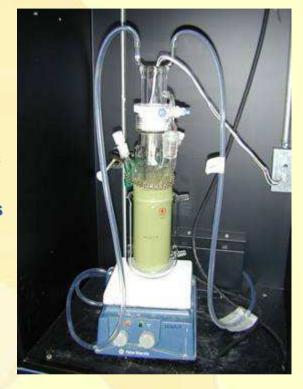


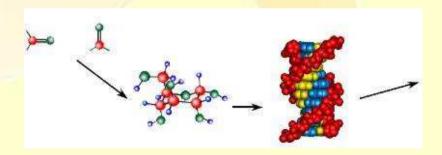


Prebiotic Chemistry and Early Evolution: COST Action D27

Prebiotic chemistry is the chemistry that describes the chemical processes associated with this transition to life from the inanimate matter. It is a classic field within the chemical world. Initiated in the early 1920s with the seminal book by Alexander Ivanovich Oparin, it was not until the famous experiments by Stanley Miller in 1953, showing that simple electrical discharges in a prebiotic-like gaseous mixture could produce amino acids and other important biomolecules, that it became an independent area of research.. Since then, prebiotic chemistry has expanded greatly, and thanks to many researchers, alleged prebiotic conditions have been described under which several biomolecules can be fabricated.

The main objective of the Action is to develop the chemistry connected with the origin of life and early evolution of life on Earth, with special emphasis on self-replicating systems, prebiotic synthesis of nucleic acids and polypeptides, as well as simple protocells as early models of biological cells.



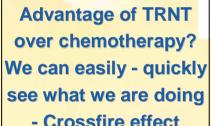


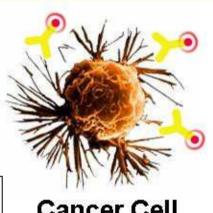


Targeted Radionuclide Therapy - TRNT: COST Action BM0607

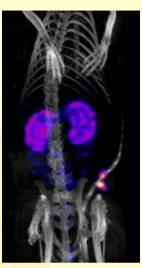
The main objective of the Action is to improve the potential of cancer therapy through the development and application of innovative vectors labeled with therapeutic radionuclides for 'targeted radionuclide therapy' of disseminated cancer

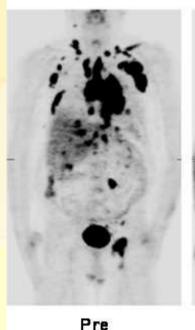
Advantage of TRNT over chemotherapy? - Crossfire effect













Lymphoma 6th leading cause of cancer death in the United States

Radioimmunotherapy of Non-Hodgkin's





How new telecommunications can benefit people with disabilities: COST Action 219 ter

A major societal issue as we move towards a fully mobile and fully linked society is maintaining accessibility for all. Future generations of mobile communications systems will transmit data, text, voice, pictures and video between fixed or moving terminals. Customers will access variable bandwidth instantly and will be charged accordingly and automatically. Mobile systems will provide Internet access as well as point-to-point communication, and they will be linked with wireless broadcast services.

COST 219ter

- Is promoting a communications infrastructure that is accessible to all – including the elderly and the disabled
- Takes part in adapting and designing the equipment accordingly
- Stimulates and carries out research and development to improve accessibility to services for disabled and older people in smart houses.

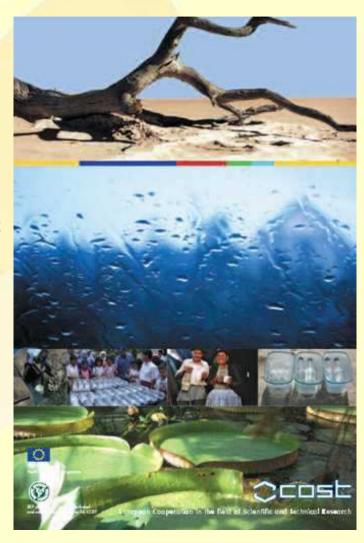




Sunshine makes water safer to drink: COST Action P9

One in five people on earth have no safe drinking water and are at serious risk from water-borne diseases. Solar Disinfection (SODIS) is a technique for making microbially contaminated drinking water safe. Transparent bottles are filled with contaminated water and placed indirect sunlight for 6 hours. The combined action of solar UVA ionising radiation and the induced heating effect reduces microbial contamination levels from 1 million bacteria per ml to zero in < 1.5 hours and is completely effective against the pathogens responsible for cholera, salmonella, gastroenteritis, and other diseases.

COST contributes to meet the EU's commitments under the Millennium Development Goals (MDG), the EU Water Initiative (EUWI), the Plan of Implementation of the World Summit on Sustainable Development (WSSD)

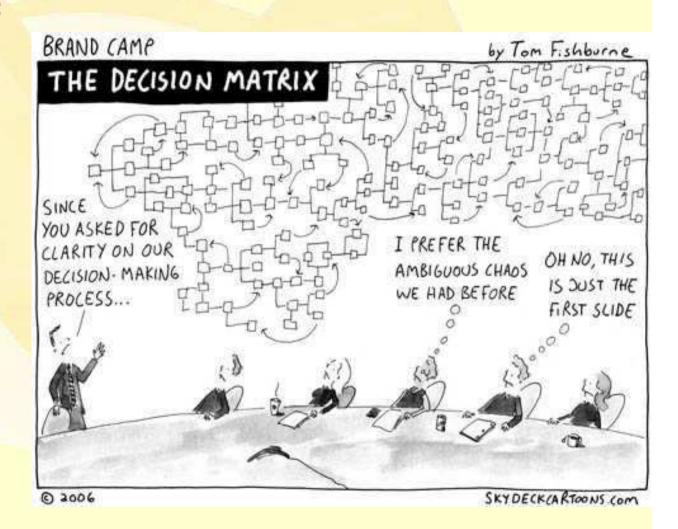




Algorithmic Decision Theory: COST Action IC0602:

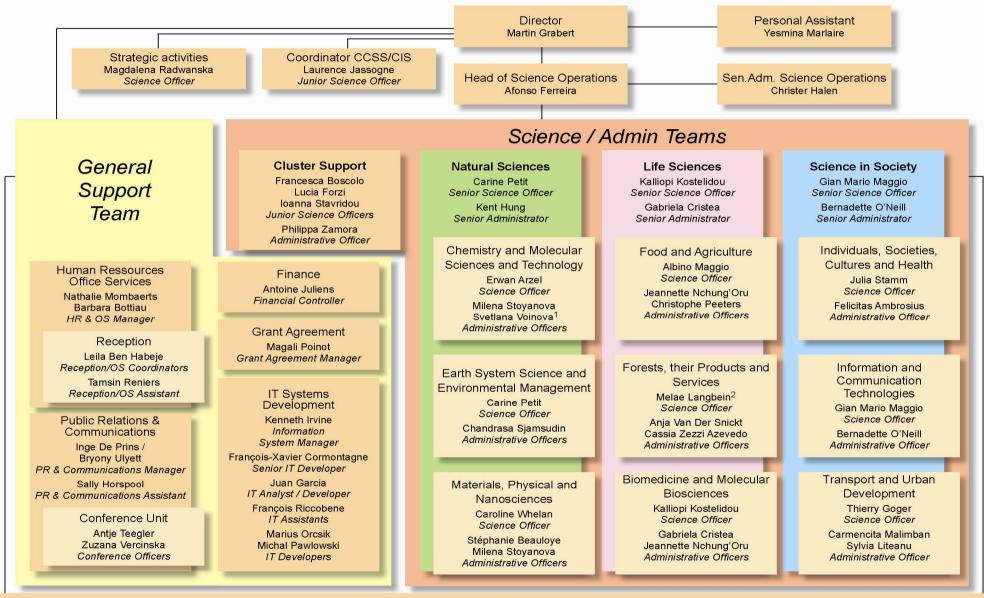
The main objective of the Action is twofold:

- propose new algorithmic solutions for hard decision theoretic problems arising from the use of large amounts of information, the presence of uncertainty as well as of complex structures of data;
- use results and concepts from decision theory in order to improve and advance in computer science and artificial intelligence.





The COST Office



ESF Services supporting the COST Office

^{1.} Co-ordinator for Balkan activities

^{2.} Co-ordinator for Reciprocal Agreements

COST scientific & technical Domains



Biomedicine and Molecular Biosciences (BMBS)



Chemistry and Molecular Sciences & Technologies (CMST)



Earth System Science & Environmental Management (ESSEM)



Food & Agriculture (FA)



Forests, their Products and Services (FPS)



Individuals, Society, Culture & Health (ISCH)



Information & Communication Technologies (ICT)



Materials, Physical & Nanosciences (MPNS)



Transport & Urban Development (TUD)



The role of the Domain Committees (DCs)

- Assessment of proposals in the Open Call
 - Reviewing and rating of Preliminary Proposals
 - Hearings and Ranking of Full Proposals
 - Participation in establishing final selection
- Monitoring of Actions in progress
 - "Progress Report" submitted every year by Actions
 - Presentation by the Action Chair at Annual Review
 Meeting (ARM) and advising the COST Office on budget
- Evaluation of completed Actions
 - Peer review by the Evaluation Panel
 - Approval of the "Evaluation Report"



The role of the Management Committees (MCs)

- Supervises and coordinates the implementation of the Action
- Each party has one vote
- Providing decisions as "legal basis" for expenditures
- Composed of:
 - Maximum 2 representatives of each party
 - > ensuring the scientific coordination at national level
 - One representative of any non-COST institution admitted to participate
 - Representatives of the COST Office
 - Invited experts



The tasks of the Management Committees (MCs)

- Managing the Action's budget
- Submitting the annual "work and budget plan"
 - Submitted by the Chair on behalf of MC
 - Preliminary Financial Report to be submitted
 - Final Financial Report to be submitted at a later stage
 - Audit Committee to certify the expenditures by the Grant Holder to be in line with the MC decisions
- Progress Report within a given deadline
- Contributions to the Domains Annual Review Meeting to be organised

The COST Open Call

- "Open Call" = Continuous and thematically open
 - Encourages multidisciplinary proposals
 - Improves transparency
 - Ensures quality
 - Furthers competitiveness
- Emphasis on Early Stage researchers: their joint efforts bring improved recognition
- Selection criteria are public
- Specific collection dates (i.e. 26 March 2009)
- 2-stage process / peer reviewed
- Successful COST Actions proposals can expect to start activities within 9 months after the collection date



COST Open Call

COST invites researchers throughout Europe to submit proposals for research networks and use this unique opportunity to exchange knowledge and to embark on new European perspectives.

www.cost.esf.org/opencall

This continuous call is thematically open. Proposals from all Scientific Domains are welcome. The next collection date for preliminary proposals is 26 March 2010.



COST Open Call next Collection Dates

Open Call - Collection Dates	2009-1	2009-2	2010-1
Collection Date	27/03/2009	25/09/2009	26/03/2010
Eligibility check & Allocation to DCs	15/04/2009	8/10/2009	13/04/2010
Domain Committee electronic ranking	17/05/2009	6/11/2009	16/05/2010
Invitation for Full Proposals	15/05/2009	13/11/2009	14/05/2010
Deadline for Full Proposals	31/07/2009	15/01/2010	30/07/2010
Deadline EEP comments	28/08/2009	12/02/2010	27/08/2010
External Experts Panel meetings	31/08-11/09/2009	15/2-26/2/2010	30/8-10/9/2010
Domain Committee Hearings	7-18/09/2009	22/2-5/3/2010	6-17/09/2010
Consensus Meeting	21/9-2/10/2009	8-19/3/2010	20/9-1/10/2010
Final list of new Actions proposals	8/10/2009	25/03/2010	7/10/2010
New Actions approved by the CSO	1-2/12/2009	(24-28/5/2010)*	(22-26/11/2010)*



COST Open Call process

Selection process – Preliminary Proposals:

Proposals BMBS distribution Invitation of top 90 for **Domains CMST** Ranking Rating **Eligibility Check Collection Date ESSEM Full Proposals** FA **FPS** Electronic **Automatic** nonymised **ICT Allocation** ranked **ISCH Filtering MPNS** TUD **TDP - SAB** 2 weeks 3 weeks 3 days

Minimum time span

Dates



COST Open Call

Assessment criteria – Preliminary Proposals:

I.1	RIGHT FOR COST? Is COST the best mechanism for achieving the Action's objectives? A SCORE OF 2 OR 1 AUTOMATICALLY TRIGGERS LOW SCORES IN THE FOLLOWING CRITERIA	yes no
1.2	SCIENCE Does the proposed Action address real current problems/ scientific issues?	yes no 4 3 2 1
1.3	INNOVATION Is the proposed Action innovative?	high low 4 3 2 1
1.4	IMPACT Would the proposed network make a significant difference in terms of knowledge, capacity building, social impacts, etc?	yes no 4 3 2 1
1.5	PRESENTATION Is the proposed Action presented in a clear and understandable way?	yes no



COST Open Call process

Selection process – Full Proposals:

of proposals **Full Proposals Expert Panels** approval by EEP in pane **CSO** in Brussels Meeting of DC chairs **Establishment of** the by þ for **Presentation** Ranking **Approval** meetings List External Deadline Rating Final 10 weeks 2 weeks 2 weeks 2 weeks 4 weeks

Start of the new Action

Minimum time span

Dates



COST Open Call Assessment criteria – Full Proposals:

A	CRITICAL CRITERIA	
A.1	IS THIS RIGHT FOR COST NETWORKING OF EUROPEAN NATIONAL RESEARCH TEAMS? Is COST the right funding	
	mechanism for achieving the proposal's objectives?	
	A SCORE OF 2 OR 1 AUTOMATICALLY TRIGGERS REJECTION	4 3 2 1
A.2	IS THE PROPOSAL PRESENTED IN A CLEAR, CONVINCING, AND APPROPRIATE WAY? A SCORE OF 2 OR 1	
_	AUTOMATICALLY TRIGGERS REJECTION	4 3 2 1
B	SCIENCE	
B.1	Does the proposed Action address real current problems/scientific issues?	
B.2	Door the proposed Action above awareness of the state of the art of the relevant aciontifie/ technical fields?	4 3 2 1
D.2	Does the proposed Action show awareness of the state-of-the-art of the relevant scientific/ technical fields?	4 3 2 1
B.3	Is the proposed Action innovative?	0000
		4 3 2 1
C	IMPACT	
C.1A	If the proposed Action aims primarily to meet European economic or societal needs, how likely is it to achieve useful impacts?	
		4 3 2 1
C.1B	If the proposed Action aims primarily to contribute to the development of the scientific or technological field, how likely is it to	
0.10	achieve useful impacts?	4 3 2 1
C.1C	If the proposed Action aims BOTH to meet European economic or societal needs, AND to contribute to the development of the	0000
	scientific or technological field, how likely is it to achieve useful impacts?	4 3 2 1
C.2	Are there clear plans for stimulating the production of high quality outputs?	4 3 2 1
C.3	Is attention given to the potential application of results (including, where appropriate, fostering their commercial exploitation)?	0000
		4 3 2 1
D	STRUCTURE AND ORGANISATION	-
D.1	Are the workplan and organisation appropriate?	0000
		4 3 2 1
D.2	Are the time schedule and the setting of milestones appropriate?	0000
D.3	And appropriate plane mode for promitering and evaluating the policy are out of phinatives?	4 3 2 1
D.3	Are appropriate plans made for monitoring and evaluating the achievement of objectives?	4 3 2 1
E	CONTRIBUTION TO WIDER COST GOALS	
E.1	How well does the proposed Action aim to involve early stage researchers?	0000
		4 3 2 1
E.2	How well does the proposed Action aim at gender balance?	
		4 3 2 1
E.3	Will the proposed Action attract interest from a wide range of European countries?	0000
		4 3 2 1



COST in FP7: Highlights

- Early stage researchers (i.e. PhD + <10 years)
 - Open Call participation
 - Increased duration of Short Term Scientific Missions (STSMs)
 - More Training schools
 - Increased involvement in existing COST Activities:
 - Outreach and profiling
 - Successful pilot scheme for Reciprocal Agreements (AUS and NZ)

Grant System

- Increased flexibility for the Actions
- Consistent reporting
- Central hosting of web sites

Joint activities

- High Level Research Conference (COST-ESF)
- Frontiers of Science Workshops (COST-ESF)
- Strategic / Exploratory Workshops, Interdisciplinary Science Initiatives
- Outreach Activities



What is funded by COST?

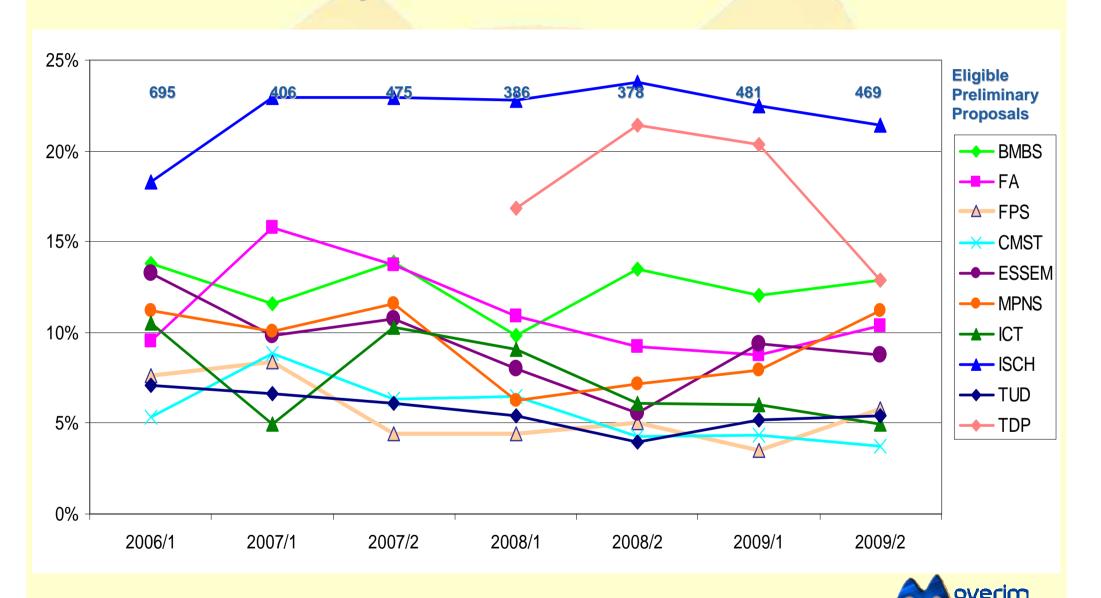
In the year 2008 COST supported:

- 236 COST Actions
- 859 scientific workshops and meetings (4.1 per working day over the year) with more than 31.000 participants
- 785 STSMs with an average duration of 3 weeks (3.7 STSMs starting every working day over the year)
- 38 Training Schools with more than 800 funded participants
- 276 high ranking publications

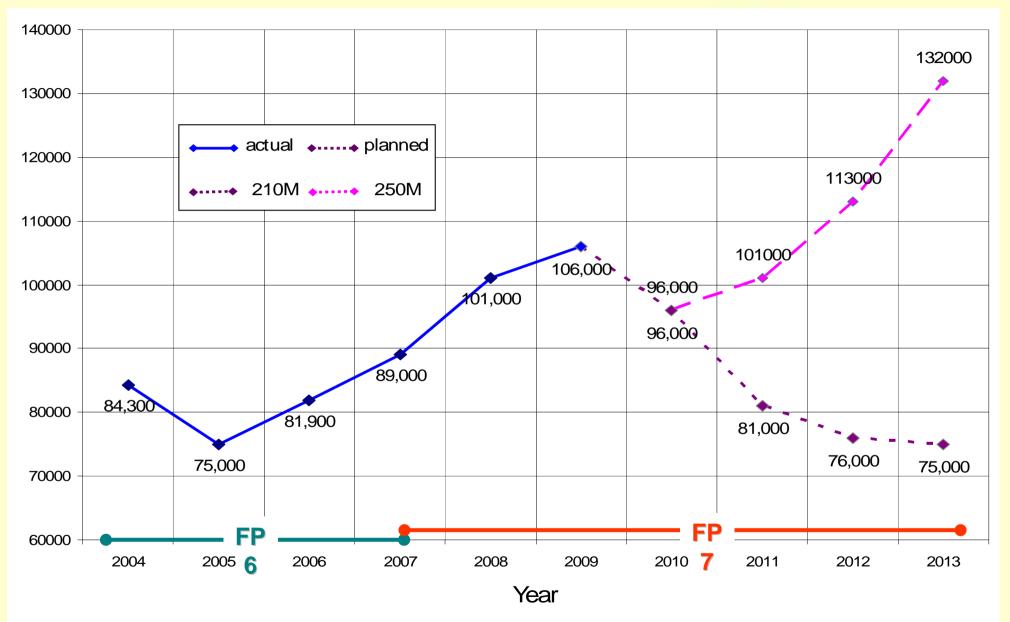


COST Open Call Collection Dates

Relative demand by Domain and Collection Date

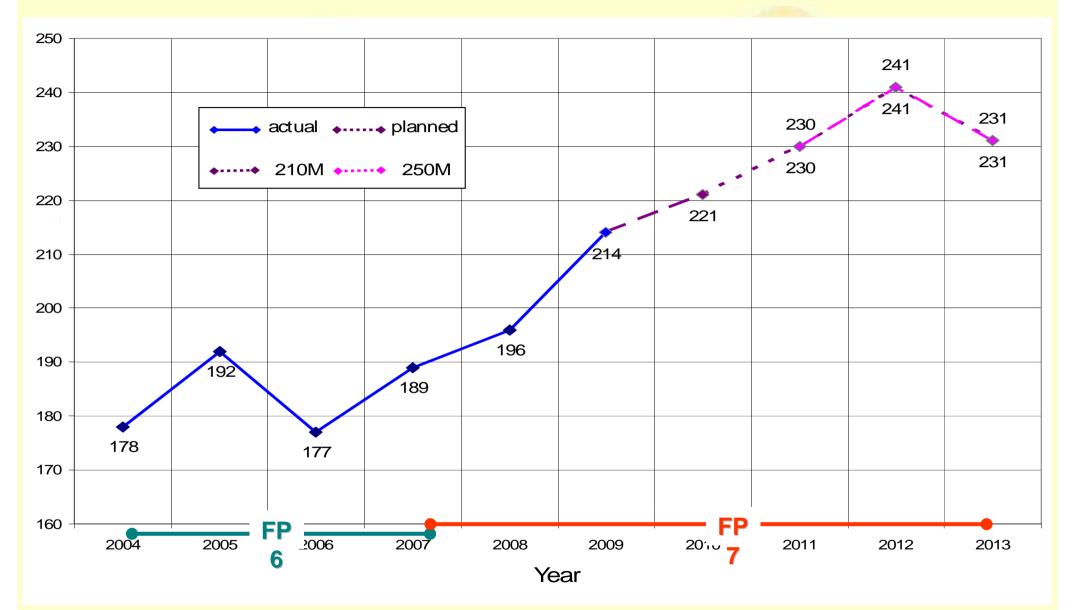


COST Actions 2004 - 2013 = +47% in Action budgets





COST Actions 2004 - 2013 = +42% in numbers





COST Vision 2020

(1/2)

- COST continues to be a flexible, fast, effective and efficient tool to network and coordinate nationally funded research activities at project level, bringing motivated scientists together under light strategic guidance and letting them work out their ideas, thus contributing to overcome the fragmentation of research in the ERA.
- COST responds to future needs; it acts as an exploratorium for ideas and addresses emerging and unforeseen developments. COST Actions are objective-driven and often multidisciplinary. Their objectives are clearly defined and information arising from COST Actions provides wellstructured evidence-based input for policy making and they contribute to Europe's competitiveness and socio-economic development.

- COST acts as a catalyst for long-term networking and in particular supports early career scientists and newly established research groups, strengthening their future participation in European and other international research initiatives.
- COST provides a framework for pre-normative cooperation leading to international norms and standards.
- COST is an inclusive and flexible international framework for the benefit of the European scientific community. COST has a worldwide geographical coverage which will be further extended in a pragmatic way by continuing to involve nonmember countries in its Actions and through a more structured series of collaborative arrangements.



Seconda parte

Operation and Administration



COST – Funding



- Funded by FP7 Cooperation
- ESF as implementing agent
- COST has no legal status; however its governance is autonomous
- Operated by the COST Office (Brussels)

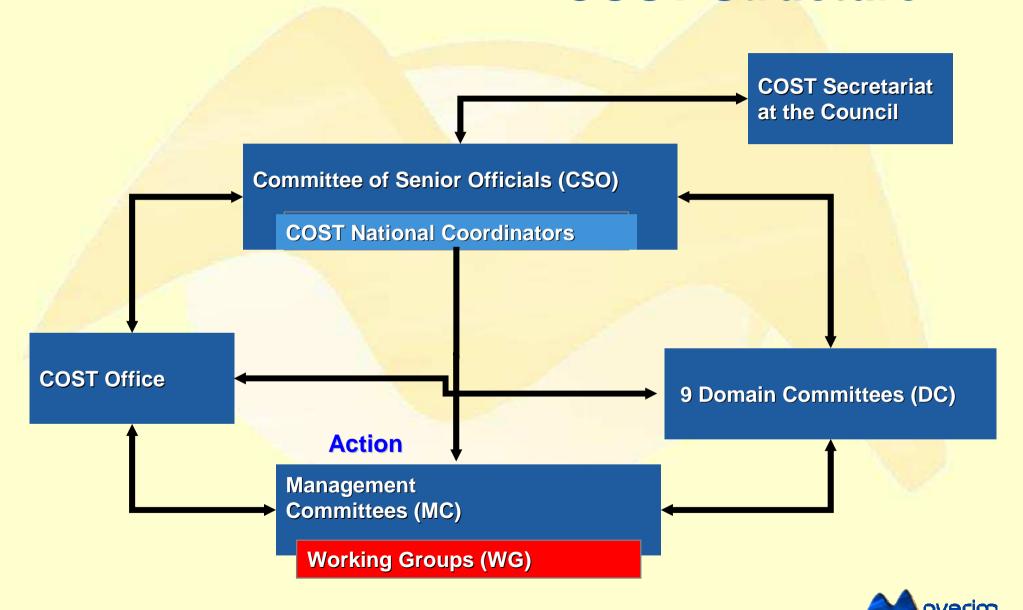


What is funded by COST?

- COST Actions: Networks integrating research funded otherwise receive a financial contribution based on a joint work programme
- Exploratory/Strategic Workshops: To explore future scientific or societal needs, support policy developments or stimulate new (transdisciplinary) research activities
- Conference Grants for Early Stage Researchers



COST Structure



COST Committee of Senior Officials (CSO)

- Responsible for the overall strategy of COST
- Decides on the launching of each individual COST Action
- Approves participation from non-COST countries institutes
- Approves prolongation/extension of COST Actions
- President: Prof. Francesco Fedi



Domain Committee (DC)

- Selection of new COST Actions
- Monitoring of ongoing COST Actions
- Evaluation of completed COST Actions
- Strategic developments in its domain
- Dissemination and valorisation of COST activities
- Synergies
- One Chair of each DC



Management Committee (MC)

- Supervises and coordinates the implementation of the Action
- Its decision is the only legal basis for expenditures within COST rules
- Composed of :
 - Maximum two representatives of each accepting party
 - One representative of any non-COST institution admitted to participate (no voting rights); max 2 per country
- Each Party has one vote



Working Groups (WGs)

- Small number of researchers per Working Group
- Working Group members may be:
 - Management Committee members
 - Other scientists from the accepting parties
 - Invited experts
- Entitled to reimbursement



Annual Grant Contracts

- Annual Grant Contracts with Grant Holder organisation
- Contract covers costs for:
 - Meetings (MC and WGs)
 - Workshops and Conferences
 - Training schools
 - Short Term Scientific Missions (STSMs)
 - Publications & Dissemination activities
 - Secretarial support
 - Max 15% of actual science expenses!



The Grant Holder

- Legal entity appointed by the MC from one of the institutions of the MC members
- Provide the financial/scientific administration/coordination of the COST Action in accordance with the COST rules
- Core tasks are:
 - Managing the grant
 - Providing scientific/administrative secretarial support to meetings
 - Ensuring scientific coordination & liaison vis-à-vis the COST Office
 - Support for publication & dissemination (including website)
 - Scientific and financial reporting
- Financial support : contribution of <u>up to</u> 15% of the actual science expenditures of the COST Action

Grant Agreement - Highlights

- Four years rolling contract
- Annual work and budget plan submitted by Chair on behalf of MC
- Signed by the Grant Holder

 representative of the legal entity!
- Application of the 'four eyes' principle:
 - Grant Holder
 - Financial Rapporteurs
 - COST Office ESF



Grant Agreement – Highlights II

- Two annual instalments:
 - 65% at the start of the annual period
 - up to 35% on request & if needed
- Reimbursement of eligible costs (e.g. VAT excluded)
- Intermediate and final financial reporting, including financial and scientific administration/coordination tasks:
 - 31 December
 - end of the annual period
- Possible controls and audits (COST/ESF, EC, Court of Auditors) up to 5 years after FP7
- Annual scientific reporting to be submitted 6 weeks before APC (next APC planned for end of June 2010)



The Grant Management Tool - eCOST

- Web-based IT platform for the management of COST Action (activities, grant, reporting ...)
- Main functionalities
 - Provides for individual account for each Grant Holder (username and password following registration)
 - Constitutes a secured data basis (easy way to build list of participants and send invitations)
 - Ensures follow-up of deviations and updates of the financial status for each COST Action
 - Allows COST staff to monitor the COST Action on a dayto-day basis
 - Contains contextual help pages (+ online user guides)
 - Helpdesk via ecost@cost.esf.org



Reimbursement policy

- Flat rates for meals and accommodation
- Actual cost of most economical travel: copies of tickets required
- Normally, up to 2 researchers per signatory country per individual MC or WG meeting
- A limited number of invited experts can be reimbursed too
- For WG meetings, selection of participants to be reimbursed can be delegated to the WG Coordinator and/or the MC Chair
- All exceptions should be approved prior to the meeting!

Reimbursement procedure

- Participants' list: sets who is eligible or not for reimbursement
- Attendance list: signed by the participants on each day of the meeting.
- Normally, only participants indicated on the attendance list can be reimbursed.
- For additional participants to be reimbursed: Action Chair's or WG coordinator's approval necessary.
- Reimbursement forms should be handed in at the meeting or sent to the COST Office/Grant Holder as soon as possible after the meeting



Workshop support

- Support for conferences and workshop in conjunction with MC meetings or other major scientific event
- One conference/workshop per year is usual
- Grant:
 - Up to 3.000 EUR: no justification needed
 - Up to 10.000 EUR:
 - Financial breakdown and justification
 - Scientific report
- A new rule will be introduced soon => check the Vademecum for additional details!



Short Term Scientific Missions

- Promote exchange within the Action's scientific objectives
- Allow a researcher (especially a junior researcher) to go to an institution in another COST country to foster cooperation
- Duration of the mission: from 5 days up to 3 months
- Grant: normally up to 2.500 EUR
- Special STSMs for Early Stage Researchers (< PhD+10 years): up to 6 months with a grant of up to 3500 EUR



Training Schools

- Provide dissemination of Action activities and intensive training, especially for young researchers.
- Can also take the form of a "think tank" for Early Stage Researchers.
- Duration: from 3 days up to 2 weeks
- Support for:
 - Organisation: like workshop/conference support
 - Lecturers: normal COST reimbursement rules
 - Fixed grants for attendees to be decided by the MC



Publication Support

- Support to books and special journal issues for disseminating the work of the Action
- Form of support: purchasing a number of copies (normally max.
 100)
- For final publications: possibility to receive budget from the central budget for publications up to 1 year after the official Action end date
- Possibility to publish via the EU Publisher OPOCE
- Other types of publications can be considered too. Check their feasibility and eligibility before making any commitment!



Monitoring/Evaluation of Actions

- Monitoring of Actions is carried out via:
 - Annual Action Progress Reports
 - Annual reviews at the Annual Progress
 Conference
 - Attendance of Action meetings by the DC Rapporteur assigned to each Action
- Annual Progress Conference (APC):
 - Action Chairs presents the progress of the Action
 - All Action Chairs are invited except for the Action Chairs of ending Actions

Non-COST Countries

- Institutions from Non-COST countries can be involved in an Action
- Participants from Non-COST countries are not eligible for reimbursement
- Special reciprocal agreements with Australia, New Zealand and South Africa
- Special conditions apply to Near Neighbouring countries
- Application procedure:
 - Application Form + supporting letter to MC
 - DC approval
 - CSO approval



Moverim Consulting

COST Office

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Moverim Consulting

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