FET

Why quantum information ?

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FP6 is not business as usual !

- The ERA dimension
  - Community funding to help aggregate member state and private efforts
  - ...not just supporting any particular RTD work...

- From project-thinking to initiative-thinking
  - New instruments: IPs and NoEs
  - More global approach and strategic thinking

FET - Future and Emerging Technologies

- IST's pathfinder activity and a nursery of new ideas

- Core values
  - Exploring "what's next"
  - Community building and mobilisation
  - Interdisciplinary - not for its own sake!
  - Selective but open; unconstrained by mainstream priorities
  - No "catch-up" research
  - Flexible, light procedures suited to basic research

FET continuity & renewal

- Continuity with respect to:
  - FET character and operation modes
  - Use of “old” instruments
  - Honor long term commitments + invest in new opportunities
- New elements:
  - IP and NoE
  - Optimisation of the Open scheme, e.g.
    - evaluation process
    - no assessment projects
  - Success indicators
- Basic research: NOT a FET monopoly

FET Proactive initiatives

- Take an early lead in key future or emerging technologies
- Motivated by long-term visions and goals
  - objective-driven
- Implementation: IPs and NoEs
- Selection on the basis of:
  - ability to focus and carve out roadmap
    - challenges, priorities, benchmarks, milestones
  - potential impact in the longer term
  - critical mass
  - timeliness

qipc budget

- qipc in FP 5 around 30 M€ plus around 5 M€ in FET-OPEN projects. It included a substantial part on cryptography which is now supported by other areas of FP 6

FET-OPEN scheme

- Accept any innovative idea of quality
  - high risk / high potential payoff research
  - longer term generic research
  - embryonic research & proof-of-concept
- Widest possible spectrum
- Implementation through STREPs
  - also thematic networks (old-style NoEs, WGs)
- 2-step submission & evaluation process
  - short proposal submitted first, at any time - three evaluations per year
  - Full proposals only if short proposal was successful
  - Refereeing by external evaluators

R&D in Europe (6th FP 2002 - 2006)

Focussing and Integrating ERA		
Genomics	2255	M€
Information Society Technologies	3625	M€
Nanotechnologies, int..	1300	M€
Aeronautics and space	1075	M€
Food quality and safety	685	M€
Sustainable development	2120	M€
Citizens and governance ..	225	M€
Anticipation of S&T needs		
Anticipating needs	555	M€
SMEs	430	M€
Specific INCO	315	M€
Strengthening ERA foundations	320	M€
Structuring ERA		
Research and Innovation	290	M€
Human resources	1580	M€
Research Infrastructures	655	M€
Science/Society	80	M€
Joint Research Centre	760	M€
Total	16270	M€

R&D in USA (draft 2004 budget)

Bush published on 3rd of February the draft 2004 federal budget.

R&D has 122,7 B$, (+ 6,7% wrt 2003). This increase goes mainly to DOD and to the newly created Department of Homeland Security (DHS).

The inter agencies programme "Networking and Information Technology R&D" (NITRD) is among the top priorities with nanotechnologies and climate change with 2179 M$ (+ 6% wrt 2003).
The increase goes mainly to the Department of Health and Human Services (441 M$ +18%).
The National Science Foundation (NSF) remains the leader of the NITRD programme (724 M$ +7%).

The draft federal budget 2004 will be examined by the Congress next summer.

for more information:
http://www.ostp.gov/html/budget/2004/2004.html
http://www.aaas.org/spp/rd/

some more figures

FP5 avg. annual funding 3740 M€ (< 10 €/citizen)

NSF 2001 funding 4572 M$ (>16 $/citizen)

2001 EAGGF funding 112 €/citizen
(European Agricultural Guidance and Guarantee Fund)

Il quarto stato (1901)
Giuseppe Pellizza da Volpedo (1868-1907)
Olio su tela, 293x545 cm, Milano, Civica Galleria d'Arte Moderna