EU-Workshop
How to write a proposal for FP7 and get it accepted

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Workshop Overview

- Introduction, Course Expectations
- Briefly about the structure of the EU, how does a framework program come to be?
- The new frame work program
  - Structure
    - The Different Instruments
    - The Different Themes
    - The Work programs
      - How did the work programs end up looking the way they do –
      - How do I lobby/How do I get information
- Exercise: Design your own EU-proposal
- Selecting your research partners (the consortium)
- The Structure of a typical EU-proposal
- The evaluation process

My main research project: INA – Imaging with Neutral Atoms (EU NEST Project)

The objective is to develop a new type of microscopy – Helium atom microscopy, with a resolution of ultimately 20 nm, creating a novel imaging method with unique characteristics and a wide application range (bio-physical, bio-medical, electronics, and other applications).

NEST HOMEPAGE: http://www.cordis.lu/nest/projects.htm

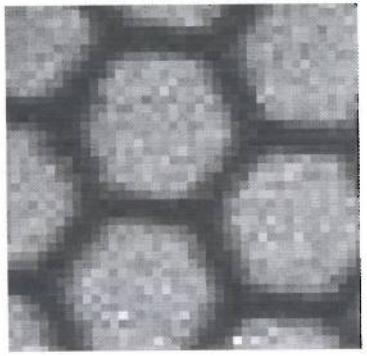
Partners:

W. Allison, Cambridge UK
D. Litwin, INOS Poland,
B. Surma ITME Poland,
D. Farias Univ. Madrid Spain,
E. Soendergaard Saint Gobain, France

10 of 180 proposals funded

Total Budget
1.4 Million Euro
Over 3 years

First image ever using neutral atoms as the imaging probe:



- Imaged object: Hexagonal Transmission grating, 36 micron period, imaged with a He-beam focused down to about 2 micron.

Basic Golden Rule

- For a normal research proposal you need to convince people that what you do is interesting and important. and that you/your team are capable of carrying out the task.

And it was always like that..

Tycho Brahe 1546-1601. Received for a several years about 1% of the Kings income for his research. His measurements of planetary orbits enabled Kepler and eventually Newton to formulate their laws. Tycho Brahe was astrologist for the Danish court and justified his expenses for instrument developments by the need to measure the positions of the planets more accurately in order to be able to make more accurate horoscopes!

The second golden rule

- It is not enough to get a bright idea.
  - Usually you also need to convince people that that you/your team are capable of carrying out the task
- And don´t forget, you also need to fit the call text
  - Announce about the type of projects/subjects which will be founded
  - possible to submit a draft and ask them if it would fit.

Extended EU Golden Rule

- For a normal research proposal you need to convince people that what you do is interesting and important and that you/your team are capable of carrying out the task
- For an EU-proposal in addition you need to demonstrate that an EU-project is the right "tool" to use (the European dimension).

The Main EU-Institutions

- The Parliament
  - Elected by the Citizens. The Parliament can amend and reject laws and legislations but is not allowed to come up with new proposals.
- The Council
  - The Council is the EU's main decision-making body. It represents the member states and its meetings are attended by one minister from each of the EU's national governments. It comes up with the large scale strategies and visions.
- The Precidency
  - The Presidency of the Council rotates every six months. In other words, each EU country in turn takes charge of the Council agenda and chairs all the meetings for a six-month period, promoting legislative and political decisions.
- The European Commission
  - The Commission is independent of national governments. Its job is to represent and uphold the interests of the EU as a whole. It drafts proposals for new European laws, which it presents to the European Parliament and the Council.

b ≠ sect' (≈ ministeria) ⇒ Now 27 (≈ 1/country Head of 1)

AGENDA 2010

- *During the meeting of the European Council in Lisbon (March 2000), the Heads of State or Government launched a "Lisbon Strategy" aimed at making the European Union (EU) the most competitive economy in the world and achieving full employment by 2010. This strategy, developed at subsequent meetings of the European Council, rests on three pillars:*
- *An economic pillar preparing the ground for the transition to a competitive, dynamic, knowledge-based economy. Emphasis is placed on the need to adapt constantly to changes in the information society and to boost research and development.*
- *A social pillar designed to modernise the European social model by investing in human resources and combating social exclusion. The Member States are expected to invest in education and training, and to conduct an active policy for employment, making it easier to move to a knowledge economy.*
- *An environmental pillar, which was added at the Göteborg European Council meeting in June 2001, draws attention to the fact that economic growth must be decoupled from the use of natural resources.*
- *A list of targets has been drawn up with a view to attaining the goals set in 2000. In it was adopted for a ten-year period in 2000 in Lisbon, Portugal by the European Council. It broadly aims to "make Europe, by 2010, the most competitive and the most dynamic knowledge-based economy in the world".*
- *One of the strategic decisions was to increase the EU funding to reasearch – FP7*

http://europe.eu/scadplus/glossary/lisbon_strategy_en.htm

What does Framework Program mean?

- The Framework Program (FP7) is an overall strategy for the Research Funding provided directly by the EU for the period 2007-2013.
- It was drafted by the European Commission and was accepted as a "law" by the European Parliament and the Council. It is referred to as FP7, because it is the 7th time such a Framework Program is initiated.
- It will run for 7 years (2007-2013). This is a new development, frameworks used to run for 4 years.
- The total funding sum for the seven years is 53 billion euro (for comparison: in 2005 the EU spent about 80 billion euro on agricultural support).
- 53 billion euro corresponds (roughly) to 7% of the total amount of money spent on science in Europe.

The European Commission

- The European Commission is organized very much like Ministerial Departments with politically elected Commissioners (Ministers)
  - These "Ministries" are refereed to as DG´s, for example DG-Research (DG stands for Directorate-General)
  - In addition there is a Director-General, who is the civil servant head of the DG.

- http://ec.europa.eu/commission_barroso/index_en.htm

How is a Framework Program Formally Decided?

- The Commission (effectively the two "ministries" DG-Research+ DG-IT) makes a first draft of the framework program.
- The framework program define the general areas of research, the resources to be allocated to each research area, the project categories etc.
- Why DG-Research and DG-IT? – For historical reasons the IT has its own ministry.
- The Parliament and the Council looks at this and suggest amendments (including budget changes)
- Eventually the framework is accepted by the Parliament and the Council.

ftp://ftp.cordis.europa.eu/pub/fp7/docs/ec_fp7_amended_en.pdf

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The Framework Program

The main website:

http://cordis.europa.eu/fp7/home_en.html

↳ cooperat° ⇒ all the big projects

The Different Categories

- Cooperation
  - Collaborative Research in the following thematic priorities (themes):
    - Health
    - Food, Agriculture and Fisheries, Biotechnology
    - Information and Communication Technologies
    - Nanosciences, Nanotechnologies, materials and new production technologies
    - Energy
    - Environment (including Climate Change)
    - Transport (including Aeronautics)
    - Socio-economic sciences and the humanities
    - Space
    - Security
  - + 3 other areas related to large scale coordination
- Ideas
  - The European Research Council (ERC). Independent Research grants for individual researchers or research themes – very much like a national research council.
- People (Marie Curie Programs)
  - Marie Curie Research Training Networks (RTN) (mainly Ph.D. studentships, shared between network of hosts in different countries)
  - Marie Curie Host Fellowships for Early Stage Research Training (EST) (Ph.D. studentships for individual hosts)
  - Post Doc Stipends and Sabattical Positions in Academia within Europe (Life Long Training and Industry+Academia) and to go outside Europe or invite post docs from outside Europe (International Dimension)
- Capacities
  - Research Infrastructures
  - Special Program for SMEs
  - Science and Society

= calls

≃ DFG – (Aktion FP7 website research proposal

↳ can also be P.D.

very competitive ⇒ have to work on a research in the way to write the proposal

⇒ Not like a research

– also for Non EU students, but who have studied in Europe for 3 years

w/ very good publicat° (mini. 3)

+ (only) for going in the best institut°

The Work Programs

- Every year a Work Program is published for each Category, listing the scientific call, THE WORK PROGRAM IS WHAT YOU NEED TO WORRY ABOUT.
- The Commission makes the Work Programs using input from many different institutions, including the European Technology Platforms and the Expert Advisory Panels
- The Work Programs are finally accepted by the Program Comities, representing the European Council. Each Program Comity has representatives from the Ministries of Research (civil servants) for each EU-country + some countries that are not EU-Members but contribute financially (Norway, Israel, Iceland, Switzerland and Lichtenstein).

An example of a call text

ENV.2008.1.1.2.1. Climate-chemistry interactions in the stratosphere related to ozone depletion

Anthropogenic emissions of chemical species have altered the atmospheric composition with long lasting impacts and consequences such as changing air quality, the forcing of climate change and stratospheric ozone depletion. Climate change in turn is affecting atmospheric chemistry with many unknown feed-back mechanisms and may further delay ozone recovery. Changes in stratospheric composition need to be detected. Research should help to better understand stratospheric dynamics, trends and processes of stratospheric composition changes, the role of climate-chemistry interactions, including the dynamical response of the stratosphere to the chemical composition changes, and its impact on stratospheric ozone depletion. Feed-back mechanisms between climate change and stratospheric processes need to be better understood in order to predict the future evolution of ozone abundance. Standard climate change scenarios should be applied to assess the impact on the future evolution of stratospheric composition and its impacts on the climate.

Funding scheme: collaborative projects (small or medium-scale focused research projects)

Expected impact: The project will reduce the uncertainties in the evolution over the next decades of the stratosphere and improve estimates of time scales of ozone layer recovery in response to the implementation of the Montreal Protocol. The project will also provide information on the interactions of changes in the stratosphere and climate.

The Different Instruments in the Cooperation Category (Instruments=Types of Proposals)

- Collaborative Projects
  - Small and Medium Scale Collaborative Projects (basically what used to be STREP (Strategic Research Project) in FP6 – 3-9 partners (indicative) budget 1-2 million euro for three years
  - Large Scale Collaborative Projects (basically what used to be Integrated Projects (IP) in FP6, indicative budget 4 million and upwards, 10 partners and upwards.
- Coordination and Support Actions (CSA)
  - Coordination
  - Supporting
- Networks of Excellence
  - Careful, seems to have changed from FP7. Sharing of research facilities between groups, about 7 partners (used to be a lot more), aim to create a "European virtual centre of research" in a dedicated field.
- Research for the benefit of specific groups (in particular SMEs)

← Applicat guidelines

≈ prototype ← forbidden for the EU to fund directly the industry

Funding Scheme	Purpose	Specific Programmes concerned	Participation	Size & Resources	Indicative Average Duration	Activities	Form of Reimbursement	Specific Characteristics
Collaborative Projects (CP)	Developing new knowledge, new technology, products, including scientific coordination, Demonstration activities or common resources for research.	"Cooperation" "Capacities"	Minimum conditions: At least three legal entities established in different EU Member States or Associated countries. The entities must be independent of each other. "Target audience": Research institutes, Universities, Industry, including SMEs, (Possibly) Potential end-users	The number of participants and volume of resources should be compatible with overall objective and manageability of the whole endeavour. A distinction between different forms of collaborative project, based on budgetary thresholds, may be made on a call-by-call basis: Projects can range from small or medium-scale focused research actions to large-scale integrating projects for achieving a defined objective. Any such limits will be applied as an eligibility criteria and will be specified in the call text.	24-60 months	X Research, X Demonstration, X Management of the consortium, X Other activities such as dissemination, training.	Based on eligible costs or other forms of grants as specified in the work programme'	X Flexibility: The description of work (annex 1 to the grant agreement) is normally fixed. If needed a yearly update will be provided for in the grant agreement. X Enlargement of partnership within the initial budget: Possible

you can add a partner but you can't get more money

= spreading the word (what is happening AFTER the project is finished / how it is going to apply in the end ex: final pdt, which industry ...

Funding Scheme	Purpose	Specific Programmes concerned	Participation	Size & Resources	Indicative Average Duration	Activities	Form of Reimbursement	Specific Characteristics
Coordination and Support Actions[1] (CSA)	No funding of research, development or demonstration activities. Coordination actions Consistent set of activities focussing on coordination of research activities and policies Support actions Normally focused on one specific activity and often one specific event	"Cooperation", "People", "Ideas" and "Capacities"	Minimum conditions Coordination actions for coordination of research activities At least three legal entities established in different EU Member States or Associated countries. The entities must be independent of each other. Other Coordination and Support actions At least one legal entity "Target audience" Research organisations; Universities; Industry including SME ; Research programme managers and owners (ERA-NET and Research Infrastructure actions)	The size, scope and internal organisation of coordination actions and support actions can vary from research theme to research theme and from topic to topic	Few months - 48 months	Coordination actions Such as: Networking, coordination and dissemination activities Support actions Such as: Conferences, seminars, workshops, working groups, studies, fact finding, monitoring, strategy development, awards and competitions, working or expert groups, operational support and dissemination, information and communication activities Management of the consortium	Based on eligible costs or other forms of grants as specified in the work programme[2]	NA

Rotorate = wp for the EU

Funding Scheme	Purpose	Specific Programmes concerned	Participation	Size & Resources	Indicative Average Duration	Activities	Form of Reimbursement	Specific Characteristics
Network of Excellence (NoE)	Durable integration of the participants' research activities/capacities with a view to creating a "European virtual centre of research in a delicate field	"Cooperation" "Capacities"	Minimum conditions At least three legal entities established in different EU Member States or Associated countries. The entities must be independent of each other "Target audience" Research institutes Universities	Once the minimum conditions have been satisfied, a range between three and seven participants would seem to be optimal for a NoE.	48-60 months	Joint programme of activities (JPA): Combination and complementary use of resources of the participants such as mutual access to infrastructure, equipment, material, data and knowledge[1], exchanges of researchers, managers and technicians; redesign of the research portfolios and the research priorities, and reallocation of the resources in a way allowing to increase the number and the quality of the results produced, while optimizing the use of the participants' capacities. Management of the consortium Where appropriate, training, dissemination and communication activities.	Based on eligible costs or other forms of grants as specified in the work programme[2]	Flexibility Yearly update of the work plan Enlargement of partnership(within the initial budget) Possible

Funding Scheme	Purpose	Specific programmes concerned	Participation	Size & Resources	Indicative Average Duration	Activities	Form of reimbursement	Specific characteristics
Research for the benefit of Specific Groups (in particular SMEs)	Objective-driven research where the bulk of the research is carried out by RTD performers for the benefit of specific groups, in particular Small and Medium sized Enterprises (SMEs) - in small groups or in associations - or for Civil Society Organisations and their networks (CSOs)	"Capacities" (for SME, SME associations, CSO) "Cooperation" (for CSO only)	Minimum conditions At least three legal entities established in different EU Member States or Associated countries. The entities must be independent of each other. Further conditions are specified in the work programmes Target audience SMEs SME associations CSOs RTD performers Other participants	Indications may be given in the work programme	Indicative average duration may be indicated in the work programmes	**Research** **Demonstration** **Management of the consortium** **Other activities including training**	Based on the reimbursement of eligible costs. EC Contribution: The Community financial contribution is limited to 110% of the remuneration of the RTD activities outsourced to the RTD performers (this ceiling does not apply to CSO)and shall not exceed the maximum Community contribution determined by the rules for participation	*IPR default regime:* Full ownership of the entire foreground belongs to the specific group; RTD performers are remunerated accordingly.

- We now look again at the Website for FP7 http://cordis.europa.eu/fp7/home_en.html to see the documents for a given call.
  - Call Fiche (Overview- What calls are available, how much money, how many pages is the proposal allowed to be, evaluation thresholds) – This you need to check how much money you can get
    - Work Program – General Introduction – Not needed
  - Work Program – This you need to find the exact description of the relevant call
    - Work Program – General annexes
    - Fp7-factsheets – Not needed
  - Guide for Applicants – This you need to design the proposal, in particular Annex 2 – evaluation criteria, Annex 3 – Instructions for drafting part A of the proposal (Administration stuff, including budget) and Annex 4 – Instructions for drafting part B of the proposal (Science stuff)

ADDITIONAL DOCUMENTS

- European Parliament and the Council decision of 18 December 2006 concerning the FP7 EC (official bla bla – Not needed)
- Regulation laying down the rules for the participation to FP7 EC. This is important! Financial guidelines
- Council decision concerning the Specific Programs (official bla bla, not needed)

How to influence the Call Texts

- European Technology Platforms
  http://cordis.europa.eu/technology-platforms/home_en.html
- Expert Advisory Panels
- Program Committee members
- Direct Contact with the Scientific Officers
  - My suggestion: Formulate a call text as you would want it and take personal contact to a number of people – Calculate at least a year.

Time for an Exercise

- Please spend 30 minutes thinking about what sort of EU-Proposal you would want to write and (start) formulating a short abstract (200-300 words) for this proposal Write an abstract (200-300 words) for a research proposal (a realistic or a made up proposal as you prefer)
- Please Remember: Focus, focus, focus. There should be a very clear end goal for the project and this should be clear from the abstract.
  - After having read the abstract the referees should know that they want to give you the money
- The two fundamental questions **–Why is the area interesting? And What do I want to do?** must be answered in the abstract. Space permitting a brief comparison with state of the art is also good.
- When you have finished you will act as each others referees using the official questionnaire from the EU.
- The issues the referee has to judge are:
  - Soundness of concept and quality of objecties (Is it possible? Is it interesting?)
  - Does the work present a genuine contribution to science beyond the state of the art? (is it new?)

EU-Workshop, Dr. Bodil Holst

Example of an Abstract. – INA Project

- Surface science has been revolutionised in recent years by nano-resolution imaging techniques such as scanning tunnelling microscopy (STM) and atomic force microscopy (AFM). It is often said that the field of nano-technology was born with the invention of the STM in the early 1980s. The main objectives of this proposal are the development and exploitation of a completely new imaging technique. We propose to develop a scanning helium atom microscope, where a focused beam of low energy, neutral helium atoms is used as an imaging probe. European researchers are pioneering this field and have built a first version instrument. In this project we bring together know-how relevant for neutral atom optics with a group of end users to speed up the realisation and testing of a fully operational INA instrument. We propose to increase the resolution by two orders of magnitude, from the present 1.5 micron to 20 nanometres. We further propose to apply the technique to the investigation of industrial membranes. With the focused helium beam the local transmissivity (permeability) of the membranes can be measured, yielding information about the internal structure, which will be used to tune the membrane properties for applications. No technique currently available can provide this information. Further we propose to use a focused helium beam to obtain structural information of fragile protein crystals which are damaged using standard techniques. Case-Study measurements will be carried out in transmission mode on 2D Porin crystals (porins are present in cell membranes). Finally we propose to use a focused helium beam to obtain the full spectral density functions of ultra smooth glass surfaces in order to reveal the structural ordering of these surfaces. If the atom beam measurements reveals differences in the spectra for different surface types then they can become an important tool as a "timbre" for measuring glass surface properties.

(305 Words)

The Stages of an EU Proposal

- Preliminary Phase
  - Understanding how the EU Works
- Preparation Phase
  - Getting the Idea
  - Finding the Consortium (for a proposal involving cooperation)
- Writing Phase
  - Outline Proposal
  - Full Proposal

Preparation Phase – Selecting the Consortium

- Getting the Idea – Make sure nobody steals it! Contact the loyal people first so that it is clear to everybody that this is your idea.
- Consortium – A mixture of loyal people, famous people, people from industry (SME) and (people from Eastern Europe/China/India).
- All partners in the consortium must be qualified to perform their task and play an important and well defined role
- On the FP7 website you can register as potential partner or search for partners: http://cordis.europa.eu/fp7/partners_en.html (under construction)
- Which countries can participate:
  - Member-states (now 27)
  - Associated countries: (Norway, Israel, Iceland, Switzerland and Lichtenstein)
  - Candidate countries: Croatia, Turkey and The Former Yougoslav Republic of Macedonia
  - Third countries: http://ec.europa.eu/research/iscp/pdf/icpc_countries_en.pdf (including China and India)
  - All other countries (ie. The United States), but they cannot receive any money

The Structure of a Typical EU-Proposal

- Online submission (be sure you sign up at an early stage)
- Part A (A list of forms, addresses etc.)
- Part B (Science, Management and Dissemination)
  - Even if you are short of space always start with a short abstract explaining what you want to do and why it is interesting

    We look at the guide for applicants – Templates for the mentioned Gantt Chart and Pert Diagram can be found on the website http://www.hyperion.ie/templates.htm
  - Patent Seach: http://www.espacenet.com/index.en.htm

Experts have their expert fun,
telling us things can't be done.

Designing the proposal

P. Hein

1. What is your central question or problem?
2. Why is this problem important and worthy of study? (Significance)
3. Why has it not been done before (State of the art)?
4. How will you go about it (Research Method)
5. How long will it take (Timetable)
6. What resources are necessary (Manpower, Equipment)

   Make this section very detailed even if this is not explicitly requested in the guidelines (you can always put it in an appendix). It makes a good impression if you show that you have thought carefully about the money issue and threat it very seriously.

   Rule of thumb: You will tend to be in love with your own research and hence consider you own idea wonderful. Other people (referees) will be more open to its imperfections. Try to retain a critical distance and play the devils advocate to yourself while writing („what could be the possible objections to this point").

If no thought your mind does visit
make your speech not too explicit

Writing the proposal

P. Hein

- It is all about answering questions – the trick is to know which questions.
- The two fundamental questions – **What am I doing?** Why is it **interesting?** must be answered in the abstract. If the funding-program is focused on a specific topic-area, it is important to use the abstract to make it clear that you fall within the topic-area. If you do not fall within the topic area, don't bother applying.
- Do not expect that the referee is an expert in your particular field. This particularly apply to EU-proposal. The whole abstract should be water tight to an absolute expert, but readable even to somebody who only has a general knowledge within the field.
  - Even if it is not requested always make an abstract where you address these questions in an exact manner. Sometime there is a special form for the research abstract. Even if this is the case, always put an abstract also in the main proposal. Sometimes the additional forms are not sent to the referee or he or she does not look at them.
  - FORMULAE/NUMBERS/ESTIMATES ARE GOOD! (this apply to the whole proposal).
    - Avoid sentences such as:
      - » *„I want to improve the resolution"*
      - » *"A series of interviews will be conducted"*
      - » *"I want to measure the growth of A on B"*
    - Instead use sentences such as:
      - » Say: *"I want to improve the resolution by two orders of magnitude from A to B. I am going to succeed in doing this by… This will enable me and others to do …"*
      - » *"A total of 100 interviews will be conducted". This is sufficient to test the following hypothesis because … The persons to be interviewed will be selected according to the following rules because …*
      - » *„I want to measure the growth of A on B by carrying out X experiments in a temperature range from Q to F (3 experiments in each range) at a deposition rate of Y. I have chosen this range because …*

Writing the Proposal

- By using numbers and estimates you expose yourself, because it is easier to test if your judgments are sound. This makes your proposal more convincing! NB – exposing yourself can also be a danger. If you know that some numbers could be seen as being controversial then mention this up front and support them with references and/or calculations. Even numbers which you think are "standard" should be supported with references.
- NEVER write a proposal which is too long.
- Do not be afraid that you will run into trouble when your project is over and you did not manage to deliver all the results you promised. We are doing science, not contractual work. You must of course be able to explain why you did not achieve everything. NB! "We ran out of time because we decided to investigate something else, which was more interesting" is not a good explanation!
- On the whole, be realistic, but also be optimistic when estimating what goals you can achieve.

Section 1. Scientific and/or technical quality, relevant to the topics addressed by the call

- 1.1. Concept and objectives
  - Explain the concept of your project. What are the main ideas that led you to propose this work *(if you have patents, publications, mention them here)*. The objectives should be achievable within the project, not through subsequent development. They should be stated in a measureable and verifiable form *(this means quantifying, numbers are good!)*, including through the milestones that will be indicated under section 1.3.
  - *The "Concept and objectives" subsection is really an extended version of the abstract with references. Don't worry about repeating from the abstract.*

Section 1.2

- Progress beyond the state-of-the art
  - Describe the state-of-the-art in the area concerned, and the advance that the proposed project would bring about *(don't forget to mention competing techniques, but try not to "put them down".)*
  - *Remember: The state of the art section is where you show that you really "know what you are talking about!" If you can show that you know what you are talking about people are more likely to believe you capable of carrying out the work. An extensive amount of references is important here, including patent. For references, always mention the full title of the article/patent you cite, so that the referees can access their relevance. Try to include very recent citations + citations from high ranking journals to increase the feeling of "hot topic".*

Section 1.3

- S/T methodology and associated work plan
  - A detailed work plan should be presented, broken down into work packages (WPs) which should follow the logical phases of the implementation of the project, and include consortium management and assessment of progress and results. (Please note that your overall approach to management will be described later, in section 2).

Section 1.3. Continued

- Please present your plans as follows:
  - i) Describe the overall strategy of the work plan (Maxiumum length – one page)
  - ii) Show the timing of the different WPs and their components (Gantt chart or similar). *For a template se http://www.hyperion.ie/templates.htm*
  - iii) Provide a detailed work description broken down into work packages:
    - Work package list
    - Deliverables list
    - List of milestones *(A milestone is when you explore two or more different paths to reach a goal, a some point in time (the milestone) you decide which method to choose). It is perfecit possible to have a project without a milestone).*
    - Description of each work package
    - Summary effort table
  - iv) Provide a graphical presentation of the components showing their interdependencies (Pert diagram or similar). *For a template see http://www.hyperion.ie/templates.htm*
  - *v)* Describe any significant risks, and associated contingency plans
  - Note: The number of work packages used must be appropriate to the complexity of the work and the overall value of the proposed project. The planning should be sufficently detailed to justify the proposed effort and allow progress monitoring by the Commission.

Section 1.3 – Work Plan Strategy

- One page Work Plan Strategy : Describe how the WPs fit together: It is important to have clearly defined objectives for each WP.

- **1.3.1 Work Plan Overview and Strategy**
- *Appendix 1: Work Package List*
- *Appendix 2: Pert Diagram showing the interdependency of the work packages.*
- *Appendix 3: Gantt Chart showing the timing of the different work packages and their components.*
- *Appendix 4: Summary Effort Table*
- *Appendix 5: Milestones and Deliverables Lists*
- *Appendix 6: Work Package descriptions.*
- The end goal of the project is to build a space qualified magnetometer instrument fulfilling the criteria listed in Table 1. A block diagram of the instrument can be found in Fig. 5.
- The project is divided into 7 Work Packages as follows:
- *WP1: Management, Leader*
- *WP2: Laboratory Model of Sensor and Near Sensor Electronics*
- *WP3: Low Frequency Data Processing Unit (LF-DPU)*
- *WP4: Part Selection and Component Level Qualification*
- *WP5: Ground Support Hardware and Software*
- *WP6: Design, Implementation and Test of Qualification Model*
- *WP7: Calibration and Performance*
- The management of the project is organised in WP1. The overall strategy is to do the research and technology development in two phases: laboratory model (LM) phase (WP 2, 3 and 4) and qualification model (QM) phase (WP 5 and 6). The objectives of each phase are given in Table 2 below. Note that the measurement performance of both models will be verified (WP7).

Work Package Model:

Workpackage number Activity Type	4	Start date or starting event:	Month 0
Participant id	ITME	INOS	
Person-months per participant:	56	25	

Objectives The production of Si(111) wafers, 50 micron thick, 2 inch in diameter, with less than ±0.5 micron surface derivation due to bow or thickness.

Description of work

2.1 Rebuild and adjustment of X-ray detector to increase cutting precision from 0.25° to 0.05°, *Partner ITME, 4 months.*

2.3. Setting up an infrared interferometer for testing the thickness of the thin silicon wafers, modification of existing Mach-Zehnder Interferometer to allow scan of entire wafer, *Partner INOS, 7 months.*

Add in the subtasks, I give a better idea

Deliverables

•Increased cutting precision for the wafers from 0.25° to 0.05° (month 3)

•Infrared interferometer for testing the thickness of the silicon wafers with a vertical resolution of at least 50 nm and a horizontal resolution of 1 mm (month 8)

- It is good to state how much time each subtask is going to take and who is going to do it. It is also good to design WPs, if possible, so that there is a reasonable distribution between partners

Deliverable	Deliverable title	Delivery date	Nature	Dissemination level
1	Project Website (WP1)	3	O	PU
2	Increased cutting precision for thin wafers from 0.25° to 0.05° (WP2)	3	D	PU
3	Status Report I (WP1)	5	R	PU
4	Micron-scale permeability measurements carried out on three types of standard, industrial porous membranes (30 samples). Correlation with AFM and standard integrity tests (WP5)	5	D/P	PU
5	Post annealing procedure for transport of glass samples to atom microscope (WP7)	5	D	PU
6	Analysis of permeability measurements of standard membranes (WP5)	8	D	PU
7	Infrared interferometer for testing the thickness of the silicon wafers with a vertical resolution of at least 50 nm and a horizontal resolution of 1 mm. (WP2)	9	P	PU

- Deliverables is the best tool for the Scientific officer to measure your progress. Quantify them.

Fears of the Referees

- Free ride partners - The partner is just participating to make the balance of the project look good. Typical free ride candidates include:
  - Eastern European Partners (of course very often easter european partners are perfectly legitimate, full project members, but cases have been known, so it is very important to be very specific about their qualifications)
  - Small companies (to increase the SME participation)
    - Technology Transfer Companies
    - Small software development companies
- No real cooperation – that is no added value on the european level. The partners really just want money to continue their own work independently
- To tackle the two issues about it is a good idea to have each partner be in charge of a WP, but he or she should not work completely alone on it. Of course there are problems which must be individually addressed, but then it is better to make the WP into some tasks and part of a larger WP.

Risk Analysis

- A risk analysis for a research proposal consists of the following:
  - Stating which part of the planned experiments may not work out
  - Come up with alternative approaches (a contingency plan) – sometimes the contingency plan is simply not to do all experiments. Milestones can also be part of the risk analysis.
- Examples of risk analysis:
  - *Goal (WP2, Silicon crystal optimisation) The production of Si(111) wafers, 50 micron thick, 2 inch in diameter, with less than ± 0.5 micron surface deviation due to bow or thickness variation. Initial goal is ± 1.5 micron. State of the art for commercially available Si(111) wafers is 50 micron ± 3 micron (bow not included) (produced by partner ITME, commercially distributed by Crys. Tec. GmbH Berlin).*
    - *Risk Assessment: ± 1.5 micron should be achievable, ± 0.5 micron will be difficult. The contingency plan is to improve the electrostatic control to compensate for even larger mirror imperfections.*
  - *Goal (WP6, Porin Crystals): A measurement of the pore-shape and the pore spacing in the OmpG porin crystal. The microscope is used in micro-diffraction mode. NOTE! We do not intend to obtain information about the internal structure of the porin molecules as the atom beam does not penetrate into the protein as discussed in section 1.1. We exploit the fact that 2-D crystals of porins have atomically defined, nanometer-wide holes forming a precise planar lattice.*
    - *Risk assessment: The main issue is whether it will be possible to produce the free standing single crystal porin protein samples. Our partner is one of the most experienced groups in the world, but the requirements of making the crystal free standing means that the preparation method has to be changed. The contingency plan is to try several porin types.!*
  - *Goal (WP4, Atom Mirror optimisation)*
  - *1: An ellipsoidal mirror (radii of curvature along the main axis = 0.1 m and 0.2 m respectively) created from an electrostatically deformed Si(111) crystal, capable of focussing a beam of He-atoms down to a 20 nm diameter spot.*
    - *Risk Assessment: This work package relies on results from WP2. The final tuning down to 20 nm will be difficult and time consuming because it requires scanning of the focused spot before each adjustment. Instrumental vibrations might also prove a problem in achieving the ultimate resolution with the present prototype microscope. Sub micron resolution is definitely feasible.*

it might ≃ not work (it's stated now)

EU-Workshop, Dr. Bodil Holst

to euphorize to good quality of the partners

General Remarks to the "non-scientific" part of a research proposal

- Whatever you do, do not ignore this part!!! You saw how many points it gave! This is often the part which decides if you are funded or not, since most people spent a lot of time on the scientific section but less on the other sections
- I strongly recommend the book "How to write a competitive proposal for framework 6" by Dr. Sean McCarthy: Can be downloaded for free on the following website. http://www.hyperion.ie/templates.htm
- Treat the non-scientific issues seriously and use common sense. If you write something sensible you will get a decent mark, if you have written nothing, the referee cannot give you a reasonable mark. Try to refer to EU-relevant publications (for example documents from the Technology Platforms or other relevant EU-publications or other official bodies (OECD, WHO etc.) or market analysis reports (for example Frost and Sullivan

Section 2 - Implementation

2.1. Management structure and procedures

- **Describe the organisational structure and decision-making mechanisms of the project. Show how they are matched to the complexity and scale of the project. (*Don't forget conflict management and consortium agreement)!!! Example:***
- The legal base of our project management is **the consortium agreement** which will be signed by the legal representatives for all partners at the beginning of the project. The consortium agreement will be based on the model consortium agreement which has been developed for FP7 by the so called DESCA-Core group consisting of representatives from ANRT (The French National Association for Research and Technology), EARTO (The European Association of Research and Technology Organisations), Eurochambres (The European Association of Chambers of Commerce), The German Helmholtz Gesellschaft and KOWI (Koordinierungsstelle EG der Wissenschafts-organisationen, financed by the German Research Council. The consortium agreement is available free of charge from the internet under http://www.desca-fp7.eu. **Since the funding of an SME (spin-off) is anticipated after this project the consortium agreement will have a dedicated extension (see Section 3.2).**
- An organigram for the project is shown in Fig. 7. The project is managed by a coordinator who will be the direct contact point to the Commission as well as to the technical manager of the project. Each of the involved organization is lead by a key person who is directly responsible to the technical manager (technical issues) and coordinator (management related issues) and who is leading the Work Packages for which his/her organization has the prime responsibility.
- The project decision making body, responsible for the overall direction of the project, is the general assembly, which is composed of one representative for each team (5 members in total). The general assembly decides upon the allocation of the budget in accordance with the EU Contract. The general assembly shall meet every six months, first time at an inaugural meeting held as soon as practicable after the signing of the contract with the Commission. At the general assembly meetings scientific progress, strategies and general management issues for each partner are presented and discussed. Any member of the general assembly can request additional general assembly meetings if he or she deems it necessary. For instance the coordinator can ask for an assembly meeting in case of problems with meeting the deadlines of the various work packages. If a partner gets into serious problems with the management and/or technical progress of his part of the project, he is obliged to inform the coordinator or technical manager directly. All partners are obliged to participate in the general assembly meetings or to send a legal representative if they are prevented to attend in person. If issues arise, which cannot be solved by discussion, they will be settled by simple majority voting with one vote per assembly member. The project will be audited in accordance with the rules by external auditors (one for each partner) once a year. Scientific meetings and exchanges between partners can be arranged on a short notice by the partners involved without the general assembly.
- As mentioned earlier all partners have experience with participating in international projects and in several cases also with working with each other and we do not expect any conflicts. In the unlikely event that serious disagreement should occur, the issue will be raised at a general assembly meeting, if necessary an extraordinary general assembly meeting. As a final measure the scientific officer responsible for the project will be applied to and the general assembly is then obliged to accept the decision of the scientific officer or alternatively, if the scientific officer in charge and the commission prefers it so an independent decision body appointed by the commission.

- 2.2. Individual Participants
  - For each participant in the proposed project, provide a brief description of the legal entity, the main tasks they have been attributed, and the previous experience relevant to those tasks. Provide also a short profile of the individuals who will be undertaking the work (maximum length: one page per participant)
    - For companies don't forget the following information
      - When was the company funded
      - How big is it
      - What is the annual turnover
      - Any other impressive info (mentioning in business journals, share growth etc.)
    - *Normally short profile of at the most two persons pr. partner. Don't forget to mention high ranking publication, patents, previous experience in international projects. Don't just write "Previous experience in international projects" – write what role he or she had in the projects and the name of the projects. If very many projects write "Previous experience in international projects – for example: And then you mention the one or two most recent + the one or two most successful (and for the successful ones you mention what outcome came of it: Spin off company/Patents/Prestigious publications.*
- 2.3. Consortium as a whole
  - Describe how the participants collectively constitute a consortium capable of achieving the project objectives and how they are suited and are committed to the tasks assigned to them. Show the complementarity between participants. Explain how the composition of the consortium is well balanced in relation to the objectives of the project.
  - If appropriate describe the industrial/commercial involvement to ensure exploitation of the results
  - *It is always good to have industrial partners, in particular end-users are important (NB – end-users are not the companies producing a product, but the people using the product). It must be clear, however, that they are committed. Some people have end-users advisory boards. In my opinion it does not bring much, because it is too diverse. It is better to have one dedicated application in mind (focus) and involve an end-user suitable for this purpose.*

- 2.4. Resources to be committed
  - Describe how the totality of the necessary resources will be mobilised, including any resources that will complement the EC contribution. Show how the resources will be integrated in a coherent way and show how the overall financial plan for the project is adequate.
  - *Referee Fear: Overcharging – therefore be very careful with this section. In particular, explain very clearly on what bases the cost of a man-month is calculated. This is a typical problem for some partners that the cost is seemingly much to high and people are left with the impression that you are "cheating". I suggest making tables for each partner as shown on the next page. A lot of work, but then you are "safe".*

→ for P 1:

NB! We are aware that this might seem a lot in comperison to some other partners. We note that the bulk of the expenses are allocated to maintaining and improving the microscope. In particular the pumps are expensive to exchange and this must be catered for. Also a new facility for micro skimmers is necessary now that the instrument has moved to Graz (see description of institute, Partner TU-GRAZ).

DURABLE EQUIPMENT	COST IN €
P-2000 Micro-pipette Puller (Sutter Instruments): Manufacturing of micro-skimmers for a sub-micron Helium source	12250
Zeiss Microscope for optical testing of the micro-skimmers	12000
Turbo-pumps, maintenance & replacement fund for the microscope. In particular the main pump on the helium source chamber costs 40000 euro new. It was inherited from another apparatus and has more than 90000 hours running time, so it is not likely to last much longer	80000
CONSUMABLES	**COST IN €**
High-purity He and Ar (for clean venting), Cu gaskets etc. (5000/year)	15000
Ultra-precision machined sapphire wafers (sub micron thickness variation) for supporting the silicon crystals in the mirror holder.	8000
LABOUR COSTS	**COST IN €**
Two Ph.D. students for 3 years (2x80250) (Austria standard rate). See WPs for detailed specification of work.	160500
MANAGEMENT ACTIVITES	**COST IN €**
Enabling the coordinator to go to half teaching load during the project (compensation to university)	9690
External auditor payment (yearly auditing) 3x2500 Euro	7500
Travelling to consortium meetings etc.	6000
DISSIMINATION ACTIVITES	
Patent applications	8000
Conference meetings etc.	7000
TRAVEL	
In particular visits to partner 4 to set up mirror testing in vacuum	12000

Section 3 - Impact

- 3.1. Expected impact listed in the work programme
  - Describe how your project will contribute towards the expected impacts listed in the work programm in relation to the topic or topics in question. Mentions the steps that will be needed to bring about these impacts. Explain why this contribution requires a European (rather than a national or local) approach. Indicate how account is taken of other national or international research activities. Mention any assumptions and external factors that may determine whether the impacts will be achieved
    - I suggest simply addressing the "expected impact" part from the Call text. To stay focussed. Perhaps one or two more point briefly if relevant, but the call text "expected impact" is the main issue.
    - Very important is the European dimension. Usually the best way to argue is that the expertise for carrying out all tasks is not available within one country – elaborate if you can.
    - If there are no external factors then simply say so, but you may always be able to write something like: Economic recession might mean that it will be difficult to get funding for our start-up company.

Section 3 - Impact

- 3.2. Dissemination and/or exploitation of project results and management of intellectual property.
  - Describe the measures you propose for the dissemination and/or exploitation of project results and the management of knowledge, of intellectual property and of other innovation-related activities arising from the project.
    - Fear of the referees: When the project is over the work does not continue, the know how is not exploited. An example of a text:
    - *As specified clearly in the consortium agreement, intellectual property rights will be shared among the partners involved who are clearly defined from the work-packages. The partners will take great care to protect all relevant work through patents and/or to publish in scientific journals and conference proceedings when the relevant patent rights have been secured. To ensure transparency all members of the project general assembly must agree to a publication or a patent even if they are not directly involved. An abstract will be sent around to all partners and if no reply arrives within 14 days this is taken as implicit agreement. This is a procedure which is used in the INA-project coordinated by the here proposed project coordinator and has found to be very good and efficient.*
  - *Since the funding of an SME (spin-off) is anticipated after this project the consortium agreement will have a dedicated extension which will include a non-disclosure agreement. The currently existing patent for the new magnetometer technology belongs to TUG.*
  - ***To ensure that the new technology can be applied with the outmost efficiency for space science in the future, the consortium agreement will also include a regulation which allows all groups involved in this project (DTU, AAS, FMI and UiB) to contribute to space science missions applying the new technology free of charge and without necessarily involving TUG and/or the future spin-off company**. The only demand will be that for all publications where the new technology is exploited either the name of the spin-off company or, should this company not have been established yet, the name of the inventor Roland Lammegger is mentioned in the acknowledgements. On the other hand the spin-off company has the right to exploit the technology developed in the project for non-space related projects free of charge.*
  - *When the project is successfully completed, the partners plan to submit instrument proposals based on the CDSM for missions (e.g. the ESA projects carried out in the cosmic vision programme) which deal with the investigation of the intrinsic magnetic field of the Earth, the exploration of the magnetosphere and intrinsic field of the giant planets or space probes sent to the edge of the solar system where the interplanetary magnetic field becomes fairly low.*
  - *Dissemination will also take place through the education of PhD and master students within the frame of the project. Articles to popular scientific magazines are envisaged.*

Learning by doing

- A very good training for writing research proposals is to act as a referee yourself.
- On a national level you usually have to be quite high ranking to be a referee (at least a permanent position as a professor/lecturer).
- On the EU level it is a lot easier to become a referee (and you even get money for it: In FP6 450 Euro pr day + Travel and Expenses). You have to do the following:

- **First Step:** Register to become an external expert:
  - Go to the official EU-Framework7 (FP7) website: http://cordis.europa.eu/fp7/home_en.html
  - Lower left corner there is a link: "Register as an independent expert for FP7: Evaluation, monitoring and other assistance https://cordis.europa.eu/emmfp7/index.cfm?fuseaction=wel.Logout

- **Second Step**: Make sure you get elected to be an expert. The scientific officers need to know you because the data base is very large and you will easily get lost in the crowd. Getting in personal contact with a scientific officer in your field can help you to avoid this. THIS IS VERY IMPORTANT (needless to say you will never get elected as an expert if you do not have the appropriate scientific qualifications). If you cannot find a scientific officer directly, contact the Danish National Contact Point, they might be able to help:

- NB! Registering as an external expert is not restricted to EU-citizens.

- Look at the Website for FP7 http://cordis.europa.eu/fp7/home_en.html to see the documents for a given call.
  - Call Fiche (Overview- What calls are available, how much money, how many pages is the proposal allowed to be, evaluation thresholds) – This you need to check how much money you can get
    - Work Program – General Introduction – Not needed
  - Work Program – This you need to find the exact description of the relevant call
    - Work Program – General annexes
    - Fp7-factsheets – Not needed
  - Guide for Applicants – This you need to design the proposal, in particular Annex 2 – evaluation criteria, Annex 3 – Instructions for drafting part A of the proposal (Administration stuff, including budget) and Annex 4 – Instructions for drafting part B of the proposal (Science stuff)

  ADDITIONAL DOCUMENTS
    - European Parliament and the Council decision of 18 December 2006 concerning the FP7 EC (official bla bla – Not needed)
  - Regulation laying down the rules for the participation to FP7 EC. This is important! Financial guidelines
    - Council decision concerning the Specific Programs (official bla bla, not needed)

Remember the three
TTT
Hear their chime:
Things Take Time

P. Hein

Tip for EU-projects. Start out by writing an outline proposal

- The transition stage between preparation phase and writing phase. It is much easier to get people interested in an outline proposal than a full proposal because this is where science is done.
- Calculate lots of time. Outline proposals should be ready at least two months before the final deadline, if possible.

Sources for Help

- National Contact Points:
  - Provides information and support for EU-proposals.
    - EU Search for National Contact Points: http://cordis.europa.eu/fp7/ncp_en.html
- The EU Enquiries Service http://cordis.europa.eu/fp7/get-support_en.html
- The Local EU-office at the University
- Simone Gautier
  Phone: +49.89.289.22613
  Fax: +49.89.289.22620
  Mail: Gautier@zv.tum.de or: EU-Service@zv.tum.de
- Direct contact with a Scientific Officer in Brussels in the Relevant Field (much recommended)
- Get a consultancy company to write your application

Tip for Illustrations

- Make black/white photo copy of all color illustrations before submission and check that they still are readable. Up till now Brussels has only handed out black and white copies to the referees.

Financial Issues – System changed since FP6. Is now better.

- EU distinguishes between different types of activities and refunding for universities:
  - Research and Development (75% eligible costs refundable)
  - Demonstration (50% eligible costs refundable)
  - Training (100% refundable)
  - Management (100% refundable)
  - Problem: Floating boarders, no exact definitions
- Eligible Costs = Direct Costs + Indirect Costs
  - Direct costs:
    - Salary of permanent staff (technical, scientific and administrative as well as overhead costs.
    - Salary of students
    - Value-loss of equipment during the project. How this "value-loss" is calculated depends on the accounting system of the institution.
    - Consumables
    - Travels
    - NB!!! VAT is not covered
  - Indirect costs:
  - Overheads (telephone, wear of equipment etc.). For universites this is set at a fix value: 60% of the direct costs.
- So we get: Refundable Sum = 75% of Eligible Costs. Eligible Costs is 160% of Direct Costs. So the Refundable Sum is 120% of Direct Costs.
- Effectively only difference to FP6 is that you can now also pay permanent staff.

http://www.forschungsrahmenprogramm.de/_media/Antragstellung7FRP_2Auflage.pdf

Thank you for your attention

"A problem worthy of attack
Proves its worth by hitting back"

P. Hein

Good Luck!
Do not hesitate to contact me fur further questions

Annex 2 of the 2007 'Cooperation' Work Programme

Eligibility and Evaluation Criteria for Proposals

Eligibility criteria

A proposal will only be considered eligible if it meets all of the following conditions:

- It is received by the Commission before the deadline given in the call text.
- It involves at least the minimum number of participants given in the call text.
- It is complete (i.e. both the requested administrative forms and the proposal description are present)
- The content of the proposal relates to the topic(s) and funding scheme(s), including any special conditions, set out in those parts of the relevant work programme

Other eligibility criteria may be given in the call text.

Evaluation criteria

The evaluation criteria against which proposals will be judged are set out in article 15 of the Rules for Participation. For the 'Cooperation' specific programme these are:

- scientific and/or technological excellence;
- relevance to the objectives of these specific programmes[1];
- the potential impact through the development, dissemination and use of project results;
- the quality and efficiency of the implementation and management.

Within this framework, the work programmes will specify the evaluation and selection criteria and may add additional requirements, weightings and thresholds, or set out further details on the application of the criteria.

The purpose of this annex is to set out such specifications. Unless otherwise indicated in the relevant parts of this work programme, the criteria, weightings and thresholds given here will apply to all calls for proposals.

Proposals will be evaluated in line with the Commission 'Rules on Submission of Proposals and the Related Evaluation, Selection and Award Procedures'.

A proposal which contravenes fundamental ethical principles, fails to comply with the relevant security procedures, or which does not fulfil any other of the conditions set out in the specific programme, the work programme or in the call for proposals shall not be selected. Such a proposal may be excluded from the evaluation, selection and award procedures at any time. Details of the procedure to be followed are given in the Commission rules mentioned above.

The arrangements for a particular call will be set out in the relevant Guide for Applicants.

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[1] **Relevance** will be considered in relation to the topic(s) of the work programme open in a given call, and to the objectives of a call. In the scheme set out on the following page, these aspects will be integrated in the application of the criterion "S/T excellence", and the first sub-criterion under "Impact" respectively. When a proposal is **partially relevant** because it only marginally addresses the topic(s) of a call, or because only part of the proposal addresses the topic(s), this condition will be reflected in the scoring of the first criterion. Proposals that are clearly not relevant to a call ("out of scope") will be rejected on eligibility grounds.

		1. Scientific and/or technological excellence *(relevant to the topics addressed by the call)* (award)	2. Quality and efficiency of the implementation and the management (selection)	3. The potential impact through the development, dissemination and use of project results (award)
All funding schemes		• *Soundness of concept, and quality of objectives*	• Appropriateness of the management structure and procedures • Quality and relevant experience of the individual participants	• *Contribution, at the European [and/or international] level, to the expected impacts listed in the work programme under relevant topic/activity*
Collaborative projects		• *Progress beyond the state-of-the-art* • Quality and effectiveness of the S/T methodology and associated work plan	• Quality of the consortium as a whole (including complementarity, balance) • Appropriateness of the allocation and justification of the resources to be committed (budget, staff, equipment)	• Appropriateness of measures for the dissemination and/or exploitation of project results, and management of intellectual property.
Networks of Excellence		• *Contribution to long-term integration of high quality S/T research* • Quality and effectiveness of the joint programme of activities and associated work plan	• Quality of the consortium as a whole (including ability to tackle fragmentation of the research field, and commitment towards a deep and durable integration) • Adequacy of resources for successfully carrying out the joint programme of activities	• Appropriateness of measures for spreading excellence, exploiting results, and disseminating knowledge, through engagement with stakeholders and the public at large.
Co-ordination & support actions	**CA**	• Contribution to the co-ordination of high quality research • Quality and effectiveness of the co-ordination mechanisms, and associated work plan	• Quality of the consortium as a whole (including complementarity, balance) [for SA: only if relevant] • Appropriateness of the allocation and justification of the resources to be committed (budget, staff, equipment)	• Appropriateness of measures for spreading excellence, exploiting results, and dissemination knowledge, through engagement with stakeholders, and the public at large.
	SA	• Quality and effectiveness of the support action mechanisms, and associated work plan		
Research for the benefit of specific groups		• Innovative character in relation to the state-of-the art • Contribution to advancement of knowledge / technological progress • Quality and effectiveness of S/T methodology and associated work plan	• Quality of the consortium as a whole (including complementarity and balance) • Appropriateness of the allocation and justification of the resources to be committed (budget, staff, equipment)	• Appropriateness of measures for the dissemination and/or exploitation of project results, and management of intellectual property

Notes:

1. Evaluation scores will be awarded for each of the three criteria, and not for the sub-criteria. Each criterion will be scored out of 5. No weightings will apply. The threshold for individual criteria will be 3. The overall threshold, applying to the sum of the three individual scores, will be 10.

2. The second column corresponds to the **selection criteria** in the meaning of the financial regulation[2] (article 115) and its implementing rules[3] (article 176 and 177). They also will be the basis for assessing the 'operational capacity' of participants. The other two criteria correspond to the **award criteria**.

3. For the evaluation of first-stage proposals under a two-stage submission procedure, only the sub-criteria in italics apply.

[2] OJ L248 16.9.2002, p1.
[3] OJ L357 31.12.2002, p1