Writing grant proposals

1. General success factors for proposal writing
2. Writing a FP proposal
3. Example: Discussion on open FP 7 Security topic „Impact of extreme weather on critical infrastructure"

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1. General success factors for proposal writing

Approaching a proposal

- Careful read of the advice offered by your funding agency!

- The program manager, and most members of the panel that judges your proposal, won't be expert.

- You have one minute to grab your reader's attention.

- Make sure that the first page acts as a stand-alone summary of the entire proposal.

- Ask lots of people to help you improve your proposal. If they don't immediately see the value of what you want to achieve, rewrite it until they do.

Criteria for a good grand proposal

- Most funding agencies apply similar criteria to the evaluation of proposals. It is important to address these criteria directly.

- Major criteria

  - Is it a research problem, or is it just a routine application of known techniques?

  - Is it an important problem, whose solution will have useful effects?

  - Is special funding necessary to solve the problem, or to solve it quickly enough, or could it be solved using the normal resources of a well-found laboratory?

  - Do the proposers have a good idea on which to base their work?

– Does the proposal explain clearly what work will be done?
– Does it explain what results are expected and how they will be evaluated?
– How would it be possible to judge whether the work was successful?
– Is there evidence that the proposers know about the work that others have done on the problem?
– Do the proposers have a good track record, both of doing good research and of publishing it?

- ## Secondary criteria

  - Keep a strong research team together; but give also priority to new researchers in the field.

  - An attempt is made to maintain a reasonable balance between different research areas.

  - Often, a proper gender balance is also required.

  - Evidence of industrial interest in a proposal, and of its potential for future exploitation will usually count in its favour.

  - The case for support should include some `route to market' plan.

- ## Cost-effectiveness

  - The program manager tries to ensure that his or her budget is to be used in a cost-effective manner.

  - The program manager may lop costs off an apparently over-expensive project.

Common shortcomings

- There is no evidence that the proposers will succeed where others have failed.
- It is not clear what question is being addressed by the proposal. In particular, it is not clear what the outcome of the research might be, or what would constitute success or failure.
- The question being addressed is woolly or ill-formed.
- It is not clear why the question is worth addressing. The proposal must be well motivated.
- The proposal is just a routine application of known techniques.
- Research funding agencies are interested in funding research rather than development. Industry is expected to fund development work.

Common shortcomings (II)

- You should sketch your idea, and describe preliminary work you have done. It is not good saying "give us the money and we will start thinking about this problem".

- "We have a good track record". Include a selective list of publications, and perhaps include a short paper (preferably a published one) which gives more background, as an appendix.

- A new idea is claimed but insufficient technical details of the idea are given to be able to judge whether it looks promising.

- The proposers seem unaware of related research. Related work must be mentioned. Do not make the mistake of giving references only to your own work!

- The proposed research has already been done - or appears to have been done. Solutions must be discussed.

Common shortcomings (III)

• A good proposal is simultaneously comprehensible to non-experts, while also convincing experts that you know your subject.

• Keep highly-technical material in particular section(s); avoid it in the introduction.

• The proposers seem to be attempting too much for the funding requested and time-scale envisaged. Such lack of realism may reflect a poor understanding of the problem and research methodology.

• The proposal is too expensive for the probable gain.

• The proposers institution should be funding it. Research agencies will usually only fund research that requires resources beyond that which might be expected in a "well-found laboratory".
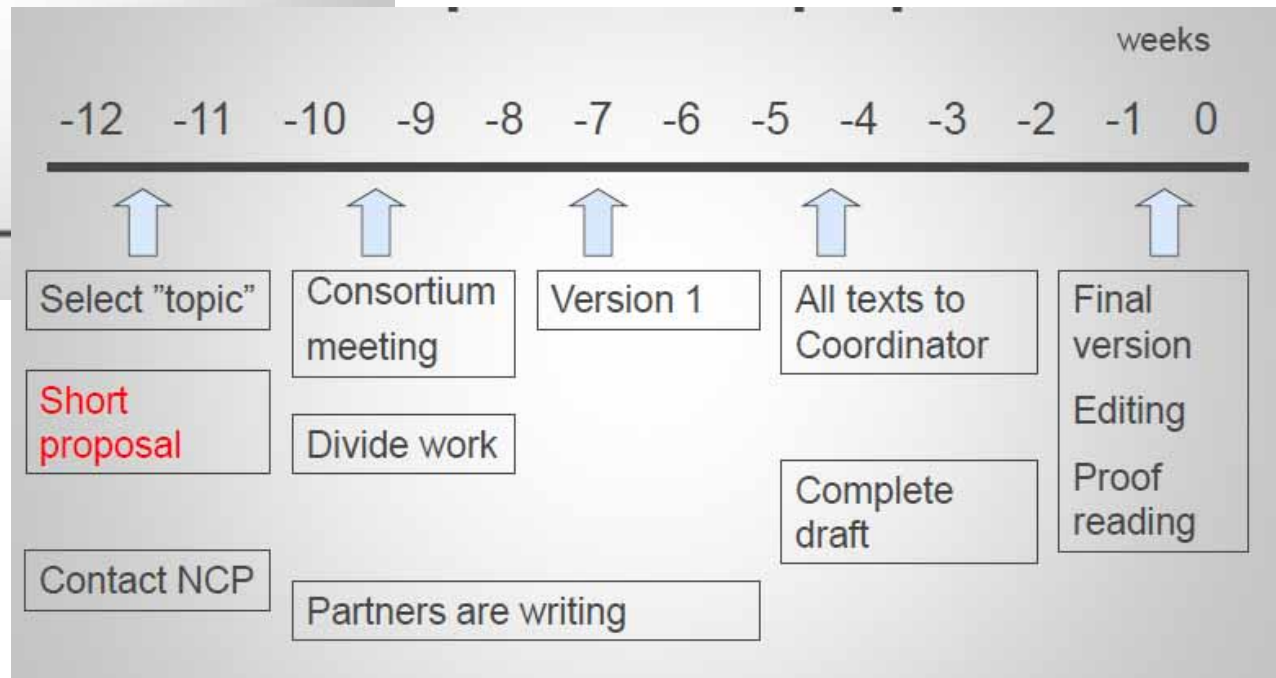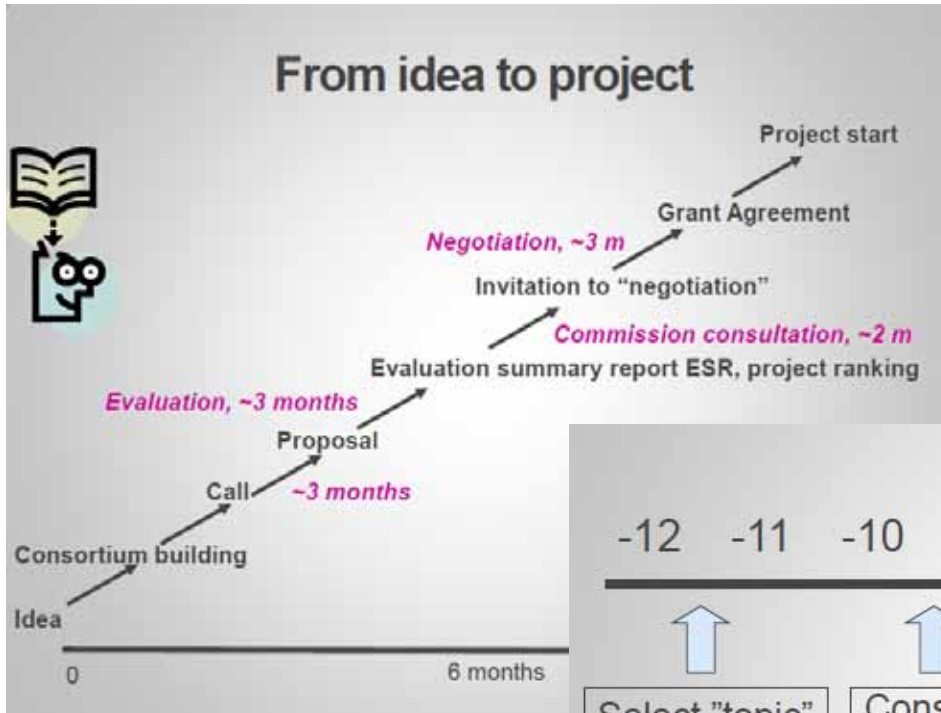
2. Writing a FP proposal

- Proposal setup
- How to write a proposal aligned with evaluation criteria
  - Important details in proposal
  - Importance of right proposal structure
  - Deliverables, milestones
- Evaluation process
  - Who evaluates
  - Selection process
  - Budget
- Grant Agreement

Proposal setup

Consortium building

- Minimum 3 partners from 3 different EU countries or associated states (normally)
- Match research groups with topic
- Defined role of each group
- What's in it for me?
- Clear synergy between the groups
- Complementary skills, no major overlaps
- Need to be a balance between academia and industry
- SME's if stated in the call text
- Start prior to the official publication of the call text

How to write a proposal aligned with evaluation criteria

Two parts:

- Part A: Forms submitted on Electronic Proposal Submission Service
  - A1: General information (ex topic, title, summary)
  - A2: Partner description (ex PIC, name, address, contact person)
  - A3: Budget (per partner and consolidated)
- Part B: Project description (approx. 60p.)
  - Cover page (title, topic etc.
  - Concept and objectives
  - Progress beyond state-of-the-art
  - Work plan and timing
  - Work package descriptions
  - Deliverables, milestones, effort in man months
  - Implementation (organization and management, partner description)
  - Major cost motivation
  - Impact (effects on economy, society, health, environment etc.)
  - Ethical/gender issues

Writing the proposal Part B

- Download (EPSS) proposal template and guidance notes
- The proposal should correspond to call text only
- Write stringently and clearly
- Educate the evaluator –no reading between the lines
- If possible put quantifiable facts in tables -E.g. progress beyond SoA
- Emphasize the importance of a European collaboration
- Put the required information in correct paragraphs
- Don't duplicate the same information

Workplan

- Rationale for your implementation method
- Alternatives considered - allow for delays
- Phasing and check points
- Potential technical risks and fallbacks (contingency plan vital)
- Reference to other work
- Reference to other funded projects and justification
- This is the technical section – convince the evaluators of your "technical excellence"

Organisation
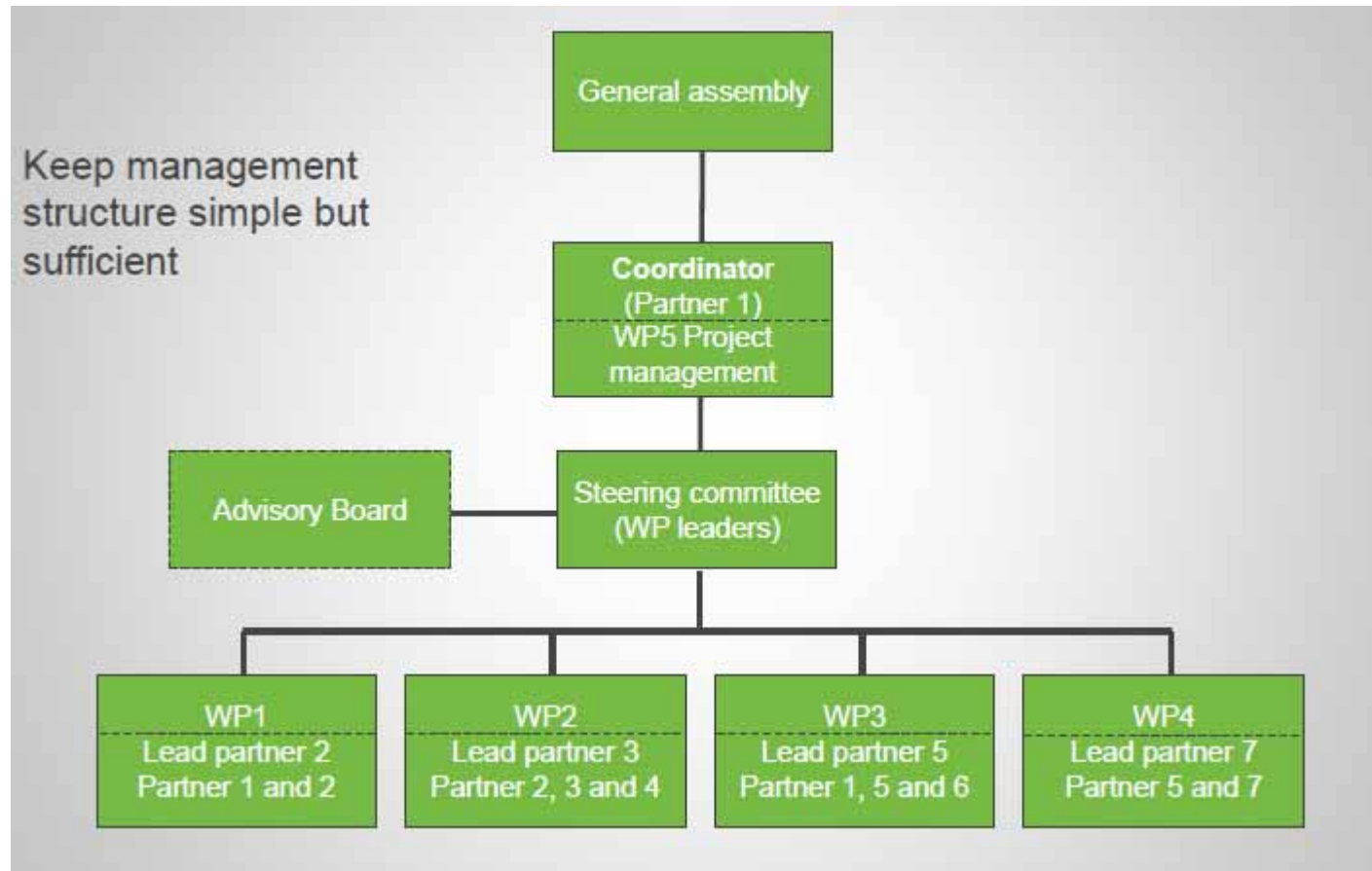
Deliverables and milestones

- Deliverables are the items showing the project results
- They are supplied to EC
- They are the basis of project reviews by external experts
- Milestones are check points of important steps in the project and don't require any separate reports
- Limit the number of deliverables and milestones and distribute them in time

Deliverables and milestones II

- Examples from CHANGES:
- (TA-4.1) Inventory of risk management strategies in Europe focusing on land use planning and emergency preparedness.
- ESR/ER: no direct ESR involvement. By TUDO and CNR, with input from IRM, UNIL,R&D and AS
- **Deliverable**: D4.1 Delivery date: M+24. Description: Inventory of risk management strategies in Europe focusing on land use planning and emergency preparedness

Deliverables and milestones III

- Example from PRESOM (FP6)
- **Deliverable** no. 9: Case study: the liberalisation and privatisation of finance, delivery date: month 19.
- Responsible partner: TUDO with input from five partners.
- **Milestone**: Third international conference: The impact of liberalisation and privatisation on the European Social model.
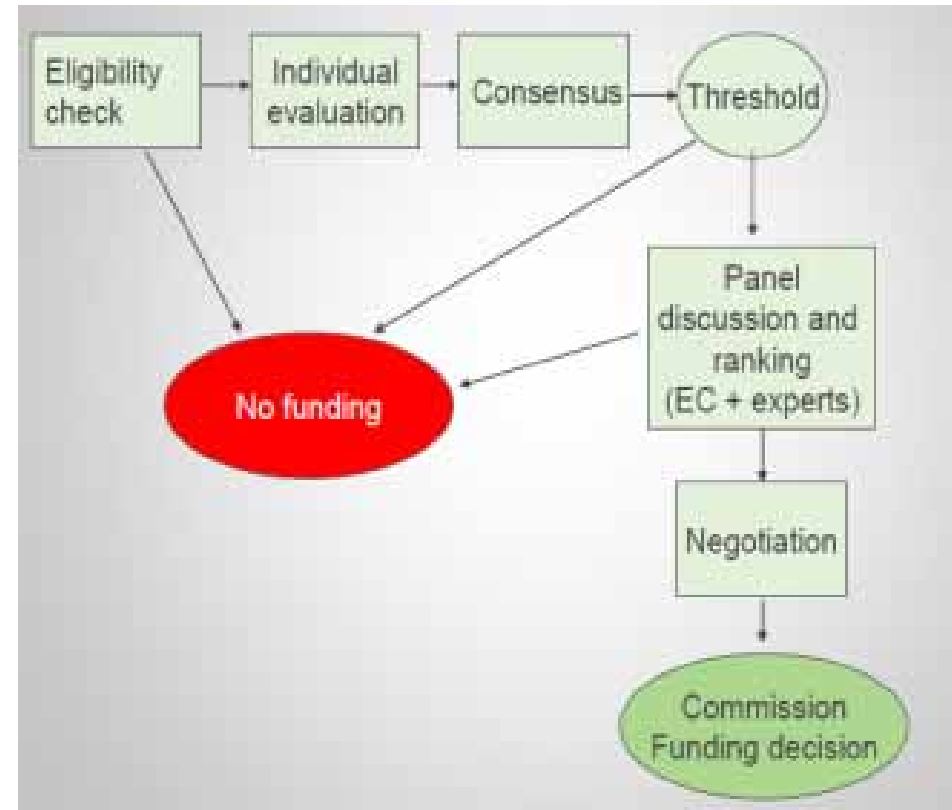
Evaluation

- Peer review
- Evaluators contracted before the call deadline
- Potential evaluators have to declare "conflicts of interest"
- 3 or 5 evaluators assigned to each proposal by EC staff
- Assignments dependent of the proposal nature based on EC judgment
- Proposals are often multidisciplinary while the evaluators aren't – educate the evaluator
- EC staff doesn't put the scores on the proposals

Evaluation II

- They love to pick on …
- Academics: S/T quality (science)
- Consultants: implementation - management
- Industry reps: impact (applications)
- Everybody:
  - clarity of scope and objectives
  - compliance with the Commission's recommendation for proposal length
  - budget (lack of) realism

Evaluation criteria (max. 5pt each)

S&T excellence	Implementation	Impact
Scientific and/or techno-logical excellence (relevant to the topics addressed by this call)	Quality and efficiency of the implementation and management	Potential impact through the develop-ment, dissemination and use of the results
• Soundness of concept, and quality of objectives • Progress beyond the state-of-the-art • Quality and effectiveness of the S/T methodology and associated work plan	• Appropriateness of the management structure and procedures • Quality and relevant experience of the individual participants • Quality of the consortium as a whole (including complementarity, balance) • Appropriateness of the allocation and justification of the resources to be committed (staff, equipment…)	• Contribution, at the European and/or international level, to the expected impacts listed in the work programme under relevant topic/activity • Appropriateness of measures for the dissemination and/or exploitation of project results, and management of intellectual property.

Grant agreement

- **Core Grant Agreement**
  - Annex I – technical annex (project plan, updated proposal as a result of negotiation process)
  - Annex II – general conditions
  - Annex IV (= Form A) – Accession to Grant Agreement (to be signed by each partner)

- **Grant Agreement itself signed only by Coordinator and EC**

SEVENTH FRAMEWORK PROGRAMME
THE PEOPLE PROGRAMME

Grant agreement for: **Initial Training Networks**

Annex I - "Description of Work"

Project acronym: CHANGES

Project full title: Changing Hydro-meteorological Risks – as Analyzed by a New Generation of European Scientists

Grant agreement no.: 263953

Date of approval of Annex I by Research Executive Agency: 27 August 2010

SEVENTH FRAMEWORK PROGRAMME
Specific Programme PEOPLE

Page 1 of 33

Consortium agreement

- Contract between partners in a project
- Standard DESCA model ("Development of a Simplified Consortium Agreement for FP7"), see www.desca-fp7.eu
- Regulates the obligations and the rights between the partners
- Ownership of Intellectual Property (IPR: inclusion or exclusion)
- Organisation, communication flow within consortia
- Voting principles, decision making structures, Settlement of disputes
- What happens in case of partner default
- Financial arrangements
- Collective technical responsibility

CONSORTIUM AGREEMENT

FOR

SEVENTH FRAMEWORK PROGRAMME

MARIE CURIE INITIAL TRAINING NETWORK

CHANGES

CHANGING HYDRO-METEOROLOGICAL RISKS – AS ANALYZED BY A NEW GENERATION OF EUROPEAN SCIENTISTS

Between:

Faculty of ITC, University of Twente, Enschede, the Netherlands
    Hengelosestraat 99
    7514 AE Enschede
    The Netherlands

acting as Co-ordinator, hereinafter referred to as "ITC " or the "Co-ordinator"

and

all other Parties of the CHANGES Consortium, being

Centre National de la Recherche Scientifique (CNRS), established in 3, Rue Michel-Ange, 75794 Paris, France, and represented by Bertrand MINAULT, Délégué Régionale and FIX, Denis, Responsable Service partenariat et valorisation

Universität Wien (UNIVIE), established in Dr. Karl Lueger-Ring 1, 1010 Wien, Austria, and represented by O. Univ.-Prof. Dipl.-Ing. Dr. Heinz Engl, Vice-Rector for Research and Career Development,

Université de Lausanne (UNIL), established in Quarter Unil-Centre Bâtiment Unicentre, 1015 Lausanne, Switzerland, and represented by Philippe MOREILLON, Vice-rector

Consiglio Nazionale delle Ricerche (CNR), established in 7, Piazzale Aldo Moro, 00185 Roma, Italy, and represented by Fausto GUZZETTI, Deputy Director IRPI,

Consortium Agreement CHANGES   1

24/09/2010

http://ec.europa.eu/research/horizon2020/index_en.cfm

- Running from 2014 to 2020 with an € 80 billion budget, the EU's new programme for research and innovation is part of the drive to create new growth and jobs in Europe.

- Horizon 2020 provides major simplification through a single set of rules.

- It will combine all research and innovation funding programmes.

Differences between FP 7 and Horizon 2020

Participant short name	Funding rate for RTD %	Indirect costs method	RTD/Innovation		Demonstration (50% reimbursement)		Management (100% reimbursement)		Other (100% reimbursement)		Total costs	Requested EU contribution
			Direct costs	Indirect costs	Direct costs	Indirect costs	Direct costs	Indirect costs	Direct costs	Indirect costs		
University A	75	60%	531.250	318.750			175.000	105.000	156.250	93.750	1.380.000	1.167.500
Foundation B	50	20%	625.000	125.000	58.334	11.666			144.896	28.979	993.875	771.375
University C	75	Simplified	481.000	240.500	26.667	13.333			133.334	66.666	961.500	761.125
SME D	75	60%	281.250	168.750	140.625	84.375			43.750	26.250	745.000	520.000
Enterprise E	50	Real	270.270	229.730	162.162	137.838			54.054	45.946	900.000	500.000
SME F	75	Real	390.000	310.000	61.289	48.711			111.433	88.567	1.010.000	780.000
Total			2.578.770	1.392.730	449.077	295.923	175.000	105.000	643.717	350.158	5.990.375	4.500.000

- One reimbursement rate
- Single flat rate for overhead
- No validation of legal status
- Unit personnel costs (average personnel costs), including for SME owners without a salary

Participant short name	Estimated eligible costs		Total costs	Requested EU contribution (100%)
	Direct costs	Indirect costs (20%)		
University A	862.500	172.500	1.035.000	1.035.000
Foundation B	828.230	165.646	993.876	993.876
University C	641.001	128.200,20	769.201,20	769.201,20
SME D	465.625	93.125	558.750	558.750
Enterprise E	486.486	97.297,20	583.783,20	583.783,2
SME F	562.722	112.544,4	675.266,40	675.266,40
Total	3.846.564	769.312,8	4.615.876,80	4.615.876,80

Discussion on Topic SEC-2013.2.1-2 "Impact of extreme weather on critical infrastructure"

Description of topic:

•The frequency of different natural catastrophes caused by extreme weather conditions induced by climate change is <u>expected to increase.</u>

•The functioning of <u>critical infrastructures</u> are more and more threatened because of the changing weather condition.

•The <u>regionally differentiated risks</u> need to be reassessed.

•A <u>better understanding</u> of factors and the elements to include in risk analysis of societal security should be developed.

•Research work under this topic should identify in a <u>systematic way</u> the European and national critical infrastructures that should be re-assessed for extreme weather risks.

•Technologies to protect against extreme weather should be <u>reviewed</u> and <u>beyond the state</u> of the art improvement should be developed.

Expected impact:

- A review of <u>European critical infrastructures</u> needs to be carried out - those that are most threatened by various risks are to be identified and classified.

- <u>Measures to protect</u> these should be suggested so major catastrophes and/or cascading effects could be prevented.

- <u>Simulations</u> are to be performed and the <u>effectiveness</u> of the measures needs to be <u>quantified</u>.

Short exercise:

1.Which ESR could contribute (being hypothetically in the role of a senior scientist in his/her discipline?)

- – Match research groups with topic
- – Defined role of each group
- – What's in it for me?
- – Clear synergy between the groups
- – Complementary skills, no major overlaps
- – What is missing?

2.Define appropriate work packages

3.Think about potential addressees of the project results, their interests and involvement (relevant for impact chapter)