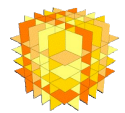


# Writing research proposals



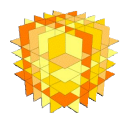
- **Paul Bons**
- **Inst. Für Geowissenschaften**
- **Eberhard Karls Universität Tübingen, Germany**
- **paul.bons@uni-tuebingen.de**



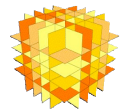
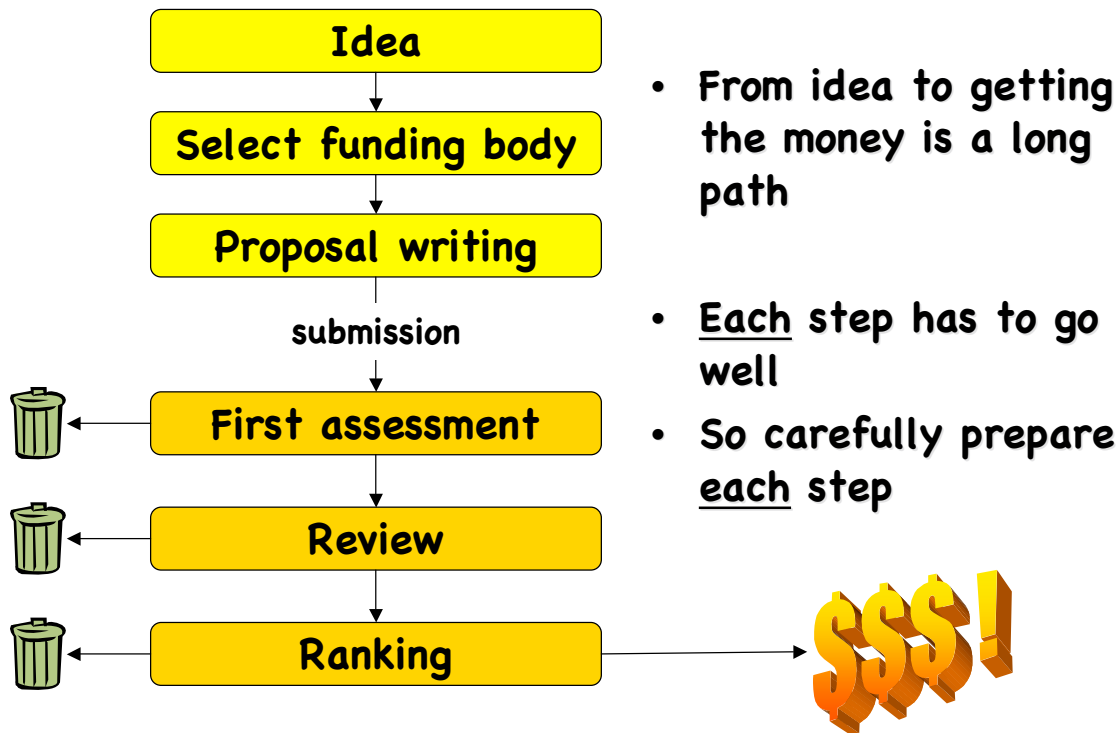
## Successful research proposals



- **There is no "secret formula" for 100% success**
- **But some things help:**
  - **Success leads to success:**
    - be good at what you do
  - **Find a successful environment**
    - Research labs
    - Host scientists
  - **Have a good, interesting and realistic research idea**
- **Sell yourself and your research well**
  - **Write a good research proposal**



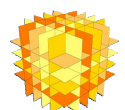
# The rocky path of a proposal



## 1. Selecting the funding body



- Many funding schemes
  - Local university
  - State/province, national schemes
  - International schemes
    - European Union (e.g. Marie Curie Human Mobility)
    - European Science Foundation
    - Bilateral schemes (DAAD, Humboldt Foundation)
- Search everywhere
  - Web sites
  - Ask lecturers & colleagues
  - Approach funding bodies and ask what is available for you



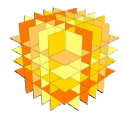
# 1.b Selecting the program



- What do **YOU** want?
  - Research funds
  - Travel funds
  - A fellowship/PhD-position, etc.
- What do **THEY** want?
  - What is their target group?
    - Age, nationality, gender, etc.
    - E.g. applied/fundamental science
  - What sort of funds do they provide?
- Does the timeframe suit you?

Do these match?

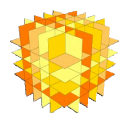
Write the proposal



## Consider your chances



- Try to find out success rates of program
  - Is it worth the trouble?
  - But if you try, **go for it 100%**
- Do not be put off by the language of the call
  - *The action will permit the best and most promising experienced researchers to undertake trans-national ...*
  - **Someone will get the grant!**
  - However, be realistic



## 2. Writing the proposal



**WRONG!** • You write up what you want to do and what you want to get

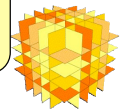
**RIGHT:** • You write what the funding body wants to read to give you the money

• Be guided by the 3 steps of the selection procedure:

- First assessment
- Review
- Ranking



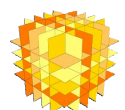
**THEY HAVE** the money, **YOU WANT** the money



## Be informed!



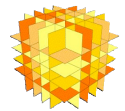
- Collect all information on the program you can get from the funding agency
  - Handbooks
  - Web pages
  - Call the officer in charge of your program
- Get all the relevant forms and templates
- Ask other sources of information
  - Your supervisor
  - Your colleagues
  - Special university offices
- Look for projects that have already been funded
  - Gives insight in what the program likes to fund
  - Ask the successful applicants for more information



## a) First assessment



- In the first assessment it is determined whether your proposal will go through to the next step
  - It is the first chance for your proposal to fail
- Remember:
  - People who do the first assessment are normally not active scientists
  - Quality is usually not an issue at this stage
- Things to consider to get through the first assessment
  - Eligibility
  - Format
  - Deadlines



## Eligibility



- Are you as a person eligible?
  - Are there age limits?
  - Do you have the right degrees (BSc, PhD, etc.)?
  - Other criteria can be gender, nationality, etc.
- Is your project eligible?
  - Subject area (material sciences, applied/fundamental, etc.)
- Is your proposed host institution eligible?
  - Location (must be abroad or not? Academic or not?)
  - Is your proposed host supervisor eligible?
- There are hard and soft criteria:
  - Hard criteria (e.g. younger than 30): NO → forget it
  - Soft criteria (e.g. applied research?): NO → adapt if possible



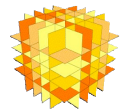
# Format



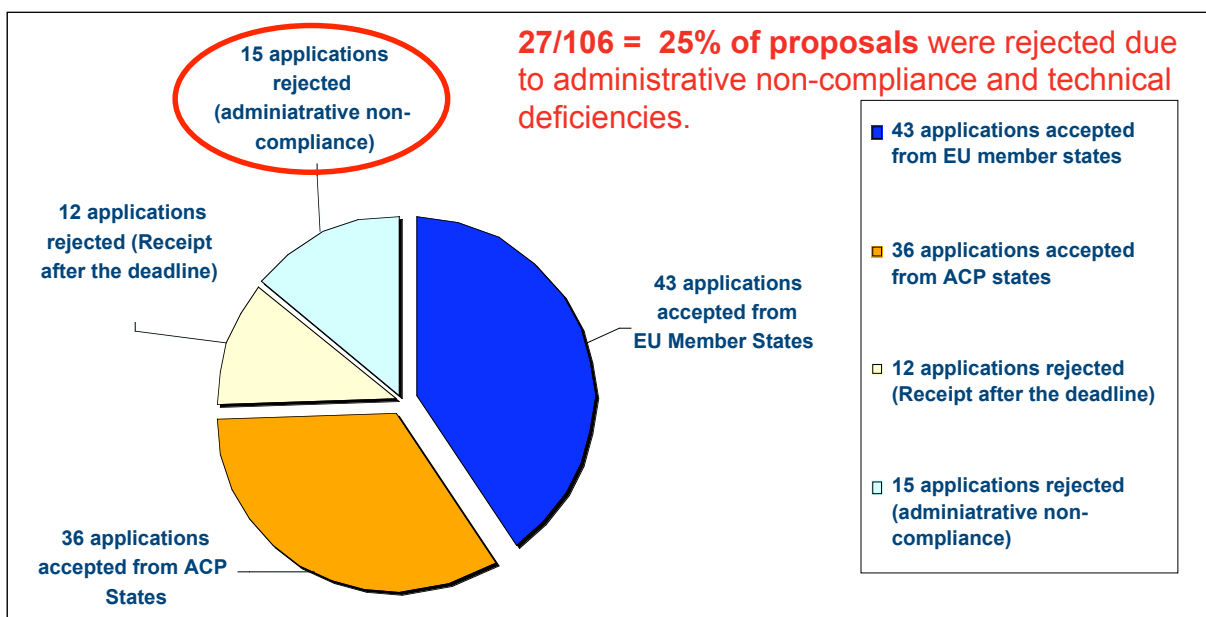
- Prepare the proposal **exactly** as instructed
  - Use the forms or templates provided
  - Use the headers, sections, tables as instructed
  - Do not exceed any page limits
    - Better too short than too long!
  - Use the required fonts, font size, etc. if given.
    - If not specified, do not use too small a font!
  - Provide the required number of copies, or submit in the right format (.pdf, .rtf, etc.)



Try to get copies of successful proposals submitted before to the same program



## Opening session and administrative check: Accepted and rejected proposals



# Is getting the format right easy?



- **Apparently not!**

This page provides the details for preparing a KBMYEIRA proposal

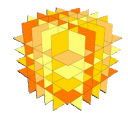
## 1. Details of funding

Funding is provided for up to 12 months for eligible researchers to extend their current research project for up to 12 months, but at a new host organisation in order to acquire new research skills on the basis of the "[personal career development plan](#)". Funding will be provided for salary and for research expenses, depending on type of research (laboratory-based or not).

## 2. Details of application procedure

Proposals in PDF-format must be uploaded at the [Knowledge-Based Materials website](#), before August 1, 2007. Content of the proposals must be structured according to the guidelines detailed in [Part B](#). Proposals must be written in 11-point (or larger) Times or Arial font and must not exceed the A4-page limit (with margins no less than 2.5 cm). Proposals not following these guidelines, will be rejected.

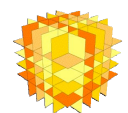
- **There was only ONE Personal Career Development Plan in the proposals!**



# Is getting the format right easy?



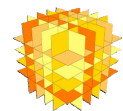
- **Apparently not!**
- **Reasons to reject exercise proposals because of wrong format:**
  - 22x Total submitted
  - 8x Wrong format (not using required headers)
  - 9x Submitted in .doc format, not .pdf
  - 4x Exceeding 12 month project duration
  - 1x Using 10-point font (minimum 11 point)
  - 1x Too narrow margins
  - 3x Exceeding 3-page limit (by up to 12 pages)
- **12 proposals would be rejected without review!**
  - (Not taking into account the .doc files...)



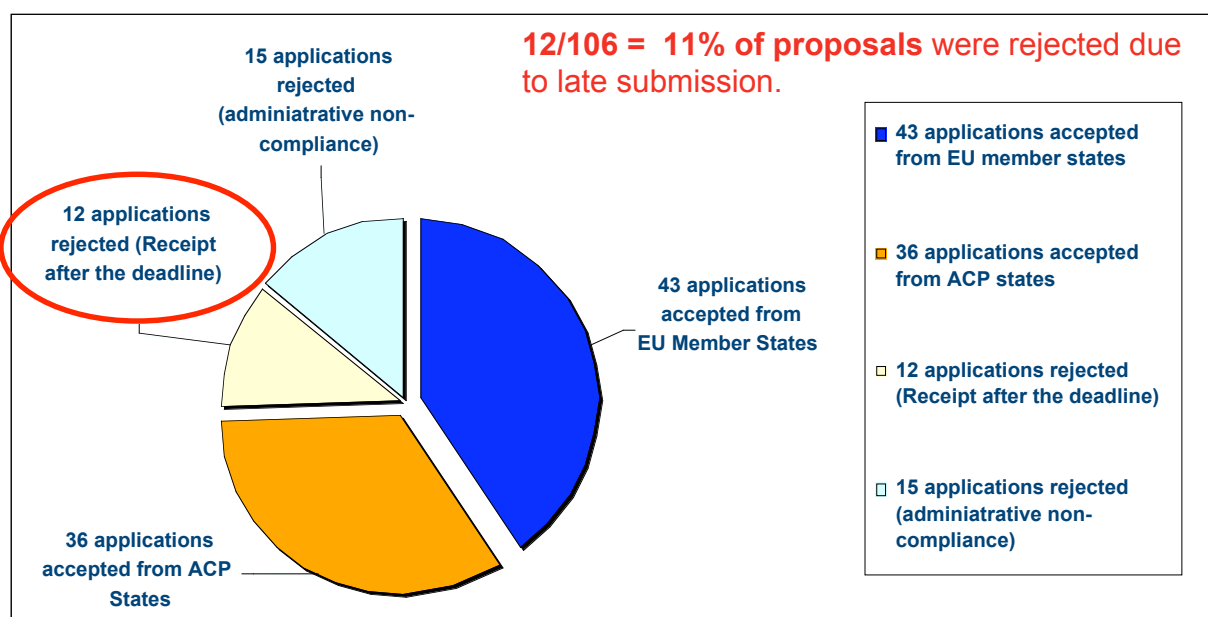
# Deadlines



- Most programs have deadlines: stick to them!
- Plan ahead
  - Collect material from others well ahead, like
    - Signature from head of department
    - Quotes from companies
    - Letters of support, etc.
  - Write your proposal well in time
    - Things fail or crash close to deadlines (printers, network, hard disks, strikes)
    - Allow for time for others to read and check your proposal
    - Servers for uploading may be overloaded just before the deadline

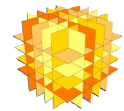
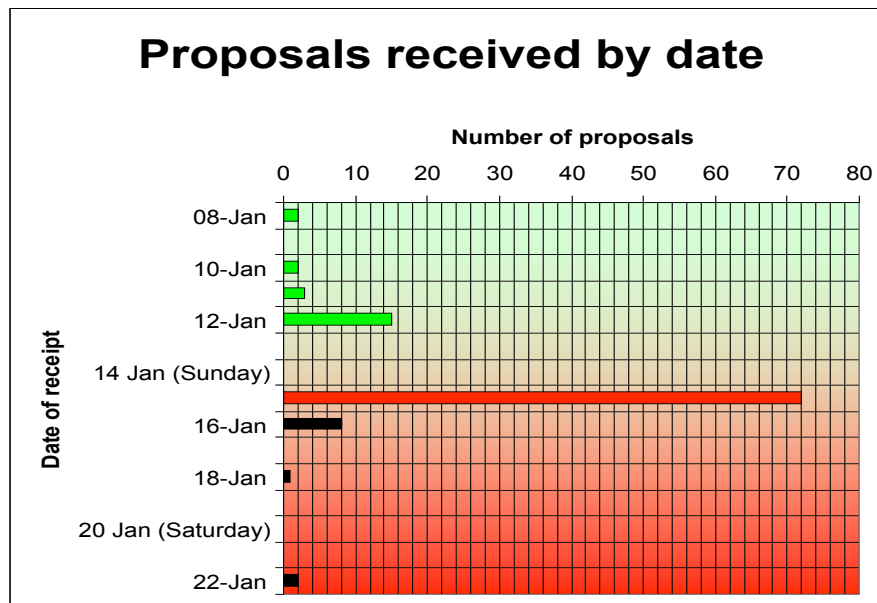


## Opening session and administrative check: Accepted and rejected proposals





# Time table of proposal submission



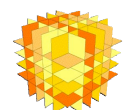
## b) The review



- The review is aimed at assessing the quality of the proposal
  - Reviewers are often specialists, not managers
  - Reviewers advise, but usually do not decide
  - Reviewers are not checked or reviewed
    - They can say what they want
    - There is usually no appealing to unjust reviews



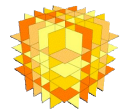
A happy reviewer is a positive reviewer



# Getting a positive review



- Sell your project
  - Convince the reviewer you should be funded
- Address the review and selection criteria
  - What is the program intended for?
  - What are the reviewers asked to assess?
- Make your proposal as pleasant as possible
  - Layout, language, figures, length
- Make it easy for the reviewer to do the review

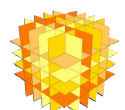


## Sell your project



You have a product that you want to sell

- Three steps in selling a product
  1. Convince the customer that the product is important
  2. Convince the customer that he/she needs to buy the product
  3. Convince the customer to buy the product only from you
- Write the proposal (and each section) with this scheme in mind



## For example

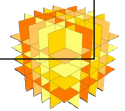


### **The rheology of Eu-silicate composites in crustal deformation**

Eu-silicate composites play a crucial role in the rheology of crustal rocks (Smith 2005, Johnson 2006).....

However, it still remains unknown how Eu controls the recovery of dislocations, and hence the mechanical properties .....

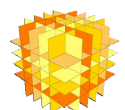
Our research group has developed a new technique to observe dislocations in composites of obscure elements. The Spectral-Ultra-Precision-Electron-Refracton (SUPER) method has so far been applied successfully to Hf composites. This project will now apply the method to Eu-composites, which will ....



## Selection criteria



- **Address the selection criteria**
  - **If they say:** "The XXX-fund aims to develop new measurement methods ..."
  - **You write:** "New measurement methods to be developed in this project are ..."
- **Use the buzz-words the funding agency apparently likes**
  - **If they say:** "Preference is given to highly innovative and intersectorial projects ..."
  - **Make sure you use the terms "innovative" and "intersectorial"**

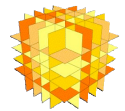


## Review criteria - address them all



### Get the instructions for reviewers

- Reviewers usually get a questionnaire with questions like:
  - Is the timetable realistic?
    - Then make sure you have a timetable
  - Is the project innovative?
    - Then make sure you list innovative aspects
  - Has the applicant addressed possible problems?
    - Then have a section "possible problems and their solutions"
- Remember, most reviewers only read their own instructions, not the instructions for applicants



## State clearly what you want



- Make it crystal-clear what you want
  - What is the scientific aim?
  - What is your approach?
  - What do you want to get?
  - Why are you so good? Etc.
- Use a logical and clear set-up
  - Following instructions of the program, if any
  - Additional section headers, tables and figures
  - Remembering the 3-point sales strategy



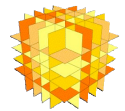
The reviewer should not have to think



# Who reviews and what is important?



- Who will be reviewing the proposal?
  - Specialist scientist or science managers?
  - Adapt your proposal to the expected audience
    - Specialists: more science, less waffle
    - Lay people: less science, more waffle
- Check the weighting of the different criteria, e.g.
  - Quality of the applicant 40%
  - Quality of the host institution 40%
  - Quality of the project 20%
  - Adapt your proposal accordingly, and emphasise what is important



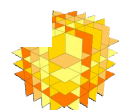
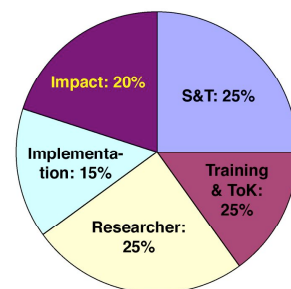
# Check what is important



- (Reviewers') instructions may show what is regarded as important:

The IEF thresholds and weightings for the different criteria are summarized in the table below:

Evaluation Criterion	Weighting (in %)	Threshold
S&T Quality	25	3
Training/Transfer of Knowledge	15	3
Researcher	25	4
Implementation	15	N/A
Impact	20	N/A



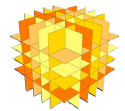
## Be ambitious and realistic



- On the one hand, you must promise to push back frontiers of science
- On the other hand, you must convince the reviewer that you can pull it off
- **Find the right balance**
  - Be ambitious, but also realistic
  - Adapt to the expected reviewers
  - Adapt to the tone of the program
  - Adapt to national customs



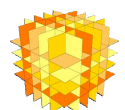
You can never win



## A well presented proposal



- **Most reviewers**
  - Are busy and have other (better) things to do
  - Don't get any reward (money) for their work
- **Be nice to them!**
- **Make sure the proposal is well presented**
  - Agreeable layout
  - Don't use very small fonts or narrow line spacing
  - As short as possible
  - Nice, useful and easy-to-understand figures and tables
  - Well-written; make the proposal interesting to read
  - No mistakes! No spelling mistakes, wrong references, figure numbers, missing information, etc.



# Do not offend the reviewer



The Tübingen Institute is by far the best in world and the only one capable of providing the facilities for my great project ....

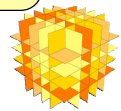
- **WRONG:** The reviewer is not from Tübingen

Nobody has so far successfully modelled ....

- **WRONG:** The reviewer thinks he/she actually did a pretty good job, or knows this one obscure little paper that you have not read ...



**Avoid any potentially offensive statement**



# Please the reviewer

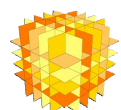


There have been no successful materials science summer schools ...

- **Why not write:**

Despite some excellent summer schools over the past years (Gottstein et al. 2005, Piazzolo et al. 2006)....

- **Consider who may review your proposal (it is a small world)**
  - Cite potential reviewers
  - Acknowledge their work, research labs, etc.



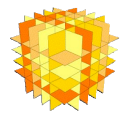
# Show you know your business



- References are normally used to support claims or statements, but they also serve to
  - Show you know the "canon"
  - Suck up to potential reviewers
- Show you know what is happening in the field
  - Acknowledge work of other labs and institutes
  - Make clear you know the state-of-the-art
  - Use the right language/jargon for the research field
  - Set realistic aims



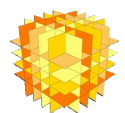
Ignorance often leads to unrealistic or over-ambitious research proposals



# Give the reviewer a chance ...



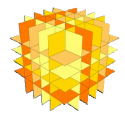
- To be critical
  - A 100% positive review may not be very convincing
  - Try to give the reviewer a chance to make critical, but harmless comments
  - **This is very tricky!**
- To cut your funds
  - A standard question is "can the budget be reduced?"
  - Try to give the reviewer a chance to cut your budget, but again in a harmless way
    - This will make the funding body happy
  - **Avoid doing this too obviously by bloating the budget**



# The ranking



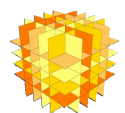
- If you get a positive review, your proposal will probably be ranked
  - You are not the only one with good reviews!
- The ranking is based on
  - The review reports
  - The aims and targets of the funding program
  - Other hidden agendas that may exist
- There is not much you can do to influence this
  - A fresh, original, good proposal helps



# The proposal is ready ...



- Your proposal is (almost) ready, but before you submit:
  - Ask others to read your proposal critically
    - Preferably by someone with review experience
    - Funding bodies or universities sometimes provide a service to check a proposal - use it!
  - Have a detailed checklist to make sure you have not forgotten anything
    - All instructions and requirements of funding program
    - All items on the reviewers' instructions
    - All documents, signatures, etc. from others



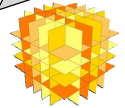
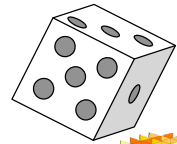
# Submitting the proposal



- When the proposal is really ready, you can submit it
  - Well in time, to avoid problems with mail or upload servers
- In the right format with the right number of copies
  - Check electronic versions after reformatting
    - E.g. PDF or EPS conversions sometimes screw up symbols
  - Avoid colour, since your proposal may be photocopied or printed on BW-printers



***And then ... Good luck!***



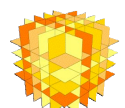
## You failed?



- Almost no program has >50% success rate
  - More likely <5%
- **Rejection is the most likely outcome**
- Carefully read the reviewer report(s)
  - Call the funding body to find out more, if necessary
  - What did you do wrong?
  - How can you improve your next application?



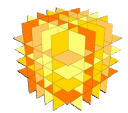
***Don't give up: try again***



# The proposal writing exercise



- Instruction mostly copied from real guidelines (EU)
- Complex and confusing
- Hard to find the right files in a maze of web-pages and PDFs
- Critical information may be hidden and scattered
- A lot of information may (seem) superfluous
- **Main deficiencies:**
  - Way too much science (44% on average)
  - Too specialist for general review panel
  - Non compliance with instructions



# The proposal writing exercise



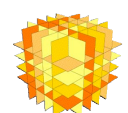
## Part B -Table of Contents

To draft PART B of proposals applicants should take into account the following structure and subheadings.

Proposal length must not exceed 3 pages. (3 exceeded that limit)

	Score	S&T	Training	Researcher	Implementation	Impact
All 22 proposals	3.0	4.1	2.6	3.0	2.4	2.5
14 using right structure	3.7	4.2	3.6	3.8	3.4	3.4
8 not using right structure	1.7	3.8	0.9	1.5	0.7	0.9



- Using the required set-up helps the reviewers to give good marks

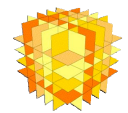




## Deficiencies

### Concept Notes Evaluation:



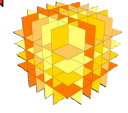
- ❖ The information provided in the concept note did not explain the proposed action in a concise and complete manner.
- ❖ In the concept note, applicants referred to a point that is explained in the application although the application form is not evaluated if the concept note is not selected.
- ❖ The structure and space provided for the concept note and for different sections of the application form was not respected. 
- ❖ Additional and unrequested information was included.
- ❖ Poorly structured application may raise doubts as to the applicants' ability to manage and report on projects. 
- ❖ Poor linguistic quality has often made it difficult for the evaluators to fully understand parts of the application.



## Lessons learnt 1st CfP



### Common reasons for the rejection of applications

- ⊗ **Premature proposal due to lack of time for the preparation**
- ⊗ **Quality of the content**
  - Not responding to the objectives of EDULINK 
  - Too ambitious, not plausible
  - Not clear, not logic, chaotic; text not clearly structured
  - Objectives, methodology, results and costs not clear
  - Text written mainly by "cut and paste"
- ⊗ **Implementation**
  - Weak project consortium, inexperienced project coordinator
  - Inadequate PCM, Logical Framework and Indicators
  - Exorbitant project costs or unbalanced budget
- ⊗ **Impact**
  - No tangible outcomes 
  - Sustainability of the project not sufficient 

# Lessons learnt 1<sup>st</sup> CfP

Some success criteria for your EDULINK Proposal



- ☺ **Follow strictly the rules and provisions of the Call for Proposals**
- ☺ **Find a good title for your project**
- ☺ **Draft a convincing Concept Note**
- ☺ **Describe a convincing background of your project**
- ☺ **Identify clear objectives, methods, results**
- ☺ **Develop a well-structured work plan**
- ☺ **Compose a convincing consortium**
- ☺ **Make sure to have an appropriate project cycle management**
- ☺ **Calculate a realistic budget**
- ☺ **Use good quality language**
- ☺ **Have a clear text structure**

