Horizon 2020 programhoz kapcsolódó értékelői tapasztalatok

Dr. Bulkai Dénes – Elnök, ArchEnerg Klaszter

Horizon 2020

The EU Framework Programme for Research and Innovation

2014-2020

Research and Innovation

What is Horizon 2020

➢ Nearly €80 billion euro research and innovation funding programme (2014-2020)

➢ A core part of Europe 2020, Innovation Union & European Research Area:

- **Responding to the economic crisis** to invest in future jobs and growth

- **Addressing people's concerns** about their livelihoods, safety and environment

- **Strengthening the EU's global position** in research, innovation and technology

A H2020 az EU €1,717 milliárdos költségvetésének mindössze 4.7%-a
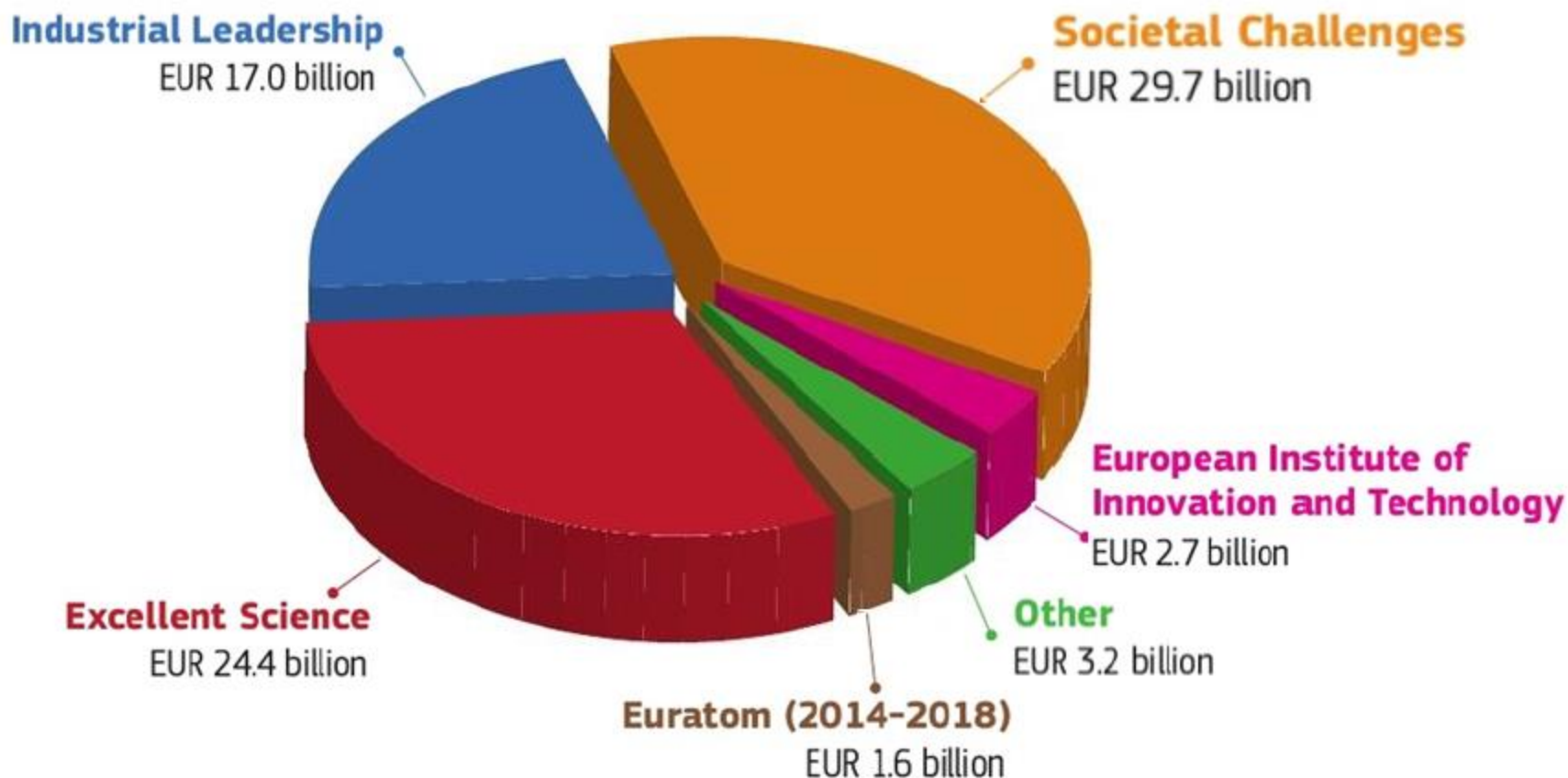
EU 2020 egyéb programjai:

- €455 B Civil Protection and European Emergency Response Capacity, (26%)

- €376 B Cohesion Fund, (22%)

- €321 B Overseas Aid Programmes, (19%)

- €281.8 B Common Agricultural Policy, (16%)

- €89.9 B Rural Development, (5%)

- €80 B H2020 (4.7%)

- €40 B Infrastructure Development (2.3%, energy, transport, ICT)

- 6 db egyéb kisebb program, €73 B (5%)

Three priorities

1. **Excellent science**

2. **Industrial leadership**

3. **Societal challenges**

HORIZON 2020 BUDGET

Industrial Leadership
EUR 17.0 billion

Societal Challenges
EUR 29.7 billion

**European Institute of
Innovation and Technology**
EUR 2.7 billion

Excellent Science
EUR 24.4 billion

Other
EUR 3.2 billion

Euratom (2014–2018)
EUR 1.6 billion

European
Commission

Priority 1. Excellent science

2014-2020: €24.4 B

European Research Council Frontier research by the best individual teams	*13 095*
Future and Emerging Technologies Collaborative research to open new fields of innovation	*2 696*
Marie Sklodowska-Curie actions Opportunities for training and career development	*6 162*
Research infrastructures *(including e-infrastructure)* Ensuring access to world-class facilities	*2 488*

Priority 2. Industrial leadership

2014-2020: € 17 B

Leadership in enabling and industrial technologies (ICT, nanotechnologies, materials, biotechnology, manufacturing, space)	*13 557*
Access to risk finance Leveraging private finance and venture capital for research and innovation	*2 842*
Innovation in SMEs Fostering all forms of innovation in all types of SMEs	*616 complemented by expected 20% of societal challenges + LEIT and 'Access to risk finance' with strong SME focus*

Priority 3. Societal challenges

2014-2020: €31 B

Health, demographic change and wellbeing	7 472
Food security, sustainable agriculture & forestry, marine/maritime/water research, bioeconomy	3 851
Secure, clean and efficient energy*	5 931
Smart, green and integrated transport	6 339
Climate action, environment, resource efficiency and raw materials	3 081
Inclusive, innovative, reflective societies	1 310
Secure societies	1 695
Science with and for society	*462*
Spreading excellence and widening participation	*816*

Additional €1 788m for nuclear safety and security from the Euratom Treaty activities (2014-2018). Does not include ITER.

Societal Challenges
EUR 29.7 billion

	Budget 2014-20 (EUR billion)
1. Health, demographic change and wellbeing	7.5
2. Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the Bioeconomy	3.9
3. Secure, clean and efficient energy	**5.9**
4. Smart, green and integrated transport	6.3
5. Climate action, environment, resource efficiency and raw materials	3.1
6. Inclusive, innovative and reflective societies	1.3
7. Secure societies	1.7

Secure, clean and efficient energy

Call	2015 (M€)
Energy Efficiency	**101**
Smart Cities and Communities	107
Competitive Low-Carbon Energy	377
SME Instrument	35
Fast Track to Innovation	14
Other actions (e.g. tenders)	58

European Commission

☞ Secure, clean and efficient energy

Call	2015 (M€)
Energy Efficiency	101

Types of action?

Research & innovation
actions that establish new knowledge or develop more energy-efficient technologies and solutions.

EU funding rate: 100%.

Innovation
actions that demonstrate the viability of new technologies and solutions or support their first deployment in the market.

EU funding rate: 70%.

Coordination & support
actions* that improve skills, mobilise large-scale investments or facilitate EU policy implementation.

EU funding rate: 100%.

European Commission

☞ **Secure, clean and efficient energy**

Call	2015 (M€)
Energy Efficiency	101

Funding areas?

Buildings & Consumers

Heating & Cooling

Industry & Products

Finance for Sustainable Energy

As of 17 August 2015, the following countries are Associated to Horizon 2020:

- **Iceland**
- **Norway**
- **Albania**
- **Bosnia and Herzegovina**
- **the former Yugoslav Republic of Macedonia**
- **Montenegro**
- **Serbia**
- **Turkey**
- **Israel**
- **Moldova**
- **Switzerland** (partial association)
- **Faroe Islands**
- **Ukraine** (Given that the EU does not recognize the illegal annexation of Autonomous Republic of Crimea and the City of Sevastopol, under the terms of the Horizon 2020 Association Agreement with Ukraine, legal persons established in the Autonomous Republic of Crimea or the city of Sevastopol are not eligible to participate. Should the illegal annexation of the Autonomous Republic of Crimea and the City of Sevastopol end, the Agreement will be revised accordingly.)

Note that, unlike in FP7, **Liechtenstein** does not intend to associate to Horizon 2020.

Simplification: Rules for Participation

1. A single set of rules
- Adapted for the whole research and innovation cycle
- Covering all research programmes and funding bodies
- Aligned to the Financial Regulation, coherent with other new EU Programmes

2. One project – one funding rate
- Maximum of 100% of the total eligible costs (except for actions close to market, where a 70% maximum will apply)
- Indirect eligible costs: a flat rate of **25%** of direct eligible costs
- Lump sum, flat rate, unit cost become broadly used

3. Simple evaluation criteria
- Excellence – Impact – Implementation

4. New forms of funding aimed at innovation:
— pre-commercial procurement,
— inducement prizes,
— dedicated loan and equity instruments

Simplification: Rules for Participation

5. Fewer, better targeted controls and audits

Audit strategy focused on risk and fraud prevention

Lowest possible level of requirements for submission of audit certificates without undermining sound financial management (€ 325,000 +)

6. Simpler rules for grants: broader acceptance of participants accounting practices for direct costs, flat rate for indirect costs, no time-sheets for personnel working full time on a project, possibility of output-based grants

7. Improved rules on intellectual property

–Balance between legal security and flexibility

–Tailor-made IPR provisions for new forms of funding

–A new emphasis on open access to research publications

Beyond the Rules: further simplified provisions in the Grant Agreement and implementing procedures to facilitate access to Horizon 2020 (e.g. common IT platform).

Simplification: Summary

– Single set of simpler and more coherent participation rules

– New balance between trust and control

– Moving from several funding rates for different beneficiaries and activities to just two

– Replacing the four methods to calculate overhead or «indirect costs» with a single flat rate

– Major simplification under the forthcoming financial regulation

– Successful applicants to get working more quickly: reduction of average time to grant by 100 days (current average of around 350 days under FP7)

Intellectual & Property Rights

- EC does not interfere – *normally!*
- Reflects value of planned work and of proposal (CR3)
- Invaluable help when problems occur
- Has legal basis in the FP
(FP, SP, RfP, Grant Agreement!)

Foreground: all results of the project (incl. inventions, software, databases, ...) and attached rights

Background: (previous) information and its attached rights

Access Rights: licences and user rights

Intellectual & Property Rights

Default IPR regime:

Ownership of FOREGROUND resides with the beneficiary carrying out the work generating it

FOREGROUND MUST be used and disseminated; FOREGROUND capable of industrial application MUST be protected

Prior notice of any dissemination activity at least 45 days only to other participants

Free IPR advice: http://www.ipr-helpdesk.org

FP Helpdesk http://ec.europa.eu/research/enquiries

Good practice in proposal writing

- **Milestones** indicate the *adequacy* of progress at key achievement points. Should be limited in number, supported by explicit deliverables and criteria for acceptance (indicators and targeted values). As far as possible, synchronized with reporting periods.

- **Deliverables** indicate the *achievements*. Should be limited in number. NO task should remain without concluding in a deliverable! Deliverables must be *specific* and *verifiable*, with brief but comprehensive *description* of their planned contents.

- Estimated **PMs** *(person month)* **for tasks/deliverables** will need to be indicated; but at proposal level, YOU find the balance.

Good practice in proposal writing

- If possible, specify when and where periodic **reviews** would be best held – and why. Whenever possible, deliverables and milestones should be timed to be completed before a review.

- Foresee **specific feedback loops** and iterations in the development workflow.

- Provide key data on **validation phases** such as location, number of users/nodes, etc. Clarify the (ICT, hardware etc) infrastructure or target group requirements for the validation. Pilot testing / validation should start in time to enable feedback into the development / engineering phases.

Good practice in proposal writing

- Define **objectives SMART** (Specific, Measurable, Accurate, Realistic, Timed)

- At the description of **partners** indicate not only their expertise but also their **role in the Project**, and if possible, which particular persons will do the work.

- Indicate which specific standardization **working groups** or stakeholder groups the project will participate in, and how.

- Do not overlook possible **ethical/regulatory hurdles** like privacy, data protection, etc.

- Include an inventory of technical **abbreviations**.

- Avoid subcontracting if possible.

Basic principles

Co-funding: achieved via the flat-rate funding of indirect costs

Principle of excellence: continue to allocate funding on the basis of competitive calls, selecting only the best projects. Criteria remain: 1. Excellence 2. Impact 3. Implementation

European relevance (minimum participation, impact, etc)

Division of scope: between cohesion policy and Horizon 2020.

- Cohesion policy - support for regions in building up their research and innovation capacity.

- Horizon 2020 - widen participation, better coordination between funding programmes, support policies.

Role of independent experts

- As an independent expert, you evaluate proposals submitted in response to a given call

- Expert evaluators: to ensure that only proposals of highest quality are selected

- Significant funding decisions will be made on the basis of your assessment

- You are responsible for carrying out the evaluation of the proposals yourself
  - You are not allowed to delegate the work to another person!

- You must close reports in the electronic system within a given deadline
  - This is part of your contractual obligations!
  - The allowance/expenses you claim may be reduced or rejected otherwise

European Commission

Guiding principles

- **Independence**
  - You are evaluating in a personal capacity
  - You represent neither your employer, nor your country!

- **Impartiality**
  - You must treat all proposals equally and evaluate them impartially on their merits, irrespective of their origin or the identity of the applicants

- **Objectivity**
  - You evaluate each proposal as submitted; meaning on its own merit, not its potential if certain changes were to be made

- **Accuracy**
  - You make your judgment against the official evaluation criteria and the call or topic the proposal addresses, and nothing else

- **Consistency**
  - You apply the same standard of judgment to all proposals

European Commission

Confidentiality

You must:

- **Not discuss evaluation matters**, such as the content of proposals, the evaluation results or the opinions of fellow experts, with anyone, including:
  - Other experts or Commission/Agencies staff or any other person (e.g. colleagues, students...) not directly involved in the evaluation of the proposal
  - *The sole exception*: your fellow experts who are evaluating the same proposal in a consensus group or Panel review

- **Not contact partners in the consortium, sub-contractors or any third parties**

- **Not disclose the names of your fellow experts**
  - The Commission publishes the names of the experts annually - as a group, no link can be made between an expert and a proposal

- **Maintain the confidentiality of documents**, paper or electronic, at all times and wherever you do your evaluation work (on-site or remotely)
  - Please take nothing away from the evaluation building (be it paper or electronic)
  - Return, destroy or delete all confidential documents, paper or electronic, upon completing your work, as instructed

European Commission

Conflicts of interest (COI) (1)

You have a COI if you:

- were involved in the preparation of the proposal

- stand to benefit directly/indirectly if the proposal is successful

- have a close family/personal relationship with any person representing an applicant legal entity

- are a director/trustee/partner of an applicant or involved in the management of an applicant's organisation

- are employed or contracted by an applicant or a named subcontractor

- are a member of an Advisory Group or Programme Committee in an area related to the call in question

- are a National Contact Point or are directly working for the Enterprise Europe Network

European Commission

Conflicts of interest (COI) (2)

In the following situations, the Commission/Agency will decide whether a COI exists:

- Were employed by an applicant or sub-contractor in the last 3 years
- Were involved in a grant agreement/decision, the membership of management structures or a research collaboration with an applicant in the last 3 years
- Are in any other situation that casts doubt on your impartiality or that could reasonably appear to do so

COI conditions are spelled out in your <u>contract</u>, and in the Code of Conduct (Annex 1)

Conflicts of interest (COI) (3)

- **You must inform the Commission/Agency as soon as you become aware of a COI**
  - Before the signature of the contract
  - Upon receipt of proposals, or
  - During the course of your work
- **If there is a COI for a certain proposal you cannot evaluate it**
  - Neither individually
  - Nor in the consensus group
  - Nor in the panel review
  - The Commission/Agency will determine if there is a COI on a case-by-case basis and decide the course of action to follow
- **If you knowingly hide a COI, you will be excluded from the evaluation and your work declared null and void**
  - The allowance/expenses you claimed may be reduced, rejected or recovered
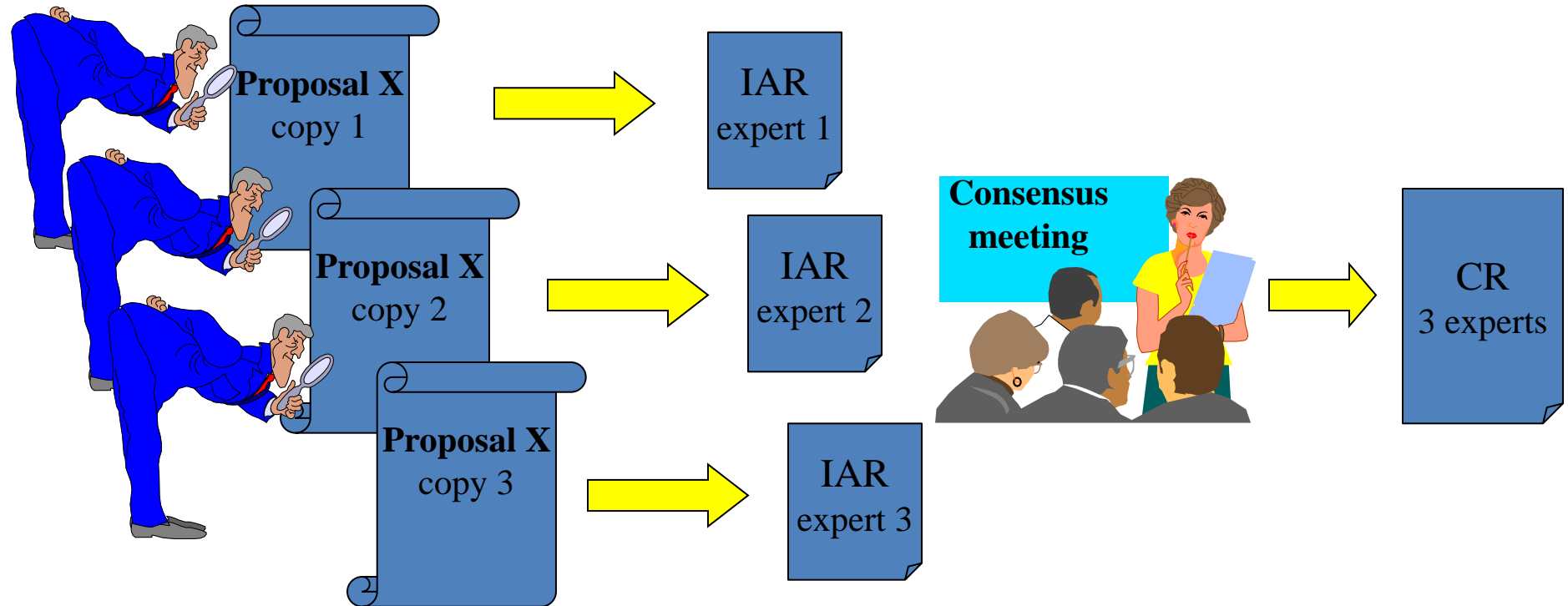 - Your contract may be terminated

European Commission

Proposal Evaluations

Note: There may be more than 3 evaluators

IAR/IER=Individual assessment report
CR=Consensus Report

Admissibility and eligibility checks

- **Admissibility is checked by the Commission/Agency:**

  - Readable, accessible and printable

  - Completeness of proposal
    presence of all requested forms

  - Inclusion of a draft plan for exploitation and dissemination
    of results (unless otherwise specified in the WP)

  Page limits: Clearly set out in electronic system; excess page(s) marked with a watermark

- **Eligibility checked by the Commission/Agency - however, if you spot an issue relating to eligibility, please inform the Commission/Agency**

  - Minimum number of partners as set out in the call conditions

  - Other criteria may apply on a call-by-call basis as set out in the call conditions

- **"Out of scope" – you need to check if the content of a proposal corresponds, wholly or in part, to the description of the call or topic**

  - A proposal will only be deemed ineligible in clear-cut cases

European Commission

What are the benefits?

- Long-term **commitments** and **strategies**

- Enhanced **synergies** between **research** and **industry**

- Increased **efficiency**

- Covering **whole value chain** and interrelated sectors

- High level **industrial** and **SME participation**

- Expanding **technological competencies and skills**

- Shortening **time to market**

European
Commission

Evaluation criteria

- **There are three evaluation criteria:**

  - Excellence (relevant to the description of the call or topic)

  - Impact

  - Quality and efficiency of the implementation

- **The criteria are adapted to each type of actions, as specified in the WP**

European Commission

Proposal Evaluation Aspects

1. EXCELLENCE

- Clarity and pertinence of the objectives;

- Credibility of the proposed approach;

- Soundness of the concept, including trans-disciplinary considerations, where relevant;

- Extent that proposed work is ambitious, has innovation potential, and is beyond the state of the art (e.g. ground-breaking objectives, novel concepts and approaches).

Proposal Evaluation Aspects
2. IMPACT

- The expected impacts listed in the work programme under the relevant topic;

- Enhancing innovation capacity and integration of new knowledge;

- Strengthening the competitiveness and growth of companies by developing innovations meeting the needs of European and global markets, and where relevant, by delivering such innovations to the markets;

- Any other environmental and socially important impacts;

- Effectiveness of the proposed measures to exploit and disseminate the project results to communicate the project, and to manage research data where relevant.

Proposal Evaluation Aspects

3. Quality and efficiency of the implementation*

- Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources;

- Complementarity of the participants within the consortium (when relevant);

- Appropriateness of the management structures and procedures, including risk and innovation management.

* Experts will also be asked to assess the operational capacity of applicants to carry out the proposed work.

Interpretation of the scores

0   The proposal **fails to address the criterion** or cannot be assessed due to missing or incomplete information.

1   **Poor.** The criterion is inadequately addressed, or there are serious inherent weaknesses.

2   **Fair.** The proposal broadly addresses the criterion, but there are significant weaknesses.

3   **Good.** The proposal addresses the criterion well, but a number of shortcomings are present.

4   **Very Good.** The proposal addresses the criterion very well, but a small number of shortcomings are present.

5   **Excellent.** The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.

Proposal scoring

- **You give a score of between 0 and 5 to each criterion based on your comments**
  - Half-marks can be used
  - The whole range of scores should be used
  - Scores must pass thresholds if a proposal is to be considered for funding

- **Thresholds apply to individual criteria...**
  For the Energy Efficiency Call, the threshold is **3**

- **...and to the total score**
  For the Energy Efficiency Call, the overall threshold is **10**

Commission

Általános hibák

- Kilencből egy pályázatot úgy adnak be, hogy nincs befejezve
- Kilencből kettőben számszaki hibát hagynak
- Ne legyen ellentmondás az anyagban
- Előfordul, hogy minden jelentést bizalmasként akarnak kezelni
- A munkatervben olyan adatgyűjtésre fordítanak időt, aminek már rendelkezésre kellene állnia

Tudatosan épüljön fel a konzorcium

- Az szakterületek megoszlása legyen kiegyensúlyozott (pl. tudós, iparos, pénzügyes)

- Legalább másfél oldalt írjunk arról milyen koncepció szerint, kit miért választottunk, mit fog csinálni, stb. (pl. mert 30 éves tapasztalata van bizonyos szakterületen)

- Egy konzorcium kialakításához fél évre van szükség, fel kell építeni bizalmat, személyes ismeretséget

- Ne forduljon elő, hogy egy 8 tagú konzorcium 5 tagja csak a munka 10%-át végzi

Ne veszítsünk pontot a munkaprogram hiányosságai miatt

- Projekt management sablonos szöveg, előre megírható

- A technikai szakértői rész is legyen közérthető

- 'Dissemination Plan', 'Stakeholder Assessment & Engagement' előre elkészíthető

- 'Risk Assessment' 'Mitigation Plan' ki szokott maradni, pedig egyszerűen elkészíthető

Hogyan tervezzük a pályázatot?

- Legyen kész a koncepció és a konzorcium mire megjelenik a kiírás
- Nem érdemes kiadni pályázatírónak, legfeljebb minőségbiztosítási szempontból
- A pályázatot nem kell perfekt angolul írni, de a kiírásban szereplő célkitűzésekre pontosan kell hivatkozni
- A projekt management is legyen a konzorcium tagja, de a költségeknek maximum 10 %-a.

Néhány apróság

- Elfogadható PM €6k-€9k, általában €7k-€8k; ha €3k, akkor gyanús, ha €14k elfogadhatatlan

- Legyen minden dokumentálva, még a telefonbeszélgetésekről is készüljön emlékeztető

- 'Gender balance' nem pontozzák, mégis díjazzák. Emeljük ki, ha a munkatársak fele nő. Említsük meg, hogyha csak 30%, de törekszünk az arány növelésére és ne pályázzunk csak férfiakból álló csapattal.

Köszönöm szépen!

Dr. Bulkai Dénes

Klaszter elnök

elnok@archenerg.eu

H-6721 Szeged, Vadász utca 5
Tel: +36-62/640-420
Fax: +36-62/553-345

Mobil: +36-30-654-7984