

SIXTH FRAMEWORK PROGRAMME FOR RESEARCH AND DEVELOPMENT

ECCREDI POSITION PAPER ON THE EVALUATION OF THE NEW INSTRUMENTS (MARIMON REPORT) – November 2004

1.0 Executive Summary

ECCREDI broadly welcomes the results and recommendations contained in the “Marimon Report”. Its timing is particularly pertinent in the light of the disastrous results recently recorded by the construction sector for proposals submitted under “Priority 3 NMP”. This has largely come about as a result of massive over subscription to a programme that has been dramatically under funded. For the construction sector, the losses in terms of wasted efforts and the consequential catastrophic results have given rise to a potential crisis of confidence in the present and future framework programmes.

Compared to its share in GDP, the construction sector has, over the years, obtained what can best be described as a “negligible” share of the Commission’s framework programmes for R&D (approximately between 1,7% up to 3% in FP4 and FP5) that has fallen dramatically under FP6 to just 0.3% to date. This low rate of participation, accentuated by a dramatic fall under FP6 remains a matter of on-going concern.

European framework programmes are more visible and better funded than the national programmes, most of which cater for politically low-profile subjects. Candidates submitting proposals in those sectors lacking a dedicated programme and providing for the vast majority of industry, are obliged to focus on “Priority 3 NMP” of the FP with the result that almost all candidates are turned away. This in turn implies an enormous, and in the light of past experience with earlier framework programmes, in large measure foreseeable waste of resources when considering the amounts invested by all candidates in preparing their proposals compared to the amounts actually granted to the fortunate few.

Many of the industry sectors involved, apart from being numerous are also large, but the programmes are failing to attract much needed industrial participation especially by SMEs. Construction SMEs, apart from specialists and materials suppliers, very seldom perform RTD and are rarely innovative since the nature of their activities rarely requires it. Moreover, industrial integration with few market leaders is good for SMEs.

As concerns the reports Recommendations:

- ECCREDI agrees that the concept of 'one size fits all' should not be applied across all thematic areas and Instruments. Europe’s aeronautics sector for instance had an annual turnover of about 65 billion € in 1999 and attracted 5 IPs of 48 million € each. Construction is a 900 billion € industrial sector (without materials) with a highly fragmented process and a complex supply chain. For sure, the concept of critical mass is even more important and several IPs over 37 million € are needed. This is why ECCREDI believes that a sectoral approach to RTD is absolutely vital and hopes that this will emerge following the establishment of a European Technology Platform for construction.
- The difference between IPs and STREPs is still not really clear. The main visible difference is in terms of size of both projects and partnerships. But the true difference should be in terms of integration and non-integration. Both are needed even for the construction sector. However, in ECCREDI’s opinion, the question of critical mass to see real benefits for a community of 1.8 million stakeholders advocates more IPs than STREPS. STREPS are adequate in terms of applied research to develop products and processes essentially focussed on a particular need and market segment coming from specialised contractors or supplier stakeholders.
- The recommendation that the portfolio of instruments for collaborative research should be designed and developed to enhance co-ordination and collaboration with other forms of public and private funding across the European Union is crucial in order not to waste scarce national resources of each

and every country. But this requires a strong political signal to both the Commission and the national governments in order that the Member States really coordinate their financing policies with single entry point procedures. This would also be highly effective should all or most countries adopt "mirror" Technology Platforms to coordinate their own RTD funding systems.

- ECCREDI welcomes the concept of the 2-step approach that should act as a "Go/No Go" gate, but believes nonetheless that the input required in Step 1 is excessive and correspondingly that for Step 2, too little.
- As concerns the evaluation of proposals in Step 1, ECCREDI regrets that the scientific officers responsible invariably stand behind the experts' report however wrongly worded or poorly substantiated, thus denying the candidate any opportunity for a face to face discussion with the panel of experts.
- Audits costs are not the same as management costs and the latter should cover the overall coordination and administrative costs needed to manage a consortium. This limit should be increased from 7% to 10%.
- As suggested in the Report, it is advisable to separate within the Commission's structures, those employees responsible for policy-making and those in charge of implementation.
- ECCREDI also agrees with the report that subcontracting rules under IPs are too rigid.
- Budget cuts during contract negotiation should always be justified.
- Further simplification is needed to provide for projects, valued on a general cost-based form, to be given enough flexibility regarding the final allocation of expenses.

2.0 Background

Total construction output in 2003 (EU 15) amounted to an estimated 910 billion € or about 9,8% of GDP, accounting for 51,2% of gross fixed capital formation. The construction industry consists of an estimated 1,8 million enterprises of which 97% are SMEs with fewer than 20, and 93% with fewer than 10 operatives. There are an estimated 11,7 million operatives accounting for 7,1% of Europe's total employment, making the construction industry – with 28,5% of industrial employment - Europe's largest industrial employer.

Compared to its share in GDP, the construction sector has over the years, obtained what can best be described as a "negligible" share (approximately between 1,7% up to 3% in FP4 and FP5 but just 0.3% to date under FP6) of the Commission's framework programmes for research and development. This low rate of participation remains a matter of on-going concern.

ECCREDI congratulates the Commission on its initiative to evaluate the effectiveness of the new instruments in the 6th Framework Programme through undertaking the "Marimon Report" and broadly welcomes its results and recommendations. Its timing is particularly pertinent in the light of the disastrous results recently recorded by our sector (as well as many others), for proposals submitted under "Priority 3 NMP". This has largely come about as a result of massive over subscription to a programme that has been dramatically under funded. For the sectors affected, the losses in terms of wasted efforts and the consequential catastrophic results have given rise to a potential crisis of confidence in the present and future framework programmes that – even if matters improve – will not be forgotten for many years to come. Furthermore, there is a widespread perception that one of the overall effects of the introduction of the new instruments into the 6th Framework Programme is to favour the larger players in the more concentrated sectors (e.g. aeronautics; automobiles) at the expense of smaller players in less concentrated sectors such as construction. The prevailing and somewhat demoralising view is, that this tendency will continue under FP7.

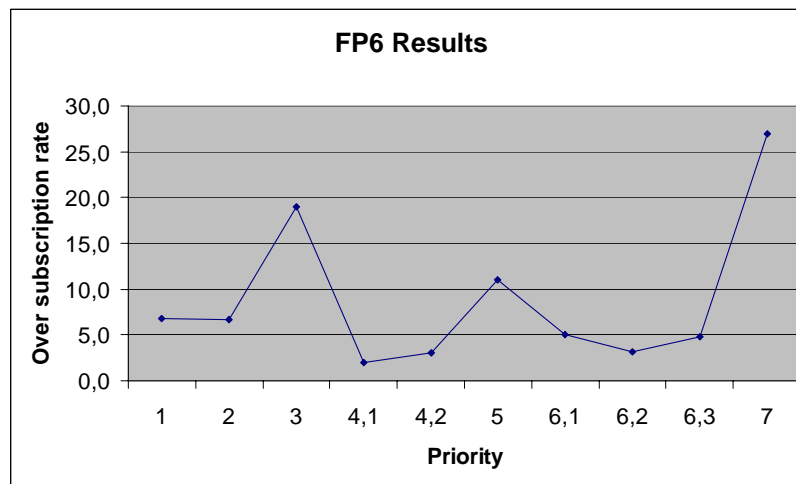
3.0 Some considerations on statistics

One of the interesting aspects of the report are the tables of statistics developed by DG Research concerning the first FP6 calls. Some of these are presented below and grouped in such a way as to make comparisons between the various priorities dealing exclusively with the Integrated Projects (IP).

	A	B	C	D	E	F	G	H	I	J	K
1	Priority	1	2	3	4,1	4,2	5	6,1	6,2	6,3	7
2	Designation	Life Science	IST	NMP	Aeronautics	Space	Food safety	Sustainable energy	Surface transport	Global Change	Governance
3	Fin. Oversubscription rate	6,8	6,7	19,0	2,0	3,0	11,0	5,0	3,2	4,8	27,0
4	Industrial participation	11,0%	39,0%	32,0%	62,0%	25,0%	12,0%	36,0%	48,0%	7,0%	0,0%
5	SME participation	11,0%	19,0%	20,0%	18,0%	20,0%	18,0%	17,0%	15,0%	7,0%	0,0%
6	retained	42	67	21	5	3	6	21	11	8	2
7	value	18,2	26,7	37	48	21	26	?	34	22	5,5
8	rejected above threshold	20	0	17	0	0	8	9	3	8	6

The graphic below visually demonstrates the results of the financial over-subscription rate (grant requested by all projects submitted compared to grant actually awarded), the participation rate of the various industrial sectors as well as SMEs, the number of projects accepted and rejected even although having passed the thresholds (meaning they were good in the opinion of the calls evaluation experts), and finally the mean value of accepted projects.

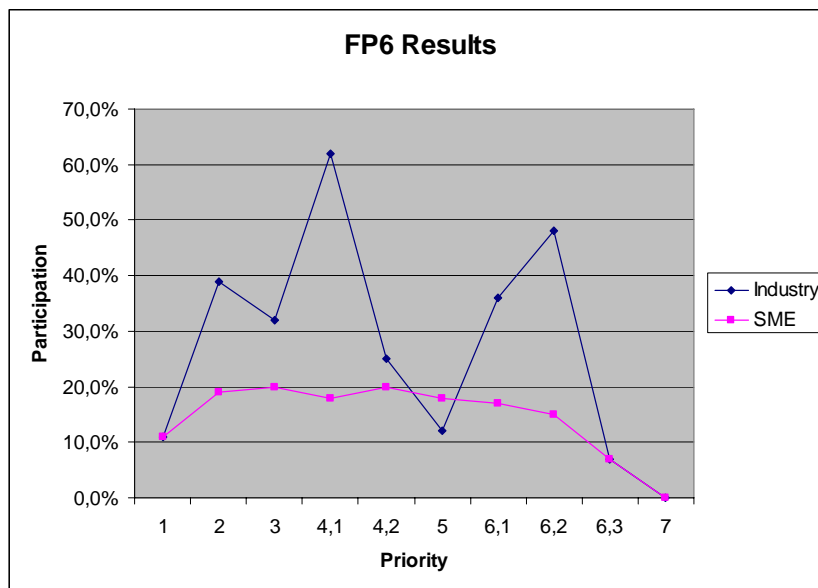
It can be seen immediately that the “Priority 3 NMP” shows very different results when compared to the other priority areas.



It is immediately apparent that Priorities 5: “Food Safety” and 7: “Citizen and Governance” are special in that they do not really support a large private sector. Their key stakeholders are public bodies and authorities. The over-subscription rate for NMP on the other hand is 3 to 6 times higher than for any other priority backed up by large private interests and industry. This is often perceived as a measure of the success of the programmes by the Commission’s officers. ECCREDI believes that an over-subscription of this magnitude is rather a measure of the inadequacy of the programmes to really respond to industry’s needs resulting in a manifest squandering of resources in terms of time wasted bidding for funds that for all practical purposes barely exist. It is also apparent that in contrast to Priority 3, Priorities 1: “Life Science”, 2: “IST”, 4.1: “Aeronautics”, 4.2: “Space”, 6.1: “Energy”, 6.2: “Surface Transport” are all sector oriented. Priority 3 therefore constitutes a totally inadequate provision for the very numerous projects that are not supported by any specific priority allocation of funding.

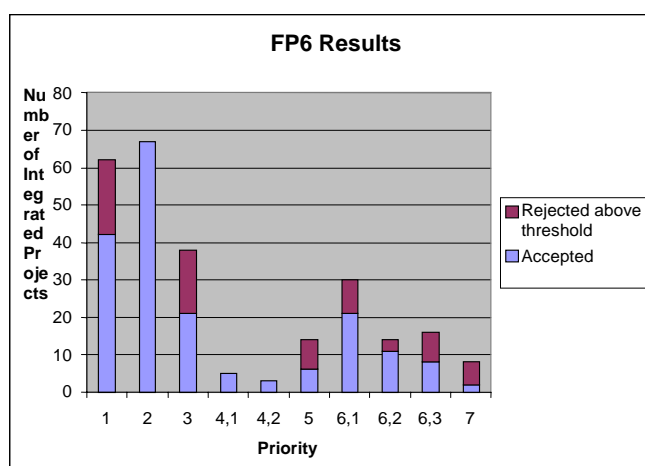
One can also observe another vicious effect: European framework programmes are the most visible as well as being better funded RTD programmes when compared with the national programmes all of which cater for the “non-sexy” subjects as compared to the more “sexy” ones easily explained to the public and the politicians (e.g. life sciences, IST, aeronautics, etc.). Candidates submitting proposals in these “bulk” sectors providing for the vast majority of industry are obliged to focus on “Priority 3 NMP” of the FP with the result that almost all participants have to be turned away, (an over-subscription rate of 19 implies that just 1 out of 19 was successful and that 95% of candidates were rejected). It further implies an enormous and scandalous waste of resources when considering the amounts invested by all candidates in preparing their proposals compared to the amounts actually granted to the fortunate few. It has been estimated that the total value of the wasted resources probably equals or even exceeds the total value of the grants ultimately disbursed to the successful candidates! This is “competition for funding gone mad”

and EU research funds, rather than contributing to the Lisbon objectives and the 3% target of GDP for research, has manifested itself in the form of a dog eating his own tail!

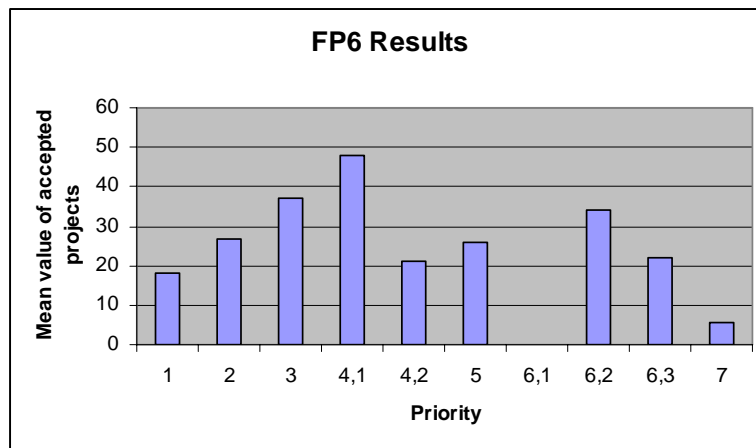


It is no wonder that industry and SME participation is low in priorities 5: “Food Safety”, 6.3: “Global Change” and 7: “Citizen Governance”. It is also low in “Life Sciences” and this may be a problem in a sector where biotechnologies have seen so many start-ups taking off the ground. For the other priorities the rate of participation of SMEs is consistently around 18-20 % which appears to be generally acceptable for Integrated Projects. SMEs may not play a leading role in such projects but one can observe that they participate above the target of 15% fixed by the Parliament. “Aeronautics” and “Surface Transport” are very concentrated industries. Nevertheless this does not prevent SMEs participating at a reasonable level, and serves to raise the overall participation of the industry. Again the performance of NMP is of concern. Many of the industry sectors involved, apart from being numerous, are large but it is failing to attract much needed industrial participation especially by SMEs. Unfortunately, detailed statistics within NMP are not available. However, as far as ECCREDI IS aware, construction SMEs, apart from specialists and materials suppliers, very seldom perform RTD and are rarely innovative since the nature of their activities rarely requires it.

Nevertheless, we cannot conclude that IPs work against the interests of SMEs. Indeed, industrial integration with few market leaders is good for SMEs.



The graphic shown above again illustrates the inefficiency and wastefulness of the FP6 system when applied to NMP. Indeed, almost as many projects that are accepted are rejected although they have been rated “good” (all thresholds passed).



Europe's aeronautics sector had an annual turnover of about 65 billion € in 1999 and attracted 5 IPs of 48 million € each. One can certainly assume that Europe achieved its critical mass in supporting this highly concentrated industry (0.3%). Construction is a 900 billion € industrial sector (without materials) with a highly fragmented process and a complex supply chain. For sure, the concept of critical mass is even more important and at least several IPs over 37 million € are needed.

4.0 Detailed commentary on the recommendations contained in the report

There are twelve recommendations as follows:

1. The New Instruments introduced in FP6 are a powerful means to foster transnational collaborative research in the European Research Area. The New Instruments should be maintained in FP7. There are however many design and implementation aspects that need to be improved, possibly already during FP6.

Comments: None further necessary.

2. The European Commission should clearly classify instruments according to the goals to which they are expected to contribute, establish clear guidelines and criteria for their use and communicate them to the participants to help them prepare their proposals.

Comments: Done since first calls.

3. The European Commission should specify the portfolio of Instruments available on the strategic objectives. Participants should define the specific research objective they will pursue and why this can best be met by the Instrument they have chosen.

Comment: Done since first calls.

4. "Critical mass" depends on the topic, the thematic area, the participants and the potential impact and added value. The concept of 'one size fits all' should not be applied across all thematic areas and Instruments. Participants should justify in their proposal the way they have built their consortium to reach the adequate critical mass.

Comment: This is certainly true, as already mentioned above in our comments on critical mass for the construction sector. This further justifies a sectoral approach.

5. Networks of Excellence should be designed as an instrument to cover different forms of collaboration and different sizes of partnerships.

Comment: None since this refers to NoE.

6. The concept that Integrated Projects are primarily concerned with delivering new knowledge and competitive advantage to European industry needs to be emphasised. As Integrated Projects and STREPs have many common characteristics, the difference between these Instruments should be clarified.

Comment: The difference is still not really clear. The main visible difference is in terms of size of both projects and partnerships. But the true difference should be in terms of integration and non-integration.

7. A greater role must be played by Instruments such as STREPs and small consortium IPs. This must be reflected in a substantial increase in the total share of the budget finally allocated to STREPs in future calls of FP6 and in the future under FP7.

Comments: Both are needed even for the construction sector. However, in ECCREDI's opinion, the question of critical mass to see real benefits for a community of 1.8 million stakeholders advocates more IPs than STREPS. STREPS are adequate in terms of applied research to develop products and processes essentially focussed on a particular need and market segment coming from specialised contractors or supplier stakeholders.

8. Emerging groups should be attracted rather than discouraged from participation. The best research groups and the most innovative firms should be attracted since they must play a leading role in structuring the ERA.

Comment: This appears not to apply to construction, but rather to high tech industries.

9. For FP7 a much more flexible approach to SME participation should be explored. The possibility to foster the market-oriented innovation activities across Priority Thematic Areas should be considered.

Comment: Probably true although this is perhaps a theoretical question where construction is concerned.

10. The portfolio of Instruments for collaborative research should be designed and developed to enhance co-ordination and collaboration with other forms of public and private funding across the European Union.

Comments: This is crucial in order not to waste scarce national resources of each and every country. But this requires a strong political signal to both the Commission (so that it gives up its pretence at a success in RTD policies given that RTD funds are the largest source of EU funding directly administered by the Commission) and the national governments (so that they abandon their authoritarian role and national pride) in order that the Member States really coordinate their financing policies with single entry points. This implies that each Member State in cooperation with the European Commission should coordinate their procedures so that projects are evaluated either concurrently or have a better ranking if previously approved by the other authority. This would also be highly effective should all or most countries adopt "mirror" Technology Platforms to coordinate their own RTD funding systems.

11. To improve the efficiency and reduce the costs for participants, a well conceived two-step evaluation procedure should be introduced.

First Steps:

- Proposals are short proposals,
- The consortium structure is defined, but only a core membership needs to be formalized.
- Proposals are evaluated on a limited set of criteria (no more than three, for example) including adequacy and excellence.
- Evaluation criteria are applied in a flexible but transparent way:
- Weights given to the criteria can be different depending on the thematic area or objective pursued (type of instrument used)
- Specific criteria can be included for projects pursuing certain goals (e.g. specific criteria on integration, when integration is the goal).
- Remote reading and on-line marking is used in preparation of consensus meetings.
- Evaluators, chosen among best specialists in the programme areas, are properly briefed.
- Feedback provided in evaluation reports (Evaluation Summary Report and, if possible complemented with the individual evaluators reports) allows learning from experience, and, for the successful proposals, gives guidance for the second step submission.

Second Steps:

- Participants in the Second Step have a high probability of receiving funding (of the order of one out of three)
- Second step proposals are complete and sufficiently define the full project period (even for longer term projects).
- The consortium is committed in order to avoid problems in the negotiation phase.
- The same evaluators as in Step 1 evaluate the same proposals. They should be complemented by other specialists to adequately cover the needed expertise.
- Additional evaluation criteria may be considered, but they should not be many and well defined ex-ante.
- Hearings are part of the evaluation process for the New Instruments (large projects)
- Feedback provided allows learning from experience, and for the successful proposals, gives guidance for contract negotiation.

Comments: ECCREDI welcomes the concept of the 2-step approach but subject to the following remarks:

- ECCREDI is also of the opinion that the input required in Step 1 is excessive and correspondingly the input required for Step 2 correspondingly too little.
- Another feature of the evaluation process, which is not mentioned in the Marimon Report, is that it is a process in which the European Commission is able to avoid blame or responsibility by simply stating that they are bound to uphold the decisions taken by the experts responsible for the evaluation process, even in circumstances in which the outcome is clearly incoherent. This behaviour undermines transparency and confidence in the entire process of evaluation and calls for a more responsible attitude by the Commission's scientific officers to ensure that the designated experts are competent, properly briefed and produce coherent and fair assessments of the proposals submitted for appraisal.
- A candidate, facing rejection of its proposal and seeking explanations, has only one course of action available, namely to discuss the difficulties arising with the scientific officer responsible who invariably stands behind the experts' report however wrongly worded or poorly substantiated. There is no opportunity for a face to face discussion with the panel and the process is purely formalistic. There is no chance of overcoming opposing experts no matter how bad or good they are, nor how good or bad are the reasons of the candidate. This procedure is often perceived as being unfair without any possibility of redress with good proposals being rejected without any genuine justification. The Commission should take whatever measures it deems appropriate to eliminate the practice of unfair dismissal of good projects in the first step.
- The criteria of "Scientific and Technological Excellence" in reality encompasses all others. Any project awarded poor notes for this criteria, even although the subject is extremely important, will never be considered for adoption even if in essence the envisaged research project is a really excellent one.

ECCREDI therefore proposes that Step 1 should act as a "Go/No Go" gate and that:

- Proposals be analysed for relevance, impact and core partnership on the basis of a brief (not more than about 20 pages) proposal with total bidding resources allocated at a level of about 10%
- Proposals to include the "Work Plan" (Form B4) and "Core Partnership" (Form B5) to be assessed by a panel of independent experts, the majority of which are drawn from the future users of the research works (not the exploiters, nor the scientists) on the basis of their own judgment (excluding completion of Form B3).
- "Relevance" to be assessed exclusively (without any form B2 filled in by candidates) on the judgment of the Commission's scientific officers themselves.
- Proposals should be classified into a few categories for which, in the opinion of the Commission, they are relevant.
- Furthermore, considering the real spread of the proposals received, projects should be supported in such manner as to avoid funding two projects that may be too similar whilst not funding another single project that may have a lower rating (but above the thresholds) but is nonetheless unique in its category and really needed.
- The best candidates in each category above the thresholds to be accepted for Step 2 with the further limitation that the purpose of Step 1 is to arrive at an ultimate over-subscription rate not exceeding 2 at the most.
- Recommendations and comments to be made known to all participants in Step 1.
- Commission to fix clear criteria to be met in Step 2 in terms of management, industrial leadership, etc.

ECCREDI therefore proposes that in Step 2:

- Proposals be evaluated against S&T Excellence, Partnership, Resources and Management.
- The "relevance and impact" evaluation should not be revised unless the Work Plan falls substantially short of recommendations, in which case the proposal should be dismissed.
- Step 2 should include submitting Consortium agreements demonstrating powerful management rules.
- All candidates to be evaluated following hearings during which they will be given the opportunity to compare and substantiate their views with those of the experts.

12. Administrative procedures and financial rules should be significantly simplified and further improved to allow more efficiency and flexibility in implementing participation instruments.

Comments:

- Audits costs are not management costs. Managements costs should cover the overall coordination and administrative costs needed to manage the consortium and that the limit be increased from 7% to 10%.
- As suggested in the Marimon Report, it is advisable to separate within the Commission's structures those employees responsible for policy-making and those in charge of implementation.
- Subcontracting rules under IPs are too rigid as mentioned in the report.

In particular ECCREDI supports the following:

- Information should be made public on time, but only when it is mature and tested for clarity and user-friendliness
- Adequate training of all EC staff involved is a necessity in order to avoid inconsistency in communication and interpretation. Staff rotation should not disrupt the efficient handling of the funding process
- Application forms should go through a simplification exercise to minimise the burden on participants.
- Electronic tools have to be tested and be ready on time. Duplication of efforts by participants is not acceptable
- Processes should be set in place to monitor and regularly improve the quality of the different service aspects. This involves clear guidance to those in charge, quality control and benchmarking.
- Assistance from the Commission in drafting consortium agreements and handling Intellectual Property issues is a necessity, particularly for the smaller and weaker players. The existing IPR help desk is a necessary tool to ensure that all categories of players have access to expertise and advice and deserves more promotional efforts by the Commission.
- Budget cuts during contract negotiation should always be justified and be part of the Evaluation Summary Report.
- The problems associated with managing large scale projects should be monitored closely and lessons should be translated into action plans.
- The Financial Regulation and the way it is used should be revised in order to ensure that a service-minded approach is feasible. Further simplification is needed to allow for projects, valued on a general cost-based form, to be given enough flexibility regarding the final allocation of expenses. Assistance with such matters could be channelled through a specialised help desk
- Risk management (rather than risk avoidance) combined with service level standards, should be used to define procedures. Procedures and their interpretation should be common for all Directorates /Directorates-General.

*The **E**uropean **C**ouncil for **C**onstruction **R**esearch, **D**evelopment and **I**nnovation (**ECCREDI**) was created in Brussels on 19 December 1995 with the signing of a Memorandum of Understanding by representatives of European construction related organisations. The European organisations participating in **ECCREDI** represent the principal actors involved in the construction sector: contractors, engineering consultants, architects and designers, product and material producers as well as research bodies.*

*The aim of **ECCREDI** is to contribute to the competitiveness, quality, safety and environmental performance of the construction sector and to the overall sustainability of the built environment, by increasing the extent and effectiveness of construction research, technical and process development as well as innovation.*

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