

TOWARDS AN EFFECTIVE 8TH FRAMEWORK PROGRAMME FOR RESEARCH

PREPARED BY THE LERU COMMUNITY

OF EUROPEAN RESEARCH PROJECT MANAGERS

LEAGUE OF EUROPEAN RESEARCH UNIVERSITIES

Universiteit van Amsterdam - Universitat de Barcelona - University of Cambridge - University of Edinburgh - Albert-Ludwigs-Universität Freiburg - Université de Genève - Ruprecht-Karls-Universität Heidelberg - Helsingin yliopisto (University of Helsinki) - Universiteit Leiden - Katholieke Universiteit Leuven - Imperial College London - University College London - Lunds universitet - Università degli Studi di Milano - Ludwig-Maximilians-Universität München - University of Oxford - Université Pierre et Marie Curie, Paris - Université Paris-Sud 11 - Karolinska Institutet, Stockholm - Université de Strasbourg - Universiteit Utrecht - Universität Zürich

Authors

The main author of the paper is:

Dr. Stijn Delauré, EU research policy advisor of the K.U.Leuven.

The paper is based on the outcomes of an extensive survey among the LERU Community of European Research Project managers. LERU thanks the members of this community, as well as the Vice-Rectors for Research, for their very valuable feedback and input, in particular Lluïsa Baltrons and Anna Massaneda (Barcelona), Greta Borg-Carbott and Michael Browne (UCL), Angelo Casertano (Milano), Miles Davies (Karolinska), Anna Groeninx (Leiden), Christian Jäger (Freiburg), Sofia Karakostas (Zürich), Annie Klisnick (Paris-Sud), Bea Krenn (Amsterdam), James D. Lloyd (ICL), Bruno Lambrecht (K.U.Leuven), Hans Melle Van Dijk (Utrecht), Angela Noble (Edinburgh), Linda Polik (Oxford), Cornelia Reimann (Heidelberg), Brice Rousseau (LMU München), Alex Waehry (Genève) and Anneli Wiklander (Lund).

LERU also thanks Greta Borg-Carbott (UCL) and Linda Polik (Oxford) in particular for their contribution to the editing of the text.

The work has been supported by Laura Keustermans (LERU policy officer) and Katrien Maes (LERU chief policy officer).

Summary

- If Europe as a continent wants to remain competitive, it urgently needs determined action. The EU needs to significantly increase its investment in research if it wants to meet the ambitious targets of the new Europe 2020 strategy. As research-intensive universities play a crucial role in knowledge creation, research and innovation, it is more than ever important that the EU guarantees enough funding for a broad spectrum of excellent research in universities, especially at a time when public funding for universities at the national level is under considerable strain. The Framework Programme (FP) is one of the best tools through which the EU can stimulate and support research. As an association of leading research-intensive universities which all have extensive experience with the FP, LERU wants to share its views on how the next FP (FP8) should be developed. The paper makes recommendations in four broad areas.
- **Firstly, LERU emphasises the need to achieve a well-balanced division between funding directed, top-down, impact-driven and non-directed, bottom-up, science-driven research in FP8.** Although we consider top-down research funding schemes to be important, policy makers should realise that bottom-up funding schemes are key to ensure the long-term capacity of the research base to address future, yet unknown societal challenges. The most efficient way for the EU to increase support for science-driven research is to reinforce the strengths of the European Research Council (ERC) and the Marie Curie Actions.
- FP8 should be set up to reinforce international, intersectorial and interdisciplinary collaboration. LERU advocates including a Cooperation-like programme in FP8 because this programme has proven to be an optimal way for academia and industry to work together on an equal basis. In FP8 the entire chain of innovation should be taken into account in each programme and funding scheme, from basic research to the exploitation of research results. We suggest to develop Future and Emerging Technologies (FET)-like schemes in all directed research funding schemes. Restrictive IPR regulations disrupting the balance between industry-academia collaboration need to be avoided.
- **Secondly, to ensure the competitiveness and impact of European research, excellence must remain the most crucial driving force for research funding in FP8.** The creation of a more coherent, transparent and harmonised professional peer review system that uses excellence as the most important criterion for evaluation, would be a momentous improvement. Valuable and detailed feedback on all proposals should be provided after evaluation.
- It is important to ensure a harmonised, transparent and effective governance system for all FP8 funding schemes and for closely related Europe-wide schemes such as the nascent Joint Programming Initiatives (JPIs). LERU welcomes the principle of Joint Programming, but is sceptical about the present lack of transparency. We recommend that JPIs focus on addressing major societal challenges as defined by the relevant stakeholders in complete transparency, with the contribution of top researchers and with the EC acting as a gatekeeper.
- **Thirdly, the financial regulations for research need to be simplified and adapted to the needs of the research community.** To realise simplification, LERU favours reducing the variety of financial rules, which not only means harmonising the funding rules across the different funding schemes, but also harmonising the implementation of the different programmes and investing in uniform training of project officers and agency staff. The requirements for timesheets should be removed and the recovery process of reporting and auditing needs to be limited. The financial regulations need to support the financial sustainability of universities. Matching funding should be avoided as it leaves universities with serious funding shortfalls. Not all universities are able to move towards full costing in the short term and therefore LERU recommends a flexible approach from the EC, including the use of lump sums based on actual costs and of flat rates for financial accounting for all cost categories in FP8.
- LERU recommends caution when considering a radical shift towards output-based funding. We believe that such a shift would result in a whole new level of complexity. Before it could be contemplated, a thorough discussion among all stakeholders would be required on how to define and measure output.

- **Fourthly, LERU is in favour of a high-trust and risk-tolerant approach to funding research.** None of the proposed options in the EC's Communication on Simplification is suitable for all types of FP funding programmes. For frontier research we believe a high-trust award approach would be the proper option, while for technology-driven competitive research we could accept the use of pre-defined lump sums. For collaborative research projects, an output-based funding system could be valuable if used in combination with a high-trust approach based on actual cost. LERU proposes a trust-based certification approach in which the EC acknowledges national certification systems and usual accounting practice.

Introduction

1. In Europe 2020, the new European vision for jobs and growth¹, it is clearly stated that Europe needs a new strategy, based on an enhanced coordination of economic policies. The strategy focuses on key areas where the EU thinks action is needed and most effective: knowledge and innovation, a more sustainable economy, high employment and social inclusion. Improving the conditions for research and development and realising the aim of 3% of GDP investment in this sector, which was already set in the Lisbon agenda, is one of the EU's headline targets. LERU is delighted that policy makers acknowledge the importance of investments in research and knowledge for Europe's economy. LERU very much supports this aspiration and emphasises that these **investments need to be significant** if they want to have a strategic impact. Europe continues to lose ground compared to its traditional competitors such as the US and Japan, but also to new, upcoming competitors such as China and India, who are massively investing in research and development. Europe is quickly running out of chances and time to improve its position towards these competitors, and if it does not act vigorously and swiftly, it will be impossible for Europe to even keep its current position. Determined action is urgently needed.
2. The European Commission and the European Council consider innovation to be crucial for Europe's future. Innovation is fundamentally a process of business engagement with markets, but European policy makers should not forget the crucial role universities play on the supply side of the innovation chain². They are indispensable when it comes to creating an environment that allows innovation to flourish. **Research-intensive universities, known for their internationally competitive research and excellent researchers, are a hub of creativity and therefore attract research-intensive companies and investment into a region and help to catalyse innovation in local businesses³.** Due to the economic crisis, Europe's leading universities are facing difficult challenges. Public funding for universities is being squeezed at national levels and many public agencies

¹ Conclusions of the European Council of 25/26 March 2010 (EUCO 7/10).

² *Universities and Innovation: the challenge for Europe*. League of European Research Universities. November 2006.

³ *What are universities for?* Geoffrey Boulton and Colin Lucas. *What are universities for?* League of European Research Universities. September 2008.

⁴ *The future of the European Research Area*. League of European Research Universities. September 2007.

⁵ *Developing the European Research Area: Note to the European Commissioner for Research*. League of European Research Universities. December 2009.

that fund research are facing budget cutbacks. At the same time industry is re-evaluating its spend on R&D. If Europe wants to guarantee the universities' important contribution to the innovation environment in the future, EU funding for research within academia is needed more than ever.

3. LERU has always been a strong supporter of the concept of a powerful European Research Area⁴. We have recently argued that the primary functions of the ERA are to create the processes and infrastructures that stimulate and enable creativity in research⁵. LERU advocates that the **priorities for the ERA** are to 1) attract some of the best talents of each generation into research; 2) stimulate excellence; 3) create a barrier-free space for European researchers; 4) ensure major, state-of-the-art facilities; 5) orchestrate collaboration in globally significant research programmes.
4. The Framework Programme for Research and Technological Development (FP) is a very important instrument for realising the ERA. Through the Framework Programme the European Commission can lead the way by setting out priorities for European research policy. **LERU very much supports the basic principles and values of the Framework Programme.** With this paper we want to give extensive and constructive input on the design of the next Framework Programme (FP8).
5. If the EU is serious about the goals it set in the 2020 strategy, **the budget allocated to the Framework Programme should be considerably increased.** The increased investment should focus on supporting the research base by allocating additional funding to excellent, groundbreaking, frontier research and to research career opportunities. A significant investment in the research base is the best guarantee for achieving a greater strategic impact in the longer term.
6. The selection mechanism for how allocating funding is also crucial. **The next Framework Programme needs a creative, flexible programme structure and a much simpler, more efficient management process.** Its tools and procedures should attract the best researchers to apply, encourage industry involvement and maximise all parties' investment in actual research instead of the accompanying administration requirements.

7. LERU wishes to provide policy makers not only with these important policy priorities, but also with a number of concrete recommendations. The latter have been formulated after an extensive consultation among LERU's members, who have extensive experience with the present and past Framework Programmes. Many LERU members are amongst the top recipients of the highly competitive research funds from these programmes. For FP6 a total of 18 LERU universities are in the top 40 university ranking for contracts and budget return, with 8 LERU universities in the top 10⁶. Preliminary results of FP7 indicate a similar share.

LERU's recommendations for the development of FP8 are:

- I. **Establish a well-balanced share between directed (top-down, impact-driven) and non-directed (bottom-up, science-driven) research in FP8.**
 - Massively invest in science-driven frontier research
 - Reinforce international, intersectorial and interdisciplinary collaboration
- II. **Ensure that excellence remains the most important driving force for research funding in FP8 and related European funding programmes.**
 - Create a harmonised peer review system that encourages excellence
 - Ensure harmonised, transparent and effective governance of European research funding
- III. **Simplify the financial regulations for research.**
 - Ensure financial sustainability for universities
 - Harmonise the rules of participation as far as possible
- IV. **Move to a high-trust and risk-tolerant approach for funding research.**
 - Avoid a too radical shift towards output-based funding
 - Instead, move to a trust-based certification approach

⁶ Flanders in the European Sixth Framework Programme for Research. Flemish government, department of Economy, Science and Innovation. 2009.

Recommendation I: Ensure a well-balanced share between directed and non- directed research in FP8

8. Between FP6 and FP7 there has been a shift of focus away from pre-competitive research projects towards supporting more applied research in companies and the creation of new schemes such as Joint Technology Initiatives (JTI), for which the economic added value and impact has yet to be proven. At the same time, the ever increasing awareness of intellectual property (IP) issues, knowledge and technology transfer in research-intensive universities is putting them in a better position to exploit research results than ever before. Europe should therefore recognise that its research-intensive, internationally competitive universities and their technology transfer offices are the bedrock of cutting-edge research and are very powerful attractors for the most talented researchers, as well as an important source of innovation at a local and international level.

9. Secondly, scientific research is essential to tackle the great societal challenges that Europe and the world are facing. Output-driven, top-down research funding schemes are definitely a means of coordinating research efforts and avoiding duplication across different research programmes at national and European levels, particularly the Framework Programme itself, the emerging Joint Programming Initiatives (JPI), Public-Private Partnerships (PPPs) and European research infrastructures. However, research can only fulfil its key role if given enough space and funding to identify and tackle future, yet unknown Grand Challenges through cutting-edge and innovative bottom-up research performed with maximum academic freedom.

For both reasons we strongly recommend the creation of a more balanced share between innovation-driven, top-down and science-driven, bottom-up research funding schemes in the future FP. More precisely:

INVEST IN SCIENCE-DRIVEN FRONTIER RESEARCH

10. Build on the strengths of the European Research Council (ERC) and the Marie Curie mobility programmes but also establish additional streams of excellence and science driven FP funding. Extend

the current dynamism in existing programmes to attract and retain top talent and to perform excellent basic research with the sole purpose of scientific advancement.

11. Support the ERC as the independent science-led institution it should be, with a significantly higher budget and simpler eligibility criteria, reporting and audit procedures. The Lisbon Treaty clearly allows for a unique status of the ERC to ensure that it fulfils its key role in boosting research in Europe. If the ERC is to compete with institutions such as the National Science Foundation in the US, it needs to impose fewer administrative burdens on frontier research scientists. The current financial control and audit procedures for ERC grants can be seen as implying a level of mistrust which is inappropriate for top-level research professionals.

REINFORCE INTERNATIONAL, INTERSECTORIAL AND INTERDISCIPLINARY COLLABORATION

12. **Continue a Cooperation-like programme:** We believe it is the optimal way in which academia and industry can work together in an international context and on an equal basis, across disciplines, institutions and areas of specialisation. The current healthy balance between academia and industry involvement should be kept, incentives be created and barriers abolished to ensure the formation of ecosystems of collaboration between universities, research centres, policy and public engagement bodies and small and large industrial players in a composition that best suits the proposed research and its intended output and exploitation. This is essential in view of science progress towards new intersectorial research.

13. **The entire chain of innovation should be taken into account in each programme and funding scheme,** as is currently the case in the ICT theme, which covers a coherent chain of funding themes, ranging from basic research to the exploitation. By supporting these types of research collaborations in Europe, the Cooperation programme helps laboratories and research centres to better find partners for their research and therefore allows them to focus on their core competences. The concept is crucial for enhancing the efficiency and excellence of research.

14. **Extend the FET-open system throughout all directed research funding schemes:** Coordinate research

funding within the Grand Challenges into different research investment streams such as the Framework Programme itself, the emerging Joint Programming Initiatives, the Public-Private Partnership (PPPs) schemes and the European research infrastructures. At the same time, invest in small- and large-scale, bottom-up, collaborative research programmes within these Grand Challenges, through programmes such as the currently much appreciated Future and Emerging Technologies (FET) scheme in the FP7-ICT theme.

15. The translation of research results into applications has been a major bottleneck in Europe for many years. In that respect, we recommend to **avoid restrictive intellectual property rights regulations that disrupt the balance between industry-academia collaborations**. For example, in the current Joint Technology Initiatives excellent research groups and universities are discouraged from joining forces with industry due to unfavourable IPR provisions. Since both the public and private sector contribute funding for Public-Private Partnerships, a more balanced IPR ruling, negotiated between all stakeholders as equal partners on a case-by-case basis, can contribute substantially to the wider use of research results for the benefit of the European economy and society in general.

Recommendation II: Ensure that excellence remains the most important driving force for research funding in FP8 and related European funding programmes

16. Excellence should be the driving force behind the funding of research initiatives in future FPs on several distinct levels: from the transparent formulation of topics and evaluation criteria in top-down research funding schemes by top scientists and entrepreneurs to the appointment of evaluation panels, the selection of excellent research proposals and the collaboration between funding agencies and balanced, equal-basis industry-academia partnerships.

CREATE A HARMONISED PEER REVIEW SYSTEM ENCOURAGING EXCELLENCE

17. We recommend the **creation of a more coherent and harmonised professional peer review system**, shaped like the current ERC evaluation system, with excellence as the sole or most important criterion and building on the successful evaluation mechanisms of national funding agencies.
 - Invite members to evaluation panels purely on the basis of their scientific (or where relevant, entrepreneurial) merits. Reduce the amount of paperwork required for new peer reviewers.
 - **Create more transparency** in the evaluation process, by e.g. announcing the evaluation panels in a timely fashion.
 - Design detailed objective parameters for evaluating research project proposals, as well as for scientific reviews of projects: **ensure the complete absence of conflict of interest** by developing detailed criteria; enable the applicant to indicate “non-preferred referees”; monitor applications from previous referees to avoid plagiarism.
 - **Provide valuable and detailed feedback** in the evaluation summary reports. The ERC evaluation reports, for example, are very instructive to applicants. This will increase the acceptance of the evaluation process and raise the quality of future applications.

- LERU is in favour of the introduction of measures which would shorten the project selection process and the time-to-grant, such as calls with a wider range of topics or open calls with cut-off dates, as proposed in the European Commission's Communication on Simplification⁷. Longer periods between the announcement of a call and the call deadline would also be welcome to allow for the development of higher quality project proposals and consortia.

RETAIN THE FOCUS ON RESEARCH IN MARIE CURIE ACTIONS

18. LERU is satisfied with the current Marie Curie Actions and believes that a strong European Programme for research-based training should always fulfil the requirements posed by the scientific community, namely project selection on the basis of peer review and on scientific excellence. The European Commission (EC), research organisations and the FP7 People Programme Committee have made great progress in improving excellence and professionalising early researchers' careers, providing salary opportunities as well as highlighting the importance of reasonable conditions in the Charter and Code of Conduct⁸.
19. In this context, **the move of the Marie Curie Actions from DG Research to DG Education and Culture could indicate a serious step backwards** if it implies that doctoral as well as postdoctoral training will be regarded as educational rather than professional activity. This shift in focus could restrict progress towards the often mentioned objectives to make research careers more attractive to young Europeans.
20. In order to stimulate researchers' careers through the Marie Curie Actions, it is advisable to ensure that fellows are appointed on normal, national salary scales appropriate for their experience and skills by providing appropriate lump-sum payments or paying actual costs.

ENSURE HARMONISED, TRANSPARENT AND EFFECTIVE GOVERNANCE

21. Ensure more transparency in the topic selection

process of directed research funding programmes such as the Cooperation Programme, the Joint Technology Initiatives (JTIs) and the emerging Joint Programming Initiatives (JPIs) and their annual work programmes. We recommend that panels of top scientists and entrepreneurs should be established via a standardised procedure to define relevant new topics and thereby complement the existing national and intergovernmental element. This would replace the 'shopping list' approach, whereby researchers or political bodies lobby to include their themes in funding programmes, which does not necessarily favours the best research output.

22. **Joint Programming as a principle is welcomed**, as it is expected to complement FP7 and FP8 by minimising duplication without decreasing competition. It will create scientific excellence in international collaborations and the implementation of common strategic research agendas will boost the impact and efficiency of public research. It may involve collaboration between existing national programmes or the development of entirely new programmes, which would result in increased efficiency by pooling resources, selecting or developing the most appropriate instrument(s), and collectively monitoring and reviewing progress.
23. However, **the European Commission should take on the role of gatekeeper** by establishing efficient and harmonised governance which is key for effective Joint Programming. Joint Programming should be based on a common vision of how to address the major societal challenges, which should be defined by relevant stakeholders in complete transparency with the contribution of top researchers.
- Create transparency in the setup process and management of Joint Programming Initiatives and establish common rules, procedures or models: Scientific experts (academics or industrial players) should decide on the challenges that grow into JPIs, instead of national ministerial delegates, who do not properly consult stakeholders. Joint Programming should concentrate in a strategic manner on just a few, major societal challenges with large impact on Europe: e.g. jobs, quality of life & environment, health, security of citizens &

⁷ Simplifying the implementation of the research framework programmes. COM (2010)187. European Commission. 29 April 2010.

⁸ The LERU universities have adopted a Model Code of Practice, which is in line with the European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers. The Model Code of Practice is Appendix 2 in the LERU paper *Harvesting talent: strengthening research careers in Europe*. January 2010.

the territory, immigration & social cohesion, food, water & energy supply.

- Ensure enough space for both result-driven applied research as well as for strategic basic research within the Grand Challenges tackled by the JPIs (cf. previous statement on FET-like schemes). To find the answer to tomorrow's questions, it is also necessary to safeguard a broad scientific approach by establishing enough research schemes outside of the Grand Challenges.
- The project selection process should be based on a transparent, harmonised and international process of evaluation striving for, and based on, excellence. Experiences with a virtual common pot show that funding is not secure unless a clear guarantee is given up front that successful applications will be funded. The EC should ensure that excellent researchers from countries that are not part of the JPI discussion are able to participate.

Recommendation III: Simplify financial regulations for funding research

24. LERU appreciates the importance the European Commission presently attaches to the simplification of the Framework Programme with regard to the financial regulations and the management process, its tools and procedures. We recognise the efforts the EC has already made to simplify the Framework Programme, such as the retention of the 60% special flat rate for overheads, the general introduction of the unique registration facility, the Participant Portal and the electronic submission and negotiation system. Still, there are a number of opportunities for improvement and simplification of the implementation of future FPs, not least the specific financial regulations for research, combined with a general harmonisation of rules and an integrated approach across all DGs. In that respect, we welcome the EC's recent Communication on Simplification as an important step in the right direction.
25. The current financial regulations, as they are presently interpreted and applied in FP6 and FP7, are not sufficiently suited to the needs of the research community in general and the ERA in particular. In addition, there is an increasing concern about current funding levels for universities in FP7, which are insufficient to ensure the long term sustainability of universities. FP8 must ensure a more sustainable funding basis for universities in the future.
26. The diversity of EU funding schemes with differing financial rules, rules for participation and rules regarding intellectual property rights within FP7 (or closely related programmes like Joint Technology Initiatives) is an impenetrable maze for researchers and administrators alike, and obliges universities to hire EU funding experts for each of these. Equally, internal project management procedures and IT-systems must cope with this diversity as well. This is very resource-demanding, at all levels of university administration (EC grants offices, financial divisions, HR departments, IT departments, etc.). In fact, the proportional administrative effort devoted to EU research projects is estimated at two to three times the corresponding funding share of external research income (only up to 10% of external funding for most LERU universities), and is widely considered to be disproportionately high. Simplification too often means simplification for the EC, but not the recipients, as not all of the steps taken so far have

a positive impact on the stakeholders or end users. We therefore stress that **all simplification should be carried out in consultation with the beneficiaries**, as the people best equipped to comment on what measures would be helpful.

27. Optimisation is strongly desired in worst cases, but stability of rules is a measure of simplification itself and is preferred to the change towards only slightly simpler rules. Too many consecutive changes should be avoided. We therefore advocate the implementation of the new rules and changes towards simplification in one iteration, after a revision of the Financial Regulations, with the start of FP8 in 2014. LERU believes the following points are crucial when it comes to simplifying the financial regulations for research:

ENSURE FINANCIAL SUSTAINABILITY FOR UNIVERSITIES

28. The **matching funding requirement is disadvantageous** to excellent and hence EU-competitive research groups and institutions. FP7 Programmes, which use a combination of RTD and Coordination/Support action rules, leave universities and research institutes with serious funding shortfalls.
29. **Recognise the variations in the state of development and ability to implement full-costing** systems (FC) within European universities and continue to provide support to enhance this ability in managing European funding schemes. About one in four LERU universities are on FC, while half of them are currently evaluating or preparing to move to it and a quarter are not yet actively involved.
30. Universities should be given the choice rather than being obliged to move to FC, as FC may be impossible to implement in their current financial accounting systems. **The option of lump sums based on actual costs and flat rates for financial accounting should be expanded in FP8** to all cost categories. At the moment, the universities that have moved to FC are more expensive as partners than non-FC universities. The latter are in fact “undercosting”, which creates an inequality that might disrupt the excellence principle (cf. recommendation 2). We therefore advocate the creation of a level playing field for researchers while negotiating a project budget: determine funding on the basis of actual direct cost and according to the indirect cost funding system that the institution has adopted (full cost or additional cost).

REDUCE THE VARIETY OF FINANCIAL RULES

31. Restrict the variety of rules across the activities of the Framework Programme.

- A one-size-fits-all approach with a single reimbursement rate for all activity types and categories of organisations would massively decrease complexity, but this simplification is mainly designed to benefit the EC, rather than the beneficiaries. It may turn out that a “**few-sizes-fit-most**” approach would be more appropriate. Instituting a uniform reimbursement rate for all (or many) activity types, while maintaining the differentiation between the two existing major categories of organisations (academia and industry) may be a good option. This is indeed suggested in the EC’s Communication on Simplification, but before such a reimbursement rate is introduced, its impact should be carefully investigated and discussed among all stakeholders.

- The suggested reduction of the number of methods for determining indirect costs, with possibly the introduction of a “single flat rate for charging indirect costs for all types of organisations and funding schemes” would be a positive development as long as it also fulfils the requirement of sustainable funding.

- LERU strongly supports the EC’s proposal to **remove the obligation to recover interest on pre-financing**.

32. Harmonise the implementation of the different programmes. A reduction of the complexity of the EU research funding landscape would be a major source of simplification, both for the beneficiaries and for the European Commission.

- The current trend of externalisation of operational tasks towards separate agencies or independent undertakings, such as Joint Technology Initiatives, creates several additional layers of complexity. We would be in favour of a “one-size-fits-all approach” if it meant a **uniformisation of the rules across the different funding programmes**: the general rules for participation in the FP should apply here as well; then having those different agencies and undertakings should not be a problem.

- **Expand the electronic tools to manage EU research funding to all Directorate-Generals.** The

FP7 information portal managed by CORDIS, the unique registration facility, the electronic submission and negotiation tools strongly reduce complexity and are much appreciated by the European research project managers within LERU universities. We recommend to expand these systems to include all European programmes (including ERA-Nets, CIP, but also research programmes from other DGs that are not yet included) and all public-private partnerships (Joint Technology Initiatives and the emerging Joint Programming Initiatives), in order to develop a unique platform for all interactions between EC and beneficiaries.

33. **Invest in uniform internal (EC) and external (Executive Agencies) staff training.** Often complexity is caused by inconsistency between the instructions issued by different Project Officers or different agencies purely due to different interpretations of the official EC documents. In addition, it is not uncommon for Project Officers to change during the duration of a project and often subsequent Project Officers disagree with the interpretations of their predecessors. Less ambiguous instructions, written from a perspective which takes into account the conditions under which the grants will be administered, would be a significant step forward in terms of simplification and towards ensuring built-in uniformity.

REMOVE THE REQUIREMENTS FOR TIMESHEETS

34. Excessive reporting rules impair the efficiency of research operations. We therefore advise the Commission to **remove the requirement for timesheets**, as suggested in the EC's Communication on Simplification, since this is perceived as particularly burdensome and often misconceived for researchers who frequently work beyond and outside of official hours.
35. However, this removal should not oblige institutions to use lump sums for staff costs, since it is not necessarily likely that the provision of lump sums would result in simplification for all beneficiaries. Instead, the EC should **accept the institution's calculation for cost of effort** on projects, as national funders do. A system of certification by national public authorities that would be accepted by the EC could be used (cf. recommendation 4).

SIMPLIFY THE RECOVERY PROCESS

36. The current implementation of a finance-based control is untenable (see also our arguments in recom-

mendation 4). However, were the cost-based control system to be maintained, we would be in favour of introducing strong elements of **simplification in the recovery process** (reporting, audits) that lead to a more cost-efficient use of human resources, both at the level of the EC and the beneficiaries. These include:

- Further reducing the number and size of reports.
- On the establishment of debts following extrapolation of systematic errors in audit findings to non-audited contracts, simplifying the extrapolation for the institution and the EC by the application of a flat-rate correction. The flat rate should correspond to the average of the individual systematic errors.
- Arranging institution-based and not project-based control, should the current input-based control be retained.

Recommendation IV: Move to a high-trust and risk-tolerant approach

37. Many beneficiaries from both academia and industry have asked for a thorough simplification of the financial accountability requirements. A more trust-based and risk-tolerant approach in European funding is often pleaded for, as well as the use of a result-based payment versus cost-based payment. In the recently issued Communication on Simplification, the EC suggests a shift of the control focus from the financial side to the scientific-technical side. The alternative to the current cost-based funding with the related focus on financial ex-ante and ex-post checks would be a system with payment against results/output/deliverables/demonstration of best effort, without the need for checking the details of costs incurred.

AVOID A RADICAL SHIFT TOWARDS OUTPUT-BASED FUNDING

38. LERU advises caution when considering a drastic move towards output-based payment for several reasons as outlined below. We believe the request for such a shift may have been inspired by the complexity of the 7th Framework Programme. However, if the current financial rules are simplified and especially harmonised across all research funding mechanisms, as recommended in the previous section of this paper, the need to move to an output-based system will probably disappear. **The introduction of an output-based payment would bring about a whole new level of complexity** to the next Framework Programme. Specifically:

- It would require a long adaptation phase for the beneficiaries, which would result in further annoyance.
- We fear that the relevant administrative burden would just relocate from the institution's administration to the researchers themselves.
- Measuring output would probably be based on certain indicators that are specific, measurable, achievable, relevant and time-bound (cf. the output indicators in structural funds), which in many cases are simply incompatible with the unpredictable nature of research.
- Output-based control does not encourage the bold

projects required to make research advances (high risk, high gain), but instead encourages the use of lower-risk, mainstream research indicators, focussed on obtaining funding and without the desired scientific ambitiousness.

- It would put beneficiaries at risk to pay for any research that failed to deliver as required, or may be perceived as failed, which is quite unacceptable.

39. **We therefore consider such a shift ill-advised. However, should it go ahead, it would require a thorough discussion among all stakeholders** on how to both define and measure output before it can be introduced.

- It would be imperative to exactly define the criteria on which to judge outputs. Clear rules would need to be developed to ensure that arbitrary decisions from scientific evaluators or misunderstanding of the concept of best efforts will be avoided.
- Scientific and technological excellence would need to be the driver of such a control system.
- A strict set of rules on how to distribute liability among project partners would be needed.

MOVE TO A TRUST-BASED CERTIFICATION APPROACH

40. Three options for a shift towards result-based instead of cost-based funding have been suggested in the EC's Communication on Simplification. We have the following comments on each of these:

- *“Project-specific lump sums as a contribution to project costs estimated during grant evaluation/negotiation, and paid against agreed output/results.”*

At first glance, this may be an interesting option, yet there are some drawbacks when looking at multinational consortia:

- Even if a clear definition or ex-ante estimation of the output can be provided, the output of most research cannot be fully anticipated, and the absence of an anticipated result can be a result in itself. Having performed a “best effort” could be regarded as output, although it is difficult to see how an evaluator of the scientific output would decide that no “best efforts” were undertaken.
- The definition of output differs based on the kind of research, and therefore it would be difficult to negotiate the monetary value of a specific deliverable of a scientific or technological work

package in which several partners are involved. In addition it might pose problems in case the expected result of the project cannot be achieved.

- “The publication of calls with pre-defined lump sums per project in a given subject area and selection of the proposals promising the highest scientific output for the specified lump sum.”
 - This approach would certainly not be the best way to attract the very best researchers worldwide. It could instead become an incentive for some researchers to promise the earth. Such practice goes against the principle of scientific excellence as a main driver.
 - For many beneficiaries in a consortium it would be impossible to invest extra resources, in addition to the lump sum. Most universities, which rely on externally funded research grants, and a lot of SME’s, which are financially less powerful, would be excluded from the award criterion which would be included in this proposal.
 - We believe that this option would probably be most suitable for demonstration activities or market-driven research, but not for pre-competitive collaborative research as in the current FP7 Cooperation programme.
- “High-trust award approach consisting in distributing pre-defined lump sums per project without further control by the EC”.
 - Universities are very commonly controlled and frequently audited by a multitude of governmental agencies and auditors. This means that in general their accounting practices are consistent with the general requirements on EU funding as these are laid down in the Financial Regulation, the implementing rules and the rules for participation of the different programmes. A high-trust “award” approach would build upon this system instead of adding another layer of control and auditing.
 - This option is the most consistent with and the most suitable for frontier research and would thus be most appropriate for the European Research Council. It could be a good option for collaborative research projects, if the beneficiaries were relieved from the risk that one had to account for the flaws of a partner who did not deliver.

41. LERU favours the introduction of a high-trust award approach for frontier research (ERC; option 3), and could agree with the use of pre-defined lump sums for technology-driven competitive research (e.g.

demonstration activities or activities under the CIP programme; option 2). However, we believe that the output-based control mode via either one of the three options formulated in the EC’s Communication on Simplification, would not be completely suited to perform high-quality collaborative research in an international consortium. For collaborative research, we would suggest a fourth option, which is a combination of options one and three, namely project specific lump sums and a high-trust award approach. This fourth option is also inspired by the fact that less funding would need to be channelled towards accountants and management staff if one were to introduce **reduced reporting procedures for institutions with reliable track records**. These could include:

- *High-trust certification*: a certificate is granted for a certain period if a beneficiary has sufficient checks and balances to avoid misuse of public funding (see above). The most efficient solution would be for the EC to accept the current certification of universities by the national funding authorities, and limits itself to certifying the national certification systems.
- *Accepting usual accounting*: beneficiaries should be allowed to apply their usual analytical accounting practice on the condition that it is based on the actual payroll costs registered in the statutory accounts.
- *Output-based control*: LERU is in favour of a “light” version of output-based control, used to detect dysfunctional projects, not as a basis for awarding the funding in the first place. Only in case of clearly unsatisfactory project execution would a beneficiary receive a detailed cost control. Where the outcome is acceptable, there should be an assumption that the declared costs are actual and the institution concerned is sufficiently controlled and audited by other public authorities.

Conclusion

42. LERU considers the Framework Programme to be an important driver for an effective ERA and believes that through the Framework Programme, the EU should aim to increase the competitiveness and impact of European research. We therefore emphasise that the budget allocated to the Framework Programme in general and the ERC in particular, should be increased dramatically. The next Framework Programme should reinforce intersectorial collaboration but at the same time enable the public and private organisations to act as equal partners. The EC should massively invest in science-driven frontier research as well as in bottom-up collaborative research within a framework of Grand Challenges-directed research schemes.

Increased collaboration between national funding programmes is recommended, but a harmonised, transparent and effective governance of transnational programmes should be ensured. In all European funding programmes, excellence should be the main driving force for funding research, and rules for participation should be harmonised as far as possible. The next Framework Programme needs a creative, flexible programme structure and a much simpler, more efficient management process. Its tools and procedures should be designed to attract the best researchers to apply, encourage industry involvement and maximise all parties' investment in research.

About LERU

LERU was founded in 2002 as an association of research-intensive universities sharing the values of high-quality teaching in an environment of internationally competitive research. The League is committed to: education through an awareness of the frontiers of human understanding; the creation of new knowledge through basic research, which is the ultimate source of innovation in society; the promotion of research across a broad front, which creates a unique capacity to reconfigure activities in response to new opportunities and problems. The purpose of the League is to advocate these values, to influence policy in Europe and to develop best practice through mutual exchange of experience.

LERU publications

LERU publishes its views on research and higher education in position papers and advice papers.

Position papers make high-level policy statements on a wide range of research and higher education issues. Looking across the horizon, they provide sharp and thought-provoking analyses on matters that are of interest not only to universities, but also to policy makers, governments, businesses and to society at large.

Advice papers provide targeted, practical and detailed analyses of research and higher education matters. They anticipate developing or respond to ongoing issues of concern across a broad area of policy matters or research topics. Advice papers usually provide concrete recommendations for action to certain stakeholders at European, national or other levels.

LERU position and advice papers are freely available in print and online at www.leru.org.

Universiteit van Amsterdam
Universitat de Barcelona
University of Cambridge
University of Edinburgh
Albert-Ludwigs-Universität Freiburg
Université de Genève
Ruprecht-Karls-Universität Heidelberg
Helsingin yliopisto (University of Helsinki)
Universiteit Leiden
Katholieke Universiteit Leuven
Imperial College London
University College London
Lunds universitet
Università degli Studi di Milano
Ludwig-Maximilians-Universität München
University of Oxford
Université Pierre et Marie Curie, Paris
Université Paris-Sud 11
Karolinska Institutet, Stockholm
Université de Strasbourg
Universiteit Utrecht
Universität Zürich



LERU Office

Huis Bethlehem tel +32 16 32 99 71 www.leru.org
Schapenstraat 34 fax +32 16 32 99 68 info@leru.org
B-3000 Leuven
Belgium