Executive Summary

LERU supports the concept and objectives of the European Research Area (ERA) and has therefore produced this paper as a response to the European Commission consultation on the subject. Based on extensive consultation with the LERU universities and drawing on previous, updated and new LERU views, this paper puts forward the priorities for EU research policy advocated by some of Europe's leading research-intensive universities.

Following the structure of the EC consultation exercise, the paper delivers the following messages:

1. **Researchers: Attracting talented individuals from anywhere in the world to a research career in Europe is the single most crucial factor in developing a globally competitive ERA.**

   - There can be no doubt that in order to attract the best talents, Europe's focus must be on fostering opportunities for excellent people in excellent environments starting with doctoral training and continuing throughout researchers' careers.

   - In order to attract and support leading researchers they have to be embedded in a vibrant research environment providing good infrastructure and enabling strong interdisciplinary, international and intersectoral linkages.

   - Researchers need to be offered clear career perspectives which are built on well-designed employment posts, well-structured career tracks, well-tailored career planning and professional development and strong funding and facilitating processes.

   - New, innovative concepts for improving the structures and processes of doctoral training have been developing at a fast pace. Europe could strengthen these efforts by supporting, in bottom-up fashion, innovative and excellence-driven doctoral schools or programmes.

   - More transparency and easier procedures with regard to social security provisions and visa regulations for researchers are needed to support the mobility of researchers into and inside of the EU.

2. **Cross-border operations: Whilst cross-border actors come in different shapes and sizes - from the individual researcher level up to national and transnational organisations - it is clear that insufficient commitment of financial resources combined with member states' (MS) reluctance to align and coordinate national resources will, unfortunately, continue to prevent true integration of joint research programmes.**

   - This has significant implications for Europe's ability to compete on the global stage and to address major societal challenges in a coordinated way by exploiting research talent and capability across MS.

   - LERU therefore recommends that the ERA Framework should work towards the development and implementation of an effective overarching EU strategy for research programmes, working closely with others such as the EIT to avoid double effort or conflicting priorities.

   - Given the sporadic and, to some extent, disjointed development of the Joint Programming Initiatives (JPIs), it is clear that there is a need for high-level policy coordination and direction on research, whilst ensuring that research is firmly integrated in societal grand challenges.

   - Cross-border collaboration is important not only for addressing societal challenges via top-down steered research, but also to support investigator-driven, bottom-up research through funding programmes that promote transnational mobility and portability of grants (such as the Marie Curie and ERC schemes).

3. **Research infrastructures: LERU is broadly supportive of the idea of the development of European infrastructures in order to maintain EU competitiveness. In the draft consultation there is little in the way of (a) specific proposal(s). As always the 'devil is in the detail' and as such LERU is certainly willing to discuss details in the future.**

   - Nevertheless, it is clear that EU research infrastructures must not become the overarching and dominant EU research expenditure which often becomes

the case from a research funder's perspective. This can be ensured by allowing for appropriate governance controls, critical review and a built-in assumption of closure rather than maintenance in perpetuity of the infrastructure itself.

- In addition, high level controls on movement between budgets for all aspects of research funding are needed to prevent redirection of additional resource to these developments. Unfortunately, a major concern has to be that member states' political imperatives can often drive the decision-making rather than the pure scientific need. Ultimately this would neither serve universities' nor the EU's long-term interests.

4. **Knowledge transfer: Research-intensive universities (RIUs) as the bedrock of internationally competitive research are hubs of creativity which attract research-intensive companies and investment into a region and help to catalyse knowledge transfer (KT) and innovation in local businesses.**

   - KT offices at RIUs act as entrepreneurial centres pushing out research throughout the entire innovation network which develops around them, thus fulfilling a pro-active supply side function. They need to be able to operate in a permissive, incentive-led environment to allow flexible interaction inside and outside of the university.

   - Within the university a culture of KT awareness and value should be actively developed; experienced KT offices and personnel are vital in this process. The significant investment in training and recruitment for KT activities required of universities needs to be justified in terms of the possible return on investment.

   - On the "pull" side, volume market demand needs to be increased in Europe. This can be promoted by providing incentives that stimulate university-industry KT interaction, including such measures as patent boxes, targeted tax incentives, leveraged funding for commercial development of academic origin technology and well-managed patent pools.

5. **Open access: Access to research information must be optimised if the European research community is to operate effectively. Open Access to research output and data can help solve access problems and advance the Open Science agenda.**

   - EU copyright legislation needs to be updated as new publishing and research trends develop. In addition, the EU Database Directive should be re-examined so that it allows Open approaches to data management.

   - Publication repositories are interoperable but far emptier than they should be. Mandates for deposit linked to institutional strategies for research and publication can help in this respect.

   - Data repositories are not sufficiently interoperable. A major issue to solve is who will be responsible for creating, managing and funding such repositories.

   - There is a lack of coordination of open publication and data policies across the EU member states and at the EU level. Given the differing national contexts, the EU should play a facilitative role, providing funding for infrastructure, as well as consultation, advocacy and guidance in best practice, especially in the area of long-term digital preservation of research outputs and data.

6. **International dimension: Interaction and partnership with leading research expertise and talent anywhere in the world is a high priority for research-intensive universities. More can be done at the EU level to leverage EU and MS resources for specific, large-scale collaborative programmes with research funding programmes across the world.**

   - The EU should step up its efforts to increase interaction with and attract top talent from established and strong emerging competitors to institutions in Europe at all stages of a research career. Obstacles to researcher mobility need to be addressed.

   - Financial pressures on RIUs in the current economic times can be a serious threat. It is important to make the most effective use of limited resources, for example through better alignment of EC and MS programmes, without however compromising funding levels or research excellence.

   - ERA international activity focused on global challenges is important and if carefully deployed can support EU policies in other areas. Care needs to be taken not to promise more than can be delivered and not to move away from funding open-ended frontier research.

7. **Managing and monitoring the ERA partnership: A single market with free circulation of knowledge as its fifth freedom, needs a better structured and managed approach of issues. The experience with the other four freedoms (persons, capital, services, goods) has shown there is no alternative.**

   - In the continued absence of effective MS action, the best option is to develop (next to a continued selective use of non-legislative instruments), a framework directive which lays down the basic goals, principles, limitations, instruments, actions and actors of the EU research and innovation policy.

   - Such a framework directive must take into account the basic principles of EU action (in particular attribution, subsidiarity, proportionality and integration) as leading principles for the development of a future EU research and innovation policy.

   - Only in this way can a balanced policy in the field of research and innovation be developed which can achieve a well-managed and -monitored European Research Area, guaranteeing a free circulation of knowledge and respecting Member State autonomy.

8. **Gender: It is vitally important to make progress towards ensuring that the research profession attracts and retains a larger proportion of women. The imperative stems not only from the argument that appreciation of diversity enables a more adequate assessment of quality, but also from an economic argument. Europe cannot afford to waste its talents, particularly its hitherto most wasted female talent for research.**

   - Universities can take actions at the level of HR management by providing good work-life balance conditions for both women and men as well as the other diversity groups and by taking specific measures to support women's careers. In a competitive research environment access to funding is crucial for career advancement.

   - An unwavering commitment of the university leadership to gender equality is essential to translate gender equality plans into succesful actions in all university divisions, faculties and departments, giving due consideration to local and scholarly-field differences.

   - Responsibilities also lie with research funders, governments and others to define frameworks and to promote or mandate gender equality and other quality-based diversity actions.

9. **Ethics: Freedom is the golden rule of research and, as a consequence, an indisputable, fundamental and internationally recognised right of researchers. Research should not be restricted by political agendas and researchers should not normally be restricted as to what questions they can ask or what fields they should research into. Yet this does not mean that such liberty can brook no limits.**

   - Communities can adopt specific sets of ethical standards or codes of practice to be applied in their own research fields. Such rules should also be stated formally and widely disseminated.

   - Academic institutions may entrust ethical committees with the power to adjudicate on ethical issues drawing their inspiration from freedom, self-criticism, precaution, respect and responsibility.

   - Researchers should reflect on the impact that scientific assumptions, discoveries and research products may have upon nature or society.