Summary

- Europe is highly competitive when it comes to developing new knowledge, but it is less successful at turning this knowledge into the innovative products and services that drive world class economies. The EU wants Europe to become a more innovation-friendly continent and is currently working on a new strategy to create an "Innovation Union". This LERU paper presents the views of some of Europe's leading research-intensive universities (RIUs) as a contribution to the development of the EU strategy and the initiatives that will follow from it.
- Research-intensive universities, as the bedrock of internationally competitive, cutting edge research and an attraction pole for a vast and dynamic pool of talented researchers, have an important role to play in the Innovation Union. However, in recent decades their research efforts have been impoverished, with some notable exceptions, in comparison with other systems because of marginal-cost funding of research, the allocation of research funding on criteria other than excellence, and an obsession with bureaucratic even-handedness.
- The EU can help universities flourish by developing or promoting processes and infrastructures that stimulate and enable creativity. Efforts should be focused on five objectives:
 - stimulating excellence by investing heavily and wisely in competitive, frontier, undirected research;
 - 2) attracting and nurturing the best talents for research of each generation;
 - 3) creating a barrier-free space for European researchers to move around in;
 - 4) ensuring the development of and access to major, state-of-the-art research infrastructures;
 - 5) orchestrating collaboration in globally significant research programmes.
- When it comes to creating an environment that allows innovation to flourish, universities play an important enabling role in the innovation chain.

RIUs in particular are hubs of creativity which attract research-intensive companies and investment into a region and help to catalyse innovation in local businesses. They have developed strong technology transfer offices (TTOs) that act as entrepreneurial hubs throughout the entire innovation network around RIUs. Within the university, TTOs are not just the centrepiece of the university's third mission operations. Because of the cognitive and financial spillovers that TTOs generate, their activities interweave across the first and second missions of research-intensive universities.

- If universities are to be more effective in enabling and catalysing innovation in Europe, action is required under three broad headings that reflect the interaction between supply and demand. We suggest that these should be the priorities for the university component in a European innovation union. These headings are 1) enhancing supply of relevant university capacity, 2) stimulating business demand and 3) improving university-business interactions.
- while universities in general and RIUs in particular play an important role in the innovation chain, they do not operate in isolation but are instead part of a larger innovation ecosystem. There are fundamentally four different, but interacting forces at work in driving innovation. These driving forces are: 1) competitively driven research, 2) dynamic entrepreneurship, 3) competitive, fair market environments and 4) adequate financial resources. We propose that the EU's efforts to create a better innovation-friendly environment should consist of a four-pronged attack aimed at stimulating these four driving forces and that they should focus on the combination and interaction of these forces.