

E-learning course 4 Strengthening the Regional Economic Development

Theme 3
Higher Education Institutions as Centers of Regional Development and Innovation



Course structure

	Strengthening the regional economic develop			
	Theme 1: EU, regional and national context: challenges, policy context, recommendations	Theme 2: Business environment	Theme 3: Higher Education Institutions as centres of regional development and innovation	Theme 4: RIS3/Smart specialization
Session 1	Analysis of the regional context, challenges	Policy context, incentives barriers	Regulatory frameworks, policy mechanisms, incentives, barriers	Definition of RIS3, policy context, potential
Session 2	National policy responses	Challenges	Regional role of Higher Education Institutes (Connecting Universities to Regional Growth)	HEIs leading role in regional development and innovation strategies e.g. for smart specialisation
Session 3	EUSDR strategic context	Policy recommendations: Increasing labour force participation, Increasing the quality of existing workforce, addressing skills mismatch etc.	on institutional, national	Creation of innovation friendly business environment
Session 4	Contribution and vision of EDU-LAB: Facilitate interaction between actors	Best practices (based on output 3.1)	Best practices (based on output 3.1)	Best practices (based on output 3.1)



Session 3 POLICY RECOMMENDATIONS ON INSTITUTIONAL, NATIONAL AND EU LEVEL



- Enhance coordination within EC across the policy domains (Structural funds, research and innovation, higher education) and link the policy instruments for structural funds, research and innovation and education so as to ensure coherent decisions on priorities, resources and strategies. ICTs could play a crucial role in this process.
- Rationalise application, funding and reporting procedures and align the timelines of different programmes so as to seriously reduce the bureaucracy for the use of Structural Funds for R&I.
- Meet the aims of RIS3 by enabling HEIs to exploit funding instruments such as the RSFF, the EIF and relevant actions within Horizon 2020 for bridging regional gaps in the innovation chain and encouraging exploitation locally.



- Facilitate inter-regional links and scaling-up initiatives by establishing a central (EU or Government controlled) Fund to make an effective use of inter-regional spill-over effects.
- Expand the potential of Horizon 2020 actions for RIS3 implementation (eg. ERA Chairs, Teaming). For example, use the relevance to RIS3 in the selection criteria. Special attention should be placed on the problems in the New Member States.

Given the current financial conditions and cutbacks for HEIs in many Member States, care should be taken to reduce potential risks such as the spatial division of scientific labour and resources which may entrench existing disparities.



In collaboration with Member States:

- Stimulate HEIs to implement Digital Science and Digital Learning models and to participate in digital economy development (e.g. Open Innovation, Digital Entrepreneurship).
- Support "virtual mobility" mechanisms and measures to be implemented in parallel to the "physical mobility" schemes embedded in Erasmus+ as an instrument to reverse the 'braindrain' in New Member States.
- Support measures and instruments based on a model for equal remuneration of researchers in all European programs providing "European Added Value" as the main instrument for "brain-circulation" and "brain-gain" in less developed countries and regions.



Effective policies for HE require three things: clear targets, alignment of incentives to support the targets and monitoring that does not add to an accountability burden. Governments that seek to mobilise HEIs for regional RIS3 process and regional engagement in general could consider the following actions:

- Create coherent governance across the policy domains (finance; human capital and skills development; science, ICTs, KETs and innovation; industry development) at the national level to coordinate decisions on priorities, resources and strategies in regional and local development, including RIS3.
- Develop synergies between Structural Funds (ERDF, ESF) and EU
 research funding programmes to build long term capacity in regions. For
 example, to support positively evaluated ERC projects which could not be
 funded due to Horizon 2020 budget limitations.
- Develop policy and budget instruments for inter-regional cooperation in RIS3.



- Increase investment in R&D (the 3% of GDP target)
- Develop a National Strategy for capacity building, retaining and attracting talent that includes a strategic decision for equal remuneration of all researchers and experts in EU that are involved in European programs producing "European Added Value".
- Simplify the rules and reduce the bureaucracy for the use of Structural Funds for R&I
- Encourage HEIs' contribution to the preparation and implementation of regional and urban strategies, including RIS3 strategies, for example with the help of HEIs' performance agreements, as is currently the case in Austria.



- Strengthen HEIs' autonomy (human, financial and physical resources, responsibility over curriculum). Strengthen HEIs' accountability without discouraging academic initiative. Promote the inclusion of external stakeholders in HEI governance and encourage the participation of HEIs in regional governance structures and RIS3 planning processes. Develop indicators and monitor outcomes to assess the impact of HEIs on regional performance, for example by including the contribution of HEIs to regional development in their performance evaluations.
- Support HEIs' diversity and develop Vocational Educational Training (VET) and
 Digital Learning to widen access and provide diverse skills and competencies
 required for the knowledge-based economy and RIS3. Encourage collaboration
 between HEIs and the development of pathways for student progression. Support
 participation of HEIs in Grand Coalitions for overcoming the e-Skills gap in Europe
- Invest in broadband, e-infrastructures and support integration of academic and industrial RDI infrastructures.



- Encourage the role of HEIs in social innovation, social sciences and humanities for understanding and tackling socio-economic disparities and generating vibrant environments conducive to entrepreneurial culture.
- Provide incentives for HEIs to be part of the RIS3 process and regional engagement in general. International experience shows that this can be achieved through a diverse range of mechanisms for example long term core funding and/or additional strategic and competitive funding, such as: i) formulae for block grant funding against outcomes, with higher weights for enrolments in academic programmes related to regional labour market needs, ii) special funding contingent on evidence of regional engagement/focus and/or industry collaboration, iii) bonus points for HEIs collaborating in funding applications; iv) special funds that provide matching of funding obtained by HEIs from contracts with regional employers for education and training services; v) investment in the fundraising infrastructure (to boost voluntary giving) to support regional engagement.
- Encourage and support collaborative research among HEIs and between HEIs and industry at the sub-national level and across regions to exploit the complementarities between different HEIs in order to reach a critical mass and enhance industry-academia interaction.



- Use RIS3 process to provide a more supportive environment for HEIindustry collaboration, regulatory and tax environment and accountability regimes that do not place an undue burden on institutions or constraints on collaboration.
- Encourage collaboration between HEIs in the regions to improve the supply and demand of HE/research training provision through the development of joint programmes, RDI activities, and shared services and facilities, in order to make better use of resources and to achieve greater impact. Use RIS3 to incentivise also rationalisation of programme offers, RDI and services/facilities within individual HEIs and across HEIs in the same city/region.
- Improve schemes for supporting innovation and facing the 'death valley' between proof of concept and commercialization (e.g. loans, guarantees, tax relief, seed funding, venture capital, and legislation).



Policy makers at the regional level that seek to mobilise HEIs and ROs for regional RIS3 process and regional engagement in general could consider the following actions:

- Establish a partnership structure of government, HEIs and ROs and public and private stakeholders to develop a RIS3 strategy and a broader vision for the region or connected regions. Support the vision with a clearly articulated long-term strategy and milestones and funding to ensure that regional engagement is part of HEIs' and ROs' activities and reflected in their development plans. Map the current engagement activities within HEIs and ROs and carry out a gap analysis (needs assessment and activity audit).
- Consider establishing a regional public-private investment fund to build HE and
 research training capacity to contribute to RIS3 and regional engagement, using a
 variety of funding sources such as the European Investment Fund (EIF); Provide
 incentives to HEIs and ROs and individuals for regional initiatives, e.g. engaging
 faculty members and students in education and applied research projects related to
 RIS3 priorities. Use competitive funding to stimulate cross-institutional,
 multidisciplinary R&D and education programmes aligned with regional challenges
 and opportunities.



Policy makers at the regional level that seek to mobilise HEIs and ROs for regional RIS3 process and regional engagement in general could consider the following actions – cont.:

- Invest jointly with HEIs in programmes that support RIS3 strategies and bring wider benefits to regional businesses and community. Such measures may include: Translational research facilities aligned with the needs and opportunities of the region for example addressing the needs of the ageing population with the help of telemedicine and social innovations which can create new opportunities for enterprise; One-stop advisory services for SMEs that pool together the expertise of all HEIs in the region; Professional development programmes; People-based mobility between HE and industry that transfer knowledge and innovation to SMEs and other organisations (such as Knowledge Transfer Partnerships in England), and Graduate retention and talent attraction policies that are aligned with the regional priorities.
- Support the establishment of ambitious projects having as a nucleus HEIs, such as the RIs and Regional RIs, with the aim of fostering R&I environments, developing a knowledge-based entrepreneurial culture, supporting the local market and creating jobs..



Policy makers at the regional level that seek to mobilise HEIs and ROs for regional RIS3 process and regional engagement in general could consider the following actions – cont.:

- Promote the internationalisation of the region, its business sector, RIS3 and HEIs through attraction of talent and by tapping into HE and research global knowledge networks. Provide incentives for HEIs to increase their capacity as technology transfer agents to bring non-local knowledge to the region. Link RIS3 strategies with talent attraction policies and support these with employee tax incentives, repatriation schemes and improving the attractiveness of academic careers.
- Use RIS3 to encourage collaboration between HEIs through programmes, joint investments in R&D facilities and incentives. Encourage HEI specialisation and a collaborative way of referring enquiries from businesses and industry to HEIs for example through one stop shops that pool the expertise of HEIs in the region.
- Develop "Regional Digital Agenda" as part of RIS3.
- Promote integration of GÉANT (NRENs), e-infrastructures and the large variety of digital innovation infrastructures related to the Future Internet (e.g. FIRE), Living Labs, Smart Cities, EIT ICT Labs, etc. and thus turning the region into a large experimental facility for new and emerging innovative products and services.
- Stimulate Open Innovation and Digital Entrepreneurship.



- Seek an active role as a lead organisation or participant in the priority-setting and delivery of RIS3 strategy. Adopt a wide agenda of engagement that mobilises the institution to address the challenges and opportunities in the region, whether economic, social, cultural or environmental and identify key capabilities that can add value to the RIS3 process. Map the institution's regional/external links in teaching and learning, RDI and service. Conduct a self-evaluation of capacity to respond to regional and local needs and RIS3.
- Include regional engagement in the core missions of teaching, research and service and use RIS3 to achieve focus for actions. Monitor, evaluate and improve activities in this area to share good practice within the institution and benchmark with other institutions and regions.
- Review recruiting, hiring and reward systems to emphasise quality, relevance, impact and regional engagement. Make available appropriate career and financial incentives to encourage and reward staff engaged in local and regional development and RIS3. Develop their communication skills and build relationships and a culture of receptivity to ideas/initiatives emanating from external sources. Knowledge needs to flow in both directions.



- Stimulate institutional reform based on ICTs, i.e. implementing Digital Science and Digital Learning models and participating in digital economy development (e.g. Open Innovation, Digital Entrepreneurship, start-ups, clusters) at regional and global level. Investment in ICT infrastructures and virtual learning environments.
- Participate in the new Horizon 2020 instruments for building capacity, e.g. ERA Chairs, Teaming/Twinning.
- Develop institutional strategies (University) for capacity building and retaining and attracting talents, including a strategic decision for equal remuneration of all researchers and experts in the EU area who are involved in European programmes producing "European Added Value".
- Support the implementation of "virtual mobility" at institutional level as a main instrument to reverse the 'brain-drain'.
- Participate in Grand Coalitions for overcoming the e-Skills gap in Europe.
- Develop senior management teams to deliver an institutional response expected by external stakeholders. Develop a management structure or capacity to support external engagement and RIS3. Invest in developing the skills of people that create and maintain links between the institution and other stakeholders.



- Provide education and training opportunities aligned to business growth to strengthen the absorptive capacity within the regional industry including SMEs and to develop general competencies to help people acquire LLL skills and adjust to rapid changes in the labour market.
- Engage in early stage interactions, for example by initiating collaborative R&D, and facilitating cluster development in the fields relevant to the region.
- Facilitate greater access to publicly funded innovation infrastructure, people and expertise, for example with the help of staff mobility schemes.
- Facilitate access to globalised knowledge networks and supply chains through collaborative networks and link them to RIS3 process.
- Invest in regional capacity building, for example by hosting or participating in joint seminars, conferences with business, local governments and civil society.



Main sources (pdf available):

- Guide to Research and Innovation Strategies for Smart Specialisation (RIS 3) May 2012
- 2. The role of Universities and Research Organisations as drivers for Smart Specialisation at regional level, EUROPEAN COMMISSION, Directorate-General for Research and Innovation, Directorate B Innovation Union and European Research Area, Unit B5 Spreading Excellence and Widening Participation, Brussels, 23 January 2014
- 3. The role of universities in Smart Specialisation Strategies, European University Association asbl · Avenue de l'Yser 24 · 1040 Brussels, Belgium, EUA Publications 2014



Thank you for your attention!