Higher Education for Smart Specialisation (HESS) PROJECT

Universities and regional development: the case of NE Region Romania

Cosmina MIRONOV
HESS National expert

Bucharest 2016

Table of Contents

Acknowledgements

Executive summary

This report was commissioned to provide based on the research evidence, an analysis and evaluation of the current and prospective implications of the North-East Romanian higher education institutions (HEIs) in the regional development.

Policy context
- There is increasing prominence given to the so called third-mission role of the HEIs beyond the traditional core functions of teaching and research.
- The new Cohesion policy framework, based around the concept of Smart Specialisation Strategies,[1] reinforces this trend placing universities[1] as key actors for regional development.
- This report contributes to the debate on the role of HEIs in regional development by exploring the case of North East Romania.
- North East Romania is home to several public and private universities which display remarkable differences in terms of size, scientific specialisation and relationship to the public and private sectors. As such, it provides the opportunity to test how different types of HEIs can respond to the needs of regional development.

Research

The research included a set of methodological tools: self-assessment evaluation, semi-structured interviews as well as a workshop which brought further input to the subject which were applied in 2016 on representatives of the universities in the NE Region Romania.

Key findings
- HEIs are at present highly aware that they can play a *pivotal role in regional development;*
- HEIs can provide *specialist research expertise* and links to national and international networks of knowledge;
- HEIs can be contributing to a *rigorous assessment of the region's knowledge assets*, *capabilities and competencies*, including those embedded in the university's own departments as well as local businesses and other actors;
- HEIs can contribute to *capacity building* on the demand side through new business formation, student enterprise, and graduate placements as well as encouraging staff to actively engage with local businesses.
- HEIs can play an important role in *building the social relations* which underpin the regional innovation system for the formulation and indeed, implementation of S3.
- *HEIs are aware that they cannot develop more if the region does not develop also* as students and graduates should be able to find jobs.
- HEIs presently contribute to the regional development mainly by enhancing the human capital.
- HEIs are part of different partnerships with industry and social sector and are deeply concerned about attracting funding for their activities related to the regional development.
- HEIs require *a more flexible legislation* related to the programmes of studies adapted to the needs of industry and social actors, to the knowledge absorption and transfer.

---

[1] In this report we use the terms "university" and "HEI" as synonyms.

- HEIs need *a framework for recognizing their involvement in the regional development* especially related to the participation to the local capacity and governance, and the communication with other actors.
- HEIs ask for *stability at all levels* and *dedicated funding for regional development.*

Further recommendations
1. Expand HEIs institutional autonomy particularly regarding funding and budget management including that related to regional development.
2. Develop a long-term vision/ strategy and exploit opportunities at regional level by establishing an institution as responsible (maybe RDA-NE).
3. Mapping existing and potential relationships between academic activities and possible partners in the region in order to initiate, develop and monitor progress.
4. Develop a single database with all academia representatives involved in RIS3 that should include also information related to representatives' professional skills and field of interests or a single data base with the list of the main collaborators of academia –RDA-NE in such manner giving the possibility to each participant to have access to enlarged group of contacts (including cross-sectorial ones).
5. Coordinate better the current information channels, offices, platforms and exchange information between HEIs, industry and public sector.
6. Map the existing research infrastructure and facilities to provide resources for regional clustering initiatives that would include sharing technology centres, incubators, administrative support services, etc.
7. Ensure more effective public funds and incentives for SMEs to collaborate with HEIs.
8. Ensure that any legal obstacles to partnerships between society and the university are removed and review intellectual property rights to allow co-sharing of royalties with the funding agency, the university and the researchers, while redefining tax incentives for R&I activities.
9. Synergy between different innovations related funding programmes (ESIF, H2020 and other European instruments and national initiatives) policy intervention can become more efficient and effective in supporting the entire research and innovation (R&I) ecosystem.
10. Reinforce cluster policies to encourage cooperation between public and private stakeholders and define better each role.
11. Develop further lifelong learning activities and distance learning and ensure that all curricula are providing opportunities for soft-skills developments (leadership, creativity, critical thinking, teamwork, etc.).

Introduction

There is increasing prominence given to the so called third-mission (Laredo, 2007) role of universities and HEIs , beyond the traditional core functions of teaching and research, by national, regional and local governments as well as supra-national bodies such as the European Commission and the OECD (E3M, 2012). This widened role has been highlighted in the agenda adopted by the Commission in September 2011 for the modernisation of Europe's higher education systems and has been promoted by the OECD in its Reviews of Higher Education in Regional and City Development which began in 2005 (European Commission, 2011, OCDE, 2007).

The new Cohesion policy framework, based around the concept of Smart Specialisation Strategies (RIS3), reinforces this trend placing Universities as key actors for regional development (Kempton et al., 2013).

Regional Smart Specialisation Strategies (RIS3) are aimed at developing national/ regional competitive advantages following a vertical prioritisation logic based on the bottom-up identification of a limited set of priorities where regions believe they have potential to obtain a comparative advantage. Priorities are identified and pursued through the interaction of stakeholders across the quadruple helix of government, industry, academia and society at large. This is because entrepreneurial knowledge is most often distributed across a regional system. This cyclical and recursive process of identification and prioritisation is referred to as an Entrepreneurial Discovery Process (EDP). In this context, universities and regions have a unique opportunity to form partnerships, together with the business sector, to maximise the use of European Structural and Investment Funds (ESIF), and particularly the European Regional Development Fund (ERDF), hence contributing to the local knowledge-based development.

Although universities are placed in a good position to contribute significantly to the process of local development, it is difficult to evaluate whether and how such potential can be untapped (Kempton et al., 2013).

Initiated in March 2016 by the Directorate General for Education and Culture of the European Commission, together with the European Joint Research Centre (JRC), for an initial twelve months period, the HESS project focuses on how higher education (HE) and HEIs can contribute to the successful implementation of S3. It has two broad aims:

- To help build innovation capabilities by strengthening the role of HEIs in regional partnerships.
- To promote the integration of higher education with research, innovation and regional development in S3 policy mixes, particularly in the use of European Structural and Investment (ESI) Funds.

The main activity of HESS is "action research" and capacity building in the two European regions which have been selected as pilots: North-East in Romania and Navarra in Spain. In addition, there is monitored the involvement of HEIs in S3 implementation and spending on education by the ESI funds on a more global scale.

The specific objectives of the project are:

1. Understand and support HEIs to align their functions of human capital development with S3 priorities.
2. Analyse how synergetic and strategic use of public funds can allow HEIs to better contribute to S3 implementation.
3. Foster change within HEIs to take on a boundary spanning role in implementing S3.
4. Promote external cooperation between the HEIs and other actors in regional partnerships.

5. Co-produce knowledge within a Community of Practice and disseminate to a large policy audience.

This report, which is based on collaboration between the JRC-IPTS and the RDA NE Romania, contributes to this debate by exploring universities' role in the regional development in the case of NE Romania.

Part I. Romanian HES

This chapter presents the institutional and organisational framework of higher education in Romania focusing on four issues relevant to the subject of investigation: students, funding, governance and autonomy.

1. Brief description of the Romanian higher education system

In Romania, the education and training sector is managed at national level by the Ministry of National Education and Scientific Research. In the execution of its specific responsibilities, the Ministry of National Education and Scientific Research cooperates at central level with other ministries and institutional structures subordinated to the Government.

Basic principles with regard to the education in Romania are established by the Constitution (2003), Chapter II "Fundamental rights and liberties", Article 32 "Right to education".

The National Education Law no 1/2011, with its subsequent amendments and completions is the main legal framework regulating the Romanian HE (structure, responsibilities, funding, autonomy, teaching career, etc.).

Higher Education (HE) is organized in universities, academies, research institutes, schools of higher education, **referred to higher education institutions (HEIs) or universities** that have obtained provisional authorization or accreditation. The mission of the higher education institutions is either education and research or only education. Specialisations and specialisations groups' nomenclature are established by the Ministry of National Education in cooperation with the Ministry of Labour, Social Solidarity and Family, the higher education institutions as well as other interested players. Higher education institutions usually include several faculties, departments, chairs and units for scientific research, design and micro-production.

In the academic year 2016/2017, according to the Government Decision 376/2016 regarding the areas and domains of training and the structure of the HEIs for 2016/2017, the Romanian higher education system comprised 55 public universities and 37 private universities, either accredited or authorised for provisional functioning.

1.1. Students/ Participation in tertiary education

Students who have graduated from an upper secondary institution are eligible to apply for admission to a BA program according to the individual admission examination methodology of each university and study program. Admission generally depends on student performance on the national exam, performance in secondary school and performance on the university entrance examination.

In 2007-2011, Romania registered a significant increase in the share of tertiary education graduates, from 13.9% in 2007 to 20.4% in 2011, exceeding the forecasts made by the National Reform Programme 2011-2013 (the estimated 18.7% in 2011). However, in 2011, Romania was the penultimate position among European countries on this indicator.

For 2020 National Reform Programme 2011 - 2013 has set a target of 26.7% tertiary graduates in the total population aged 30-34 years. Target assumed by Romania is much lower than that proposed at European level (40%), being the second smallest in that plan.

Table 1. The number of students enrolled in HE study programmes (2011 – 2015)

Academic year	Total (public and private)	Public	Budget	Fee	Private
2014/2015 provisional data	:	448,939	287,927	161,012	:
2013/2014	**540,828**	461,582	287,300	174,282	79,246
2012/2013	**579,552**	479,876	285,652	194,224	99,676
2011/2012	**661,241**	520,853	289,087	231,766	140,388
				Source: UEFISCDI – CNFIS, Public report 2014, issued 20.06.2015	

The total number of students for 2013/2014 was 540.828 (of which 461.582 were registered with public universities). For 2014/2015 we only have the number of students registered in public universities – 448939. There should be mentioned the fact that the data available do not allow for the identification of the accurate number of individuals enrolled in the Romanian universities, either public or private. This is because an individual enrolled in several universities may be counted several times.

We should notice the tendency towards quantitative contraction of the Romanian higher education system (e.g. From 661.241 students enrolled in HEIs in 2011/2012 to 540.828 in 2013/2014). Thus, the massification trend which was prevalent in the period of 1990-2008 was reversed starting with the academic year 2009/2010, due to the combined impact of the cohorts born after 1990, to the decrease in the Bachelor study programmes duration, with the implementation of the Bologna system starting with 2005 (with visible statistical effects in 2008 and 2009), and to the decrease in the number of Baccalaureate graduates (combined effect of the school dropout in the pre-university education and of the increased exigency of the baccalaureate examination starting with 2011) (*CDFIS Report 2013 (2014)).*

According to the data from the National Institute of Statistics for the year 2011/2012, there are large disparities in enrolment between students from rural and urban areas. The enrolment rate of students (at the bachelor level) from urban areas was approx. 76%, as compared to the students from rural areas whose rate is 24%. These disparities continue to be a real challenge for the system at present.

Students from the wealthier and urban strata of the population are significantly more likely to go on to higher education in the public sector. Only 7 percent of higher education students come from families with less than 8 years of schooling compared to 32 percent of the total population aged 45 to 65, and only 5 percent of students come from families whose main occupation is agriculture compared to 53 percent of the total population aged 45-65 (HIS 2008). About 28 percent of urban 24 to 29 year olds have completed tertiary education compared to only 4 percent of rural young people of that age.

A World Bank and Ministry of Education, Research and Youth study (2008) also indicates that only 3.7% of youth aged 25-29 from a rural background have graduated from a higher education institution. These data show that students from rural areas have significant problems with progression and completion in higher education, not just with access. Within the *Project "HE Evidence Based Policy Making: a necessary premise for progress in Romania - Code: 34912"* (implemented by the Executive Agency for Higher Education, Research, Development and Innovation Funding (UEFISCDI), 2012 – 2014) it was shown that the access of youth from a rural background has decreased by approximately 10% in

the last 4 academic years. This indicates the still severely reduced access of people from the rural environment to higher education and also the emergence of serious labour market challenges for this population.

The main challenge in terms of access to higher education in Romania is the relatively low enrolment rates than the EU average, influenced by low rates of promotion baccalaureate (only high school graduates holding a diploma de baccalaureate (*ro.* Bacalaureat) can be admitted in higher education) in recent years, and the low participation of the rural population to this level of education. Also, in our country there is low participation in higher education of people from non-traditional age groups (25-29 years and 30-34 years), which indicates the need for universities to adapt educational programs to the specific needs of these people. Other critical issues relating to: the small percentage of students pursuing a career in scientific research; not enough open for mobility of students and teachers and reduced attractiveness for foreign students in the Romanian university system, in terms of a small number of study programs organized in another language than Romanian.

2. Funding

The National Education Law no 1/2011, with its subsequent amendments and completions is the main legal framework regulating the Romanian higher education funding.

Article 8 of the Law provides for the two major sources of funding in education, regardless of the level of education (pre-university or higher education):
- **state budget** (base and supplementary, and complementary funding) and
- **own income**, which the education institutions may use autonomously.

The methodology of financing is achieved by using the Ministry`s methodological proposals developed by the **National Council for HE Funding** (CNFIS) based on statistical studies and simulations.

Public higher education is funded through public financial resources (art. 222, paragraph 3), based on the following set of rationales:
- higher education is seen as *public responsibility and education*, generally, as a national priority;
- *quality assurance* in higher education according to the standards of the European Higher Education Area to ensure human resources training and personal development as citizens of the knowledge-based democratic society;
- *human resources training* according to the diversification of the labour market;
- development of h*igher education, scientific research and university-level artistic creation* to ensure integration with the international scientific world.

According to Article 223, public higher education institutions obtain income from the following sources:
- contract-based allocations from the budget of the Ministry of National Education for their **core funding**,
- **complementary funding and additional funding**, investment objectives, institutional development funds for allocated on competitive basis, inclusion funds allocated on competitive basis, grants and student social protection, as well as from own income, interest rates, donations, sponsorships and fees received in compliance with the legal provisions in force, from Romanian or foreign natural and legal persons, and from other sources. By law, all these are considered own income of the higher education institutions.

The financing contracts between the government and individual public higher education institutions include the following detailed components:

1. **Base (core) finance** is allocated according to an institutional contract concluded between the Ministry and each public university and is *multiannual, fully covering the duration of the cycle of study.* It is used by universities to cover personnel expenditures and material expenditures. 70% of the core finance is based on the number of physical students eligible by law for state budgeted financing (i.e. eligible for the study grant) as reported by the university in each form and field of education and 30% finance is based on quality indicators that include teaching staff quality, teaching staff development potential, research work performance, research capacity use, quality of physical resources, quality of documentation, quality of academic, administrative and financial management and quality of social and administrative services provided to students;

2. **Supplementary funding** – is based on **excellence**
   (1) In order to encourage the excellence in HEIs, **a fund for supplementary (additional) funding of HEIs** is constituted, in sum, at national level, of minimum 30% from the sum allocated at national level for state HEIs for base (core) finance.
   (2) Allocating funds for supplemental (additional) finance is based on the study programmes ranking, for the component based on excellence, and other criteria referring to:
   (a) Preferential financing of masters and doctoral study programmes in advanced sciences and technologies, in international languages and joint (supervision) doctoral studies;
   (b) Developing institutional capacity and increasing effective management;
   (c) Assuming by the HEIs of an active role at local and regional level
   (3) Rectors of state HEIs, (by means of the institutional contract/ agreement with MENCS), allocate the funds for supplementary (additional) finance with priority for the departments and structures/ bodies most performant within the university.

3. **Complementary funding** used by universities to cover among other things accommodation and food subsidies for students; capital expenditures, other investment expenditures and capital repair work; university research; social expenditures for students (scholarships, travel expenditures, etc.) distributed according to numbers of eligible students in each university; and acquisitions. Complementary funding is allocated to universities using Ministry of Education formulas that are based on the numbers of eligible students.

At the end of 2013, the legal framework was amended by OUG no 117/2013. Among the amendments related to higher education funding, it eliminated some provisions limiting the possibility to finance Master and Doctorate programmes provided by the universities included in the categories "education-focused universities" and "scientific research and education universities" and those which provided for differentiated fund allocation based on universities classification and study programmes ranking (art. 193, paragraphs 7-10 from the initial LEN no 1/2011); amendment of the provision stipulating that the methodology on the allocation and use of the institutional development fund should be approved by Government decision, whereas now a minister's order is sufficient (art. 197, paragraph 2); removal of a provision never enforced stipulating that doctoral grants should be allocated based on competitions organised under the coordination of the National Council for Scientific Research (art. 160, paragraph 3 of the initial LEN no 1/2011).

Higher education is free of charge for state funded students; however the institutions may collect fees from these students for application and registration, and for the repetition of tests. State funded students (and some fee paying students) receive subsidized accommodation in the university residences and only pay a range of € 25-50 per month. They also may eat in the subsidized cafeterias that are run by the universities. Approximately 30 percent of all students live in the dormitories.

Table 2. The value of medium allowance for physical students (between 2008 and 2014)

	2008	*2009*	*2010*	*2011*	*2012*	*2013*	*2014*
Medium allowance/Physical Student (LEI)	*6,004*	*5,930*	*5,828*	*5,090*	*5,107*	*5,461*	*5,503*
Annual medium exchange rate	*3.6827*	*4.2373*	*4.2099*	*4.2379*	*4.4560*	*4,419*	*4,4446*
Medium allowance/Physical student (EUR)	*1,630*	*1,399*	*1,384*	*1,201*	*1,146*	*1,236*	*1,238*
						Source: UEFISCDI – CNFIS, Public report 2014, issued 20.06.2015	

Higher education institutions may accept a number of students above those financed by the state budget, subject to students' agreement to support the costs for education provided. The Ministry of Education approves the exact number of paid placements for each higher education institution based on proposals made by the university senates.

Generally, 30 to 40 percent of the students are fee paying and as of 2007/08, approximately 282,504 students were studying on a fee paying basis. At some institutions (generally those that are very technical), the proportion of fee paying students is very small, while at others a much higher proportion are fee paying. The educational fee is established by the university senate according to the costs of education provided.

3. Governance
3.1. External governance

✚ National and international bodies

The overall responsibility for higher education lies with the relevant ministry, that is, the **Ministry of National Education**. Generally, the Ministry oversees HEIs as regards compliance with the law, ministerial codes and legal statutes.

The Ministry is responsible for formulating higher education policies that frame national or institutional strategic plans and development. The Ministry is also responsible for formulating national strategic priorities or a formal strategic or development plan for higher education.

A general picture of the main authorities, bodies, responsible for RoHES governance is presented below:
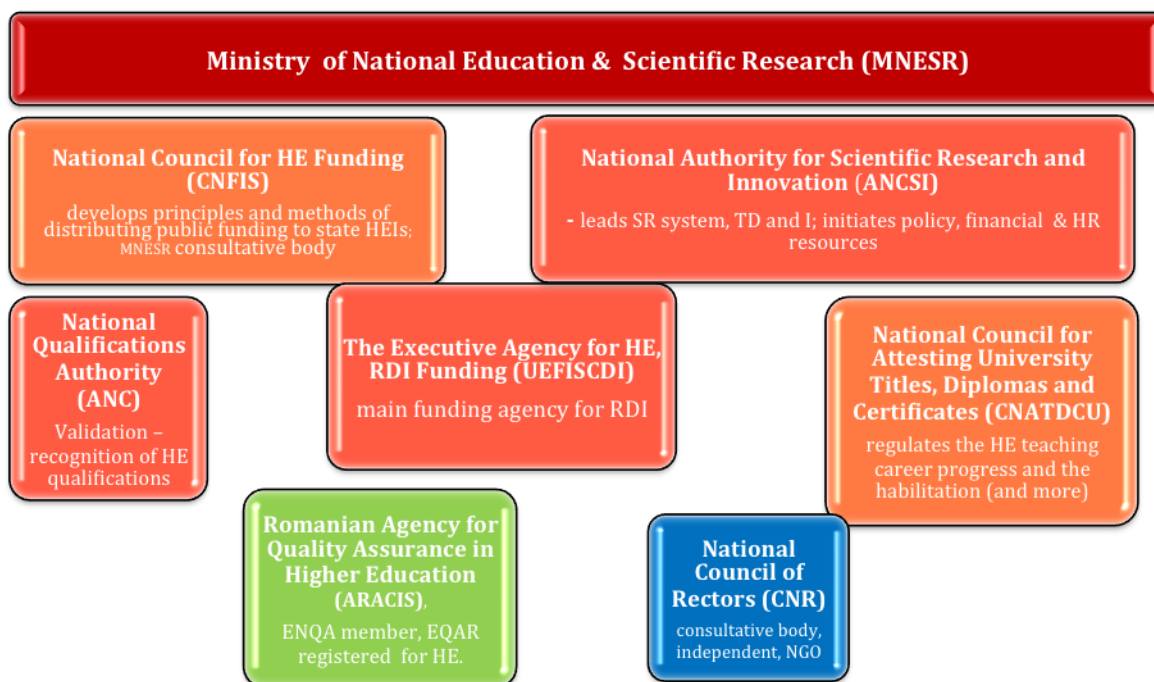
Figure 1. The external governance bodies of HES in Romania

National bodies are also an important part of the external governance of HEIs.

✓ **The Romanian Agency for Quality Assurance in Higher Education** (ro. ARACIS) was established in 2005 and is an autonomous public institution, of national interest, whose main mission is the external evaluation of the Romanian higher education's quality, at the level of study programmes, as well as from the institutional point of view.

As of September 2009, ARACIS is a full member of the European Association for Quality Assurance in Higher Education – ENQA and is registered in the European Quality Assurance Register for Higher Education - EQAR.

✓ **The Executive Unit for Higher Education, Research, Development and Innovation Funding** (ro. UEFISCDI) is the main funding agency for research, development and innovation. UEFISCDI is a legal entity, public body of the Central Administration under the ultimate authority of Romanian Ministry of Education Research Youth and Sport (MECTS).

UEFISCDI is the executive agency for the National Research Council (ro. CNCS), the National Council for Higher Education Funding (CNFIS), the National Council for Development and Innovation (CNDI). UEFISCDI also coordinates programmes of the National Research, Development and Innovation Plan, 2015 – 2020 for funding programmes in all scientific domains: human resources, ideas, capacities, partnerships in priority S&T domains, and innovation.

✓ **National Council for Attesting Titles, Diplomas and Certificates** (ro. CNATDCU) – regulates the HE teaching career progress and the habilitation (and more) - the Habilitation - certification to supervise PhD theses; university teaching career progress; evaluates and validates the doctoral thesis and the habilitation thesis committees

✓ **National Authority for Qualifications** (ro. ANC) **-** *validation – recognition of HE qualifications,* it subordinates to MENCS. NAQ is the National Point for EQF Coordination and The National Centre for Accreditation (CPET – Continuous/ in-service (Professional) Education and Training).

✓ **National Council of Rectors** is the national-level and consultative body, an NGO, politically independent and non-profit, that consists of the executive heads of all public or government-dependent private universities.

International/regional bodies that influence higher education governance at the institutional level in Romania include:

- Agence universitaire de la Francophonie
- Association of the Carpathian Region Universities
- Danube Rectors' Conference
- Network of Universities from the Capitals of Europe

🔸 **External regulations on the structure of institutional governance**

HEIs have become autonomous entities according to national legislation; however, the institutional governance structure of HEIs is organised according to national regulations. The regulations delineate the institutional-level governance bodies and their respective duties and responsibilities. Official regulations are usually supplemented by specific rules in the respective institutions' constitution or statutes, which usually provide for the procedures of election for institutional governance bodies.

🔸 **External governance –** Involvement of employers
- Involvement of employers in QA governance bodies and external review teams (2013/14) **is not a requirement in Romania**.
  Source: The European Higher Education Area in 2015*:* Bologna Process. Implementation Report

3.2. Institutional governance

All HEIs in Romania have an executive body, called the **Rectorate** and headed by a **Rector**. Candidates for Rector must be selected from among the members of the University Senate.

All institutions have a collegiate academic body, called the **University Senate**. The academic body is primarily responsible for matters relating to the educational and research services provided by the institution. The academic body is composed of academic staff members employed at the institution as student representatives.

In Romania, there are **no supervisory bodies**, while further additional responsibilities have been delegated to the academic/ decision body with the introduction of institutional autonomy. Consequently, the Senate is responsible for assessing the institution's and the Rector's performance, adopting the financial plan, and approving the institutional financial report.

Middle management

The governance structure of basic units (faculties, departments, institutes, etc.) typically mirrors the structure of the institution's central level. Deans and middle management bodies are significant across all aspects of institutional activity.

Independent private higher education

The institutional governance bodies at independent private HEIs are regulated in the same way as public HEIs.

4. Autonomy

According to the Law of National Education (Law 1/2011) universities and other higher education institutions are autonomous and have the right to establish and implement their own development policies, within the general provisions of the in-force legislation. The Ministry of National Education coordinates the activity of the universities and other higher education institutions, complying with their autonomy.

The university autonomy is guaranteed by **Constitution**. **The academic freedom** is guaranteed by **Law**.

The university autonomy is correlated with the principle of personal and public accountability for the quality of the entire teaching and scientific research activity accomplished by the higher education institution.

The university autonomy encompasses the domains of:
- management,
- structuring and functioning of the higher education institutions,
- teaching and scientific research activities,
- administration and financing. From the financing point of view, the university autonomy is accomplished through the right to manage the funds from the state-budget and other sources, according to the provisions of the law and personal accountability.

5. Increasing HEIs' relevance for the labour market

We will make reference to only two indicators of utmost importance for the present reform:
- ***The employment rate of recent tertiary graduates has been decreasing since 2009.*** In 2014 the figure was 74.2% (with 76.2% for 2013 and 81.9% for 2010) which is around 6 percentage points less than the EU-82% average, while there are also concerns about universities' limited connections with the most innovative sectors of the economy. At the same time, adapting university curricula and teaching practices to help students better develop the kind of skills they need on the labour market is a slow process.
- The national headline target Europe 2020 for the *Share of population aged 30-34 with tertiary education attainment* is 26.7% while the current rate is 25% (for 2014) and 25.5% (according to the Eurostat provisional data for 2015).

The Romanian Government assumed the following **key-actions** to achieve these targets in the current *National Reform Programme, 2016, Chapter: Tertiary education*:
1. Supporting students from rural areas, disadvantaged groups and non-traditional students to participate in tertiary education
2. Developing and integrating of education and research IT system
3. Developing institutional capacity and increasing internationalization of HE
4. Increasing the quality HE and matching labour market needs
5. Setting-up and developing of an open and accessible LLL framework.

Also, during the past few years, Romania designed and now is implementing a set of complementary strategies, related to the HEIs and connected with the National Strategy for Sustainable Development (that implement sustainable development goals):
- National strategy for lifelong learning 2015-2020;
- National strategy for tertiary education 2015-2020;
- Strategy for education and training in Romania for 2016-2020;

- o National strategy for competitiveness 2014 – 2020;
- o National strategy for research, development and innovation 2014 – 2020.

The strategy on tertiary education adopted in July 2015 aims to **make higher education more relevant to labour market needs and more accessible to disadvantaged groups. The strategy aims at boosting the engagement of HEIs towards the economic sector by:**

1. Development of a national program for encouraging the dialogue between HE and the economic sectors;
2. Development/ Establishment of an institutional function/ structure related to industry/ agriculture/ business in each HEI;
3. Development of training programmes in partnership, including for workplace learning programmes.
4. Involvement of employers in designing and delivering the study programmes, encouraging staff exchanges and integrating the practical experience in teaching activities.

There should be underlined that at present there is little or no involvement of employers in curriculum, teaching, and in planning and *management with decision-making* or consultative bodies, in Romanian HE. However the National Strategy for Tertiary Education, under Support condition no. 2: Promoting effective governance, at national and local level, there are the following measures/Actions taken into account:

1. *Increasing the role and representation of the relevant stakeholders*, especially those from external environment, regarding issues related to *governance*
2. *Recalibrate the level of institutional autonomy* in close and balanced relation with assuming the public responsibility for performance, related to *well-defined expectations of the socio-economic environment*
3. Development of a ranking exercise based on data which respect the missions of the institutions.

A more detailed presentation of the measures can be found in the table below where these are the three measures are shown in relation with their goals, areas of involvement and indicators.

Table 3. Directions and strategical indicators of measures/ actions for promoting effective governance

Directions and strategical indicators			
Goal	**Measure**	**Area of Involvement/ Audience**	**Indicator**
1. Stakeholders' involvement in the process of identifying and following the attainment of strategical goals	Increasing the role and representation of the relevant stakeholders, especially those from external environment, regarding issues related to governance	National and local stakeholders	No. of external stakeholders involved in the formal processes/ structures of governance
2. Harmonization of the level of operational autonomy with assuming public responsibility for performance, related to well defined ex-	Recalibrate the level of institutional autonomy in close and balanced relation with assuming the public responsibility for performance, related to well-defined expectations of the socio-economic environment	National and local	Comparative analysis between Romania perseverance and European trends achieved

pectations			
3. Assuring transparency in the process of ranking HEIs	Development of a ranking exercise based on data which respect the missions of the institutions	National and local	Ranking methodology, relevant data and justification about ranking related to all important parameters for the institutional activity, published

Some measures have already been taken and some are to be taken in the near future regarding the increase of the relevance of university education to the labour market:

- In the *Methodology for external evaluation* (ARACIS) which preceeds the Strategy there is a requirement to prove the relevance of the study programme, being revised periodically, based on peer reviews, together with students, graduates, and employer representatives. Consequently, there are scheduled meetings with these stakeholders that aim at the evaluation of: the quality of graduates' preparation/ training and the level of students' satisfaction with regard to their professional and personal development ensured by the HEI which end with recommendations for curricular changes.
- Database integrated into the management systems of 50 public HEIs has been completed to enable monitoring of HE graduates' entry to the labour market. It is ON-GOING WORK
- Development of the National Qualifications Framework and on-going work to align the occupational standards with labour market requirements and updating the educational offer. It is also ON-GOING WORK
- The structure of National Register of Qualifications in Romania (will be) was endorsed; the registry will be updated and managed by the ANC as a single reference tool in training, ensuring both a fair access to national and European labour market and the matching of education and training, and the labour market.
- All HEIs were expected to establish career guidance and counselling centres in 2015. ON-GOING WORK. According to the HE Status Report for 2014 – The National Centre for Euroguidance extended collaboration with relevant stakeholders/ institutional partnerships, such as: NBCC Romania - National Board for Career Counselling. It will be held training sessions for HE counsellors, held by international experts.
- The reinforcement of the six-month compulsory practical internships in companies for all university graduates. – This measure is TO BE IMPLEMENTED

In the meantime, a database integrated into the management systems of 50 public universities has been completed to enable monitoring of higher education graduates' entry onto the labour market. Work has continued on aligning occupational standards with labour market requirements and updating the educational offer, with 36 new standards developed. All universities were expected to establish career guidance and counselling centres in 2015.

6. Conclusions

a. The Romanian system of education, including the HES is suffering from a *chronic underfunding.* For the RoHES this underfunding translates into a lower HE quality and competitiveness on medium and long term, thus hampering the sustainable development

opportunities.

b. No governance and involvement of labour market.

c. *Quality* for different levels and types of HE is *unequal*, especially between private and public HEIs.

d. The relation between the needs of the *labour market and HES* needs consolidation – *especially as far as the transversal competences are concerned*.

e. *Participation* to HE of the young from the *rural area, vulnerable populations and minorities* is inferior to those coming from the urban areas, who in general have greater incomes.

Part II. Strategic engagement of HEIs towards the economic sector – at national and local level

1. HEIs in NE region of Romania

In the North-East Romania, there are **seven public** universities and **four** accredited **private** universities:

- o **Public HEIs – total: 57,959 students (12,91% - national level)**
  1. "Alexandru Ioan Cuza" University, Iasi – **25,573 students** (BMPhD)
  2. "Gheorghe Asachi" Technical University, Iasi – **14,247 students** (BMPhD)
  3. "Grigore T. Popa" University of Medicine and Pharmacy, Iasi – **9,297 students** (BMPhD)
  4. "Ion Ionescu de la Brad" University of Agricultural Sciences and Veterinary Medicine, Iasi – **4,515 students** (BMPhD)
  5. "George Enescu" University of Arts, Iasi – **1,426 students** (BMPhD)
  6. "Vasile Alecsandri" University of Bacau – **4,884 students** (BMPhD)
  7. "Stefan cel Mare" University of Suceava – **8,317 students** (BMPhD)
- o **Accredited private HEIs**:
  1. "George Bacovia" University of Bacau – 1 faculty,
  2. "Dimitrie Cantemir" Ecological University of Iasi – 9 faculties,
  3. "Petre Andrei" University of Iasi – 5 faculties,
  4. "Apollonia" University of Iasi – 2 faculties.

The number of students enrolled in these universities in 2014/15 can be seen for each of them, including B – Bachelor, M – Master, PhD (Doctorate studies – PhD degree).

The total number of students enrolled in these universities, around 58,000, accounts for around approximately 13% of the total students from public universities in Ro.

The chart below reveals the distribution of percentages of students for the same data:
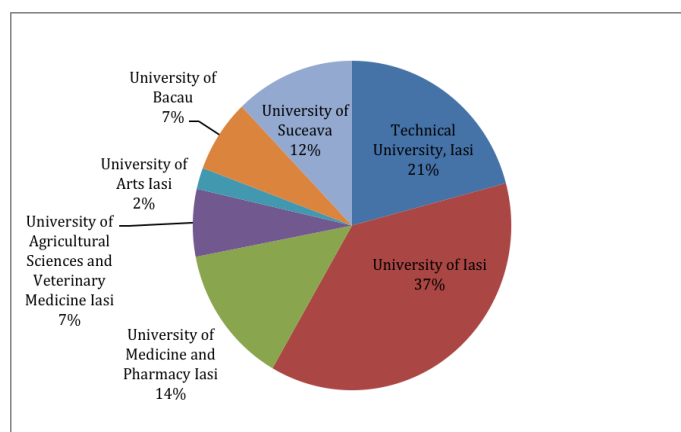

Figure 2. Distribution of students in NE HEIs

Source: UEFISCDI – CNFIS, Public report 2014, *issued 20.06.2015*

As can be noticed, the biggest university is "Alexandru Ioan Cuza University" from Iaşi and the students' majority is in Iaşi in public universities – with a percentage of 81% from the total students from public universities in the region/ NE-Ro.

Table 4. Number of faculties, doctoral schools and PhD students related to the HEIs

HE Institutions	No. of Faculties	Doctoral Schools	PhD Students	Location
"Alexandru Ioan Cuza" University	16	13	748	Iași
"Gheorghe Asachi" Technical University	11	12	849	Iași
"Grigore T. Popa" University of Medicine and Pharmacy	4	1	307	Iași
"Ion Ionescu de la Brad" University of Agricultural Sciences and Veterinary Medicine	4	2	264	Iași
"George Enescu" University of Arts	3	4	109	Iași
"Stefan cel Mare" University	9	2	271	Suceava
"Vasile Alecsandri" University	5	1	72	Bacău

Structure of public universities:

- ***University Ioan Alexandru Cuza from Iași***: Biology, Chemistry, Computer Science, Economics and Business Administration, Geography and Geology, History, Law, Letters, Mathematics, Orthodox Theology, Philosophy and Social-Political Sciences, Physical Education and Sports, Physics, Psychology and Education Sciences, Roman-Catholic Theology, Centre for European Studies
- ***"Gheorghe Asachi" Technical University from Iași***: Faculty of Automatic Control and Computer Engineering, Faculty of Civil Engineering and Building Services, Faculty of Architecture "G.M. Cantacuzino", Faculty of Chemical Engineering and Environmental Protection, Faculty of Machine Manufacturing and Industrial Management, Faculty of Electronics, Telecommunications and Information Technology, Faculty of Electrical Engineering, Faculty of Hydrotechnical Engineering, Geodesy, Environmental Engineering, Faculty of Material Science and Engineering, Faculty of Mechanical Engineering, Faculty of Textiles, Leather and Industrial Management
- ***"Grigore T. Popa" University of Medicine and Pharmacy from Iași***: Faculty of Medicine, Faculty of Dentistry, Faculty of Pharmacy, Faculty of Biomedical Engineering.
- ***"Ion Ionescu de la Brad" University of Agricultural Sciences and Veterinary Medicine from Iași***: Faculty of Agriculture, Faculty of Horticulture, Faculty of Animal Husbandry, and Faculty of Veterinary Medicine.
- ***"George Enescu" University of Arts from Iași***: Faculty of Music Performance, Composition, and Music Studies, Theatre Faculty, Faculty of Visual Arts and Design
- ***"Stefan cel Mare" University from Suceava***: Faculty of Physical Education and Sports, Faculty of Food Engineering, Faculty of Electrical Engineering and Computer Science, Faculty of Mechanical Engineering, Mechatronics and Management, Faculty of History and Geography, Faculty of Letters and Communication Sciences, Faculty of Forestry, Faculty of Economics and Public Administration, Faculty of Educational Sciences
- ***"Vasile Alecsandri" University from Bacău***: Faculty of Engineering, Faculty of Letters, Faculty of Sciences, Faculty of Economic Sciences, Faculty of Movement, Sports and Health Sciences
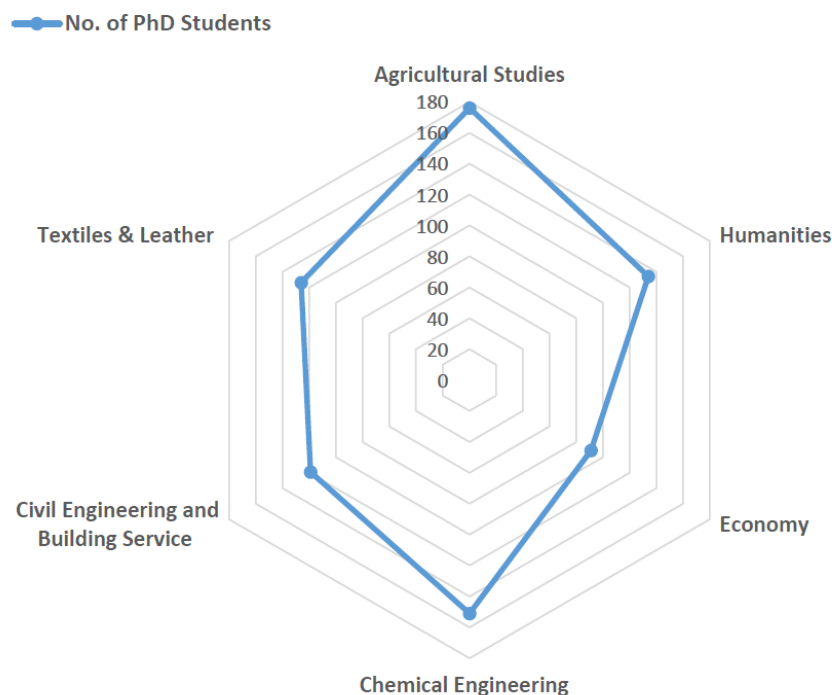
Figure 3. Number of PhD Students in NE HEIs

The most of the research and development activities are carried out in the public sector (over 70%). During 2001-2006, in the North-East Region there were set up 12 Centers of Excellence in higher education institutions in Iasi ("Alexandru Ioan Cuza University" University, "Gh. Asachi" Technical University, "Gr. T. Popa" University of Medicine and Pharmacy of Iași), while other 13 Centres of Excellence are operational within "Ştefan cel Mare" University of Suceava. During 2001-2006, the National Research Council recognized 79 research centres in the North-East Region, hosted by the "Alexandru Ioan Cuza" University of Iasi, "Gh. Asachi" Technical University, "Gr. T. Popa" University of Medicine and Pharmacy Iasi, "Vasile Alecsandri" University of Bacău and "Ştefan cel Mare" University of Suceava.

Structure of the private university (involved in the present research):

- ***"George Bacovia" University from Bacau:*** Faculty of Economic, Law and Administrative Sciences.

2. Smart Specialization Strategy (RIS3) – 2013 in NE Romania

The Regulation (EU) 1301/2013 of the European Parliament and of the Council of 17 December 2013 is a legal base which defines 'smart specialisation strategy'.

'Smart specialisation strategy' means the national or regional innovation strategies which set priorities in order to build competitive advantage by developing and matching research and innovation own strengths to business needs in order to address emerging opportunities and market developments in a coherent manner, while avoiding duplication and fragmentation of efforts. A smart specialisation strategy may take the form of, or be included in a national or regional research and innovation (R&I) strategic policy framework. Smart specialisation strategies shall be developed through involving national or regional managing authorities and stakeholders such as universities and other higher education institutions, industry and social partners in an entrepreneurial discovery process.

For the NER, the main objectives are:

- Foster regional economy competitiveness
- Move from resource-based competitiveness to the innovation-based competitiveness
- Promote economic and innovation system from a trans-regional and international perspective
- Identify regional strategic projects which can integrate and exploit the competitive resources of the region

Main Priorities:

- P 1: Develop innovation competences for future generations
- P 2: Support innovative enterprises within the region
- P 3: Support existing and emerging clusters as backbone of the regional innovation system
- P 4: Technical assistance

At regional level, there have been identified the following sectors with potential for smart specialization:

- o Agro-food sector: agronomy, crop science, food science, biotechnology, soil research, nano-materials for protein separation;
- o ICT sector: future networks, internet services, software, design embedded systems, personal and health systems, ICT for energy efficiency, ICT access, computer science and artificial intelligence.
- o Textile-clothing sector: advanced biomaterials, functional textiles, medical textiles, smart textiles for interconnecting clothing, biomaterials, technical textiles, textile composite structures, knitted structures with thermal properties, mechanical protection knits, clothing synergistic;
- o Biotechnology sector: pharmaceutical biotechnology, medical biotechnology - microbial and cellular (obtaining effective antitumor preparations, antiviral, antimicrobial, vaccines, methods for early diagnosis of diseases).

Table 5. NE Romania – RIS3 priorities (Curaj, A., 2015)

NE Romania - RIS3 priorities				
Agrofood	Safe foodstuff, affordable and nutritionally optimized Bio-based industries (food and non-food products for food processing industry)	Development of new products, practices, processes/ technologies in horticulture Sustainable farming 2nd and 3rd harvest	Bioenergy - biogas, biomass, biofuel Eco-building - processing of hemp (construction panels for natural houses)	Blue biotechnologies (sustainable management and exploitation of aquatic living resources and potential) Field crops (adapted to the impact of global climate change)
Textiles – clothing	Advanced bio-materials (for medical use) Innovative product design (e.g. micro nano bio textile technology; textile electrodes for med.	Eco-textile products (antimicrobial, agriculture health, transport, security) Cultivation and processing of hemp and flax	Smart factoring (improved management of production, energy and waste)	Smart textiles (for high performance water filtering purposes) Eco-materials (science and engineering)

	use) High tech sensors use in textiles			
IT&C	Big Data analysis, management and security (telemetry, telematics, tele-assistance, telemedicine) Real time monitoring of social systems – eHealth	Traceability of food (value) chains (IT&C solutions) Precision agriculture (site specific crop management)	Increasing energy efficiency of consumers; Energy-Net (energy efficiency management system)	Industrial waste water monitoring Management of surface and underground water (SmartGrid & Smart City apps)
Biotech-nology	Bio nano-technologies new technologies and new biomaterials for use in medicine Medical and pharmaceutical	Agrofood biotechnologies (sustainable production of healthy and safe food, & renewable resources)	Industrial biotechnologies (high-energy biofuels, bio-catalysts for industrial applications)	Environment-oriented biotechnologies (based on the use of biological/ enzymatic systems) Pollution-removing and waste recovery tech.
Societal Challenge	Health, demography and welfare	Food security, sustainable agriculture and bio-economy	Reliable, clean and efficient energy	Climate change and resource efficiency

3. Conclusions

1. Based on all documents available, the main field for **interaction and engagement** between HEIs and labour market seems to **rely on HE's core mission – to develop students' competences and qualifications** hopefully with relevance for regional development (RD)!
2. Regarding the **research**, there might have been projects developed in collaboration **with local/ regional businesses** but which **are not** necessarily **presented at national level** or in relevant documents related to HE.
3. Concrete **measures with impact on the RD will be implemented in the near future** *(National Strategy for Tertiary Education 2015-2020).*
4. Existence of Centres of Excellence in higher education institutions;
5. The existence of the 79 recognized research centres CNSIS; Business infrastructure well represented at regional level;
6. High number of PhD's and doctoral schools in the region, most of them choosing real and technical profile;
7. Reduced collaboration between business environment and universities/ research institutes - low technological transfer.

Part III. Research

1. Methodology of research

The research had four specific objectives:
  i. To provide the European Commission with data and evidence on how Higher Education is contributing to the implementation of S3, including through the European Structural and Investment Funds (The Research);
  ii. To foster capabilities among innovation actors to engage in regional partnerships that can match supply and demand for smart specialisation through understanding the future skills and jobs that can increase regional growth and employment quality (The Action);
  iii. To develop the methodology further so it may be used by the S3 Platform or other stakeholders in future capacity building exercises (The Pilot);
  iv. To extract and understand the policy implications from the case studies that could help Navarra and East Romania regions to build an improved and sustained process, as well as help other regions in Europe to learn from this initiative and engage in similar initiatives (The Reflection).

In order to achieve these objectives, the team adopted methodological elements of 'action research'. Within the research community this approach was followed because of shared ontological and epistemological considerations. However, it also was very useful from a policy perspective, since it allows us to both stimulate change while producing knowledge that can be useful when designing new initiatives or reforming existing policies.

The research focused on two case studies in very different European regions: North East Romania and Comunidad Foral de Navarra in Spain. While the case studies followed similar methods, the research team took into account the geographical, institutional and cultural differences. At the same time the project aimed to allow knowledge exchange between the two regions which can allow policy learning. This will be widened out in a second stage through the dissemination of the research findings, a peer review workshop and the development of a community of practice.

The ultimate goal of the fieldwork was an in-depth understanding and analysis of the ways in which HEIs and the region contribute jointly to the implementation of the smart specialisation concept and, thus, to territorial development.

Specifically, the project addressed the following research questions:
  I. How can HEIs, in their teaching, research and third mission activities, contribute to the Entrepreneurial Discovery Process (EDP) within a region?
  II. How do curricula and academic specialisation within and between HEIs interact/align with priority setting at regional level?
  III. What are the main drivers and barriers for building quadruple helix partnerships within the HE and territorial governance systems?
  IV. How to optimize the role of HEIs throughout the RIS3 cycle and make it self-sustainable over time?
  V. How can HEIs combine sources of funding at EU and national level in a more strategic manner to bring about transformational change within a region?
  VI. What are the main instruments used to capitalise the potential of HEIs, business and other key stakeholders in the context of S3?
  VII. How an improved participation and higher integration of HEI in the overall RDI ecosystem of the region can contribute to higher impact of the region's RIS3.

In the case of NE Romania, the study adopted a qualitative methodology based on a set of tools: self-evaluation exercise, semi-structured interviews and a workshop on leadership for HE managers.

2. Self-evaluation exercise: methodology and results

➕ *Methodology*

The self-assessment exercise was viewed to complement the desk based research and had two main functions:

- To provide an opportunity for regions to undertake a self-assessment of how HE is integrated into the S3 policy mix and how HEIs are contributing to S3 implementation. This objective was to initiate a process of self-reflection that could bring about changes to policy approaches.
- To allow the JRC and external experts to understand the regional context, maturity of the R&I system, the role played by higher education in development and innovation, as well as the opportunities, challenges and barriers to the territorial engagement of HEIs and their role in S3 implementation. It allowed the research team, together with the regional authorities, to better plan the next stages of the project.

The self-assessment exercise was conducted through the completion of a questionnaire with open ended questions on the perspectives, concerns and visions of both the regional authority and its stakeholders *(Appendix 1).*

On 7th June, 2016 with the support of the North-East Romania Regional Development Agency, a meeting was organised to introduce the HESS project to local universities and to start a self-evaluation discussion. The participants were split into two working-groups to discuss the self-evaluation questionnaire.

➕ *Results*

The self-evaluation exercise revealed that there is a general very positive feeling about the process of regional development. Also, relevant initiatives include REGINOVA, REGIOTEX as well as the existence of Master Programmes addressing regional development within the EU-studies school. The synthesis of the results of the self-evaluation exercise are presented in relation to the 6 main issues highlighted in the tool: knowledge generation, knowledge absorption and transfer, teaching and learning, organisation oh HE system, and funding.

    i. **Knowledge generation** – main ideas:
- *Knowledge production* is, more or less directly, relevant to the regional priorities.
- HEIs are active as *innovation experts* within EU-funded project (Interreg).
- HEIs need to have *private partners* to get funding, hence research has become more relevant for regional development.
- The *sources of financing* for the research projects, particularly the national ones, are not encouraging a good bottom-up process for collecting project ideas.

    ii. **Knowledge absorption and transfer** – main ideas:
- The universities *share knowledge* through various channels related to staff mobility (ERASMUS+) and participation to international programmes (INTERREG, etc.); structural funds projects (of different kinds) are perceived as an opportunity to share and receive knowledge.
- The *production of graduates,* who proceed to enter the labour market, is also perceived as a

critical vector for knowledge transfer.

- The mechanisms for more strictly defined *technology transfers* (support to Spin-offs, start-up, etc.) are not really available.
- There is limited capacity within the institutions, on *intellectual property management*; professors do not feel they have the knowledge (legal, business, etc.) and the support to capitalise on their research either in terms of entrepreneurship or patents.
- The *results of the research* projects is difficult to pass to the companies and create incentives to test, exploit and apply these results.
- Serious difficulties with *generation of spin-offs* due to a legislation incapable to give sufficient separation of the conflict of interest.

iii. **Teaching and learning** – main ideas:
- *Poor correlation between offer and demand* (shortage of engineering, medical and IT graduates (amplified by brain-drain), a relative oversupply of economics, law and biology graduates and an even larger oversupply of graduates in the social sciences and humanities, while in the textile sectors graduates are in high demand, it is difficult for the university to recruit students).
- The training system is perceived as *too rigid in terms of legislation* as it is not feasible to provide flexible learning under the current framework; similarly, life-long learning is relative underdeveloped due to a lack of appropriate policy framework.
- The *direct communication between academia and entrepreneurs is missing*. The interinstitutional communication needs a framework.
- Each university is ready to include a module dedicated to *business management* (alternative curricula or master degree program) in order to get students more prepared for entrepreneurial initiatives.

iv. **Cooperation** – main ideas:
- In terms of *international cooperation* with other universities, there are several agreements signed for students' exchange.
- *Interaction with the private sector* is common through student placements.
- *The cooperation between HEIs* is most of the time occasionally based on projects; there is a lack of administrative cooperation among universities, while inside each university there is difficult to communicate between the faculties.

v. **Organisation of HE systems** – main ideas:
- There is *high complementarity* between the different universities.
- There is also *good cooperation with vocation training* in Engineering and Economics (not so clear for other schools).
- The *evaluation of members of stuff* is done by the universities (following national regulation) whereas *the evaluation of institutions* is done by the central government (The Romanian Agency for Quality Assurance in Higher Education). Typically, the criteria for evaluation revolve around bibliometrics, teaching quality, participation in international networks/ projects, while they do not take into account the alignment with regional development, nor third mission activities.
- The *regional development policy* in Romania is built in statistical regions (not administrative units). The financing programs for this policy are national with regional allocation, which concludes that the needs identified and prioritized at regional level are only partially addressed by the financing programs (where criteria are set according to the

national prioritized needs).
- HEIs have a certain degree of *autonomy* which allows them to get involved in the regional development process.

vi. Funding
- Universities are actively pursuing participation to *H2020 and international research project*, however H2020 is too competitive.
- *ERASMUS+* is appreciated, but it is mostly seen as being more concerned with a new "philosophy" of teaching than with the needs of the industries.
- *Synergies* are not explicitly pursued, through some projects with Moldova (run by the Economics University) may be seen as making a synergetic use of funds.

Concluding questions:
- Out of the three functions, *teaching is the most aligned to regional development*. Graduates produced are relevant to S3 priorities. Research comes second and appears most important in the Engineering school, whereas outreach is not really relevant.
- There is a clear need for *more flexibility in the relation between industry/university* in order to adjust to the evolving economics challenges. Cultural differences between the two sectors, result in insufficient understanding of each other's needs and of the opportunities than interaction can offer.
- *The governance system* needs to change and provide opportunities for universities to act with a common voice.
- There is a need for a better *communication strategy* in which positive examples of university-industry collaborations are promoted.

Conclusions of the self-assessment evaluation:

The self-evaluation exercise revealed a strong interest for the topic and for the HESS project. There is a good alignment between the sectors in which the university is strong and the priorities selected for RIS3.

Universities were unanimous in highlighting that their main source of support to the RIS3 lied in their teaching activities as the main channel through which universities contribute to regional development is through graduate production. These, especially for STEM (science, technology, engineering and math) and IT faculties, were very much aligned with the strategic needs of the region. However there was underlined a need for interdisciplinary training on entrepreneurship. Also, there appears to be a demand on more flexible learning modules, which cannot be addressed under the current framework.

The IT sector emerged as particularly important and well organised in terms of interaction with industry for training purposes and certainly appears as interesting case to explore in more depth.

In terms of technology transfer and outreach activities, local universities appear less engaged, not least because the legal framework does not favour third mission activities and limit the opportunities to create spin-offs and to engage in knowledge transfer activities.

3. Semi-structured interviews: methodology and results

♣ *Methodology*

Through the support of RDA and the JRC-IPTS I contacted the relevant Rectorates of each university and arranged the semi-structured interview with key representatives of the university management. These were often Vice-rectors in the areas of research, innovation and knowledge transfer.

The interview-guide (annexed to the report in Romanian and in English - *Appendix 2 and 3*) was sent to the interviewees in advance. The interviews were held face-to-face during two periods of time: in November 2016 – in Iaşi and Bacău and in December 2016 in Rădăuţi and lasted around two hours each. The semi-structured interviews had the following **goal and specific objectives:**

Goal:
• Collect data from HEIs in the NE Ro about the way in which they could contribute to the implementation of the S3 in the region.

Specific objectives:
• To identify and analyse the current situation and the potential of the HEIs in getting involved in the regional development.
• To identify the perspectives related to the active involvement of HEIs in the regional and/ or local development.

The 7 public and 1 private universities were contacted, of these all accepted to participate in our study. The participants were often Rectors and Vice-rectors, deans and/ or vice-deans and university professors of representative faculties:

– 11 rectors and vice-rectors in the areas of *RDI and knowledge transfer; international affairs, university promotion and student affairs; institutional strategy, academic evaluation, relations with student organizations, trade unions, NGOs and local community;*
– 6 deans and/ or vice-deans of representative faculties;
– 4 university professors from the S3 fields.

The participants were representatives of the fields connected with the regional priorities or S3 fields:

– ICT and Computer Engineering and Automatic Control
– Medicine, Pharmacy, Chemistry
– Agricultural Sciences and Veterinary Medicine
– Engineering
– Textile Industry, Chemical Engineering (e.g. Biosynthesis and Food industry) and Environmental Protection
– Geography and tourism
– Economy and tourism
– Sports, kineto-therapy
– Arts: Visual Arts and Design, Drama, Music, etc.

♣ *Results*

The semi-structured interviews covered **three broad areas** that will guide the analysis and interpretation of results:

1. Participation in and evaluation of the current situation and the potential of the universities in getting involved in the regional development.

2. The active involvement of the HEIs to align their functions of human capital development with S3 priorities that can support the regional/ local development including developing partnerships with the regional actors in the process.
3. Collaboration between the HEIs and other actors in regional partnerships with a special focus on research – development – innovation, designing and implementing strategies for fostering regional development.

The NE Region offers an interesting mix of reputable HEIs (some of them in the top 12 of the Romanian's HEIs), with different characteristics and different relationships with the territory.

IAȘI has stood for centuries as the most important political, economic, social and cultural centre in North-Eastern Romania. At present Iași houses five of the most representative HEIs in Romania: University Ioan Alexandru Cuza, "Gheorghe Asachi" Technical University, "Grigore T. Popa" University of Medicine and Pharmacy, "Ion Ionescu de la Brad" University of Agricultural Sciences and Veterinary Medicine, and "George Enescu" University of Arts.

Alexandru Ioan Cuza University of Iași is the oldest higher education institution in Romania. Since 1860, the university has been carrying on a tradition of excellence and innovation in the fields of education and research. It offers accredited Bachelor, Master and Doctoral studies at 15 faculties covering a varied field of specializations. It collaborates well with the business environment both at field and faculty (e.g Computer science Faculty – projects, clusters, a very active player in the business environment, Geography and Geology Faculty, especially the Tourism geography). They started courses dedicated to the development of the students' entrepreneurial skills (within the Faculty of Economy and Business Administration), but are very interested in developing this area by means of different projects (Faculty of Computer Sciences) or different initiatives with the industry (e.g. BringItOn). IACU has developed and is further preparing active partnerships with other HEIs in the area in order to develop transdisciplinary study programmes or specific courses (ICT – medicine – arts (arts therapy) – engineering, etc.) or in the research area together with the socio-economic environment (different companies). They benefit of a Department for Research and Project Management and is one of the best placed universities regarding the number of students who benefit(ted) of an international mobility.

"Gheorghe Asachi" Technical University from Iași comprises at present eleven faculties. It is an institution with a long history and tradition in the field of engineering and technical, scientific and cultural education, one of the most well-known institutions of its specialty in the country. It has an active participation both at local and national level, but also international. It has a good collaboration but still aiming for more with the business environment (especially related to S3): Textile Industry, Information and Communication Technologies, Chemical Engineering (e.g. Biosynthesis and Food industry) and Environmental Protection etc. The Centre for Research and technological transfer – POLITEC (running from 1994, is well-known by companies) covers 23 research centres – is undergoing a full process of reorganization, up-dating, redefinition of identity related to the present needs.

It collaborates well with the business environment on multiple levels both at field and faculty (e.g Faculty of Automatic Control and Computer Engineering, which is involved in different projects, clusters, while being a very active player in the business environment, an omnipresent faculty in companies). The university is quite involved in different activities at local level (e.g. Faculty of Architecture "G.M. Cantacuzino" – in city projects). The university has the potential and will to initiate and coordinate other activities and partnerships in specific fields (e.g. Economic/ industrial strategy) as well as to apply for funding.

"Grigore T. Popa" University of Medicine and Pharmacy from Iași, one of the most appreciated institutions with this specialty in the country, stands as a pioneer in the medical field at national level due to the research activity, projects, clusters, policies and legislative initiatives. With recognised innovations in large fields of medicine, oncology, genetics, nutrition, it is the first university which founded a cluster in the NE region. Regarding the HR development, the university answers to the re-

gional needs related to medical care – it produces physicians, pharmacists, bio-technicians, while ensuring training in all residency specialities. The special feature of the university stands with its capability to initiate many of the interdisciplinary study programmes with other HEIs from Iasi and the region to offer specialised personnel in interdisciplinary fields (e.g. biotechnology) which are fundamental for the medical field. The university is also making big efforts to ensure the official recognition by the labour market of qualifications/ occupations and employment of the graduates in pilot medical fields (e.g. nutrition) as well as to investigate the need for medical specialists related to fields and specialties in order to develop a local and regional educational policy based on evidence – planning of tuition number, residency places, jobs.

"Ion Ionescu de la Brad" University of Agricultural Sciences and Veterinary Medicine from Iaşi is another HEI with a rich tradition in the higher education agricultural field, in time adding new fields such as horticulture, veterinary medicine, zootechnics. It is a top level institution with national prestige and it benefits of the potential of the region in the field of agriculture, but also of the tradition and the up-dated technology and material resources. It covers 15 programmes of studies – including the S3 offer – organic agriculture, food security, animal health, environmental and plants protection, agro-tourism. Regarding the HR development, the university offers both studies for all three university cycles, as well as continuous training programmes for the active personnel, and intends to extend its offer also for persons without higher education training in order to develop specific skills within short training courses. The university has a Centre for Research-Innovation and Technological Transfer (including veterinarian clinics and research laboratories) as well as a more recently developed within a POS CCE project – Institute for Research in Agriculture and Environment. The university is actively involved in national and international projects, in partnerships with other HEIs (expertise exchange) – bilateral projects (which led to acknowledging the advanced potential of the Doctoral School). Noticeably, all students are trained to become entrepreneurs.

"George Enescu" University of Arts from Iaşi has its own specific features due to the field approached: Visual Arts and Design, Drama, Music. It has a Centre for Conservation – Restauration (in collaboration with the Museum of Arts – The Moldavia Museum Complex) and is deeply involved in the cultural development of the region. One specific feature is the fact that the artistic field is quite unique regarding the professional status of the graduates: the employers might have personnel schemes and freelancers - mainly liberal professionals. The university developed a good collaboration with the business field and local and county administration, even regional (regional from an European perspective) through concert or theatre seasons, free exhibitions, in the design field with companies, on-requests performances. The university is highly interested to get involved in creating a research field along with the local authorities and other universities, an integrated institute (e.g. at present and in the near future collaboration with Alexandru Ioan Cuza University of Iaşi, "Grigore T. Popa" University of Medicine and Pharmacy - arts therapy) as well as educational partnerships with other HEIs related to the design of interdisciplinary programmes (especially related to S3) or courses. The students of the university are trained in the field of entrepreneurship by means of the courses for artistic management.

Stefan cel Mare University from Suceava is placed in a less developed area where there is no industry or (representative) company. However the last 15 years brought quite a paradigmatic change in the university which was transformed in Humboldtian university where the professor is both an educator and a researcher. More recently the university developed its entrepreneurial dimension. The university is well-known for its spirit of initiative: it started a new cluster and new projects which attract important funding for the scientific research, representing more than 50% of the university funding coming from education. It implements spin-offs in companies, while being preoccupied with improving the technological transfer of the research results, on the collaboration with different businesses while supporting them to apply for projects. The university came first in the last 10 years in the national

ranks of the HEIs regarding patents and requests for patents thus proving an intense innovation focus. It is one of the key ambassadors of the region in attracting investors. Regarding the S3 fields, the university covers IT, food industry, tourism, medicine – nutrition, kineto-therapy. All students are trained by means of compulsory or optional courses in the field of entrepreneurship. Noticeably the university staff especially the academics are supported in their professional development (e.g. foreign language classes). The university transformed itself over the years in a comprehensive university focused on the integrated, full development of its students and academic community: scientific, economic, social, cultural, physical. It developed and is continually investing in maintaining and enriching the relationships with the national and international scientific research community (including international universities), with the local community and the entrepreneurial environment.

"Vasile Alecsandri" University (public) and "George Bacovia" University (private) are both situated in **BACĂU**. The Bacău County is the sixth county in Romania regarding the population number as well as the economic power, covering 4.2% of the national industry. The two universities are complementary as they themselves underlined and both have good relationships with the socio-economic environment *being practically assaulted by employers for certain fields of expertise*.

"Vasile Alecsandri" University from Bacau was founded in 1990 rooted in the tradition of the Pedagogical Institute of Bacău (1961) turned into the Institute of Higher Education of Bacău (1976), in which most of the study programmes were technical. The mission of "Vasile Alecsandri" University of Bacău is both a didactic mission and one of scientific research; it is focused on local and international necessities, and are open to the regional ones. The university intensified its collaboration with the local and county administration, with other city halls from Bacau county and accessed founds for the Youth European Capital, Sports City (1000 competitions a year). As the businesses in the area are confronted with a shortage of HR the university developed good partnerships related to the HR development and only secondarily to research. The university covers S3 fields (environment – first doctoral school in the field; kinetotherapy and medical recovery). It runs one of the first study programmes in the country related to occupational therapy – which led to the inclusion of the occupation in the Romanian Occupational Catalogue that led to jobs within the institutions dealing with children with special needs.

"George Bacovia" University from Bacau was founded in 1992 and developed its study programmes in order to respond to local and regional necessities and to complement "Vasile Alecsandri" University: public administration, commerce and tourism, law. It is a private university, with a well-established entrepreneurial and philanthropic behaviour (volunteering especially). The university has close relationships with the city hall, the local and county councils, but also with RDA-NE providing infrastructure and expertise. It initiated projects and are partners in national and international projects related to the social and corporative responsibility, value based management, entrepreneurship (e.g. students' enterprises similar to spin-off in the tourism field).

To conclude, in most cases the NE HEIs are highly recognized outside the borders of the region at national and international level sometimes even better than inside the region both as knowledge generator and promoter.

HEIs are now actively engaging with other actors firstly for HR development a field where they could be a trend setter, but also research, development and innovation and other 3rd mission activities focusing primarily on the local level and only sometimes on regional development. However, they are mainly re-active aiming at becoming more pro-active and start getting involved in activities focused on regional development with the support of the national authorities (dedicated policies, regulations (legislation) and financial resources).

At present, the HEIs have the potential to act as an appropriate platform for collaboration among other key actors in the region and are also assuming the role of strategic partners in regional development in their fields of expertise.

The synthesis of the results of the semi-structured interviews is presented in relation to the 5 main issues: (1) multi-level governance: balance between national authority - institutional autonomy; (2) local capacity and governance; (3) human resources training and development; (4) partnerships between HEIs and public & private & the 3rd sector actors; (5) funding (European, national, local).

(1) Multi-level governance: balance between national authority - institutional autonomy

Current situation	Challenges
HEIs have the vision and the potential to think and act at regional level - some of the institutional strategies already encompass this.	o Romanian HE policy lacks an explicit regional dimension. o Decentralization regarding funding and budget management, but also HR policy (hiring actors with various expertise) at regional level. o Relative autonomy in spending their budget
Recommendations	
o Policies, strategies and procedures (including financial and fiscal) focused primarily on the involvement of universities in regional development o Expand institutional autonomy particularly regarding funding and budget management related to regional development initiatives, but also the policy of HR (staff).	

(2) Local capacity and governance

Current situation	Challenges
o University staff are voluntarily involved in different decisional committees at local and county level, based on their reputable expertise o HEIs are highly aware of the importance of being present in different organizations (including NGOs, civic society etc.) and thus form strong platforms and partnerships involved in designing long term strategies and a unitary vision related to fields they represent	o Regional approach still at the beginning (it is not institutionalized), counties are having their own policies (!RDA-NE has a regional perception) o Direct and recognized involvement of HEIs in the local and county administration o Maintaining a strong relationship with the local authorities in order to develop a shared understanding of local needs and how the HEIs can meet them o HEIs do not address the local authorities of the counties where they do not activate (only 3 counties with HEIs out of 6) o The well-defined role of HEIs within the local and county administration and regional approach.
Recommendations	
o Awareness campaign to acknowledge the role of HEIs at the political, economic and social level with impact on the regional development o Local, county and regional development framework/ strategy (ideally developed by representatives of the community) based on a long-time vision that should articulate the needs of the wider region, foster ideas and partnerships, support sustainability and a certain predictability, as well as a set of coherent actions to mobilise regional actors including HEIs (coordinated maybe by RDA-NE?)	

o Consistent, institutional partnerships with local and county administration in order to think and act regional
o Means of recognizing and stimulating the expertise of HEIs participating in local/ regional levels of administration.

(3) Human resources training and development

Current situation	Challenges
o HEIs are one of the greatest players in the field of HR education and training o HEIs offer a variety of highly knowledgeable and skilled qualifications: university level qualifications (B, M, PhD), post-university and professional (re)conversion, including an upgrade of the already existing qualifications by means of pre- and in-service training programmes o HEIs are promotors of new study programmes while consciously being capable of an intelligent positioning on the HR training and development market o HEIs are open to adapt the curriculum depending on the labour market needs and those expressed by specific requirements of employers (especially in designing masters, post-university study programmes and professional (re)conversion) o HEIs build partnerships for the professional practicum while also inviting representatives of local and regional actors to act as trainers, mentors, tutors in different masterclasses, workshops, laboratories, summer schools.	o University study programmes and qualifications relevant from the regional perspective o Initiate market labour force analysis, technological and social trends assessment o Scaling up efforts to prepare students for employment (!professional practice/ practicum) o Diversification of the practicum locations and fields/ areas of expertise, including the SMEs complementary to the big national and international companies with quarters in the area o Study programmes reviewed in the light of regional employment patterns, but also syllabuses (at content level) in light with the development of science and technology o Not enough jobs in the region for the graduates o Delays and inertia of work/ labour legislation (e.g. medicine - nutritionists) o Mentorship programmes and professional counselling for students o Stronger linkage with the high school and VET educational entities
Recommendations	
o Development of in-service training (including for employees that do not have higher education diploma – e.g. good practice agriculture) o Involvement of stakeholders in designing masters, post-university study programmes and professional (re)conversion (e.g. good practice ICT) o Development of formative activities and ensure that all curricula are providing opportunities for soft-skills developments (entrepreneurial skills, leadership, creativity, critical thinking, teamwork, etc.). o Development of programmes of studies in partnership with other HEIs in the region o Partnerships with the pre-university level (e.g. good practice consortium with the professional and technical education) to balance demand and offer	

(4) Partnerships between HEIs and public & private & the 3rd sector actors

Current situation	Challenges

o HEIs are actively involved in the relationship with the business environment – recently even more in relation to the S3 o HEIs are part of clusters, industrial parks, business incubators o Projects are a mechanism for creating partnerships	o Personnel exchange (especially coming from public & private sector to HEIs) o Rigid legislation in HEIs o Incentives for the public & private sector o Research (and Technological Transfer) Centres or Knowledge Transfer Departments – at scientific domain/ discipline level or transdisciplinary level (some of them in process to be redefined at the university level o The role of HEIs within the industrial parks, business incubators o Emphasized the social role of the university – less the entrepreneurial one meaning a support and volunteer based involvement and contribution rather one which is awarded o The local industry is underdeveloped, lack of job opportunities, the HEIs should attract private organizations o To use the infrastructure and/ or the expertise of the existing clusters, industrial parks, business incubators for research and Technological Transfer o The poor economic environment, including low-tech structure of the industry inhibits HEIs attempts to promote technology transfer. o Applying fundamental research to the local context, visible gap in moving knowledge to the ground

Recommendations
o Recognition of expertise without academic requirements (PhD, etc.) for representatives of public or private sectors involved in the implementation of study programmes (as top practitioners) and dedicated funds o Fiscal facilities for regional actors (e.g. professional practicum for students) if they enter partnerships with HEIs o Involvement in technological parks, clusters o Mapping existing and potential relationships between academic activities and possible partners in the region in order to monitor progress o Increasing the entrepreneurial potential of the HEIs (including the necessary legislation) o Development of departments for entrepreneurial development in HEIs o Facilities for the stakeholders to get bank credits for their investments in HR development (within the in-service training programmes) o Tools, information and policies to ensure technological transfer by means or researchers mobility

(5) Funding (European, national, local)

Current situation	Challenges
o HEIs have a direct, immediate impact, but also	o Little and limited funds

an indirect (subtle and multidimensional) impact by means of projects of RDI but also focused on the cultural – socio – economic intervention in the community – in relationship with actors involved in local and regional development. o HEIs are one of the big players in absorbing funds by means of different projects (the NE region absorbed almost 90% - ESIF 2007-2013, from the funds dedicated to the region). o HEIs attracted investments coming from the business field (although small amounts of money)	o Bureaucracy (rigid and sometimes absurd) related to projects
Recommendations	
o Allocate directly funds from the EU to regional development, to boost participation to projects related to regional development (HR, infrastructure, research and innovation). o Supplemental funding (from the Ministry budget) for regional development	

4. Leadership workshop for HE managers: methodology and results

🞢 *Methodology*

During the 9th and the 10th of December, RDA and the JRC-IPTS organised at Rădăuți a leadership workshop for HE managers. At this workshop attended 25 participants out of which 18 participants from the 8 HEIs involved in the semi-structured interview.

The leadership workshop for HE management had two main functions:

1. To present and validate the partial conclusions of the semi-structured interviews carried on at a previous stage;
2. To gather more input on specific issues of interest that were tackled both in the self-evaluation exercise and the semi-structured interviews: teaching and learning, human resources development, researchers' mobility and international networks, technology transfer, and external engagement with government, industry and society.

The workshop unfolded according the following structure and organisation of discussions.

- Story Harvest: a Vision for NE Romania (RDA-NE Romania) and its Universities (National expert) – *was the section dedicated to the "original" presentation in a story-like manner of the partial conclusions of the research and thus a validation of the semi-structured interviews*
- Pro-action Café: How to change. Conversations around four vectors for change
  • Teaching and lifelong learning
  • Human resources development, researchers mobility and international networks
  • Technology transfer: Potential, obstacles and challenges
  • External engagement with government, industry and society
- Collective mind mapping: Tools to implement the action plans
- Inspiration from elsewhere:
  • Universities and RIS3 in different European regions
  • Human resources and mobility
- Brainstorming: project ideas for education and learning

-   Understanding the potential for technology transfer in North East Romania

The first aim was reached by the first section of the workshop dedicated to the *Story Harvest: a Vision for NE Romania and its Universities*, while the second aim was covered by the following activities especially the four Action-Cafes.

According to the methodology, the *Story Harvest: a Vision for NE Romania and its Universities* comprised of two interventions, while each speaker had 15 minutes to present in an original manner what the research brought to attention as well as the vision for HEIs engagement in Regional Development in 10 years should be. The rest of the participants had two roles, which were assigned randomly:

a. General listeners: they paid attention to the story and took notes on the aspects most relevant to them. The notes included some reflections on their own experience, not just capture what the story-teller was saying.
b. Wisdom catchers: "Wisdom catchers" needed to focus and take notes on the themes they were assigned. The notes included some reflections on their own experience, not just capture what the story-teller was saying. The themes included:
    - Opportunities and benefits
    - Challenges and obstacles
    - What is missing from the vision
    - Who will be involved?

The methodology for the Pro-action Café was also very specific:

-   The participants sat down at one of four tables in groups of four or five, depending on which of the themes they were most interested: teaching and lifelong learning; human resources development, researchers mobility and international networks; technology transfer: Potential, obstacles and challenges; external engagement with government, industry and society. They were encouraged to form four balanced groups while stressing that they were be moving tables anyway after 20 minutes. Each table had some issues to stimulate conversation in case this is needed.
-   At the beginning of the conversation the table host asked for another participant to report on the conclusions at the end.
-   Conversations pursued structure in three stages of 20 minutes each, addressing the following subjects:
    o   Contribution to the vision
    o   Actions that need to be taken
    o   Governance and organisation
-   At the end of the first 20 minutes, one of the participants volunteered to stay at the table as the host for the following two sessions. The other participants were 'travellers' and chose another table.
-   At the beginning of the second and third stages, the table host briefly summarised what was discussed and agreed.
-   After the third round of discussions, there was a ten minute break when the table host and note taker agreed on the main conclusions from the theme.
-   Feedback from each table was then be shared in plenary by either the table host or the note taker (or both).

✦ *Results*

➢ The first activity at the workshop, *Story Harvest: a Vision for NE Romania and its Universities,* brought together two original interventions:

- *Higher Education and regional development: a vision from the NE- RDA* - Vasile Asandei, Director NE-RDA
    - The first intervention focused on challenges for the HEIs while underlining some of their features that led to the development of a 10 year vision for HEIs in NE Romania. Those features are similar to some of those presented by the HEIs themselves during the interview thus being covered within the presentation of the results, while the 10 year vision can be found in the general conclusions and recommendations of the report.
- *Higher Education and regional development: a vision from academia* – storyteller Cosmina Mironov, University of Bucharest, HESS national expert
    - The second intervention, represented an "original" approach, in a story-like manner, to the partial conclusions of the research and thus a validation of the semi-structured interviews, the complete version of which were presented in extenso in Semi-structured interviews results part.

> The Pro-Action Café brought more input for the research, as follows.

(1) Table 1: Teaching and lifelong learning

Issues:	Actions:
1. Universities do not really understand what businesses require in the regional labour market. 2. Adapting curricula is limited by national regulations 3. Difficulties in enquiring new skills 4. Inter-disciplinary approach is lacking and so graduates cannot 'think outside the box)	1. Informing and consulting the business environment in design of curricula 2. Creation of new professional skills in graduates (e.g. Master programmes, short term courses) 3. Development of soft skills (entrepreneurship, communication, problem solving, management, etc.) 4. More specialisation of masters subjects - should be prepared with regional partners 5. Increase practical element of degrees
Governance:	**General conclusions:**
1. HEIs are not yet empowered to develop flexible programmes of studies	1. Fostering collaboration between universities 2. E-learning, blended-learning, technology in general in providing study programmes 3. Building of interdisciplinary teams and mixed specializations.

(2) Table 2: Human resources development, researchers' mobility and international networks

Issues:	Actions:
1. Difficult to capitalise on the experience academics acquired during the stages abroad once back in Romania 2. Individual initiatives are easier to implement than systemic ones – need to find a way to institutionalize and increase impact of the initiatives we have	6. Intraregional exchanges of staff (either in terms of teaching or job-shadowing) 7. Intraregional Erasmus-like support for students placement (ERASMUS international grants do not cover all the costs of living, a much smaller amount would cover the costs of living for local internships).

3. Long term mobility for researchers 4. Inter-sectoral mobility (HEIs to industry and vice versa both in terms of researchers' or students' exchanges) is pursued only on an ad-hoc basis and it is difficult to identify the right person of contact in businesses without prior knowledge) 5. European Structural Funds is centrally managed, thus making it difficult to elaborate tailored regional approaches	8. Increase International PhD supervision/ co-supervision. 9. International Master courses (however it is difficult to implement new teaching methodologies as education is centrally regulated). 10. Targeted job-fairs between employers and students. 11. Industrial seminars 12. Centralised brokering service 13. Short term mobility for researchers 14. Sound policies for technological transfer, intellectual property rights and conflicts of interest or commitment from HEIs, 15. Investments in technological transfer offices infrastructure and staff 16. Communicating success stories to the general population
Governance:	**General conclusions:**
1. The RDA could have the role of centralised brokering between research and business. 2. The governance system should institutionalise many informally established activities/ initiatives to given them continuity and sustainability (i.e. student exchanges with firms). 3. The governance system should embed incentives for the private sector to search solutions together with HEIs currently firms prefer inferior, maybe more costly, ready-made solutions to investing in research with local HEIs due to the uncertainty of the process). Fiscal incentives could also be explored to incentivise business collaborations with HEIs. 4. Measures to monitor and understand skills-match could be pursued.	1. There is a certain need for the development of a roadmap for human resources mobility 2. Need for mechanisms and a flexible legislative framework for supporting the human resources mobility

(3) Table 3: Technology Transfer

Issues:	Actions:
1. HEIs are not permitted by law to engage into economic activities. This means that they cannot directly create cash flows from technology transfer activities. (It seems that in practice, they're getting paid in an indirect manner, i.e. by getting consumables, equipment and computers by the licensees). 2. The "low tech" regional economy and the luddite character of the population including business owners and local government do	1. Capacity building in existing technology transfer offices by using external expertise is considered as the top priority by most participants. 2. The engagement in strong and focused networking activities with industry and local government to understand needs and propose solutions was mentioned as the second priority by most participants. 3. Cluster-like schemes and demonstration pro-

not provide a fertile ground for new knowledge. 3. There is a strong asymmetry of needs (industry) and solution-information (research) between regional actors. 4. Most HEIs have technology transfer offices but they're funded on a project basis through ERDF; they're not a part of the administrative apparatus of HEIs. No performance statistics publicly available to assess their effectiveness and efficiency. 5. Staff overwhelmed by teaching, research and admin activities: no time to engage with regional government or industry. 6. Collaborative research projects are the main vehicle for technology transfer. There is evidence of all types of TT modalities (licensing, clusters, contract research) 7. There are too many HEIs in the region that are specialized in specific disciplines. It is hard to co-ordinate and perform interdisciplinary research that solves real-life problems.	jects are needed to diffuse innovative approaches in the primary sector. 4. A regional technological transfer office specifically built to solve the information asymmetry would be beneficial to both HEIs and all the other regional actors. A solid project brief for such should be developed. 5. Systematic collection and understanding of needs information; promotion and dissemination of relevant research outcomes. 6. A specific strategy for commercializing research outcomes should be elaborated for each industrial sector in the region.
Governance:	**General conclusions:**
1. HEIs are not yet able to reach a clear conclusion on the governance structure of technological transfer governance in the Region. Two alternatives are being examined: a regional partnership between HEIs, the RDA and the regional industry and retaining the status quo, i.e. keep the HEI technological transfer offices, probably with some capacity building.	1. The main challenge for NE Romania seems to be how to strengthen the linkages between academia/research and industry, government and the society so that knowledge flows are channelled to interested recipients and are conversed into economic assets for the mutual benefit of both sides. 2. Assessment of the potential for technology transfer in the region would start by considering them in the local context. Such factors include the legal barriers for HEIs to engage with industry, the motivation of the faculty members and their understanding of the industry's needs, the HEI policies in providing incentives for technological transfer, the type of knowledge or technology produced by HEIs, proximity to industry, the availability of intermediaries, the industry conditions and others. 3. Elaborating a regional partnership between HEIs and the local government to promote knowledge transfer and address the legal, institutional and organisational issues that are well-understood.

	4. NE Romania HEIs should be proactive in diffusing innovations to society mainly through demonstration and should actively promote their research outcomes that are available for commercial exploitation together with the opportunities for consulting and other services to the industry.

(4) Table 4. External Engagement with Government, Industry and Society

Issues:	Actions:
1. Legislative frameworks (e.g. restrictions on electronic/distance learning) 2. Funding not targeted to priority sectors (e.g. in Turkey there is financial assistance to develop masters programmes in priority areas) 3. How do employers/society/government access knowledge – where is the 'door' into the university? 4. Lack of critical mass/dedicated staff to do engagement 5. How is knowledge managed? 6. How to sustain models and projects after initial funding finishes?	1. Exploit (or create) alumni networks 2. More use of entrepreneurial and problem based learning 3. Develop case studies of good practice locally (e.g. UMF enterprise activities) and internationally (e.g. Aalto university 'factory' model in Finland) 4. Capacity building to develop boundary spanners and experts in regional engagement
Governance:	**General conclusions:**
1. Identify mechanisms for knowledge brokerage (knowledge alliances, KTPs, technology transfer etc.) 2. Regional board for innovation – consultative group, include universities – to articulate the vision and strategy 3. RDA has a mandate to link local/regional clusters to universities	1. Academics engaging with the region are doing so because they are personally motivated, rather than (or in some cases in spite of) institutional or sectoral encouragement. 2. There is a need/desire for a shared vision for the region with a shared understanding of challenges/opportunities and what mechanisms are needed to overcome/achieve them. 3. Need to find ways to exploit the bonds between HEIs and the bridges they can form to reach into other sectors and places (e.g. help to attract investment). 4. There is a need to create frameworks and structures to bring people together to cooperate. 5. Development of the region is also in the interests of universities as it will help to attract and retain students and staff. 6. Sometimes the region needs appropriate rather than the most cutting edge technology – there should be special funds for this as

	most research funds are for 'excellence'.
	7. What is the future for 'mid-level' universities? Where do they fit?

Part IV. Conclusions and recommendations

In this report we have analysed the role of the North-East Romanian universities in the regional development based on the research evidence gather through a set of tools implemented during 2016. At the research participated a number of 7 public universities (all the public universities in the region) as well as a private university (out of 4 in the area). The desk-research and fieldwork allowed drawing two types of conclusions, covering:

      a. the perceived role of the universities within the regional development - perspectives, issues and challenges,

      b. an analysis and evaluation of the actual ways in which HEIs are now involved in regional development,

based on which a set of general recommendations were developed.

As for the first point, HEIs are at present highly aware that they can play a pivotal role in regional development, that they have the potential to support the creation of networks and other capacity building activities. Also, they are aware that they can provide specialist research expertise and links to national and international networks of knowledge. HEIs can be contributing to a rigorous assessment of the region's knowledge assets, capabilities and competencies, including those embedded in the university's own departments as well as local businesses, while bringing global awareness and partnerships across regional borders into the frame through evidenced based identification of competitive advantage around which regional strategies and resources can be concentrated. HEIs can contribute to capacity building on the demand side through new business formation, student enterprise, and graduate placements as well as encouraging staff to actively engage with local businesses. Universities as key anchor institutions can play an important role in building the social relations which underpin the regional innovation system for the formulation and indeed, implementation of S3. In meeting major societal challenges that have both global and local dimensions, universities can contribute to local knowledge creation and its translation into innovative products and public and private services. Furthermore, *HEIs are aware that they cannot develop more if the region does not develop also* as students and graduates should be able to find jobs.

As for the second point, the interviews reveal that universities are now much more actively engaging with stakeholders for research, innovation and other third mission activities. HEIs presently contribute to the regional development mainly by enhancing the human capital in the region through their teaching programmes mainly under and post graduate courses (although they could focus more on in-service training and lifelong learning). They are part of different partnerships with industry and social sector and are deeply concerned about attracting funding for their activities related to the regional development.

Whilst this paper cannot constitute a complete analysis and evaluation of the current situation nor a comprehensive list of what the next steps should be, it nevertheless indicates that universities might offer an appropriate platform for collaboration among key actors and are also useful to emphasize the role of universities as strategic partners in regional development. At present, universities are on the path to develop a strategic role/ vision in the region and its key sectors and are open and willing to meet partners that were previously out of their radius for teaching, research and innovation activities.

Indeed, the HEIs require *a more flexible legislation* related to the programmes of studies adapted to the needs of industry and social actors, to the knowledge absorption and transfer, *a framework for recognizing their involvement in the regional development* especially related to the participation to the local capacity and governance, and the communication with other actors, as well as *stability at all levels*

and *dedicated funding for regional development.*

However, for the universities to get more involved in the regional development, some caveats need to be taken into account. Indeed, it appears that HEIs would have benefited if clearer guidelines for interaction at different levels had been provided by the public sector as well as industry.

These would have made it easier for HEIs and other actors to position themselves strategically within the region in relation with other actors. In particular, rules for participation should be defined in such a way to generate a framework for collaboration which acknowledges the differences across stakeholders.

At this point, to realise the 'promise' of universities to RIS3 and regional development in practice is highly challenging as there are a range of barriers to the effective involvement of universities in this process on both sides (HEIs on one side and industry plus public sector on the other) to which it should be added also an externally one (national government, policy makers, etc.). Policy makers must consider this broader, more supportive role alongside the potential 'generative' role that universities can play, and universities need to be willing to 'step up to the plate' and take on a wider, developmental role that might not directly contribute to traditional research and teaching success measures. There needs to not only be commitment to work together but also concrete action plans for how to achieve it and to overcome barriers.

While every stage of the research led to a set of recommendations as already presented in the Results section, we can formulate 11 general recommendations as generalised from the whole research:

1. *Expand HEIs institutional autonomy particularly regarding funding and budget management including that related to regional development.*
2. *Develop a long-term vision and strategy and exploit opportunities at regional level by establishing an institution as responsible (maybe RDA-NE).*
3. *Mapping existing and potential relationships between academic activities and possible partners in the region in order to monitor progress.*
4. *Develop a single database with all academia representatives involved in RIS3 that should include also information related to representatives' professional skills and field of interests or a single data base with the list of the main collaborators of academia –RDA-NE in such manner giving the possibility to each participant to have access to enlarged group of contacts (including cross sectorial ones).*
5. *Coordinate better the current information channels, offices, platforms and exchange information between HEIs, industry and public sector*
6. *Map the existing research infrastructure and facilities to provide resources for regional clustering initiatives that would include sharing technology centres, incubators, administrative support services, etc.*
7. *Ensure more effective public funds and incentives for SMEs to collaborate with HEIs*
8. *Ensure that any legal obstacles to partnerships between society and the university are removed and review intellectual property rights to allow co-sharing of royalties with the funding agency, the university and the researchers, while redefining tax incentives for R&I activities*
9. *Synergy between different innovations related funding programmes (ESIF, H2020 and other European instruments and national initiatives) policy intervention can become more efficient and effective in supporting the entire research and innovation (R&I) ecosystem.*
10. *Reinforce cluster policies to encourage cooperation between public and private stakeholders and define better each role.*
11. *Develop further lifelong learning activities and distance learning and ensure that all curricula are providing opportunities for soft-skills developments (leadership, creativity, critical thinking, teamwork, etc.).*

To conclude, whilst the road ahead is challenging for HEIs, which at present face a policy environment that is not so friendly and supportive as it should, universities are showing both resilience and leadership in taking up the challenge of being a key actor for local development. If it were to sketch **a vision for the universities for the next 10 years**, then this might be: *universities cooperating more, specialized, but flexible, take more advantage of new opportunities, promote change, be a true brain for the region, be a laboratory, contribute to entrepreneurial discovery, multidisciplinary training and creative development, attract funds, promote quadruple helix.*

References

Conte, A., Ozbolat, N. K. (2016) "Synergies For Innovation: Lessons Learnt From The S2e National Events", Starway To Excellence - Briefs Series – Issue #1 - December 2016, European Commission Joint Research Centre, Institute for Prospective Technological Studies

Curaj, A. (2015). Stairway to Excellence. Country report: Romania. JRC Science and Policy Report (EC, Report EUR 27466 EN)

E3M Project (2012) 'Green paper: Fostering and measuring "third mission" in higher education institutions'. <http://www.e3mproject.eu/docs/Green%20paper-p.pdf> accessed 11 June 2015.

European Commission (2010), Communication from the Commission, "Europe 2020. A strategy for smart, sustainable and inclusive growth", COM(2010) 2020 final, CEC, Brussels

European Commission (2011) Supporting growth and jobs – an agenda for modernisation of Europe's higher education system (COM (2011) (567), CEC, Brussels

Kempton, L., Goddard, J., Edwards, J., Hegyi, F.B. and Elena-Pérez, S. (2013) "Universities and Smart Specialisation", S3 Policy Brief Series No. 03/2013, European Commission Joint Research Centre, Institute for Prospective Technological Studies

Laredo, P. (2007), "Revisiting the third mission of universities: Toward a renewed categorization of university activities?", Higher Education Policy, Vol. 20, pp. 441-456.

Miroiu, A., Murgescu, B. (coord.). (2014). Annual Public Report 2013. Higher education funding and necessary improvement actions. UEFISCDI-CNFIS. Document retrieved in September 2016 at http://www.cnfis.ro/wp-content/uploads/2014/11/CNFIS-Raport-public2013-2014-08-04_en_ultim.pdf

Murgescu, B. (coord.). (2015). Raport public anual – 2014. Starea finantarii invatamantului superior si masurile de optimizare ce se impun. UEFISCDI-CNFIS. Document retrieved in September 2016 at http://www.cnfis.ro/wp-content/uploads/2015/07/CNFIS-Raport-public2014_final_20.06.2015.pdf

OECD (2007) Higher Education and Regions: Globally Competitive, Locally Engaged, OECD, Paris

* * * (2016). Agenția pentru Dezvoltare Regională Nord-Est (document in lucru). Strategia de Specializare Inteligenta a Regiunii Nord-Est, ed. a II a, actualizată

* * * (2016) JOINT STATEMENT OF THE NATIONAL EVENT OF ROMANIA. Synergies between European Structural and Investment Funds (ESIF) & Research and Innovation Funding. http://s3platform.jrc.ec.europa.eu/documents/20182/161712/S2E+Joint+Statement+Romania_FINAL.pdf/064bbf89-0d65-4a42-9f01-8857ea4d88c2

http://www.adrnordest.ro/index.php?page=HESS&language=2
http://www.adrnordest.ro/user/file/hess/EN/Introductory%20meeting%20conclusions.pdf

List of abbreviations

ANC - National Authority for Qualifications
ARACIS - The Romanian Agency for Quality Assurance in Higher Education
CNATDCU - National Council for Attesting Titles, Diplomas and Certificates
E3M - European Indicators and Ranking Methodology for University Third Mission
EDP - Entrepreneurial Discovery Process
ERDF – European Regional Development Fund
ESIF – European Structural and Investment Funds
HE – Higher Education
HEI – Higher Education Institutions
HES – Higher Education System
JRC - European Joint Research Centre
MENCS – Ministry of National Education and Scientific Research
NE – North East
RDA-NE –Regional Development Agency North-East
RIS3 - Regional Smart Specialisation Strategies
R&I – Research and Innovation
S3 – Smart Specialization Strategy
SME – Small and medium enterprises
UEFISCDI – CNFIS - Executive Agency for Higher Education, Research, Development and Innovation Funding - National Council for HE Funding

List of figures and tables

Appendices

SELF-ASSESSMENT EXERCISE
HIGHER EDUCATION FOR SMART SPECIALISATION

Objectives:

The HESS self-assessment exercise has two main functions:

- ✓ An opportunity for regions to undertake a self-assessment of how higher education is integrated into the S3 policy mix and how Higher Education Institutions (HEIs) are contributing to S3 implementation. This objective is to initiate a process of self-reflection that will bring about changes to policy approaches.
- ✓ A starting point / baseline for the HESS project. The objective is for the JRC and external experts to understand the regional context, maturity of the R&I system, the role played by higher education in development and innovation, as well as the opportunities, challenges and barriers to the territorial engagement of HEIs and their role in 53 implementation. It will allow the research team, together with the regional authorities, to better plan the next stages of the project.

Guidelines:

The reply to this questionnaire should be coordinated by the regional authorities responsible for smart specialisation; which is usually the contact point held by the 53 Platform. It should be completed at least a month in advance of the expert and peer field work.

We highly recommend consulting stakeholders before replying, especially the HEIs themselves. This could be the result of a long standing dialogue or a dedicated workshop.

The exercise has two complementary elements:

b) Open ended questions on the perspectives, concerns and visions of both the regional authority and its stakeholders

a) A rating tool (HESS self-assessment wheel') which involves the scoring of your region's current situation with regard to the role played by higher education and HEIs in the implementation of S3.

Questionnaire:

Background

- In your opinion, what has been the level of engagement of HEIs in the regional development strategies so far?
- Which are the enablers/facilitators of the engagement of the HEI in regional development? Give some examples.

1. Knowledge generation

- To what extent is the knowledge produced by HEIs relevant to addressing regional priorities?
- How would you describe the role of HEI in the Entrepreneurial Discovery Process and Smart Specialisation Strategy definition?

2. Knowledge absorption and transfer

- What are the existing tools to support the generation of new companies from HEI (spin-offs)
- Are there examples of universities transferring knowledge to the region from outside the region (knowledge importation)?

3. Teaching and Learning

- To what extent do the curricula of degree programmes in HEIs match regional priorities?
- Do you think that the region has access to the appropriate quantity and quality of graduates?
- Which specific tools have been promoted to enhance the development of human capital and skills in response to regional development needs? Which further tools would be needed to enhance it?
- Do HEIs promote an entrepreneurial spirit among the academic community and the students? Which further tools would be needed to enhance it?

4. Cooperation
- Which have been the specific tools develop to increase the cooperation of HEI with other research and innovation stakeholders?
- How would you describe the connections of the HEI to other stakeholders of the territory (research and technology centres, regional authorities, companies, clusters, etc.)?
- Which specific barriers/challenges have been encountered to improve the coordination of the HEI with other stakeholders of the territory?
- How do HEI contribute to the overall vision and marketing of the region?

5. Organisation of HE systems
- Are existing universities complementary between themselves and to other vocational training or education institutions of the territory?
- How is the role of HEI in the regional development strategy influenced by national rules and policies? What is the degree of autonomy of the HEI to adapt their activities to regional development needs?
- How is the performance of HEIs measured? How these influences on the way they engage in regional development?

6. Funding
- What is the level of engagement of HEIs with international research networks (H2020, etc.)?
- What is the level of engagement of the university sector in international teaching/learning networks (Erasmus+, knowledge alliances, etc.)?
- Are the examples of universities using international / national funding programmes in synergy with regional funds (including the ESIF?) How could this be improved?

Concluding questions
- Overall, which of the three missions of HEI (education, research, outreach) has been better integrated in the S3? Why?
- Which could be the potential specific mechanisms that would be needed to optimize HEI involvement in the implementation of RlS3 and make it sustainable over time?
- Which are the key future challenges to improve the role of HEI in the RlS3 of the region?

HESS Self-assessment wheel

Please rate the current situation of the region according to the six main elements of the questionnaire. This is done by giving a score of 1-5 in the accompanying excel sheet, which also includes a summary of what each element refers to. The wheel is intended to provide a quick overview of how the region sees itself and which areas need to be improved.

INTERVIEW GUIDE

I. In general, the university can play an important role in its community, as well as within a larger, regional ecosystem. One of its key functions is that to support and coordinate the regional, social and community development.
- In your opinion, to what extent is your university involved in the regional and/ or local development so far?
- Is your university involved in the regional policies development?
  - What kind of in-put do you offer?
  - Is your expertise being used one way or another? Please give examples.

II. Collaboration, engagement and information sharing with local and/ or regional stakeholders, with different industries, with the public sector is important for a university that aims to become a driving force for the region in which it acts.
- Does your university have any departments/ organizations acting as knowledge transfer actors or which are required by businesses to provide different services? Please give examples.
- What would be helpful to boost the transfer knowledge, from the legal framework perspective or otherwise?

III. The mobility of human resources, especially researchers, between the private and research sector is a critical element of knowledge transfer.
- How much does your university promote/ take part into exchanges of personnel?
- What tools/ information/ policy support would you need to enhance this type of knowledge transfer?

IV. One of the conclusions of the self-evaluation exercise, implemented in an earlier stage of the research, states that the main channel through which universities contribute to regional development is through graduate production.
- Which are the main drivers and barriers for realistically defining the demand and supply needs at local and/ or regional level, considering the programmes of studies from your university?
- Do you use specific tools to enhance the development of human capital and skills in response to regional development needs? Which further tools would be needed to enhance it?
- Are the local and/or regional partners involved in the process of designing and implementing study programmes (any cycle – B, M, PhD)?
  - Do you find solutions for integrating the experiences and the expertise of the local and/ or regional partners in designing and delivering didactic activities, extracurricular activities or support services?
  - Are there recruited at the university level relevant persons, with significant expertise form the local/ regional area?
  - Are there developed post-university programmes of study (especially) based on requirements expressed by local/ regional organizations?
- In order to develop the professional competences of students which is the perspective for the professional practice? Strengths and weaknesses, opportunities and threads.
- How does your university respond to the development of cross-curricular of competences including the entrepreneurial ones?
  - Are there projects or programmes or any other initiatives within your university focused on this issue?

- o Does your university offer opportunities, formal or non-formal contexts for the development of an entrepreneurial thinking and other related skills?
- o Are there available programmes of mentoring or of personal/ professional development delivered by persons with expertise either in academic field or in the related professional area?

V. The partnership between the university and the community can be strengthen by reciprocal involvement at management/ administrative level, by coordination specific activities, by developing and implementing strategies focused on regional and/ or local development.

- Does your university support different collaborative partnerships with the local communities and organizations, the central and local administration, chambers of commerce and industry and alumni of the institution? Please give examples.
- Do you think that there might be useful for your university to involve the local/ regional partners in some kind of consultative body that might contribute to the development of strategies and practices focused on the regional/ local development? Which might be the pros and cons.
- What about involving your university in the local governance together with other stakeholders within the regional/ local ecosystem?
  - o What kind of input can your university offer?
  - o Which might be the instruments that you could use in this context?

VI. Projects represent a tool for creating partnerships and by which the universities can contribute to reaching some goals related to the regional and/ or local development

- In your opinion, to what extent the projects in which your university is involved have a direct impact on the regional and/ or local development?
- What kind of funding do you access for these projects?
- What incentives might there be put in place in order to boost the interest for this kind of projects?
- How does the process of building up partnerships with local and/ or regional stakeholders work?
  - o Which are the barriers and which are the motivator factors?
- Did you use or intend to develop a strategy or tools to increase the cooperation of your university with other research and innovation stakeholders in the region (business incubators, technological parks and other external initiatives)?

Ghid de interviu

I. În general, universitatea poate avea un rol marcant în comunitatea sa, precum şi într-un ecosistem mai larg, regional. Una dintre funcţiile sale cheie este aceea de a sprijini şi coordona dezvoltarea regională, socială şi comunitară.

- În opinia dvs., în ce măsură consideraţi că este implicată în prezent universitatea dvs. în dezvoltarea regională şi/sau locală?
- Este implicată universitatea dvs. în dezvoltarea de politici în regiune?
    - Ce tip de input oferiţi?
    - Este utilizată expertiza dvs. într-un mod anume? Oferiţi exemple.

II. Colaborarea, implicarea şi schimbul de informaţii cu parteneri locali şi/sau regionali, cu diferite industrii, cu sectorul public este importantă pentru o universitate care se doreşte a reprezenta o forţă motrică pentru regiunea în care îşi desfăşoară activitatea.

- În universitatea dvs. există departamente/ organizaţii care au un rol activ în transferul cunoaşterii sau cărora li se solicită de către mediul socio-economic regional să ofere diferite tipuri de servicii? Vă rugăm să oferiţi exemple.
- Ce anume consideraţi că ar putea stimula această funcţie de transfer al cunoaşterii, spre exemplu, un nou cadru legislativ sau alte modalităţi?

III. Mobilitatea resurselor umane, a cercetătorilor, în special, între mediul privat şi mediul de cercetare reprezintă un element critic al transferului de cunoaştere.

- În ce măsură universitatea dvs. promovează şi/sau este implicată în schimbul de personal?
- Ce instrumente, informaţii, politici ar putea să conducă la o creştere a acestui tip de transfer al cunoaşterii?

IV. Una dintre concluziile exerciţiului de auto-evaluare, realizat într-o etapă anterioară a cercetării, a fost aceea că modalitatea certă prin care universitatea contribuie la dezvoltarea regională o reprezintă producerea de absolvenţi competenţi.

- Care consideraţi că sunt principalii factori de stimulare, respectiv barierele în a defini în mod realist cererea şi nevoile de formare la nivel regional şi/sau local, raportate la programele de studii oferite în universitatea dvs.?
- Utilizaţi instrumente specifice care să orienteze dezvoltarea capitalului uman şi a competenţelor acestora ca răspuns la nevoile de dezvoltare regională? Ce alte instrumente ar putea fi utile pentru a stimula această dezvoltare?
- Sunt implicaţi parteneri locali şi/sau regionali în procesul de proiectare, implementare şi revizuire a programelor de studii?
    - Găsiţi soluţii pentru integrarea experienţei şi a expertizei partenerilor locali şi/sau regionali în dezvoltarea şi livrarea activităţilor didactice, a celor extracurriculare şi a serviciilor de suport?
    - Sunt recrutate la nivelul universităţii dvs. persoane reprezentative, cu expertiză semnificativă din spaţiul local/ regional?
    - Sunt dezvoltate programe de studii post-universitare (în special) ca răspuns la nevoi/ solicitări exprimate de partenerii locali şi/sau regionali?
- În vederea dezvoltării competenţelor profesionale ale studenţilor, care este strategia_privind practica profesională în cadrul universităţii dvs.? Indicaţi puncte tari, puncte slabe, oportunităţi şi ameninţări.

- Cum răspunde universitatea dvs. la provocarea de a dezvolta competenţe transcurriculare, inclusiv competenţe antreprenoriale?
  - Există programe, proiecte sau alte iniţiative, în cadrul instituţiei dvs., în acest sens?
  - Oferă universitatea dvs. oportunităţi, contexte formale sau non-formale de dezvoltare a unui mod de gândire antreprenorial, dar şi a abilităţilor aferente?
  - Mentoratul sau alte forme de dezvoltare personală & profesională sunt asigurate şi oferite de persoane cu experienţă din mediul academic sau din domeniul de activitate profesională?

V. Parteneriatul între universitate şi comunitate poate fi consolidat şi prin implicarea reciprocă la nivel administrativ, prin coordonarea de activităţi specifice, prin dezvoltarea şi implementarea unor strategii centrate pe dezvoltarea regională şi/sau locală.

- Universitatea dvs. susţine diverse parteneriate de colaborare cu comunităţile şi organizaţiile locale, administraţia centrală şi administraţiile locale, camerele de comerţ şi de industrie şi alumni ai instituţiei? Oferiţi exemple.
- Consideraţi că ar fi util pentru universitatea dvs. să implicaţi parteneri locali/ regionali într-un organism de tip consultativ care să-şi aducă contribuţia la dezvoltarea de strategii şi practici centrate pe dimensiunea dezvoltării regionale/ locale? Indicaţi argumente pro şi contra.
- Ce opinie aveţi în legătură cu implicarea universităţii dvs. în coordonarea de activităţi cu alte categorii interesate din cadrul ecosistemului regional/ local?
  - Ce tip de input ar putea oferi universitatea?
  - Care ar putea fi instrumentele pe care să le utilizaţi în acest context?

VI. Proiectele reprezintă un mecanism prin care se pot construi parteneriate şi prin care universităţile pot contribui la atingerea unor obiective de dezvoltare regională şi/sau locală.

- În ce măsură proiectele în care universitatea dvs. este implicată au un impact direct asupra dezvoltării regionale şi/sau locale?
- Ce tip de finanţare aţi accesat pentru aceste proiecte?
- Ce stimulente ar putea fi oferite universităţii dvs. în sprijinul creşterii interesului pentru astfel de proiecte?
- Cum decurge procesul de dezvoltare de parteneriate cu categoriile interesate la nivel regional şi/sau local?
  - Care sunt barierele şi care sunt factorii motivatori?
- Aveţi sau intenţionaţi să dezvoltaţi o strategie şi/sau instrumente care să stimuleze cooperarea universităţii dvs. cu alţi actori implicaţi în activităţi de cercetare sau inovare la nivel regional şi/sau local (incubatoare de afaceri, parcuri tehnologice şi alte iniţiative externe)?