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COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

"A new partnership for the modernisation of universities: the EU Forum for UNIVERSITY-BUSINESS DIALOGUE"

Impact Assessment

{COM(2009) 158 final SEC(2009) 424 SEC(2009) 425}

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Modifications following the Opinion of the Impact Assessment Board

Following the opinion of the Impact Assessment Board several changes have been made to the impact assessment:

This version tries to make clearer the relationship with the University Modernisation Agenda. The general policy objective has been redefined to clarify the link. We have also integrated an additional table to clarify the link between the specific objectives and the general policy objective and the specific objectives and the areas addressed under the modernisation agenda of Universities.

This version provides also some more details on the proposed options 2, 3 and 4.

A summary on the internal and external consultation has been included into the main part of the report.

1. **PROCEDURAL ISSUES AND CONSULTATION OF INTERESTED PARTIES**

1.1 Introduction and mandate

Lisbon Strategy – Important role of Education and Training

Education and training was, from the start, identified as a crucial factor in achieving the overall objectives of the Lisbon Strategy to become the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion. As part of this, the Heads of State and Government asked for "not only a radical transformation of the European economy, but also a challenging programme for the modernisation of social welfare and education systems". At the 2007 Spring European Council, Member States agreed in the framework of the Lisbon strategy for Growth and Jobs on 4 priority areas; education and training is related to three of these areas, namely more research and innovation, investing in people and a more dynamic business environment. In the recovery package¹, which was endorsed by the European Council at its summit on 11-12 December 2008, the Commission highlighted the crucial role of education, innovation and research for Europe.

Universities, research organisations and enterprises are at the heart of the Knowledge Triangle:

Within the overall focus on education and training, there is a particular stress on the Knowledge Triangle, i.e. the interaction of education, research and innovation and acting as a key driver of the knowledge economy in delivering sustainable growth. Europe has to reinforce its efforts to make the triangle fully operational². Universities have a key role to play in this regard and new forms of cooperation between universities and research organisations with the world of enterprise, to address education – research – innovation ecosystems have to be developed and implemented.

¹ COM(2008) 800 final "A European Recovery Plan"

² COM(2008) 865 final "An updated strategic framework for European cooperation in education and training"

Growing importance of Higher Education

The educational attainment level of the working age population in the EU (15 to 64 year olds) has risen during the last decade. In 2006 there were 7 million more persons in the labour force having a high educational attainment level, compared to 2000. Since 2000, upper secondary attainment in the EU increased slightly, from 76.6% of people aged 18-24 to 77.8% in 2006. In other words, higher education institutions produce about one million more graduates per year compared to 2000. Furthermore, the number of graduates in maths, science and technology has increased by 26% since 2000³.

About 19 million students were in 2006 enrolled in higher education in the EU, nearly 3 million or 18% more than in 2000.

This increase will not stop over the coming years. Given the up-coming challenges, many Member States intend to increase the participation rate of young age cohorts in Higher Education (HE) substantially (ex. UK from 40% to 50% over next 5 years); however increasing the numbers is not sufficient. HE needs to be modernised to make sure that the quality is right. The positive trend noted above needs to be seen in this light. Europe needs more university graduates and needs them to be educated in new ways in order that they can address the need for adaptable, creative knowledge workers to sustain its ambition to become the world's leading knowledge economy. Furthermore, many of the EU's key competitors have higher shares of people with tertiary level educational attainment. The EU average for 25-64 years old is 23% compared to 40% for Japan, 39% for the USA, 32% for Australia and Korea and 27% for New Zealand.

Modernisation of Universities

The Communication of the Commission "Delivering on the Modernisation Agenda for Universities: Education, Research and Innovation"⁴ highlighted the key role Universities play in **Europe's future and for the successful transition to a knowledge-based economy and society.** It underlined the need for in-depth restructuring and modernisation of the sector if Europe is not to lose out in the global competition in education, research and innovation.

The Communication suggested changes in nine areas as key to success:

- Break down the barriers around universities in Europe
- Ensure real autonomy and accountability for universities
- Provide incentives for structured partnerships with the business community
- Provide the right mix of skills and competencies for the labour market
- Reduce the funding gap and make funding work more effectively in Education and Research
- Enhance Interdisciplinarity and Transdisciplinarity
- Activate Knowledge through interaction with society
- Reward excellence at the highest level
- Make the European Higher Education Area and the European Research Area more visible and attractive in the world.

³ SEC (2008) 2293 "Progress Report - Indicators and benchmarks 2008"

⁴ COM(2006) 208 final "Delivering on the Modernisation Agenda for Universities: Education, Research and Innovation"

The Council in its Resolution on modernising universities for Europe's competitiveness in a global knowledge economy⁵ agreed to these items and **invited the Commission to support** the Member States with regard to the modernisation agenda, including through encouraging partnerships between universities and industry/private sector.

The implementation of the modernisation agenda for higher education has also been defined as one of the priority themes for 2009 - 2010 in the updated strategic framework for European cooperation in education and training⁶, within which the Commission and the Member States engage in policy cooperation and exchange based on commonly agreed objectives, indicators to measure progress and, in certain key areas, benchmarks.

Importance of partnership between business and universities

Partnership between universities, research organisations and enterprises is already crucial to several different actions at the EU level which are designed to strengthen the knowledge triangle. The Joint Technology Initiatives, the European Technology Platforms, the Clusters of Excellence and the newly established European Institute for Innovation and Technology (EIT) with its Knowledge Innovation Centres are good examples for new forms of collaboration and partnerships.

The May 2006 Communication on modernising higher Education argued that business had a contribution to make in three areas:

- Governance: business models could be imported to the university world;
- Funding: enterprises have a potential role to play in funding university activities in both the education and the research fields; and Curricula: students need to receive the kind of education which will prepare them for the world of work of the future, enterprises can both help to define that and can offer the kinds of placement which will help students make the transition from study to work. Enterprises must also feel encouraged to release their staff for further learning and updating of their skills throughout their working lives.

In successive Council exchanges on *higher education*, focussing on how the quality of higher education could be improved and on how to develop top quality universities, the relationship between business, universities and research has been identified as one important point. In addition, several Member States have begun to develop mechanisms to structure the dialogue and interaction between universities and business.

1.2 Consultation of interested parties

A public consultation on the importance and relevance of a mechanism for enhancing university-business dialogue was not considered necessary for the following reasons:

a) Contacts with projects and discussions with stakeholders had clearly identified the demand for such a mechanism;

⁵ COUNCIL RESOLUTION of 23 November 2007 on modernising universities for Europe's competitiveness in a global knowledge economy; 16096/1/07 REV 1

⁶ COM(2008) 865 final "An updated strategic framework for European cooperation in education and training"

b) Discussions in the Cluster on Higher Education (with representatives from Education Ministries from the Member States) and at the Peer Learning Activity (PLA) in the UK in October 2006 had further underlined the need for such a mechanism.

c) The added value of a public consultation in this context was not obvious to us. Instead of organising a public consultation a more targeted approach towards relevant stakeholders seemed more efficient and effective.

Opinions and views of stakeholders on the importance and relevance of a mechanism for enhancing university-business dialogue were collected via two main roads: directly through the organisation of a number of targeted events with the stakeholders, indirectly through the analysis of a number of projects implemented under EU programmes.

Most relevant input was collected via the organisation of events bringing together the main stakeholders: representatives of Higher Education (staff and students), research organisations, companies (small and large), business organisations and public authorities.

Workshop in July 2007 with representatives from European Business and Higher Education Associations

The University-Business Forum in February 2008

Thematic Forum on Continuing Education and Lifelong Learning in June 2008

Thematic Forum on Curriculum Development and Entrepreneurship in October 2008

Thematic Forum on Knowledge Transfer in November 2008

The 2nd European University-Business Forum in February 2009

These six events brought together more than 900 representatives from the different stakeholders from all over Europe. The first two events (workshop in July 2007 and the first European University-Business Forum in February 2008) addressed the issue of University-Business Cooperation on general level and the relevance of specific action on European level in this field. The three other events were focusing on specific aspects of possible areas of cooperation. The 2^{nd} University-Business Forum in February 2009 took stock of the lessons learned from the different meetings organised during 2008 and tried to map out future directions for the Forum's work. It is the main source for the envisaged policy document.

There was a clear message that participants wanted the opportunity to dialogue on European level on these issues and to build on the experience already gained. There was strong support for a University Business Forum at the European level and for the collection, exchange, sharing and dissemination of good practices.

The participants supported the view that cooperation between the stakeholders needed to be reinforced.

<u>Modernising Higher Education Cluster - Peer Learning Activity on University – Business</u> <u>Partnerships (UBPs), October 2006</u> Modernising Higher Education Cluster - Peer Learning Activity on Circling the Knowledge Triangle from the perspective of Education: the added value in better connecting Higher Education to Research and Innovation, June 2008

These two events were organised within the framework of the Education and Training 2010 work programme. The Cluster on Higher Education involves representatives of 20 Member States. Peer Learning Activities are organised in different Member States on specific topics that are considered as being of particular interest by the cluster members. These two PLAs were focusing on partnership and better cooperation between relevant stakeholders.

Number of projects under the Erasmus programme, including a survey among Higher Education Institutions on University-Business Cooperation.

There are a number of projects under the Erasmus programme that address issues related to University-Business cooperation. Particularly interesting was a project, coordinated by the DAAD⁷, which included a survey of European Higher Education Institutions to understand the importance given to University-Business cooperation. More than 80% of the HEIs that replied indicated that University-Business cooperation was of strategic importance. The project formulated also a number of conclusions and messages to Higher Education Institutions, enterprises, governmental organisations and the European Commission.

A working group with representatives from DGs Research, Employment, Social Affairs and Equal Opportunities and Enterprise and Industry met regularly during 2008; colleagues from those DGs participated also at the preparation/organisation of the plenary and thematic Forums.

An **Inter-Service Steering Group (for Impact Assessment)** with representatives from: Secretariat-General, Research, Employment, Social Affairs and Equal Opportunities, Information Society and Media, Regional Policy, Enterprise and Industry met 2 times.

The annex provides a detailed list of the different events together with the respective reports.

The stakeholders involved in the events were:

Representatives from European, National and Sectoral Business associations;

Representatives from companies;

Representatives from Regional Development Agencies;

Representatives from European University Associations; European Student Associations; Universities and other Higher Education Institutions (presidents, rectors, professors and students);

Representatives from national and regional authorities.

There was a clear message on the importance and value of University-Business Cooperation. Discussions did not focus on the "IF there should be cooperation", but on "HOW cooperation is to be organised" so that it is beneficial for all stakeholders. Participants from both the enterprise and the education sides welcomed the opportunity to dialogue on these issues and to build on the experience already gained. There was strong support for a University Business

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Socrates Accompanying Measures: project 130023-AM-06-EMC

Forum at the European level and also for the collection, sharing, exchange and dissemination of good practices.

The discussions in the thematic forums organised during 2008, which were focused on specific topics in the context of University-Business cooperation (Continuing Education and Lifelong Learning; Curriculum Development and Entrepreneurship; Knowledge Transfer), lead already to the identification of a number of areas where action is required on National, regional or institutional level.

The forum in February 2009 took stock of what has been learnt and achieved so far, it provided a number of messages to the different topics addressed and proposed several lines of action for the future.

2. **PROBLEM DEFINITION**

This impact assessment considers potential impacts relating to two specific issues from within the overall agenda for modernising higher education: the first concerns the issue that too many graduates do not have the right mix of knowledge, skills and competences for the labour market, and the second, the insufficient innovation capacity of Europe. However, it is worth emphasising that the analysis could be extended to other fields and the value of a dialogue will not be confined to these areas alone.

The proposed initiative is a direct Commission contribution to the modernisation agenda. Given the broad nature of the issues and the nature of the sector – the need to engage with Governments, with universities and with other stakeholders, all the while respecting subsidiarity – there is no one unique track by which the Commission pursues university modernisation. Modernising universities is a priority issue within the Open Method of Coordination (OMC) for Education and training – the main vehicle by which the Commission works with Member States. It is also a major element within the Bologna process.

A key element within the agenda for modernisation set out in 2006 was that universities should develop structured partnerships with the world of enterprise in order to "become significant players in the economy, able to respond better and faster to the demands of the market and to develop partnerships which harness scientific and technological knowledge", without in any way calling into question their social and cultural remit.

The Commission, in response to the invitation from the Council (Council Resolution, 23 Nov 2007; 16096/1/07 REV 1) has established a report to the Council on "Modernising Universities for Europe's competitiveness in a global knowledge economy" (COM(2008) 680 final). This report recognises that although progress is being made in all nine areas, a lot remains to be done. Just to mention some few of the nine areas: Mobility of professors, researchers and students is by far not at the targeted level (Break down the barriers around universities in Europe); structured partnerships with the business community are too exceptional (Provide incentives for structured partnerships with the business community); still too many graduates do not have the right mix of knowledge, skills and competences for the labour market, universities and mindsets, universities are still not very committed to the lifelong learning agenda (provide the right mix of knowledge, skills and competences for the labour market); universities do not sufficiently share their knowledge with society (Activate knowledge through interaction with society).

The Commission will continue its dialogue with national authorities and stakeholders on how best to advance the modernisation agenda.

Links between universities and business were identified early on as being important for the modernisation agenda, important for governance, funding and curriculum development.

2.1 Inappropriate mix of knowledge, skills and competences

As highlighted in the Commission's Communication⁸ on the 'Employment in Europe 2008 Report', a recurrent concern of policy makers in the fields of education and employment is the mismatch between workers' education and skill levels, and actual job requirements in the labour market.

While graduates generally succeed comparatively well in the labour market, the composition of skills emerging from EU universities and training systems does not fully support a truly innovation-driven economy.

Feedback from employers indicates that a too large number of graduates do not have the right mix of knowledge, skills and competence that is required in the labour market. Employers are in particular asking for more transversal and transferable skills, an area of skills development which is often inadequately tackled by universities. Research by the CBI⁹ shows that almost a third of employers (30%) have problems with graduates' generic employability skills such as team working, communication and problem solving. Employers are also disappointed with graduates' attitudes to work (25%), self-management (33%), business awareness (44%) and knowledge of foreign languages (49%). This mismatch between the knowledge, skills and competences acquired by graduates and those expected and valued by employers, is explored in more detail in the study undertaken by the CIHE in the UK¹⁰. The report confirms the mismatch and provides some recommendations to employers, universities and students.

From the REFLEX survey, there is evidence that graduates are expected to be more or less competent in at least the following five areas: professional expertise, functional flexibility, innovation and knowledge management, mobilisation of human resources, and international orientation¹¹.

The report of the European University Association (EUA) "Trends V"¹² suggests that employability is a high priority in the reform of curricula in all cycles. This concern transcends national boundaries and implementation priorities. However, the results also reveal that there is still much to be done to translate this priority into institutional practice. This is a paradox for a reform process inspired, at least in part, by a concern that higher education should be more responsive to the needs of a changing society and labour market. It indicates that one of the main challenges for the future is to strengthen dialogue with employers and other external stakeholders. For many institutions this requires a change in culture that will take time.

⁸ COM(2008) 758 final "Key messages from the Employment in Europe 2008 Report"

 ⁹ CBI/Pertemps, "Employment Trends survey", 2006

¹⁰ Council for Industry and Higher Education; Graduate Employability: what do employers think and want; 2008

¹¹ Cf. conclusions of the REFLEX project, Allen, J. and van der Velden, R. (eds) (2007), "The Flexible Professional in the Knowledge Society: General Results of the REFLEX Project", Research Centre for the Education and the Labour Market, Maastricht University, The Netherlands.

¹² Trends V: Universities shaping the EU Higher Education Area, EUA report, 2007

But there does not only exist this qualitative skills mismatch in Europe; we also face the challenge of a quantitative skills mismatch: for a number of professions it is and/or gets problematic to find qualified staff (ex. Insufficient number of engineers in several Member States).

And studies show that labour market demand in higher level skills in Europe is intensifying as EU countries strive to reinforce their competitive edge. There is an increasing demand for people with highest qualification levels:

In EU 25, between 2006 and 2020, the proportion of jobs requiring high levels of education attainment should rise from 25.1% to 31.3% of the total; jobs requiring medium qualifications would also increase slightly, from 48.3% to 50.1%. This would amount respectively to 38.8 and 52.4 million high-and medium-level job openings. At the same time, the share of jobs requiring low levels of education attainment would decline from 26.2% to 18.5%, despite 10 million job openings¹³.

A detailed analysis of these issues is provided in the Communication on "New Skills for New Jobs" and the accompanying Staff Working Document¹⁴.

Organisations and individuals are increasingly required to update their skills in response to the demands of competition and a globalised market place, but also due to demographic developments in Europe. The limited and selective access to LLL is a major issue for Europe. Although in many countries the provision of LLL is part of the mission of universities, relevant strategies are rare and for many universities, LLL is still a "slogan". Similarly, few employers have developed strategies which will allow their workforce to update their skills throughout their working lives.

2.2 Europe insufficiently innovative

The Mid Term Review of the Lisbon Strategy stressed the importance of knowledge and innovation as key drivers of European competitiveness, and outlined a variety of proposals aimed at increasing the level, efficiency and the exploitation of education and research as the drivers of innovation¹⁵.

"There has been a continued improvement in the EU's performance (in 2008) relative to the US and a recent improvement relative to Japan. Nevertheless, there remains a significant gap between the EU and these two other regions and there appears to be some slowing down in the catching up with the US in recent year's reads the main conclusion in the eight edition of the European Innovation Scoreboard (EIS)¹⁶.

A key cause of this is the limited level of knowledge sharing, exchange and transfer between higher education and research centres on the one hand and business on the other¹⁷. Many European universities and researchers still consider business as a separate, perhaps even an

¹³ Cedefop, Skill Needs in Europe. Focus on 2020. Luxembourg 2008

¹⁴ SEC(2008) 3058 Staff Working Document accompanying COM(2008) 868 final "

¹⁵ COM (2005) 24 final "Working Together for Growth and Jobs: A New Start for the Lisbon Strategy"

¹⁶ EIS 2008 published on 22 Jan 2009. EIS is an instrument providing a comparative assessment of the innovation performance of the EU Member States and a limited number of other countries. Report and annexes are available at http://www.proinno-europe.eu/metrics

¹⁷ OECD (2002) Benchmarking Industry-Science Relationships

undesirable world, and many businesses do not consider interaction with universities or other research organisations as a strategic input into their future. Whilst this is, in part, a demand side problem resulting from widespread private sector reluctance to work with the higher education sector¹⁸, the responsibility also lies with European universities, and their ability to deal with the demands of companies¹⁹.

Professors, students and researchers need to develop entrepreneurial skills to facilitate the creation of new opportunities out of study and research²⁰. On the whole they have a poorly developed entrepreneurial mindset in Europe that results in few spinouts and new businesses²¹. The staff working paper²² accompanying the Communication "Think Small First - A Small Business Act for Europe underlines that Entrepreneurship is still not sufficiently reflected in educational and training policies.

Another issue in the EU relates to insufficient mobility of professors, students, researchers and company staff in education, innovation and research. The lack of mobility – between institutions, across borders and between academia and business – hinders knowledge exchange, sharing, transfer and creation.

2.3 Diversity of situation in Europe

It is important in this context to underline the diverse situation that exists in Europe between the Member States. Whereas people with higher education have in all Member States better chances to find/keep a job, there are still substantial differences between unemployment rates of graduates in the Member States:

EU	AT	BE	BG	CY	CZ	DE	DK	EE	EL	ES	FI	FR	HU
3.6	2.4	3.3	2.2	2.8	1.5	3.7	2.9	Na	6.0	4.8	3.6	4.8	2.6
IE	IT	LT	LU	LV	MT	NL	PL	PT	RO	SE	SI	SK	UK
2.3	4.2	1.8 (u)	3.0 (u)	3.7	Na	1.8	3.8	6.6	2.2	3.4	3.2 (u)	3.4	2.1

Table 1 - Unemployment rates of the population aged 25-64 with tertiary education level

Eurostat, Unemployment rates of the population aged 25-64 by level of education (annual average); extract of figures for tertiary education, year 2007. (u): Unreliable or uncertain data

This diversity is also reflected in the above mentioned EIS. Although the US keeps its "innovation" lead towards the EU as a whole, there are some MS with a higher innovation

¹⁸ (2003) The Lambert Review of Business-University Collaboration

¹⁹ Lambert, R. and Butler, N. (2006) The Future of European Universities: Renaissance or Decay?

²⁰ COM (2006) 33 "Fostering entrepreneurial mindsets through education and learning"

²¹ Idem 9

²² SEC(2008) 2101 "Commission Staff Working Document *accompanying the* Communication "Think Small First - A Small Business Act for Europe"

index than the US: Sweden, Finland, Denmark, Germany and UK are the most innovative EU countries and ahead of the US^{23} .

2.4 Baseline scenario

A number of policy initiatives and financial instruments exist on EU level in order to support policies and actions in the Member States towards a stronger focus on the readiness of graduates for the labour market and the development of Europe's innovation capacity.

The Commission supports the modernisation agenda for universities²⁴, which aims at creating a framework within which universities can adapt to the emerging demands and become stronger players in the global knowledge society and economy, and thereby play a vital role in support of the knowledge and innovation objectives of the Lisbon Agenda. Furthermore, the Commission²⁵ has proposed a systematic approach to entrepreneurship education at all levels, from the primary school to university, with a view to encouraging more start-ups and a better commercial exploitation of new research developments.

The *New Skills for New Jobs* initiative identifies a number of measures and actions to improve the availability and quality of information on present and future occupational demand and related skill requirements. Although there is awareness of the complexity of the undertaking, everybody agrees that forecasting is an indispensable tool to better inform policy makers and to achieve a better matching between demand and supply of skills.

Several policy initiatives address the promotion and development of innovation in Europe. Some examples: The Commission has proposed framework conditions²⁶ as well as specific measures in support of research and innovation that will contribute to meet the Lisbon targets. The communication on "improving knowledge transfer between research institutions and industry across Europe"²⁷, with its annex²⁸ goes a step further and provides more concrete support to different stakeholders.

Particularly important in this context is the set-up of the European Institute of Innovation and Technology (EIT)²⁹, which aims

• To contribute to improving the innovation capacity of the EU by involving partner organisations in integrated innovation, research and education activities at the highest international standards;

²³ Idem 17

²⁴ COM (2006) 298 "Delivering on the modernisation agenda for the Universities: Education, Research and innovation"

²⁵ Idem 21

²⁶ COM (2005) 488 "More research and Innovation, Investing for Growth and Employment: a common approach"

 ²⁷ COM (2007)182 "Improving knowledge transfer between research institutions and industry across Europe"

²⁸ SEC(2007)449 "Voluntary guidelines for universities and other research institutions to improve their links with industry across Europe"

²⁹ Regulation (EC) No 294/2008 of the European Parliament and of the Council of 11 March 2008 establishing the European Institute of Innovation and Technology

• To become a model and flagship for the integrated European Innovation Research and Education area by generating innovations in areas of key economic or societal interest and providing a reference for managing innovation.

The policy initiatives are financially backed up by various Community programmes: the Financial Framework 2007-2013 allocates substantial amounts of resources to education, innovation and research related actions which will contribute to boost the EU economy and create more and better jobs.

The integrated Lifelong Learning Programme (2007 - 2013) addresses important needs concerning the modernisation and adaptation of Member States' education and training systems, particularly in the context of the strategic Lisbon goals. It also bring added value directly to individual citizens participating in its mobility and other cooperation actions.

The 7th Framework Programme for Research and Technological Development is the main financial tool through which the European Union supports research and development activities. Particular interesting in this context are measures that support the sharing, exchange and transfer of research results, particular important the mobility programme for researchers and post-docs.

The **Competitiveness and Innovation Programme** (CIP) aims at improving the structural innovation and growth conditions of the Union. For this purpose, it includes actions in support of innovation and of growth for SMEs. It aims to improve access to finance, promote eco-innovation and funds EU services in support of business and innovation.

The new generation of **economic and social cohesion programmes** allocates a significant proportion of its budget to investing in the main drivers of growth and employment, especially in the fields of research and development, innovation, business-support activities, employment and education. The Community strategic guidelines on cohesion policy (2007-2013) adopted by the Council, stress the promotion of sustainable development and the strengthening of competitiveness by concentrating resources on research and innovation (RTDI), entrepreneurship, information society and training and adaptability of workers.

This shows that a number of EU policy initiatives and financial instruments are targeted towards supporting education, innovation and research activities, however mainly from one specific angle: education, innovation or research; or focusing on specific target groups: Higher Education Institutions, companies, research organisations or regions.

There is insufficient integration and cooperation; synergies between different actions are not at their optimum. Sharing and exchange of good practice is mainly limited to the respective Community programmes under which they were funded. The analysis of the two problem areas above also shows that a large element of the problem has to do with changing institutional attitudes in both the education and the enterprise worlds. This can best be achieved by the fostering of dialogue and by learning from and extending the good practices which do exist.

2.5 Legal basis, the principle of subsidiarity and EU added

The legal basis for the proposed initiative and instrument is Article 149 of the Treaty.

The proposed initiative and instrument fully respect the principle of **subsidiarity**; the initiative aims at developing a platform on European level for a structured dialogue between the key stakeholders, in particular representatives from Universities and Business. The platform is meant to support the sharing and exchange of experience and good practice, and facilitating mutual learning. It complements and supports activities undertaken on national or regional level.

The **EU added value** of the proposed initiative is two-fold: it will provide concrete support to the stakeholders in the Member States, and it will contribute to better and more coherent EU activities in this field. The initiative on EU level is of particular value to those Member States/regions that are lagging behind. Examples of good practice from leading countries can be used to inspire relevant reforms and actions. The initiative on EU level can provide important support to national and/or institutional champions to promote and implement changes in their systems.

3. **OBJECTIVES**

3.1 General Policy Objectives

To improve the relevance of HE for the labour market (employability of graduates) and to improve Europe's innovation capacity by speeding up the implementation of the Higher Education Modernisation agenda

3.2 Specific objectives

Taking into account the current situation and the needs identified, the most appropriate specific objectives to be considered are:

To support curricular development, leading to employability of graduates;

To support the identification of those skills that graduates are expected to have when entering the labour market;

To support the development of an entrepreneurial mindset among graduates, professors and researchers;

To support the development of appropriate Governance structures at Universities;

To support the development of HE in the field of lifelong learning, more precisely the cooperation between universities and companies in the identification and provision of training/retraining programmes;

To support the inter- and transdisciplinarity in the research and trainings agenda;

To support the exchange, sharing and creation of knowledge through increased mobility between universities, research organisations and business (students, researchers, professors, other staff of Higher Education Institutions (HEI), company staff).

The following table provides an overview of how the specific objectives relate to the general policy objective and to the areas identified in the modernisation agenda for higher education:

Specific objectives	Link of specific objectives to General Policy Objective	Link of specific objectives to areas under Modernisation agenda (speeding up of implementation of HE modernisation agenda)
To support curricular development, leading to employability of graduates	Cooperation in curriculum development should ensure that the needs of the labour market (the relevance of the study programmes) are better taken into account \rightarrow contributes mainly to improving the relevance of HE to the labour market.	Provide the right mix of skills and competencies for the labour market Provide incentives for structured partnerships with the business community
To support the identification of those skills that graduates are expected to have when entering the labour market	Getting a better understanding of the skills that graduates need in order to face successfully the challenges of the labour market should positively influence relevance of the study programmes and so the employability of graduates. \rightarrow contributes mainly to improving the relevance of HE to the labour market.	Provide the right mix of skills and competencies for the labour market Provide incentives for structured partnerships with the business community
To support the development of an entrepreneurial mindset among graduates, professors and researchers;	Development of entrepreneurial attitudes among graduates, professors and researchers should increase the number of start- ups and more generally to a more open and positive attitude to change and innovation \rightarrow contributes mainly to the improvement of Europe's innovation capacity	Enhance inter- and transdisciplinarity Provide the right mix of skills and competencies for the labour market;
To support the development of appropriate Governance structures at Universities;	Development of relevant Governance structures should ensure the establishment of appropriate incentive and assessment systems that would support a better involvement of HE into the problems faced by society.	Break down the barriers around universities in Europe Provide incentives for structured partnerships with the business community

	Activities linked to the needs and expectations of society have to be recognised and valued. → contributes to improving the relevance of HE to the labour market and to the improvement of Europe's innovation capacity	
To support the development of HE in the field of lifelong learning, more precisely the cooperation between universities and companies in the identification and provision of training/retraining programmes;	Improving employability involves not only to those who enter the labour market: the upgrading of competences for those already in the workforce is an equally important challenge. \rightarrow contributes mainly to improving the relevance of HE to the labour market.	Provide the right mix of skills and competencies for the labour market Break down the barriers around universities in Europe Provide incentives for structured partnerships with the business community
To support the inter- and transdisciplinarity in the research and trainings agenda	Having more interdisciplinarity and transdisciplinarity will contribute to make people more open to changes and to innovation; will improve the development of transversal and transferable skills \rightarrow contributes mainly to the improvement of Europe's innovation capacity	Enhance inter- and transdisciplinarity Provide the right mix of skills and competencies for the labour market
To support the exchange, sharing and creation of knowledge through increased mobility between universities, research organisations and business (students, researchers, professors, other staff of HEI, company staff).	Increased mobility between HEI and business in both directions will improve the understanding on both sides of respective needs, expectations and constraints; is a very effective preparation for students to learn about working and to exercise the application of theoretical knowledge to solve practical issues. Helps to build bridges between the two worlds – a good basis to build trust and longer-term relationships	Provide the right mix of skills and competencies for the labour market Break down the barriers around universities in Europe Enhance inter- and transdisciplinarity Provide incentives for structured partnerships with the business community Activate knowledge through interaction with society

\rightarrow contributes to improving the relevance of HE to the labour market and to the improvement of Europe's innovation capacity
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4. **POLICY OPTIONS**

Four main options exist for action on EU level:

- (1) No additional action (baseline scenario)
- (2) Specific actions using the existing instruments
- (3) Focused policy action on EU level including the issuing of a policy document on EU level together with the establishment of a platform on European level for a structured dialogue between the stakeholders
- (4) Focused policy action targeted at Member States.

Policy option 1: See baseline scenario (section 2)

Policy option 2: This option would use the existing financial instruments. No policy document would be published. In difference to the baseline scenario specific actions would be enabled through relevant priority setting in the existing Community programmes. This would lead to the availability of extra resources and the launching of specific calls for proposals and/or calls for tender to support dialogue between stakeholders from the worlds of enterprise and higher education within the framework of existing financial instruments. This option would for example include the possibility to issue specific calls for proposals under the different financing instruments of the EU. We could for example, after agreement by the Lifelong Learning Programme Committee, launch a call for proposal on university-business cooperation in areas related to the specific objectives identified under Section 3.2. Similar calls could be issued under other financing instruments of the EU, as for example the Research programme or the Innovation programme, always conditioned by the approval of the respective programme committees. It would also be possible under this option to set up a (physical and virtual) platform on European level for a structured dialog between the stakeholders, the development and implementation of a database with examples of good practice and relevant promotion and dissemination mechanisms.

However there would be no specific mandate for the operation of such a forum, and it would keep its "piloting" character of 2008. It would not be possible to develop a longer-term vision of the activities of the forum.

Policy option 3: Focused policy action on EU level supporting better cooperation between Universities and Business. As main difference to option 2, this option would include the publication of a policy document by the Commission. This policy document would allow to give a clear mandate to the forum and

 To take stock of what has been learned from the first year of the Forum and other relevant activities at European level about the challenges and barriers to university-business cooperation, the issues to be addressed and good practices and approaches which could be more widely used.

- To make proposals for the next steps in the Forum's work.
- To outline concrete follow-up actions to strengthen university-business cooperation.

The policy document would raise the profile of the initiative substantially and attract attention to the related issue. It would allow, based on the activities of the forum, to formulate a number of messages targeted at the different stakeholders. And last but not least, it allows formulating a number of concrete follow-up actions to strengthen university-business cooperation. The policy document would be of particular relevance for countries, regions or higher education institutions that are lagging behind, and would like to move forward and implement relevant changes.

Policy option 4: Focused policy action targeted at national level to support better cooperation between Universities and Business. As options 2 and 3, this solution would involve the set up of a (physical and virtual) platform on European level for a structured dialog between the stakeholders, the development and implementation of a database with examples of good practice and relevant promotion and dissemination mechanisms. As option 3, it would also include the publication of a policy document. However this option would try to focus much more on the national, regional and institutional level, and would seek defining a number of actions for Member States and stakeholders coupled with agreed deadlines and an agreed process for monitoring and follow-up. Under this option we could also envisage to ask for the definition of relevant benchmarks and indicators that would allow to measure progress of the different Member States.

Policy Instrument

The initiative is based on Art. 149 of the Treaty; possible policy instruments under this article are

- Communication from the Commission to the Council and the European Parliament
- Recommendation from the Council and the European Parliament

For policy option 3, a Communication from the Commission to the European Parliament and the Council with a number of clear messages on the main issues together with proposals for solution and/or actions to the different stakeholders seems the most appropriate policy instrument under Article 149. The establishment of a platform on European level for a structured dialogue between the stakeholders would support and facilitate sharing of good practice and mutual learning. It would also allow supporting and following-up the implementation of measures identified in the Communication.

For policy option 4, a Recommendation from the Council and the European Parliament to the Member States seems the most appropriate policy instrument. Such a Recommendation could specify a range of actions together with deadlines and mechanisms for monitoring and follow-up, addressed to the Member States.

5. ANALYSIS OF POSSIBLE IMPACTS

This initiative aims at improving the employability of HE graduates and at supporting an increase of Europe's innovation capacity. It also aims at speeding up the implementation of the modernisation agenda of Europe's HE.

For none of the options any environmental impacts are expected. The different options do not have budgetary impacts. All proposed actions would be implemented within existing financial resources.

It is extremely difficult to assess the economic and social impacts of the different proposed options. There is no way to prescribe on European level that and what action is to be taken by the Member States. The EU can only provide supporting measures to the Member States. The EU can show that there is urgency for action, it can identify and inform about main issues and possible solutions, it can provide a platform for discussion and exchange between the stakeholders and it can provide access to examples of good practice stemming from multiple sources. On European level we can improve synergies between existing initiatives and programmes.

5.2 **Possible economic impacts**

Making progress in the modernisation of HE would trigger positive economic impacts in the EU. Options 2, 3 and 4 would – at different degrees – contribute to positive developments in the fields of higher education, innovation and research. It is also expected that options 2, 3 and 4 would have positive impacts on certain regions or sectors. In particular trailing regions and sectors could benefit from the proposed options.

The proposed options should also positively influence the macroeconomic environment. HE graduates that are better prepared for the labour market will increase the competitiveness of European companies.

The University of Twente is a good example of a university embedded in its regional economy. Together with regional partners, the university has a knowledge park and business accelerators linking the knowledge in the university with the business community. In supporting entrepreneurship, for over 10 years, the university has had a programme available to all students. For students who wish to start a company there is support from the TOP programme (Temporary Entrepreneurial Positions) with a number of benefits. There is also a programme for University Student Enterprises and a growth programme which is for owner managers of companies. Included in these modules are training and networking activities. Over the last ten years a substantial number of SMEs have been created.

In Western Sweden, 3 universities have developed tailor-made distance-learning courses for SME employees as a means to boost the competitiveness of these enterprises and of the region as whole. The courses address crucial questions for SMEs such as better production techniques, Economics, Logistics, Product Development and Total Production Management. Most of the employees who take these courses are in their forties and have not studied at university level before.

5.2 **Possible social impacts**

Better employability of HE graduates would have positive impacts on employment and labour markets. It would facilitate new job creation and prepare people better for a changing labour market and changing working places. Making progress in the modernisation agenda of HE would positively affect the access of individuals to public/private education or continuing training. It would have an effect on mobility and it would affect universities (Access to and effects on social protection, health and education systems).

Turku Academic Career Services (Rekry) is a joint service of universities in Turku and the Turku Employment Office in Finland. Rekry provides information on job openings and job seeking for students and graduates. Career counselling, seminars and info-days are also provided. In addition, Rekry serves companies and public authorities as a channel for finding interns, and students to do their thesis on a subject important to the company. The University of Turku has the alumni and mentoring programmes which both try to support at least partly students' mobility from the university to the labour market. Within the mentoring programme the person with working experience guides student at the graduating phase to direct final studies, look for job, write CVs etc. The mentor can also use own networks to find work opportunities for the student.

In order to facilitate the comparison between the different options, the following 2 tables provide

- an overall assessment of the 4 identified options in relation to the specific objectives presented under Section 3 (table A);
- B) an estimate to what extent the different options could contribute to the speeding up of the implementation of the HE modernisation agenda (table B).

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	Option 1	Option 2	Option 3	Option 4
	(Baseline)	Specific actions using the existing instruments	Focused policy action on EU level	Focused policy action targeted at Member States
Curricular Development	0	+	++	+++
Identification of skills	0	+	++	+++
Entrepreneurial attitude	0	+	++	+++
Governance	0	+	++	+++
Lifelong learning	0	+	++	+++
Inter- and	0	+	++	+++
Transdisciplin. in research and training agenda				
Knowledge sharing and	0	+	++	+++

Table A – Options in relation to specific objectives

creation		

There is a certain hierarchy between these options, which is reflected in the assessment of the possible impacts. The options are complementary. Option 2 includes option 1 + additional actions within the existing programmes and financial instruments; option 3 includes option <math>2 + the publication of a policy document that provides a clear mandate of the Forum and provides it with a more longer term vision. The policy document proposed under option 4 could cover the aspects addressed under option 3 and option 4 could also include the establishment of the platform foreseen under option 3.

	Option 1	Option 2	Option 3	Option 4
	(Baseline)	Specific actions using the existing instruments	Focused policy action on EU level	Focused policy action targeted at Member States
Break down the barriers	0	+	++	+++
Autonomy and accountability	0	+	+	+
Incentives for structured partnership	0	+	++	+++
Right mix of skills	0	+	++	+++
Reduce the funding gap	0	+	++	+++
Enhance Interdisciplin. and transdisciplin.	0	+	++	+++
Activate knowledge through	0	+	++	+++
Reward excellence at the highest level	0	+	+	+
EHEA and ERA more visible and attractive	0	+	+	+

Table B – Options in relation to items on HE modernisation agenda

6. **COMPARING THE OPTIONS**

Policy option 1 would mean no change to the current situation. Member states and stakeholders that do well today will most probably continue to do so. The existing policy initiatives and financial instruments are highly valuable, however insufficient. The report of the Commission to the Council to the Council Resolution³⁰ shows that a certain progress has been made in the implementation of the modernization agenda of Higher Education, however "*a lot remains to be done*". It shows also that there are substantial differences between Member States and institutions. No action would mean that we continue as in the past; progress against the different targets would continue to be too slow. Without additional action on European level, the additional risk exists that the gap between those countries that are doing well and those that lag behind, increases.

Policy option 2 describes a first possible approach: within the existing policy framework, it is proposed to redefine certain priorities within the available financial instruments. Specific calls for proposals and/or calls for tenders could be organized, resulting in a number of projects and contracts. It is expected that these projects and contracts would positively contribute to achieving the specific objectives. However there would be no specific coordination on EU level between the different projects and contracts. Cooperation, exchange, mutual learning between projects funded under different financial EU instruments would most probably only happen in few cases.

Policy option 3 is based on the analysis that effective university-business cooperation is of key importance for ensuring that graduates have the right mix of skills when entering the labour market and for improving the innovation capacity of the EU. This option involves the issuing of a policy document on university – business cooperation and the establishment of a platform at the European level for a structured dialog and partnership between the stakeholders facilitating and stimulating sharing and exchange of good practice and supporting mutual learning. The initiative on EU level can provide important stimulus for champions on national, regional or institutional level to implement changes in sometimes change-adverse environments.

In addition this initiative has the potential of a specific added value on EU level: it should allow for better coordination of initiatives in the field of University-Business cooperation, managed and supported in different policy areas of the Commission and funded via different financial instruments (ex. Education; Research; Enterprise; Employment; Regional Development).

The strong involvement of the European Commission in the implementation of this option increases the visibility and credibility of the action. The discussions and exchanges with the different stakeholders during 2008 show that additional and coordinated action on EU level in this field is highly appreciated.

Option 3 would also act to complement the policy exchange between the Commission and Member States on these issues which is planned under the next phase of the Open Method of coordination for Education and Training, where modernization of universities has been identified as one of the priority fields to be addressed.

Policy option 4 would, in addition to the actions foreseen on EU level under option 3, involve policy recommendations to Member States, including the possibility to define a number of

³⁰ SEC(2008) 2719; Report from the Commission to the Council on the Council Resolution of 23 November 2007 on Modernising Universities for Europe's competitiveness in a global knowledge economy

actions for the Member States with deadlines and mechanisms to monitor and follow-up.

Whereas option 4 might potentially have the strongest impact, it is extremely likely that Member States and stakeholders would be reluctant to follow a specific set of policy guidelines on university-business cooperation. The cooperative exchanges on education and training within the Open Method of Coordination are based on a careful recognition of subsidiarity and of the different roles and responsibilities of the Commission, Member States and of regional and institutional actors. Direct policy prescriptions from the EU-level would risk undermining the basis of this cooperation. In addition, the adoption of a Recommendation would be a much heavier process compared to the adoption of a Communication and the time frame would be substantially longer, which would lead to a delay in implementation.

Conclusion of section 6

Given the preceding analysis, in particular the strong risk associated with option 4, considering the potential of option 3 compared with option 2, the limited administrative and procedural effort of option 2, the possibility for fast implementation and the strong support received by the stakeholders during 2008 for the set-up on European level of a platform for a structured dialogue, our proposal is to proceed with option 3.

Cooperation between Higher Education and Business is not any more an option, it is a must.

The question is not if there should be cooperation, the question is about HOW – Implementation is the issue. And the EU can support the Member States to make progress in implementation.

Better and more intense cooperation is beneficial for Academia and Business. It is mutually reinforcing and moves knowledge forward in both the 'business' context and the academic context, as the knowledge becomes an integral part of the teaching, learning and the researching in HE and integrated into the business processes of firms and public organisations. Good cooperation provides the basis for longer term relationships that generate a wider variety of opportunities and returns. The insights generated from working together contribute to both the peer review of research and the business need. Student learning is enriched and prepares them for future employment as they gain exposure to live problems and solutions through the curriculum and placements. Relationships become stronger through an increasing number of arrangements from student projects and placements to ambitious partnerships and collaborations that bring benefit to the business and the academics.

The proposed initiative provides a basis for dialog and discussion between the stakeholders; an important element is the sharing and exchanging of examples of good practice. This process of mutual learning should help Member States to establish favourable frameworks and conditions for University-Business Cooperation (ex. University-Business Cooperation part of national/regional HE strategies; appropriate incentive structures for universities; removal of existing barriers (legal and non-legal)). It should also help universities and business to better understand the challenges of University-Business cooperation. For universities it is important to integrate U-B cooperation into their strategies; they have to set-up relevant incentive structures for their professors, researchers and students, and put in place structures that are appropriate for cooperating with enterprises. Companies, in particular SMEs, have to organise themselves for being ready to cooperate with universities. They have to clearly express what they expect from universities. For SMEs, intermediary structures might be of crucial relevance to make cooperation happening.

For both sides it is important that cooperation has to be seen in a long-term perspective and not as a quick fix to urgent problems.

As illustrated in table A (Section 5), better cooperation between universities and business should have a positive impact on the specific objectives identified under point 3:

- Involvement of Business in curriculum development ensures closer linkage to the needs of the labour market;
- Graduates, researchers and professors are more entrepreneurial through increased exposure and cooperation with business (common projects, mobility);
- Universities get active players in the provision of lifelong learning; they formulate a clear lifelong learning strategy and set-up relevant structures to meet the needs of learners and companies. Companies provide structured input on their needs to universities;
- The cooperation will increase trust on both sides; Universities will get better acquainted with business and universities will be more open to involve business into the modernisation of its governance structures;
- Cooperation with companies will stimulate work with inter- and transdisciplinary teams and approaches, including increased mobility of students, researchers, professors and company staff.

This is not only wishful thinking. Examples of good practice exist which demonstrate the value of cooperation between universities and companies: for the students, researchers and professors, for the universities as institution, for the companies and for society. There are examples of companies and universities cooperating in the definition and organisation of new study programmes (very interesting in this context are the so-called dual study programmes, which combine periods of working in a company and studying at university). Some universities have set-up specific boards on faculty and on university level that participate in the development and/or modification of curriculum. Business representatives are members of these boards, ensuring the relevance of the curriculum for the labour market. There are successful examples of cooperation between universities and companies in the field of lifelong learning. Certain universities provide the possibility to people in employment to follow "normal" Bachelor or Master courses, others are setting up specific structures to widen access to their resources and services. Certain universities have implemented mechanisms for the validation of non-formal and informal learning.

A number of companies, in particular large multi-nationals, are very active towards mobility of students, researchers and professors. Students perform internships at the companies, and very often undertake their Master Thesis or PhD on issues identified by the companies. The big challenge is to substantially increase the exchange with SMEs. There are specific programmes in place targeting mobility of students to SMEs: Students spend 3-6 months with an SME working on specific issues. These schemes are highly successful and it is necessary to make the stakeholders, in particular the SMEs, aware of their existence.

7. MONITORING AND EVALUATION

It is proposed to launch a survey in 2010 in order to establish an analysis of the situation. The

study would target national and regional ministries and Higher Education Institutions in Europe with a number of defined questions on the situation of University-Business Cooperation. The survey could for example try to identify the number of universities that have university-business cooperation clearly defined in their missions; or identify the number of strategies or frameworks that exist on national, regional or institutional level, favoring or hindering University-Business cooperation. It is not clear to what extent such a survey would allow to identify the concrete level of cooperation between universities and business, ie. to identify the number of concrete cooperation projects a university has with companies. It would be necessary to set some very clear criteria allowing the definition of university-business cooperation. The survey could be repeated later-on to identify progress.

The survey would be undertaken by an external contractor. The Terms of reference should be ready by end of 2009, and the results available by end of 2010.

This quantitative work should be complemented by qualitative work, in particular the identification and dissemination of good practice and the definition of success factors for university-business cooperation, which lead to achieving the specific objectives.

7.1 **Possible indicators to assess progress**

- Number of new strategies on national or regional level supporting the development of cooperation between HE and business (including the modification of laws to remove existing barriers and/or to provide new incentives)
- Number of universities that include cooperation with business into their mission/strategy
- Number of concrete cooperation agreements between universities and business
- Number of universities that involve business representatives into the development of curriculum
- Number of universities that involve business representatives into their governance structures
- Number of universities with structures in place to communicate with business
- Number of participants at different European forums and more important distribution between participants
- Number of examples of good practice identified and disseminatedNumber of students, researchers, professors and/or company staff that participate at relevant exchange/cooperation programmes

ANNEXES

1. Workshop in July 2007 with representatives from European Business and Higher Education Associations (report annexed)

2. The University-Business Forum in February 2008 (report annexed)

3. Thematic Forum on Continuing Education and Lifelong Learning in June 2008 (report annexed)

<u>4. Thematic Forum on Curriculum Development and Entrepreneurship in October 2008</u> (report annexed)

5. Thematic Forum on Knowledge Transfer in November 2008

http://ec.europa.eu/invest-in-research/policy/ipr_en.htm

6. The 2nd European University-Business Forum in February 2009

7. Modernising Higher Education Cluster - Peer Learning Activity on University – Business Partnerships (UBPs), October 2006 (report annexed)

8. <u>Modernising Higher Education Cluster - Peer Learning Activity on Circling the Knowledge</u> <u>Triangle from the perspective of Education: the added value in better connecting Higher</u> <u>Education to Research and Innovation, June 2008 (report annexed)</u>

<u>9. Number of projects under the Erasmus programme, including a survey among Higher</u> Education Institutions on University-Business Cooperation. (report annexed)

10. A working group with representatives from DGs Research, Employment, Social Affairs and Equal Opportunities and Enterprise and Industry

11. An **Inter-Service Steering Group (for Impact Assessment)** with representatives from: Secretariat-General, Research, Employment, Social Affairs and Equal Opportunities, Information Society and Media, Regional Policy, Enterprise and Industry.