THE IMPACT OF TEMPUS III

The impact of the Tempus Programme on higher education development in the Tempus Partner Countries

A Survey

TEMPUS

European Commission

European Commission
Directorate-General
Education and Culture

http://ec.europa.eu/dgs/education_culture

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Luxembourg: Office for Official Publications of the
European Communities, 2008

ISBN: 978-92-9157-549-7
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Table of contents

1. Introduction 3
   1.1 The Tempus programme and its objectives 3
   1.2 Different types of Tempus projects and national priorities 4
   1.3 The geographical scope of the Tempus programme 5

2. Methodology and objectives of the study 7

3. The impact of Tempus on higher education institutions, staff and students 11
   3.1 The impact of Tempus: analysis of the online questionnaires 12
   3.2 The impact of Tempus broken down by regions 31

4. Recommendations 45
   4.1 Recommendations for the current phase of the Tempus programme 45
   4.2 Shortcomings of the current phase of the Tempus programme 46
   4.3 Recommendations for a future Tempus programme 48

5. Conclusions 53
   5.1 Modernisation 53
   5.2 Supporting the introduction of Bologna principles 54
   5.3 Exposure to an EU environment 55
   5.4 Summing up 59

6. Glossary 61

1. Introduction

1.1 The Tempus programme[1] and its objectives

Tempus is one of a number of European Community programmes designed to help the process of social and economic reform and development in its partner countries.

The **T**rans-**E**uropean **M**obility **P**rogramme for **U**niversity **S**tudies (Tempus) enables universities from EU Member States to cooperate with those in the Western Balkans, Eastern Europe and Central Asia and in the Mediterranean partner countries through projects to modernise higher education. Tempus has been renewed three times since it began in 1990. The programme was consolidated and renewed for the periods of 1994 - 1998 and 1998 - 2000 and again for the 2000 - 2006 period. It has become customary to refer to these periods of the programme as Tempus I, Tempus II and II bis, and Tempus III respectively. The European Commission adopted a communication on the future of Tempus and other EU education programmes[2] in 2004. The content and modalities of Tempus IV are currently being developed.

Objectives[3]

Today, the need to promote understanding between cultures and for the European Union to work with its partner countries in the field of higher education is as strong as ever. Tempus is mainly designed to facilitate the process of transition and reform and to contribute to the reform and upgrading of partner countries' higher education systems. By means of cooperation between higher education institutions, the programme also aims to strengthen civil society and promote democracy as well as enhance mutual understanding and intercultural dialogue between the EU and its partners.

A major goal of the programme is to support the Bologna Process[4], which aims to create a common European higher education area by 2010. In June 1999, Europe's education ministers vowed to reform the structures of their higher education systems aiming for convergeance, while still retaining their fundamental values and diversity. A number of Tempus partner countries have since signed up to this process.

The Tempus programme combines a bottom-up approach, whereby initiative is left mainly to the universities, with a top-down approach, whereby each partner country sets its own priorities so as to maximise the impact of the programme on its reform processes.

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1 http://ec.europa.eu/education/programmes/tempus/index_en.html

2 "The new generation of Community education and training programmes after 2006", Brussels, 9.3.2004 COM(2004) 156 final

3 http://ec.europa.eu/education/programmes/tempus/back_en.html

4 http://www.ond.vlaanderen.be/hogeronderwijs/bologna/

1.2 Different types of Tempus projects and national priorities

1.2.1 The types of Tempus projects

There are three types of Tempus projects: Joint European Projects, Structural and Complementary Measures and Individual Mobility Grants.

Joint European Projects (JEPs)

Joint European Projects aim to increase cooperation and network-building between actors in higher education in EU Member States and partner countries and help the higher education sector propagate its knowledge outside academic institutions. Projects can support universities in applying the principles of the 'Bologna Process', for example by implementing the two-level education system, and the European Credit Transfer System (ECTS).

JEPs for curriculum development create or update courses in line with the Bologna principles, enhance the skills of teaching staff, develop modern teaching and learning materials and provide funds for buying computers and other teaching materials.

JEPs for university management focus on restructuring universities, strengthening managerial and administrative capacities, improving university governance and finance, improving central university services such as libraries, human resources management or student services, introducing management information systems, developing quality assurance systems and promoting stronger links between universities and their surroundings.

JEPs focusing on institution-building aim to develop the administrative and institutional structures of partner countries. They provide short courses aimed at upgrading the skills of non-academic staff from public and private institutions who may play a key role in the transition process.

Structural and Complementary Measures (SCMs)

Structural and Complementary Measures are designed to feed into national higher education policies. Structural Measures are short-term policy advice interventions aimed at supporting reform processes and developing strategic frameworks within higher education. Projects typically address issues linked to the Bologna Process such as quality assurance and related accreditation systems, credit systems and restructuring qualification frameworks to create a convergeant and transparent European system.

Complementary Measures are designed to disseminate and transfer good practice, especially good quality education programmes and effective management practices. They support the process of higher education reform at national level.

Individual Mobility Grants (IMGs)

Individual Mobility Grants aim to help academic and administrative staff take part in training and conferences abroad and to help European academics organise training courses in partner countries. They facilitate discussion and cooperation between participants in Member States and partner countries, participation in specific events such as seminars, conferences or training sessions, retraining or study abroad including collaboration on a specific academic subject, dissemination of good practice and provision of training.

1.2.2 National priorities

Working closely with the European Commission, partner country authorities decide which priorities best meet national needs and which will become the goals of the different types of Tempus projects.

When setting priorities, it is always difficult to identify the most important issues and to focus on just a few. Hard decisions always have to be made. Tempus partner countries and the European Commission agree on national priorities for JEPs and SCMs every year. While thematic priorities will naturally vary from country to country, some priorities come up time and time again. For example, the Bologna Process, accreditation, quality assurance and the need to help higher education respond better to the needs of the labour market are high priorities in all countries.

1.3 The geographical scope of the Tempus programme

The Tempus programme was launched at the meeting of the Council of Ministers of Education in December 1989 as an instrument of cooperation between higher education institutions in the Member States and a limited number of partner countries. The first phase lasted from 1990[5] until 1994.

The first country to be involved in TEMPUS and which is still involved in TEMPUS III was Albania in 1992 as a Phare country[6], followed by **Eastern Europe and Central Asia**[7]region (Russian Federation, Western NIS, Caucasus and Central Asia) in 1994, the Former Yugoslav Republic of Macedonia and Bosnia-Herzegovina respectively in 1996 and 1997, the remaining Western Balkan, so-called Western Balkans[8], countries in 2000 and 2001 and finally the Mediterranean (North Africa and the Middle East [9]) partner countries joined in 2002.

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5 Council decision 90/233/EEC of 7 May 1990.

6 http/ec.europa.eu/enlargement/financial_assistance/phare/index-en.htm

7 http://ec.europa.eu/external_relations/ceeca/index.htm

8 http://ec.europa.eu/external_relations/see/index.htm

9 http://ec.europa.eu/external_relations/med_mideast/intro/index.htm

Currently, Tempus covers 7 Western Balkan countries, 12 countries from Eastern Europe and Central Asian and 9 countries from North Africa and the Middle East:

- Western Balkans countries: Albania, Bosnia and Herzegovina, Croatia, Former Yougoslav Republic of Macedonia, Kosovo[10]; Montenegro and Serbia.

- Countries from Eastern Europe and Central Asia : Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, the Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan

- North Africa and the Middle East: Algeria, Egypt, Jordan, Lebanon, Morocco, Syria, Tunisia, West Bank and Gaza Strip and Israel (on a self-financing basis).

Between 2000 and 2006, Tempus has funded:

- For the Western Balkans: 265 JEPs, 265 SCMs (2003 only), 575 IMGs;

- For Eastern Europe and Central Asia: 361 JEPs, 361 SCMs (2003 only), 908 IMGs;

- For North Africa and the Middle East: 168 JEPs, 168 SCMs (2003 only), 632IMGs.

[10] (under interim international civil administration in line with UN Security Council Resolution 1244 of 10 June 1999 and hereafter referred to only as Kosovo)

2. Methodology and objectives of the study

As part of the discussions on the future of Tempus, the European Commission (DG EAC/ A) decided to launch regional impact studies in order to gauge the impact of the programme on higher education systems, institutions and individuals in its partner counties. The information was gathered through face-to-face interviews and surveys with key actors involved or informed about Tempus activities.

The European Training Foundation (ETF) established teams of two people for each of the seven different regions, consisting of an EU expert and a second expert from the region itself. The teams covered the following regions:

Eastern Europe and Central Asia
(1) the Russian Federation
(2) Western NIS: Belarus, Moldova, Ukraine
(3) Caucasus: Armenia, Azerbaijan, Georgia
(4) Central Asia: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan

North Africa and the Middle East
(5) Maghreb: Algeria. Morocco, Tunisia
(6) Mashrek: Egypt, Jordan, Lebanon, Syria, West Bank and Gaza Strip

Western Balkans
(7) Albania, Bosnia and Herzegovina, Croatia, Former Yougoslav Republic of Macedonia, Montenegro, Serbia, Kosovo[11]

The seven regional studies drew on the results of questionnaires sent to different categories of Tempus stakeholders and on interviews carried out in each country. They were intended to illustrate, on a regional basis and through a convincing number of specific examples, the impact that the Tempus programme has had on the following actors:

- On higher education institutions, including teaching, training and management practices, and external relations. More specifically, they had to show to what extent modernisation processes have taken place within faculties and universities, how much Tempus has contributed to these changes and to what extent teaching/learning processes and curricula have been upgraded leading to better qualifications as a result;

- On higher education staff, including management, teaching and administrative staff. They had to describe to what extent exposure to an EU environment through cooperation with EU university staff and mobility programmes has modified work and teaching practices and modernised the content of curricula;

[11] (under interim international civil administration in line with UN Security Council Resolution 1244 of 10 June 1999 and hereafter referred to only as Kosovo)

- On students, including their potential employability. They had to describe the impact of Tempus on the quality of students' qualifications and whether this has led to improved recognition and acceptance from local employers;

- On organisations closely linked to higher education such as employers, local administrations and ministries of higher education. Did Tempus influence employers at all, and if so, how did they perceive graduates who participated in/benefited from the programme? Did enterprises benefit from Tempus, and if so, did this result in improved relations with universities?

- On higher education systems, with a special emphasis on the impact of the Bologna Process in partner countries.

The key actors interviewed in partner countries belonged to the following categories:

- university staff involved in Tempus projects (management, teaching and administrative staff) and students;

- representatives of organisations benefiting directly or indirectly from Tempus projects (enterprises, local administrations, organisations representing civil society);

- representatives of the Ministry of Education and Local Education Authorities;

- representatives of the National Tempus Offices, EC Delegations, Tacis National Co-ordination Units and international donors.

The regional studies also provide some general conclusions, including positive and negative findings and recommendations for future developments.

The teams used three different sources of information:

1. Reports provided by the grant holders at different stages in a Tempus project's lifecycle.

2. Statistics provided through online questionnaires sent to institutions and individuals participating in Tempus projects (JEPs, SCMs and IMGs). Institutional questionnaires for Tempus JEPs and SCMs and individual questionnaires for the IMGs were developed.

The institutional questionnaires consisted of 79 questions, a few of which were included to provide background information or to help ensure consistency. Different sections were sent to university authorities, faculty authorities and students. University managers were expected to answer viewing the university as a whole and to judge the impact of all Tempus projects implemented at their university. Faculty authorities were questioned concerning the impact of Tempus on their curricula, their experience of new teaching methods and the impact on university management. Students were asked how the reforms and a possible visit to EU universities had affected their studies, qualifications and their lives in general.

The individual questionnaires consisted of 13 questions and were sent to grant holders of IMGs. They were asked about the impact of their visits to EU universities on their working and teaching practices as well as on their careers.

A total of 938 questionnaires were completed, with different completion rates in each region. There was a very good rate of participation from the **Western Balkans** for both the institutional (45) and the individual questionnaires (250), from the Russian Federation for the institutional questionnaires (43) and from North Africa and the Middle East region for the individual questionnaires (160 for Mashrek and 100 for Maghreb). The level of participation from Caucasus and Central Asia was very disappointing.

3. Interviews with the key actors in the different regions through visits to stakeholders in the Tempus partner countries.

Each team received a list of current Tempus projects in their region. From these lists, teams chose which universities to visit, ensuring a regional spread by selecting at least two universities from each country. The link between teams, universities and individuals was provided by the National Tempus Office of the partner country.

The interview questions were prepared in advance as a set of guidelines for the various teams. This made comparing the interview results afterwards easier.

Participants from almost 90 projects were interviewed. 60% of the projects concerned curriculum development,the rest were on university management, institution building and SCMs. More than 400 university staff members and around 140 students took part in the interviews. Details can be found in Appendix I.

This overall, comparative report has been written based on the seven regional studies and summarising the main findings of the seven teams.

Furthermore, individual country fiches have been prepared which give an overview of higher education in each country as well as Tempus activities and their impact. They are published separately and can also be downloaded from the EAC website (http://ec.europa.eu/tempus). One example of the seven regional studies, the one on the Western Balkans, can also be found on the same website.

3. The impact of Tempus on higher education institutions, staff and students

This study aims to investigate the impact of the Tempus programme over a very broad geographical area including extremely diverse cultural, ethnic, linguistic, economic and political realities from North Africa to Central Asia. This sheer diversity should be borne in mind when reading the results of the study.

The impact analysis concentrates on five key areas:

- modernisation processes within universities and faculties influenced by Tempus;
- progress towards the Bologna principles, such as curriculum development and quality assurance;
- exposure to an EU environment including cooperation with EU university staff and mobility programmes;
- links to the labour market and university-enterprise cooperation;
- promoting lifelong learning.

The impact of Tempus on higher education in the partner countries will firstly be examined overall (see section 3.1 below), and secondly on a region by region basis (see section 3.2).

However, it should first be said that the most important finding in all regions was the overwhelmingly positive appraisal of Tempus by all stakeholders: university authorities, ministers, employers, academics, administrative staff and students alike.

Numerous statements by interviewees reflect this positive opinion:

- "Tempus is the core, all other programmes are complementary..." – this opinion is often given when comparing Tempus projects to those of other organisations.
- "Tempus is the only programme addressing higher education as a whole in the (...) countries and it is appreciated for its continuity. Programmes by other organisations only tend to deal with single elements of higher education."
- "Everybody was happy to begin a positive and permanent relationship with students, academics, universities and official institutions in the Maghreb region and Europe."
- "The Tempus programme is a door which provides people from different cultural

backgrounds access to Europe; it opens peoples' minds and enables them to see the other not as someone completely different but as a normal human being with similar academic and personal problems and aspirations."

- "The Tempus programme is the only large international programme left in the country. There are no other programmes involving large-scale mobility of academic staff."

No really negative opinions on the Tempus programme were recorded during the undertaking of this study.

In the following chapters, the five areas mentioned above will be analysed one by one, providing a balanced picture of the Tempus programme in the different regions.

As was explained in the methodology in section 2, a substantial number of Tempus stakeholders completed questionnaires for this study. What follows is a commentary on the most relevant responses accompanied by graphs showing the regional breakdown of these responses.

3.1 The impact of Tempus: analysis of the online questionnaires

3.1.1 How has Tempus influenced the process of modernisation within universities and faculties?

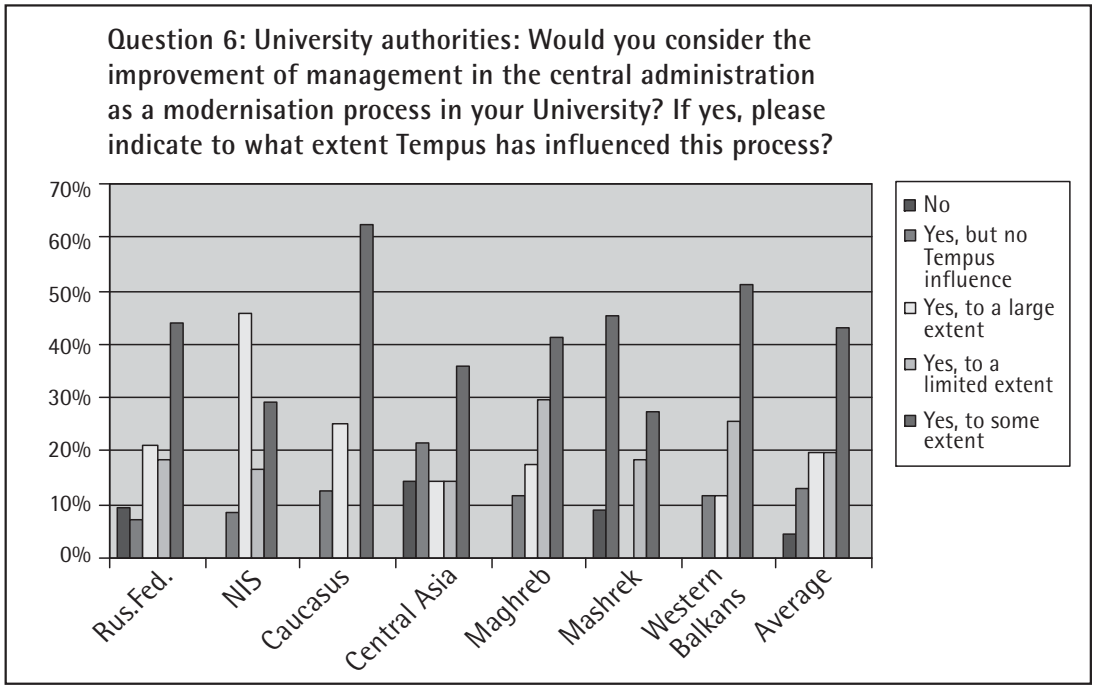
There are many different answers to the question of who initiates modernisation and reform processes in the different partner countries. Moreover the role of ministries of education and the kind of support they provide to universities in the reform process varies from one country to the next. There seems to be a clear link to the nature of the political system in the country concerned, but the dynamism and the willingness to embrace change of people in the ministries are also given as important factors. The majority of the respondents reported that the ministry of education and other official bodies dealing with higher education matters are in charge of formulating higher education policies and strategies. Universities say they have little control over general policy.

When asked about the contribution of Tempus to the processes of reform and modernisation, university authorities reported it had had a very positive influence on their teaching, training, and management processes.

70% of university authorities reported that Tempus had had some degree of influence on the introduction of new statutes in their institution, with the extent of this influence ranging from major to limited. Central Asia represents one extreme, reporting very little impact from Tempus in this respect, while in the Western Balkans the impact is seen as considerable. In the Maghreb region, the influence of Tempus seems to be growing.

Most university authorities stated that Tempus has made a big contribution to achieving effective, professional and transparent university management as well as better education services. More than 85% of respondents said that Tempus had had an influence on modernising administration, be it great or small (see fig. 3.1).

Fig. 3.1

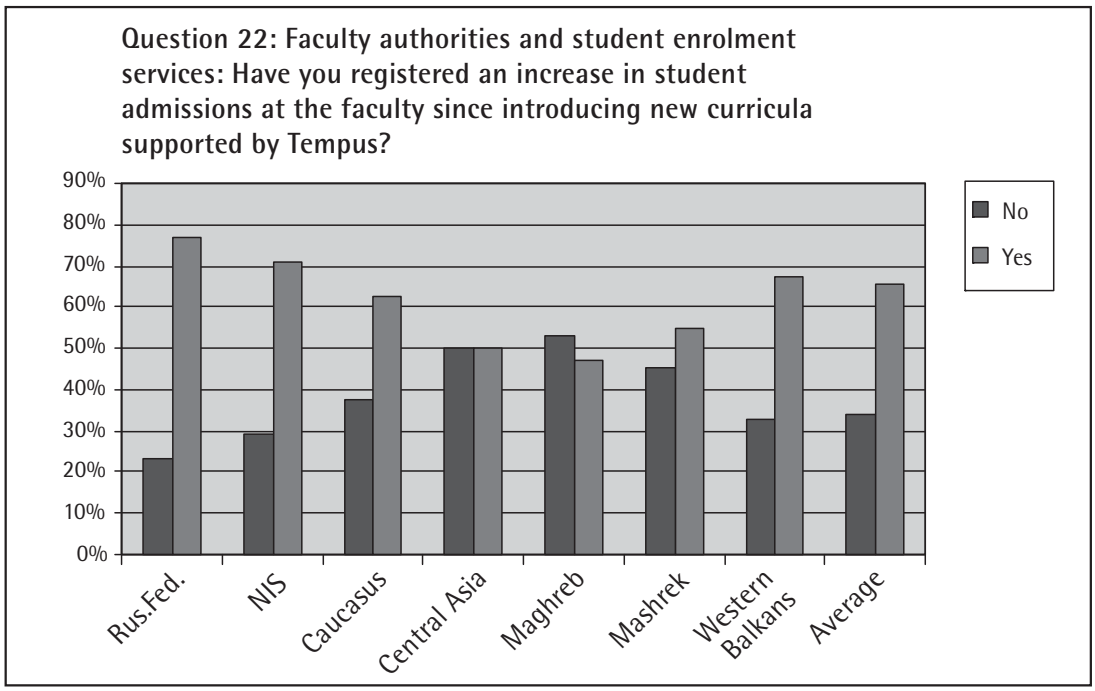


There were few negative responses to question 6 (with Central Asia providing the highest number at 35%). Tempus seems to have had the biggest impact on university management practices in Eastern Europe and Central Asia, with Western NIS showing the biggest impact of all. The impact on the Western Balkans region is lower than could have been expected. Tempus seems to have had some influence (on average in around 50% of cases) on introducing funding allocation to faculties according to exam results and quality indicators. Tempus has also facilitated the introduction of a central quality management system in almost all regions, with the greatest impact reported in Eastern Europe and Central Asia and the Western Balkans.

Participating in the Tempus programme boosted the prestige of faculties and departments and led to greater popularity for the university in question. As can be seen from fig. 3.2, 65% of respondents reported higher student admissions as a result of introducing new curricula supported by Tempus.

One of the main objectives of Tempus is the development of new curricula and/or the modernisation of existing ones. Together with the new curricula, new teaching and learning methodologies are introduced. Faculties offering new or modernised study programmes are more attractive to students and accordingly the student enrolment is higher.

Fig. 3.2



The biggest increase in student enrolments was reported in the Russian Federation, Western NIS and Western Balkans. In Central Asia, participating in Tempus did not lead to more students for all institutions and in the Maghreb region the influence of Tempus on attracting more students is still negligible.

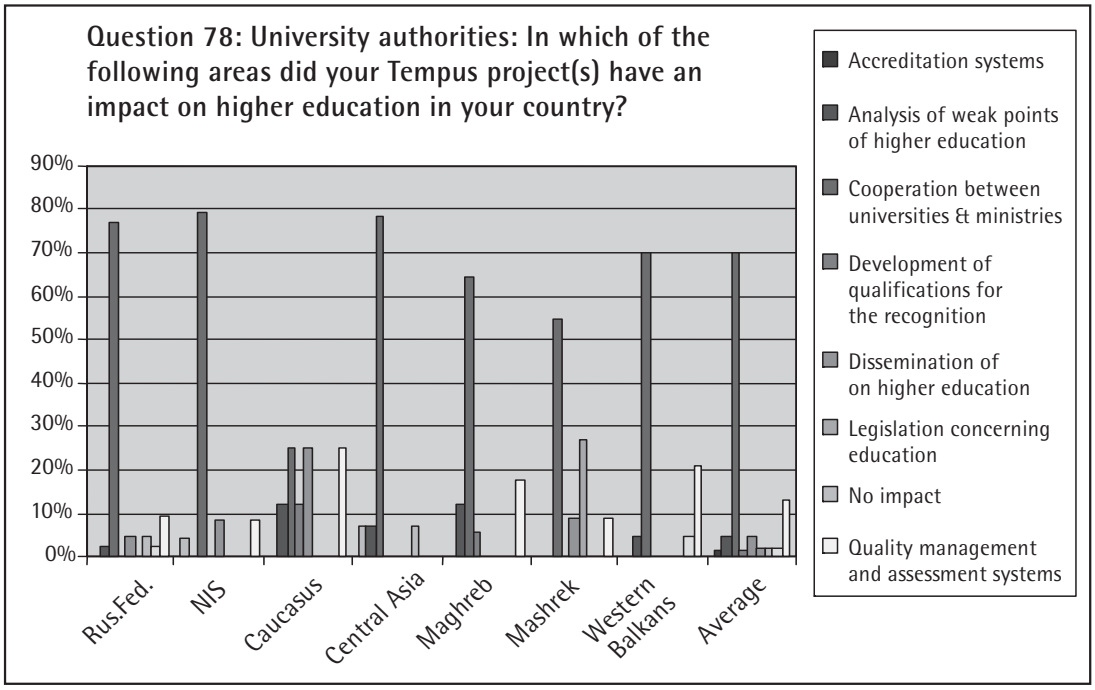
Even faculties and departments not directly involved in Tempus projects notice some changes. They tend to benefit from the experience gained by the participating departments or faculties although this is not systematic. For this reason, their pace of development is often slower given that they have to rely more on individual and ad-hoc contact with other universities and colleagues.

When asked to indicate in which part of the harmonisation process Tempus has been most influential, stakeholders of all regions with the exception of Mashrek, replied that the most tangible contribution was the harmonisation of curricula. This achievement was chosen by 70% - 90%, far ahead of unified admission criteria for students or promotion of staff. Curriculum related matters will be discussed further in the next chapter.

The other area where a strong majority across all regions believed Tempus had had a big effect was in relations between universities and ministries. Apart from the Caucasus region where all areas listed in the graph below are given roughly equal importance (see fig. 3.3), all other regions said Tempus played an extremely important role in fostering links, setting up contacts and generally improving relations between higher education institutions and national authorities. Far behind come legislation on higher education in Mashrek and quality management in Western Balkans and Maghreb. In the other areas - accreditation

systems, analysis of weak points in higher education, development of mechanisms for the recognition of qualifications and dissemination - the influence of Tempus is seen as negligible.

Fig. 3.3



3.1.2 The impact of Tempus on implementing Bologna principles, especially curriculum development and quality assurance

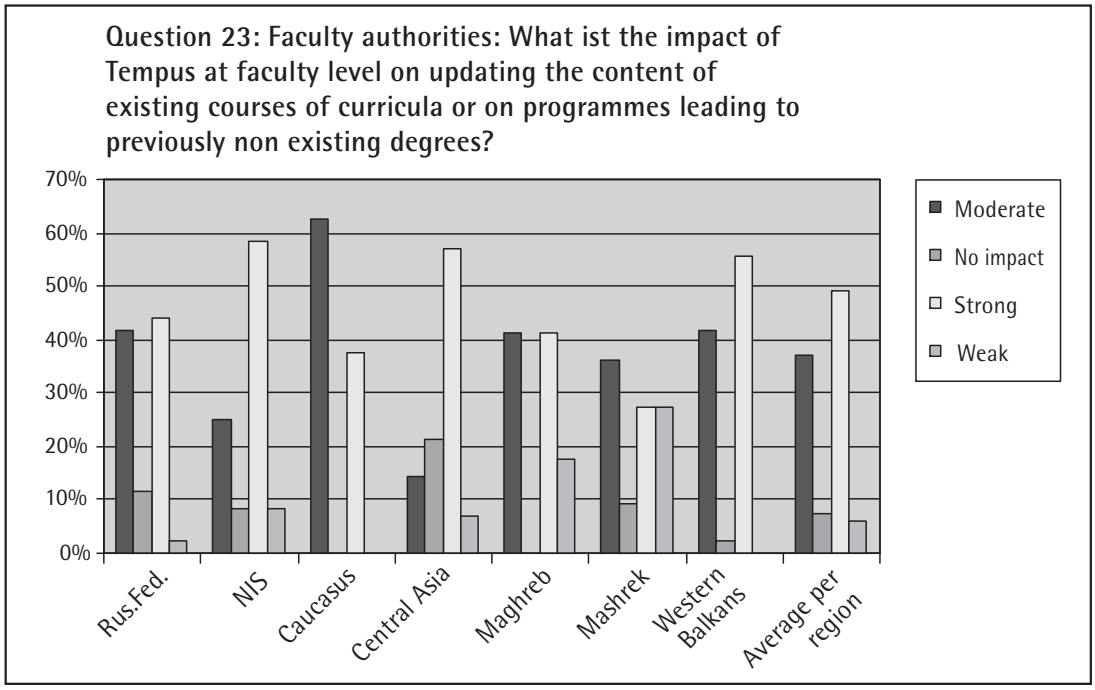
The Bologna Process, launched by European higher education ministers in 1999, aims to introduce a common European higher education area by 2010 by means of a gradual process of harmonisation. In so far as this concerns Tempus partner countries it should be born in mind that not all are part of the Bologna family and those that have joined at different times display different degrees of convergence. In those countries which have not signed the Bologna Declaration there is an ongoing debate on how Bologna can be adapted to meet their specific needs.

In some countries, the biggest question seems to be how relevant Bologna really is to their higher education systems and which formal and content changes would be needed to align the one with the other. Tempus is considered helpful in showing the advantages and implications of such changes. In some countries, Tempus has initiated much-needed reforms and helped universities to reduce the rigidity of their systems. However, there are other countries that have begun to establish self-governing structures such as internal quality assessment/evaluation systems and accreditation processes that do not follow the Bologna model. Usually it has been the universities who have initiated these changes rather than the ministries of education.

In some of the non-signatory countries, the Bologna Process is being seriously considered as a vehicle for the future development of higher education. The number of countries wishing to align with the Bologna principles is thus steadily increasing year by year.

It is also widely acknowledged that Tempus has had a big impact on the curriculum development activities of institutions as shown in fig. 3.4, whether this be upgrading existing curricula or introducing brand new degrees.

Fig. 3.4



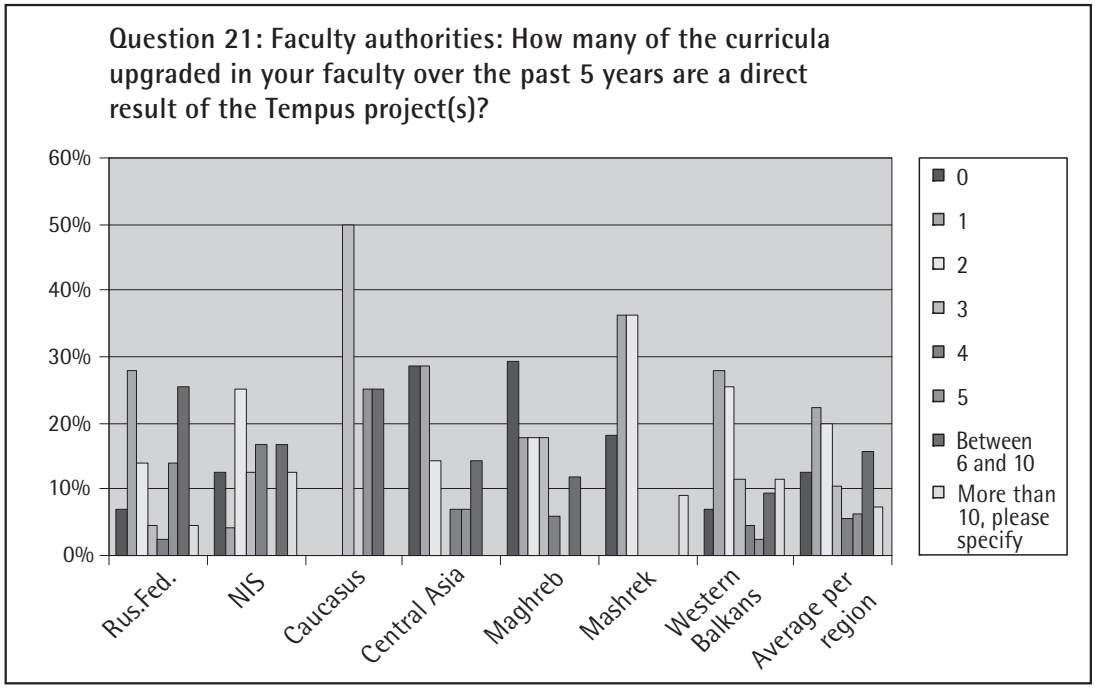
Very high levels of impact are reported for Western NIS, Central Asia and the Western Balkans. Less influence has so far been reported in North Africa and the Middle East, though progress is still considerable given that Tempus projects have only been underway in this region since 2003.

Stakeholders often reported that Tempus projects introduced topics that were new to universities. Therefore, Tempus projects have not only helped create new and innovative degrees within institutions, but are triggering new processes of integration into the European academic area.

Respondents also emphasised that participating in Tempus projects has made them more aware of the need for universities to become more flexible, decentralised, entrepreneurial and vocational. New units such as chairs and centres have been established and new research projects and PhD courses have been started. Central university administration, teaching staff and students were described as very supportive of curriculum development activities.

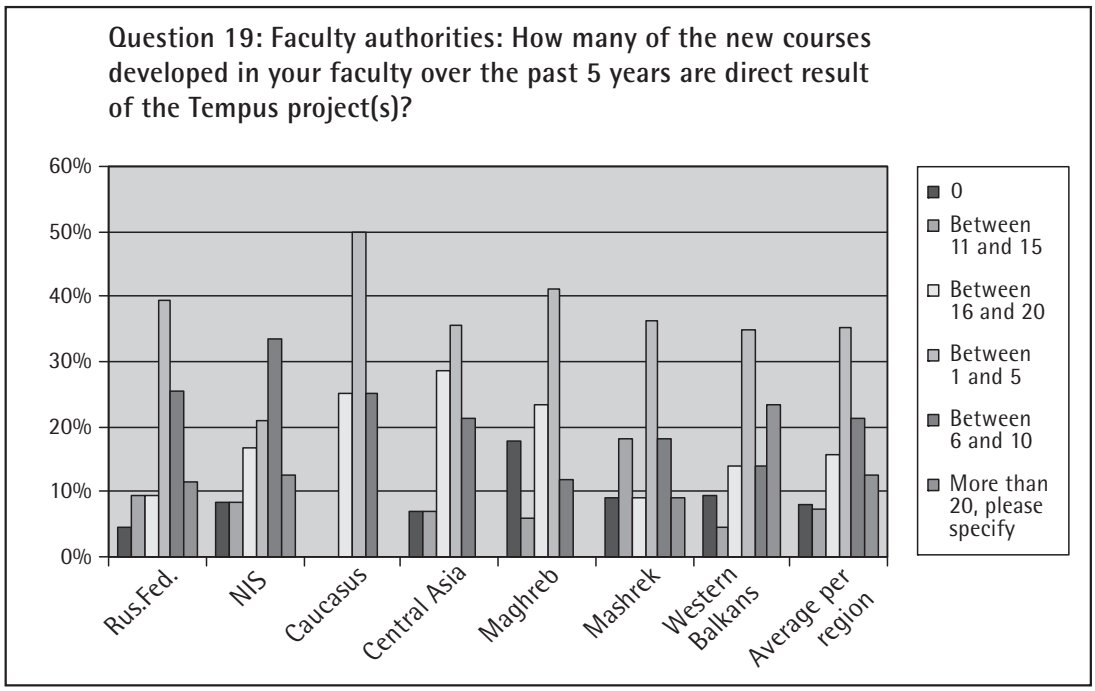
When you take a closer look at these success stories of curriculum development activities however, the answers received to question 21 paint a more modest picture. Only 33% of universities have upgraded more than five of their curricula as a direct result of Tempus projects (see fig. 3.5 below). Caucasus (25%) and the Russian Federation (26%) report the highest percentage of between 6 and 10 curricula upgraded by university. But very few regions give a figure of more than 10 curricula upgraded, with NIS (13%) and the Western Balkans (12%) as the highest scorers. Many faculties in Central Asia and Maghreb report that none of their curricula have been upgraded as a result of Tempus and many faculties in the Russian Federation and Mashrek report a negligible influence from Tempus.This can be mainly explained by two factors; on the one hand the low number of Tempus projects in a given institution and/or given country and on the other hand a situation where curricula were modernised in the framework of a Tempus project but not formally renewed as this is dependent on official approval procedures and also reflects a political/national will.

Fig. 3.5



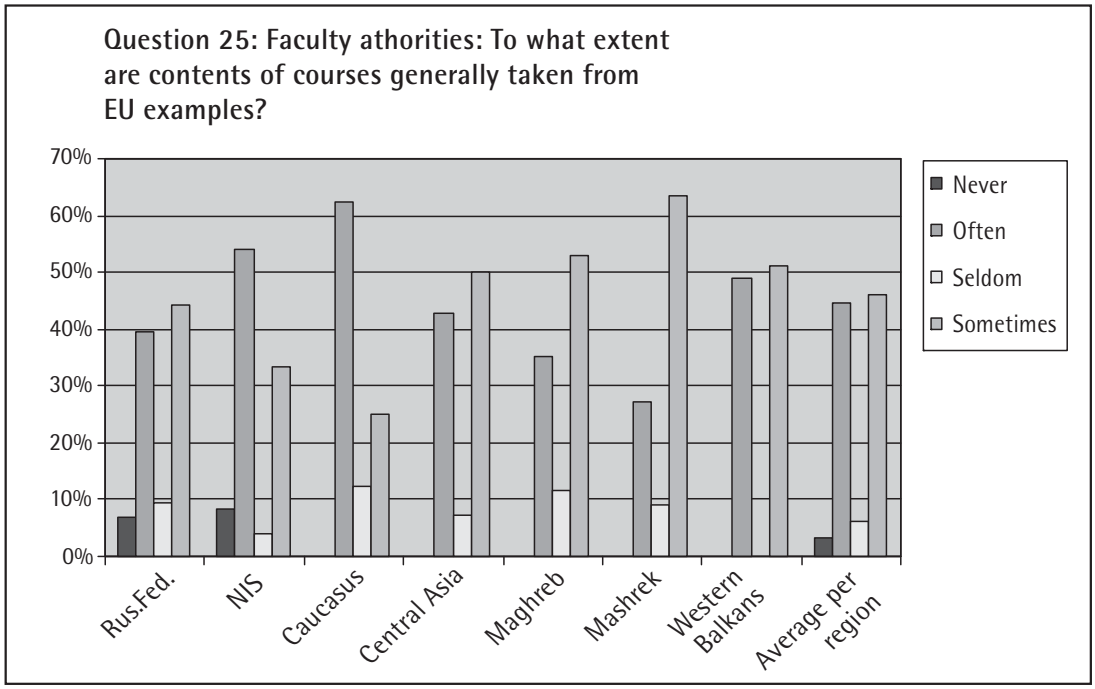
The same comments apply to the new courses developed as a result of Tempus projects as shown in fig. 3.6. The statistics from Maghreb and Mashrek show a very low introduction rate of new courses as a result of Tempus and this is very much in line with the results on upgrading existing curricula. But for the Western Balkans and Western NIS and, to a lesser extent, the Russian Federation, the number of new curricula introduced as a result of Tempus is impressive. Fig. 3.6

Fig. 3.6



When upgrading or creating curricula, faculty authorities report that in many cases EU examples were used as input. Very seldom has there been no use whatsoever of EU course material, and answers vary from often – mostly in Eastern Europe and Central Asia – to sometimes - mostly in North Africa and the Middle East and the Western Balkans.

Fig. 3.7



Answers to the question whether EU courses were used as an example for courses developed as a result of Tempus projects leads us to the same conclusion. In all regions, most courses are partially based on or adapted from EU courses.

However, universities in some regions face serious obstacles to the introduction of new curricula, mainly due to regulatory decisions by government. The following quotes taken from the questionnaires give a fair reflection of these difficulties:

"Universities have no autonomy. All decisions are taken by the government. There is always the risk that new curricula will be rejected."

"All new programmes need accreditation and approval from the ministry of higher education. This process is quite complicated and academic programmes that deviate from the national centralised curricula have difficulty getting approved."

"A massive obstacle is getting methods approved by old-fashioned staff and education committees due to red tape and bureaucratic procedures at the ministry of education."

"In some countries in the region, (...), the higher education authorities did not recognise or fully accredit academic programmes established within the framework of the Tempus programme due to the different modular course structure. ECTS and credit point systems have not yet been introduced in these countries."

As these quotes clearly show, a European initiative such as the Tempus programme will only have limited success without the national will to support and sustain the reforms. And while Tempus has done a lot to stimulate cooperation between universities and national authorities, there is still some way to go towards a systemic and comprehensive policy approach.

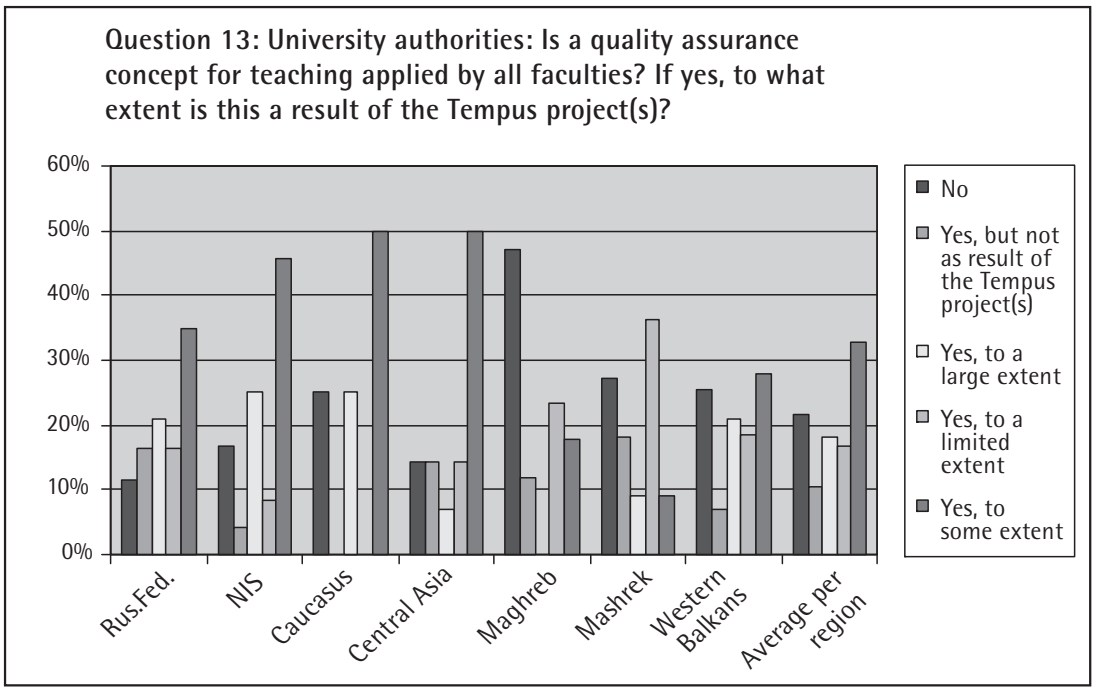
Quality assurance

Together with curriculum development, quality assurance is a key element of the Bologna Process. Several questions in the online questionnaire addressed the implementation of quality assurance mechanisms in the different regions.

In general, it seems that countries where no quality assurance system previously existed, did either begin to introduce one as a result of Tempus or at least start the discussion process.

Fig. 3.8 shows the influence of Tempus on quality assurance applied to teaching, a concept which is almost non-existent in the North Africa and the Middle East region. Even the Western Balkans shows a relatively low incidence of measuring the quality of teaching practices. Eastern Europe and Central Asia shows greater acceptance of this practise as "to some extent" tends to be the most common answer to the question below.

Fig 3.8



While evaluating teaching practices is not evenly spread across regions, and is even almost entirely absent in some of them, evaluating curricula seems to be more common practice. The North Africa and the Middle East and the Western Balkans regions, and also very occasionally, Caucasus, report that more than 50% of their curricula are evaluated either by internal and external stakeholders and students. And in three out of four of the Eastern Europe and Central Asia regions, a small majority reports that less than half of their curricula are evaluated.

Here too Tempus seems to be having more of an impact. Some regions see quality assurance as an urgent need and universities are seriously discussing how to go about introducing it. In those universities where a quality assurance system was already in existence, faculty authorities reported that participating in Tempus helped to improve it. Both for the Western Balkans and Eastern Europe and Central Asia regions, a small majority reports that less than half of their curricula are evaluated.

The Eastern Europea and Central Asia regions seem to have benefited from Tempus as an aid to their curricula evaluation processes. Only the North Africa and the Middle East region, particularly Mashrek, has not yet used Tempus to its full potential for this purpose.In the framework of this study, research on quality assurance aspects focused mainly on teaching processes and the evaluation of curricula. Other aspects such as university management or student services have not been addressed.

Fig. 3.9

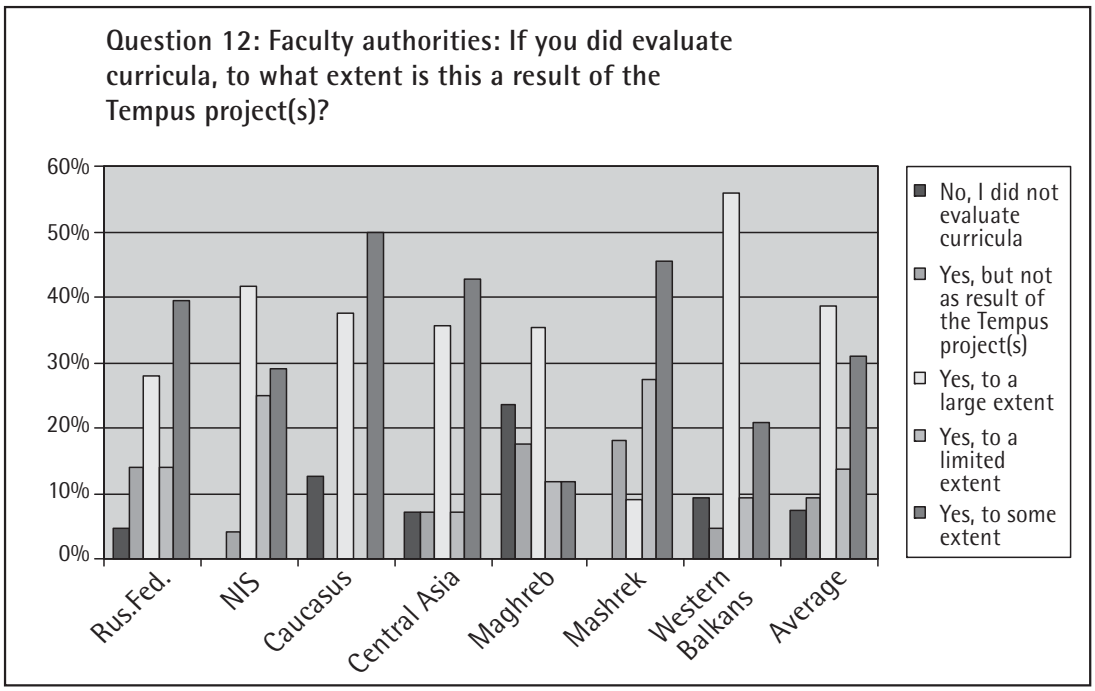
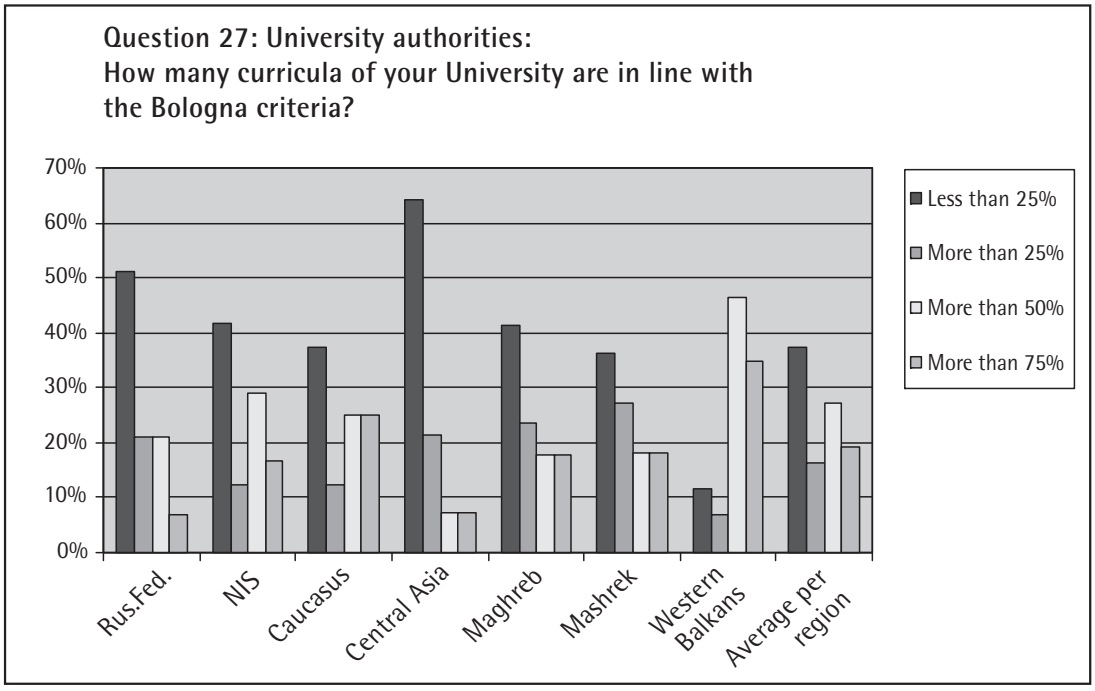


Fig. 3.10

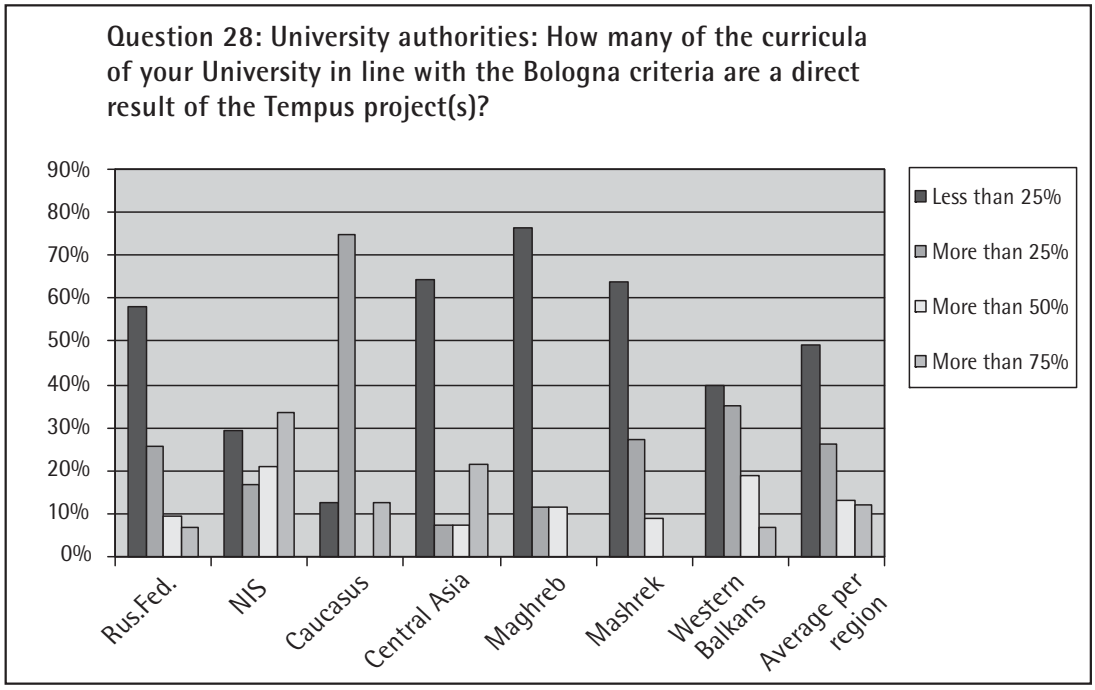


The proportion of curricula which are in line with the Bologna criteria varies considerably from region to region (see fig. 3.10) with very few in North Africa and the Middle East or Eastern Europe and Central Asia, especially Central Asia. Only Western Balkans, where all countries are signatories, seems to have made serious efforts to implement the Bologna

criteria in the curricula. Here, the majority of interviewees reported that around 50% and sometimes even 75% of their curricula are in line with Bologna.

The extent to which Tempus has influenced the alignment of curricula to Bologna criteria can be seen in fig. 3.11. Minimal influence is reported in the North Africa and the Middle East region as well as Central Asia, the Russian Federation and Caucasus. Only in the Western Balkans and Western NIS is Tempus seen as having had a strong influence on progress in this area.

Fig. 3.11



3.1.3 Exposure to an EU environment through Tempus, including cooperation with EU university staff and student mobility programmes

Exposing staff to an EU environment through cooperation with EU university staff and mobility programmes was often reported to produce changes in working and teaching practices, modernised curriculum content and to have a considerable impact on career development.

The vast majority of respondents reported that Tempus gave them their first opportunity to travel to an EU university. Across all regions, staff said that participating in a Tempus mobility project gave a substantial boost to their career opportunities. On average, over 80% said that Tempus has been very beneficial for their career. Only Maghreb showed slightly less enthusiasm; only 60% of its Tempus participants reported an increase in career opportunities.

These improved opportunities generally appeared inside peoples' own institutions, indicating that participating in Tempus does not encourage them to change institutions. As respondents to the online questionnaires and interviews stated, around 80% remain at

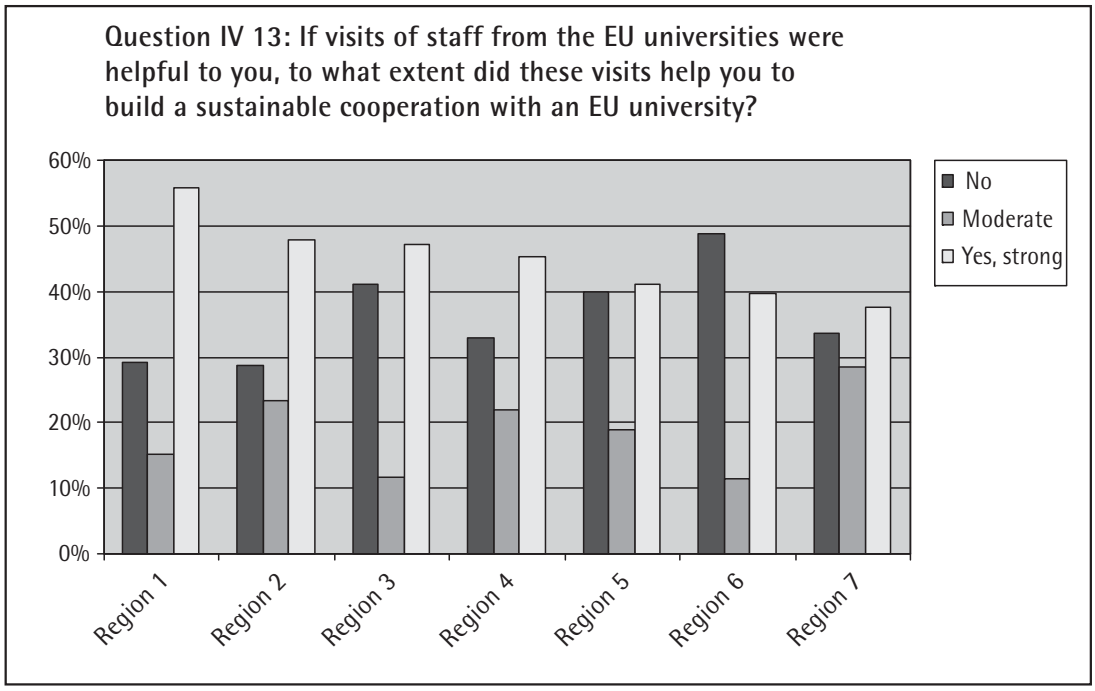
their home university but many take on new responsibilities. Tempus brought other benefits too. Participating academics were introduced to new teaching methods and contents and became more motivated as a result.

Many also upgraded their qualifications through their visits to EU universities. A stay abroad was seen as an important tool for self-development in an academic environment. Some 30% of participants reported a moderate impact and only a very small percentage saw little impact, with this group mainly from the Mashrek and Maghreb regions.

The visits are seen as a good way of building sustainable contacts with EU universities. However most universities seem to prefer building on existing relationships to starting new ones; in around 75% of cases some form of cooperation already existed. Tempus continued to build on these networks and, as such, increased the number of multilateral partnerships considerably. Eastern European and Central Asian countries seem to have benefited the most.

Visits by academics from EU universities helped form sustainable links in more than 50% of cases. 45% of respondents reported that Tempus projects helped them start an ongoing form of cooperation to a great extent, 19% moderately, while 36% of the respondents seemed to have had no success in establishing sustainable links (fig. 3.12). Respondents from the Eastern European and Central Asian region reported substantial benefits from visiting EU staff, while in Caucasus and Magreb, around 50% reported benefits. In the case of Belarus, Tempus was said to have significantly helped to prevent the isolation of universities. In Mashrek the majority of the EU visits did not lead to a sustainable form of cooperation and it is true that a more positive result could have been expected for the Western Balkans

Fig. 3.12



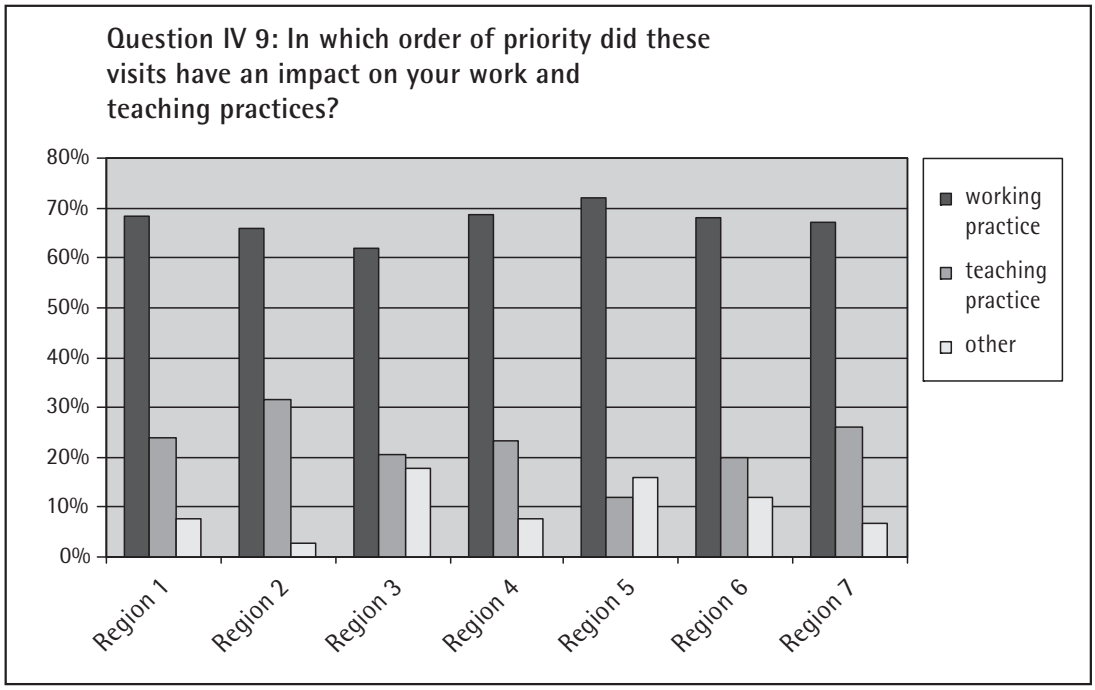
In some cases, visits led to the start of research projects. Up to 70% of respondents said that Tempus stimulated some cooperation in a research area, with the main beneficiaries in North Africa and the Middle East , the Western Balkans and Caucasus.

Respondents to the online questionnaire also stated that visits to EU universities had a big impact on their working and teaching practices; 76% benefited strongly, 20% moderately and only 4% benefited slightly or not at all.

When asked whether the visits by partner country staff to EU universities had the greatest impact on working or teaching practices, the participants in an Individual Mobility Grant responded that the greatest impact had been on their working practices (see fig 3.13). This finding was similar for the overwhelming majority across all regions. The impact on teaching practices is rather disappointing, with Western NIS and the Western Balkans having a low but still the most positive return. It is not clear from the responses why this should be so. Additional benefits of the visits included a boost to the credibility of teachers' knowledge, the inclusion of practical information in educational processes, a new kind of relationship with students and a different atmosphere in class.

Participating in a Tempus mobility project also developed the skills necessary for participating in other programmes and for fundraising as well as improving the language proficiency of staff. Familiarity with EU educational systems was given as another positive outcome. Overall, personal professional development was enhanced and the programme helped to produce publications – both as a result of individual research and collecting teaching materials.

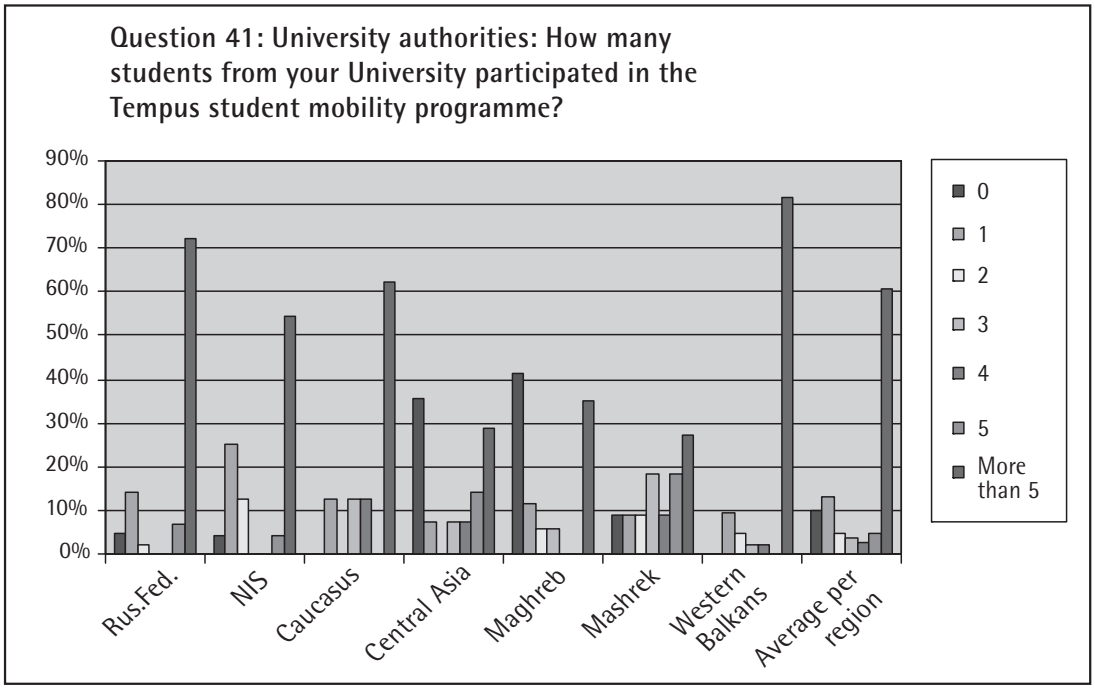
Fig. 3.13



As shown in fig. 3.14, the numbers of students taking part in a Tempus mobility programme are rather disappointing especially bearing in mind that this question was asked at university level. However, it has to be noted that student mobility was not one of the main objectives of the third phase of the Tempus programme.

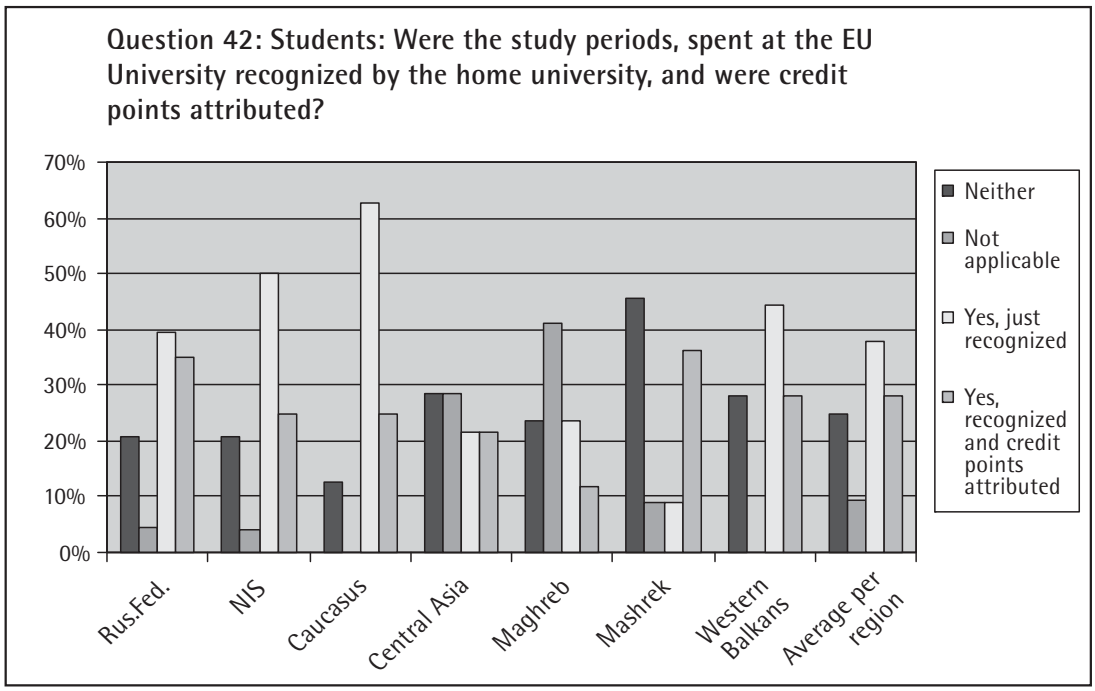
The only definite conclusion that can be drawn is that Tempus student mobility was lower in North Africa and the Middle East and in Central Asia than in other Tempus regions. This result is partly explained by the fact that the number of Tempus projects in Central Asia is low, while Tempus projects only began in North Africa and the Middle East in 2003.

Fig. 3.14



Only an average of about 30% of students reported that their study abroad period was recognised and that credit points were allocated. Broken down by regions, Maghreb, the Russian Federation and the Western Balkans score the highest on recognition and accreditation, with Mashrek (45%), Central Asia and the Western Balkans (30%) giving the highest percentages of students not achieving any recognition (see fig. 3.15).

Fig. 3.15



Students said they benefited from exposure to EU teaching methods and concepts and from the chance to get to know another culture. Participants became more independent in their learning and improved their communication skills. The importance of studying abroad for the future was acknowledged, and in general, students who went abroad felt they had better qualifications than those who did not. Students from the Russian Federation, Caucasus and the Western Balkans reported the strongest improvement in their qualifications from their stay abroad while students from Central Asia and North Africa and the Middle East were less convinced. Recognition of the importance of a stay abroad on future career opportunities is quite balanced with 15% believing it will have a strong impact. Nevertheless, when career opportunities are created for students, these tend to occur within the home institution (35% versus 8% outside the university).

Final year students and younger teaching staff seem to have often been involved in several projects at once. Some commented by saying that participating in a Tempus project, and therefore experience of higher education in an EU country, had often encouraged them to opt for an academic career and to take up a PhD, with the choice of topic often influenced by mobility. So it seems that Tempus is contributing to the development of a new generation of teaching staff.

Many students noticed improvements in teaching practices as a direct result of Tempus projects. Nearly all students agreed that their teachers had become more accessible after participating in a Tempus project.

Student grades and success rates increased when there was a more intense interaction between staff and students and when student assessment methods had changed through Tempus projects.

On the question of whether students had provided suggestions for improvements on their return from a study period abroad, many students from Caucasus and the Western Balkans seem to have returned with new ideas. Students from the other Eastern European and Central Asian regions and North Africa and the Middle East seemed to be less interested in making these kinds of suggestions.

The most common suggestions were as follows:

- increasing the number of hours for studying foreign languages
- increasing the use of e-learning
- a change in course content, including the number of hours spent on compulsory and individual work
- improving student-teacher relations, including more personal contact with lecturers
- introducing a system whereby students can evaluate lecturers
- introducing student self-administration, including an increase in students' autonomy, career guidance and more interactive teaching methods such as student-centred teaching, more room for discussion and debate rather than monologues from the teacher
- joint study projects with students from EU universities
- more project and group work, less theoretical lectures
- more hands-on practical work such as laboratory work done by students rather than theoretical classroom demonstrations.

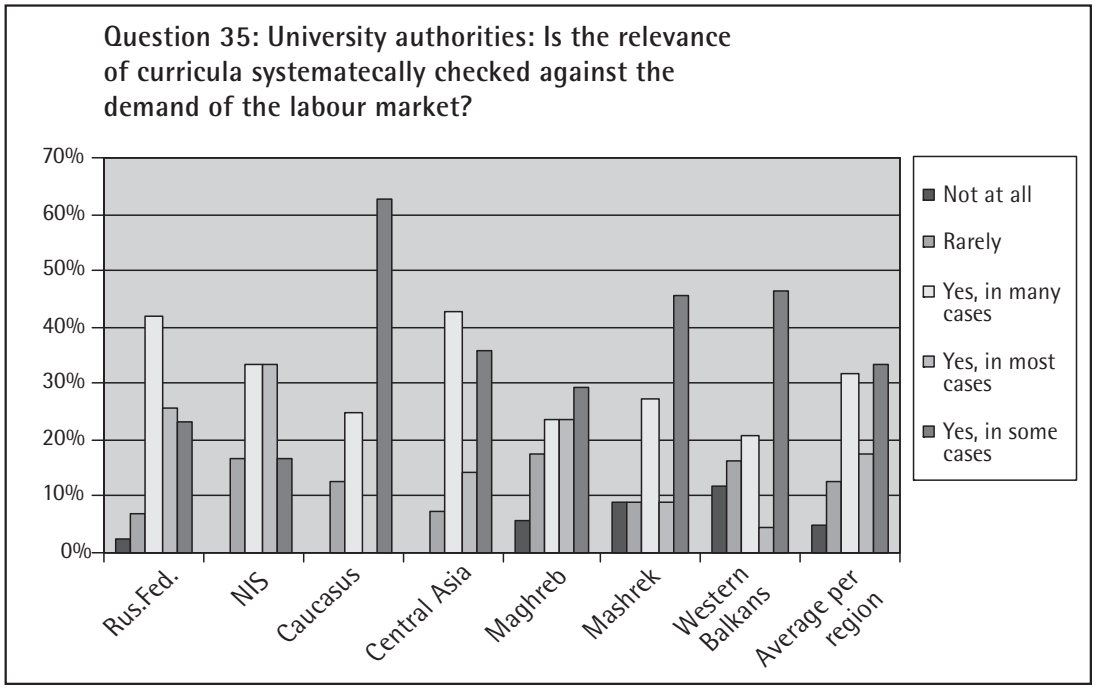
3.1.4 The impact of Tempus on labour market issues and university-enterprise cooperation

Practical examples presented in the recent Commission publication "Linking the worlds of education and training through Tempus" have shown that one measure of the success of curriculum development projects is their relevance to the needs of the labour market. However, when university authorities were asked whether the relevance of their curricula was regularly checked against labour market needs, their replies revealed that this is not always common practice (see fig. 3.16).

"Yes, in some cases" is the most common answer to this question in Caucasus, the Western Balkans and Mashrek. In the Russian Federation, Western NIS and to some extent in Central Asia, university authorities seem to be more concerned with labour market needs. Of all the regions, the Western Balkans is the one that pays the least attention to this need.

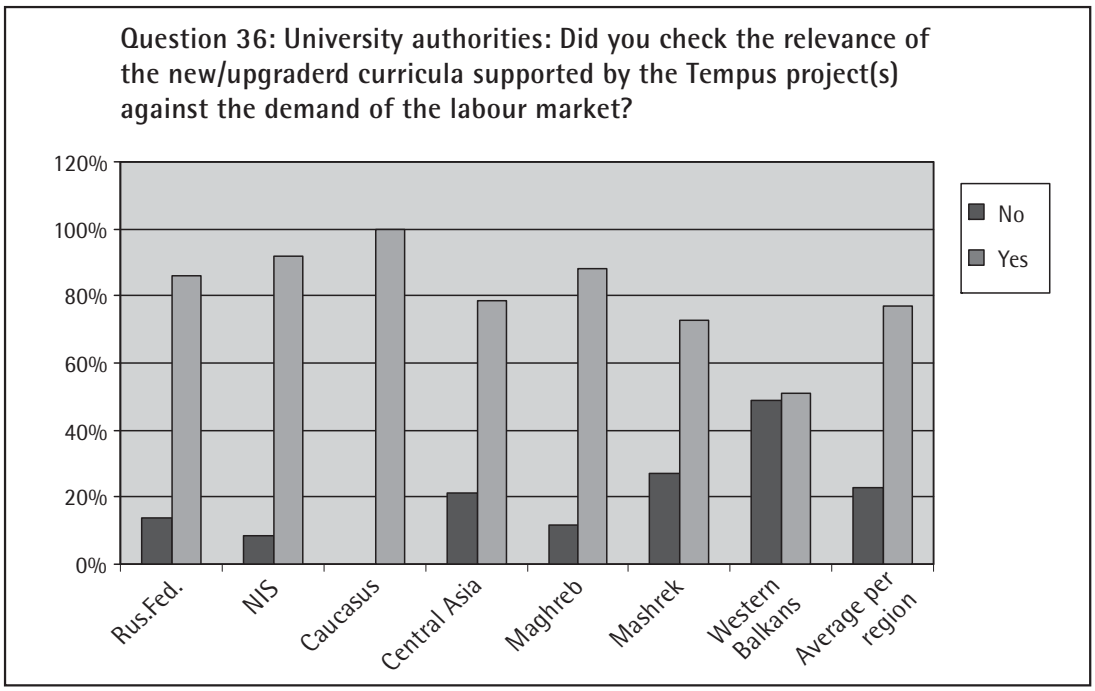
On the other hand, in many partner countries industry and enterprises are undergoing restructuring and modernisation and this makes it much harder for universities to keep up.

Fig. 3.16



When university authorities were asked (fig. 3.17) whether they checked the relevance of a new or an upgraded curriculum funded by Tempus against the needs of the labour market, the Eastern Europe and Central Asia region replied overwhelmingly yes, with an average of more than 80%, with the North Africa and the Middle East region only slightly behind. In the Western Balkans however, only about half of Tempus-funded curricula are checked against the needs of the labour market.

Fig. 3.17



Replies to the questionnaire indicate a lack of sufficient involvement of other key actors such as professional associations, social partners and policy makers in the process of curriculum design.

Whether employers appreciate graduates who have benefited from the Tempus programme seems to depend very much on the area of study. Graduates who have benefited from the programme do seem to have their skills recognised by public administrations. In the case of subjects closely related to industry, graduates with Tempus experience are also appreciated. Employers see their qualifications as better, resulting from improved and updated curricula, teaching methods and teaching facilities in line with EU standards. In the Eastern Europe and Central Asia region in particular, employers are very interested in students who have participated in Tempus.

In order to ensure employability of students and to produce curricula which are useful to future employers, there must be a form of structured dialogue between all stakeholders. Once more the Eastern Europe and Central Asia region is far ahead of the others and uses the structured dialogue with industry in over 80% of cases either to arrange placements for students or to request career guidance. The North Africa and the Middle East region provides a more balanced picture with 60% making use of this. For the Western Balkans again, there is a majority of negative answers, with over 60% of respondents replying that they do not use any structured dialogue for making such arrangements.

The role of Tempus in encouraging this structured dialogue between university and industry varies considerably from one region to the next. Caucasus and Western NIS clearly state that Tempus has had a very big impact on this dialogue (almost 90% in Caucasus and

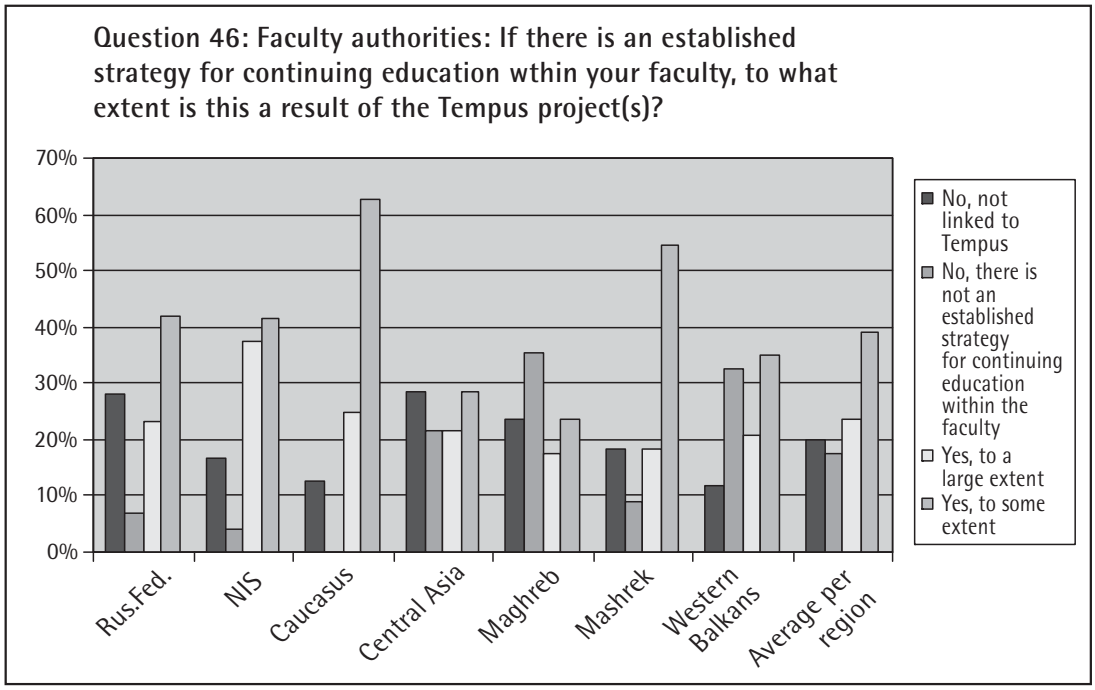
over 60% in Western NIS). There has been far less impact from Tempus in the Russian Federation and even less in Central Asia. In North Africa and the Middle East the answers are balanced, with almost as many negative as positive answers. In the Western Balkans, over 50% have replied that there is no structured dialogue between university and industry.

3.1.5 The impact of Tempus on continuing education and lifelong learning

In line with EU priorities, the questionnaire also looked at the question of continuing education and lifelong learning. Faculties were asked whether they already had a strategy for continuing education; on average almost 80% replied that they did. The highest scores were for the Eastern Europe and Central Asia area, with all four regions above 80%, followed by North Africa and the Middle East with fairly similar results for Maghreb and Mashrek. The Western Balkans provided the lowest score, with just over 60% positive replies.

Tempus appears to have had a limited impact on whether faculties introduce a strategy for continuing education; 40% believed Tempus has influenced this to some extent, but only 23% to a large extent (see fig. 3.18). On average 20% replied that there is no link betweenTempus and continuing education strategies within an institution while a smaller proportion did not have any strategy.

Fig. 3.18



When asked which part of the market their continuing education strategy was aimed at, on average more than 50% of faculties replied that their main target was business, with very high percentages in Western NIS (71%) and the Western Balkans (62%). Caucasus provided

a different picture with the majority of the courses targeting civil servants (50%) and only 25% targeting business.

As for staff development, most faculties seem to support their staff in improving their qualifications even if no specific policy has been officially introduced . In all regions, special programmes are organised by universities for this purpose and in Mashrek and Eastern Europe and Central Asia between 60% and 80% of respondents described this as the main tool for improving staff's qualifications. In the Western Balkans and Maghreb however, mobility activities are seen as the best tool for boosting staff qualifications. To a large (25%) or to some extent (60%), these activities are reported as being the result of a Tempus project.

3.2 The impact of Tempus broken down by regions

These findings are based on a selection of the questions addressed in the previous section, but they are now presented from a regional perspective. As the questions address related fields, some repetition may occur..

3.2.1 What has been the impact of Tempus on higher education institutions in terms of teaching, training and management practices and international relations?

To what extent have modernisation processes taken place within universities and faculties and what influence has Tempus had on these processes?

To what extent have teaching/learning processes and curricula been upgraded?

The Russian Federation

Interviews with Tempus project beneficiaries and the Russian national authorities show there has been a clear link between national efforts to modernise and reform Russian universities and the Tempus programme. University reform in Russia started in the late 1990s with a new higher education law. Tempus came at a time when its projects could therefore be used for addressing and implementing different aspects of these reforms.

Major changes within universities and faculties that began during this period did so largely with Tempus support. Tempus supported the retraining of staff, strategic management, scientific exchanges and the development and mapping of customer focused processes. By developing comparable criteria for student admissions, exchange of work experience between universities and setting up links between universities and other economic and administrative bodies, Tempus projects have helped harmonise Russian higher education.

The impact Tempus had on teaching/learning processes, modernisation of curricula and improving students' qualifications was significant and helped bridge the gap caused by the transition period. Attitudes and behaviour also changed. Through Tempus projects a sense of ownership, responsibility and cooperation was nurtured. In many case this helped improve relations between university teaching staff and management.

Western NIS

The interviews conducted in Belarus, Moldova and Ukraine back up the trend shown by statistics, namely that participation in Tempus projects has had a significant impact on the process of modernisation in all institutions visited.

In Moldova and Ukraine, Tempus projects helped university and faculty authorities as well as academic staff to develop critical thinking and identify strategic directions for modernisation such as improving libraries, the use of multimedia, fundraising and strengthening links with industry.

Some of the specific achievements of modernisation include involving younger academics and students in the decision-making process, developing quality assurance systems, including recruiting qualified staff or integrating quality assurance responsibilities into existing job profiles. Relations between central management and faculties improved at all levels. In almost all cases, there was a reasonable degree of alignment between university policies and Tempus priorities.

The information obtained on Belarus does not permit an accurate estimate of the impact of Tempus on modernising in the country's universities. University management, faculties and academic staff highly value their experience of participating in Tempus projects, but there is little clear information about Tempus's impact on decision-making procedures and the role of the different actors involved.

However in all three countries, Tempus had less of an impact on other issues such as the allocation of resources or university statues. Participating in Tempus projects did bring about a boost to the reputation of the institutions involved and led, in some cases, to academic staff being called to contribute as experts in advisory panels. .

The impact of Tempus on teaching/learning processes, curricula and enhancing student qualifications was particularly noticeable at faculty and departmental level. One clear sucess story was the development of new curricula and courses as a direct result of staff mobility. There was strong demand for the new specialisations and this led to increased admissions. A second innovation was a pilot European Credit Transfer System or ECTS which was introduced after project completion. Some weaknesses pointed out by faculty members concern the failure to give students a bigger role in quality evaluation processes and the generally low participation of students in Tempus projects. In the region, quality control is traditionally a matter of academic staff evaluating their colleagues from other departments, gathering feedback from students through questionnaires is not common practice.

Caucasus

Institutions with Tempus experience seem to have an advantage over institutions without when it comes to implementing change, due to their knowledge of similar developments/policies in EU universities. Some successful projects have gone on to take part in follow-up activities after the project and funding have finished which may be supported by different organisations such as the SOROS Foundation. Teaching/learning processes, curricula and staff development activities in Caucasus universities have been modernised to a certain extent through participating in Tempus projects.

In Armenia, Tempus has helped set up a student career centre which has forward-looking strategies such as building links with employers and involving student associations in its operations.

Another project has established a distance learning centre within a sociology department offering certified courses in social work. Other centres in the region have been established and collaboration with local higher education institutions has been set up.

Central Asia

Although it only started relatively recently, Tempus has made a significant contribution to launching the process of modernisation in Central Asia, where in most cases the programme has been the only vehicle for addressing reform issues. When a high number of projects have been hosted by a single university, the impact has been even greater.

Tempus has had a big impact on teaching/learning processes and curricula development in areas such as upgrading curricula, developing new teaching materials, introducing modern technology and retraining teaching staff. Other topics such as quality assessment, credit systems and evaluation by students are being addressed but, due to their complex nature, will need more time to fully develop.

Maghreb

Tempus projects are contributing to the process of modernisation underway within faculties and universities and are effective in achieving the expected outcomes. They have familiarised individuals and higher education institutions with new methods and approaches to both academic and administrative affairs.

An overwhelming majority of universities confirm the significant impact of Tempus, mentioning issues such as introducing new university statutes, improving relations between university management, central administration and faculties, making administrative services more efficient and involving younger academic staff and students in the decision-making process.

The new Master's qualifications developed by some faculties with the support of Tempus could be considered exemplary for other institutions.

Furthermore, through development of new curricula and unified admissions systems for students as well as consistent systems for staff promotion, Tempus has contributed to the harmonisation of higher education in the Maghreb countries.

Mashrek

Tempus has made a significant impact on the modernisation of curricula and the quality of teaching. More specifically, this includes improving teaching methodologies and course contents, upgrading staff skills and improving facilities.

Students have benefited greatly from this modernisation as it helps enhance their qualifications.

Western Balkans

Tempus has achieved notable progress in helping develop curricula in line with the Bologna principles. 81% of institutions state that over 50% of their curricula are now compliant with the Bologna criteria and 26% of respondents say this is due to Tempus. There is evidence of the influence of Tempus spreading beyond participating faculties and new practices starting elsewhere as a result. There are also examples of inter-faculty cooperation for a field of studies and all faculties say that Tempus has helped update the content of existing courses and create new ones. 60% of faculties, with the exception of Bosnia and Herzegovina, say that PhD programmes have been developed as a result of updated or new curricula introduced through Tempus.

The influence of the Bologna Process is behind changes in teaching methods and work is now starting on new methods of student assessment. Tempus is also making a tangible difference to student marks; students are achieving better results with elective and restructured courses and are taking less time to complete their studies. Faculties that provide training in teaching methodology are in many cases doing so as a result of Tempus and some excellent examples were seen in Bosnia and Herzegovina.

Faculties have focused firstly on making courses shorter or introducing new ones, encouraging more staff-student interaction, encouraging departments to work together and improving laboratory and classroom equipment. Libraries have been upgraded and staff have improved the quality of their textbooks and acquired new materials. Software has been purchased and staff now prepare experiments online before using them with students. All Tempus projects have overseen a decrease in hours of theoretical teaching and more practical content. This has included the introduction of new elective subjects, laboratory work and assignments, and, in a number of cases, work placements. All of this adds up to a more hands-on form of education and some of these changes were made at the specific request of students. Excellent examples of innovative teaching, web-based learning, hands-on practical teaching, additional certification and completely new assessment methods were seen in the former Yugoslav Republic of Macedonia.

Changes to teaching and assessment methods due to Tempus are mainly the result of staff training abroad. Teaching staff were able to see how teaching and assessment are organised in EU universities and assistants and laboratory staff were able to gain experience with practical work for students. The pace of change is notably faster at institutions participating in Tempus than others. There is still strong resistance to change in Bosnia and Herzegovina and in Croatia, although pressure for change is now expected to increase with the introduction of more systematic quality assurance in universities.

Tempus has acted as a strong driver for internationalisation of faculties. 74% of Tempus faculties are members of international associations and, in 61% of cases, this is at least partly due to Tempus. In 74% of cases, Tempus has managed to build new links leading to research projects with EU universities (58% in some cases, 16% in many cases), with the exception of Bosnia and Herzegovina where it helped in only 33% of cases. In 86% of faculties, Tempus has helped pave the way for new multilateral partnerships with partner and neighbouring countries.

3.2.2 The impact of Tempus on higher education staff (academic and non academic):

To what extent has exposure to an EU environment, through cooperation with EU university staff and mobility programmes, changed working and teaching practices and modernised curriculum content?

What has been the impact of Tempus on staff career development?

The Russian Federation

In general staff and students have benefited considerably from mobility schemes. According to the comments received, university staff value learning about the different teaching methods and tools in use in EU universities. Students value their study periods abroad highly and often try to initiate changes when they return to their home universities. Common suggestions include better recognition of study abroad, the introduction of new subjects in existing courses, more academic freedom, providing more courses in English and giving students more say in university decision-making.

The Tempus programme has had a strong influence on staff training and consequently on career development. However, this is an issue which will need even more attention in future. It is still difficult to recruit highly qualified teachers in the Russian Federation.There were many requests to maintain and even increase staff mobility in the new Tempus as this is seen as a high priority for the country. Both interviews and questionnaires indicate that teachers are gaining promotion within their universities due to their improved qualifications through Tempus. There are also examples of staff who have been promoted to civil service positions or employed by industry.

Western NIS

Cooperation with EU university academic and non-academic staff and participation in Tempus mobility activities has had a significant impact on management procedures and teaching methods. Many young academics reported changing their teaching methods to include more use of information technology, a closer relationship with students and improved qualifications. Many had also passed on these new teaching methods to colleagues.

Moreover cooperation with EU universities has led to the development of new courses, the implementation of new teaching methodologies and the introduction of more practice-oriented teaching. Tempus has also helped buy equipment for universities such as computers and special laboratory equipment for teaching, research and cooperation with industry.

All respondents without exception stressed the positive impact of Tempus on their personal career development. During their visits to partner universities many project participants worked in libraries, gathered materials or conducted research in laboratories. These activities contributed to their personal career development such as completing Masters and/or PhDs. University and faculty authorities also stressed the importance of Tempus experience for the career development of their academic and non-academic staff.

Caucasus

Tempus has had a limited impact on the work of university staff. In Azerbaijan and Georgia, staff and students benefited considerably from mobility schemes. Staff acquired knowledge about new approaches and methods and applied this in their teaching, producing changes such as a more practical orientation or a broader range of optional courses.

Staff training and development remains a burning issue for the region as it is difficult to recruit highly qualified teachers. This should be a high priority in future.

Central Asia

Staff mobility within Tempus projects is considered to be the most effective and powerful tool for training academic staff and transferring knowledge. Its results are long-lasting and can have a multiplier effect on all educational processes at universities.

For many staff from Central Asia, Tempus provided their first opportunity to visit the EU and get acquainted with different EU education systems. Staff were highly motivated to learn or improve foreign languages, use modern technology, learn about new teaching methods or upgrade curricula. However, putting this new knowledge into practice on their return was sometimes limited by the lack of facilities at home universities such as computers or fast internet connections. Training through participation in Tempus projects

was considered very effective and often changes in behaviour, leading to better relations with students, were the result.

Staff involved in Tempus projects received extra pay for performing special duties and this increased their motivation to stay at the home university. Staff who acquired new skills found this led to better career opportunities at their universities.

Maghreb

84% of respondents reported that visits carried out via Tempus projects helped modernise working and teaching practices. 61% consider they also contributed to modernising curricula.

Furthermore, individual staff performance was improved by learning foreign languages and gaining greater understanding of other cultures.

62% reported working with staff from EU universities to set up sustainable links. 88% of universities report that faculties have improved staff development through special programmes, mobility and staff exchange as a result of Tempus projects.

Cooperation with international partners helped improve the efficiency of university adminstration and boosted the reputation of individual academics.

Mashrek

Tempus mobility schemes and staff exchanges have had a considerable positive impact on individual staff performance, skills and knowledge and have thus helped modernise working and teaching practices.

Exposure to an EU environment has also helped university staff participating inTempus learn about new approaches to curriculum development. There has been an increased use of multimedia in teaching as a result.

In general, the boost to the skills of staff has enhanced their career opportunities both inside and outside the university.

Western Balkans

Nearly all staff participating in Tempus mobility state that the visits have changed their working and teaching practices; 78% report a strong impact and 20% a moderate impact, only 1.5% say weak or no impact. Tempus has also had a big impact on career development for younger staff both in terms of qualifications and new skills. Experience of international projects is also useful for academics seeking jobs and is an important aspect for potential promotion of the staff members inside the institution.

The recent introduction of evaluation by students, in addition to those by other stakeholders, and new quality assurance mechanisms are driving further change. Lecturers who have adopted more student-centred teaching methods are getting better evaluations from students and staff who, through Tempus, have raised the international profile of their faculty are getting better chances of promotion. Working on the projects has also created new networks within countries and across the region.

Many staff who have co-ordinated projects have developed skills in management and international relations, skills which have since proved useful for implementing new projects. Many others are providing input to discussions within institutions and nationally. Even if there are currently no financial benefits or direct consequences in terms of evaluation or promotion, all staff reported professional benefits from mobility and involvement in Tempus which increased their motivation. 86% of respondents say that Tempus has increased their career opportunities.

3.2.3 The impact of Tempus on students and student employability:

What has been the influence of the Tempus programme on students' qualifications and overall behaviour?

The Russian Federation

Demand driven curricula development through Tempus has made it possible to train specialists with better job prospects in subject areas such as economics, management, marketing, logistics, law, agriculture and environmental studies. The survey does not report any career centres being restablished and consequently no verifiable statistics are available. Students who participated in Tempus projects feel they have acquired greater knowledge in technical subjects due to better and modern equipment and improved foreign language skills as well as gaining international experience and new professional knowledge. They feel that they have generally become more independent, better organised and more experienced and are familiar with new methods of teaching and evaluation.

Western NIS

The impact of Tempus on students' qualifications and overall behaviour has been very positive. Students' interest in their subjects has increased and thus the level of knowledge has increased as well. Fewer absences from class have been observed; group work as a teaching method has become widespread, students are more capable of working independently and modular testing systems have been introduced.

There have also been some very positive verdicts on student mobility programmes. For most students this was their first opportunity to visit a foreign university. But student participation in Tempus mobility, not being the main objective of the programme, was rather limited and this remains an area with huge potential for growth.

Caucasus

Tempus has brought about upgrading of students' qualifications and skills, in particular through new distance learning programmes. But universities do not maintain strong links with the labour market and this is still an obstacle for employability. Like for the Russian Federation, no career centres for students seem to have been established and so there are no reliable statistics.

Central Asia

At the universities visited during the study, no students had participated in Tempus mobility.

However, responses to the questionnaires show that better knowledge of foreign languages and information technology are the most noticeable qualifications students gained due to the Tempus programme and this is recognised by local employers.

Maghreb

Students have understood that the new learning and teaching approaches provided through Tempus also lead to new qualifications. This motivates them to get to know different cultures and to learn foreign languages through mobility between one, two and three countries. Obtaining a specialised Master's degree will be valuable for student's future. Many universities have stated that students who have spent time studying abroad via Tempus projects feel they are better qualified than those who have not.

Mashrek

Students' qualifications have been upgraded thanks to better teaching methods and modernised curricula due to Tempus and this in turn improves their job prospects. Tempus has also exposed students to different cultures and new teaching/learning environments. There is no information on recognition by employers in the region.

Tempus has significantly improved the quality of students' qualifications. Upgraded curricula, teaching methods and knowledge as well as experience gained through mobility have positively contributed towards this result.

Western Balkans

Student admissions have increased as a result of new Tempus curricula but this depends to a large extent on demand from the labour market. Some students feel they have improved their qualifications compared to other students but not as much as expected (30% say strongly, 44% say moderately, 12% slightly, 9% not at all). These figures vary however from country to country: Albania, Kosovo and the former Yugoslav Republic of Macedonia tend to produce the highest ratings and Bosnia and Herzegovina the lowest.

Although Tempus has clearly helped introduce new practices in universities, its contribution to increasing the employability of students is still insufficient. For this reason, there should be support for projects which emphasise relevance of curricula and which enhance the dialogue with industry so as to provide students with a more hands-on education and better job opportunities. Efforts are also needed to improve career guidance services and enhance the quality of student mobility.

3.2.4 The impact of Tempus on organisations closely linked to higher education (employers, public administration and civil society):

Do employers recognise that graduates have benefited from Tempus?

To what extent have enterprises benefited from Tempus projects and enhanced cooperation with universities?

The Russian Federation

Many of the Tempus projects have had some influence on employers' perceptions through different activities either during project implementation or dissemination. Employers, public administration civil servants and NGOs have been directly or indirectly involved in the Tempus programme and are aware of the benefits for graduates. They state that graduates are motivated, act as change agents and have better qualifications. They can work in teams and are interested in further training. But there is,among others, a need for more emphasis on career guidance.

Western NIS

University and faculty authorities emphasised the importance of Tempus for career advancement within the university such as obtaining higher degrees. It was stated that continuing education has always existed, but that Tempus projects have provided new methods and content. One example is that short courses and summer schools have become part of continuing education repertoire.

The respondents said that Tempus has helped strengthen links with industry. Direct cooperation between academic staff and industry has increased, especially in fields such as food quality control and developing new substances for the food industry. Two new food control laboratories have opened in Moldova and Belarus in order to enhance cooperation with regional food production companies. Courses and curricula have been revamped to suit the needs of the agricultural sector.

Caucasus

In Armenia, there is no information on employers' recognition of the benefits of Tempus as student career centres, as one of the instruments to follow up on students, insofar as they have been established, are still not fully operational.

In Azerbaijan and Georgia, cooperation between universities and industry is already taking place to a certain extent. Some employers already inform universities of their needs for qualified personnel. Universities make this information available to students and can also make recommendations. However, these are only a few isolated examples and career guidance clearly requires more emphasis in the future.

Central Asia

Recognition of the benefits of Tempus by employers seems to be limited to specific subject areas such as public administration and technical studies. The tangible impact of Tempus graduates on organisations/enterprises will be only become clear in the years to come.

Enterprises and public administration benefit most from Tempus Institution Building projects due to the continuing education programmes especially developed for external students coming from industry/business and/or administrations.

Maghreb

No specific information has been provided by the expert teams.

Mashrek

Tempus has significantly contributed to the growth in continuing education provision. This helped to improve synergy between market needs and the qualifications of students and trainees, although more needs to be done to provide a really responsive offer.

Although there are some indications that employers' perception of graduate employability has improved, it is still too early to provide an accurate assessment.

In Egypt, Jordan and Lebanon, the administration, NGOs and the private sector have benefited from continuing education and training components of Tempus projects by upgrading the skills of their employees. In Syria and Palestine, a strategy for continuing education at universities has not yet been implemented and links between universities and the private sector are not yet on a firm footing.

Western Balkans

Institution Building Projects in the region have been highly effective in developing human resources and building capacity in public administration, civil society and industry and have lead to further cooperation not only through Tempus but more importantly at national level. This is mainly the result of a real partnership between universities and the above mentioned target groups with a continuous assessment of needs and adaptation of priorities.

Tempus has had an impact on the improved level of cooperation between universities and industry in most countries. The sectoral partners involved in or linked to Tempus projects

appreciated the work being done. Interaction was effective and potential employers had the possibility of providing input to needs' analyses and training programmes. Through this interaction, Tempus is also making university consultancy services available to the business sector. With a gradual increase in practical teaching in universities, student placements, the use of laboratory equipment and the possibility of joint research projects these opportunities would be further enhanced. Excellent examples were seen, particularly in Albania and Bosnia and Herzegovina.

3.2.5 The impact of Tempus on higher education systems, with a particular emphasis on the impact of the Bologna Process on the partner countries' higher education systems:

What has been the impact of Tempus on higher education reforms and modernisation processes?

Has Tempus facilitated the introduction of the Bologna principles?

The Russian Federation

The interviews revealed that a number of Tempus projects did not focus on Bologna requirements as they had been launched before the Bologna principles became a priority for the Russian government. Some institutions visited – the Russian Peoples' Friendship University, Nizhny Novgorod State University and Novosibirsk State University - had already set up credit and quality management systems. These universities have been selected as model universities to pilot the introduction of these systems in the Russian Federation.

According to the Ministry of Education, much has been achieved, but more work on quality management systems, student employability and new double diploma programmes still needs to be done. Some universities suggested including these topics as priorities for Structural and Complementary Measures for forthcoming Tempus calls for applications.

Western NIS

Feedback from stakeholders confirms that Tempus has had an impact on the reform of universities including management, changes in line with the Bologna process, introducing new teaching methods, boosting student performance, setting up links with EU universities and research collaboration. However, there is a consensus that the impact on curriculum development and the introduction of new teaching methods are the most significant changes. Faculty authorities gave specific examples of courses which have been developed or modernised within the framework of Tempus projects. Academic staff who participated in Tempus mobility explained how they were trying to adapt the content of EU courses to local needs and to establish a modular credit system. ECTS has been officially introduced in some universities.

Caucasus

In Armenia, some universities such as the Yerevan State University plan to introduce ECTS in 2007. According to the ministries of education of Azerbaijan and Georgia, much has been achieved, but more still needs to be done on the accreditation of universities. In Azerbaijan, plans exist to establish a national accreditation body independent of government. In Georgia, the accreditation process began in 2005 and a national accreditation council was set up in 2006. However, quality assurance mechanisms still require further development.

Central Asia

As the only programme promoting the Bologna principles in the region, Tempus has had a big impact on planned and/or ongoing developments at universities. Cooperation with very experienced EU universities would help this process still further.

Tempus has had the biggest impact on countries where the process of modernisation has full government support. In 1997 Uzbekistan began introducing a two-level degree system, a credit system and quality assurance mechanisms. In Kazakhstan this process started in 2002 - 2003 and includes a new three-level degree system and quality assurance mechanisms. In Kyrgyzstan higher education modernisation has the support of government but has not yet been implemented throughout the system.

Maghreb

The Tempus programme has had a very big impact on universities and is highly valued by the various Ministries of Higher Education and Research. The introduction of Masters' degrees and the harmonisation of study programmes with Bologna are already underway.

Bologna principles have been introduced through Tempus and 17% of universities declare that more than 75% of all curricula are in line with Bologna criteria. However, it seems that less than 25% of these 75% curricula are a direct result of cooperation through Tempus.

Mashrek

Tempus has had a strong impact on the modernisation of curricula, teaching methods and tools as well as on enhancing bilateral and multilateral cooperation between EU and partner country universities.

Tempus has had less of an impact on higher education reform, in particular with regard to the Bologna process. This especially applies to countries such as Egypt, Syria and the Palestinian Authority. Jordan and Lebanon, however, have already implemented Bologna principles to a certain extent.

Western Balkans

Enormous progress has been made in implementing Bologna principles and Tempus has been instrumental in supporting faculties and universities in this process. The programme fitted well with the needs and the strategies of universities and was also timely. Implementation of the Bologna process across the region is still piecemeal however.

Tempus has helped harmonise higher education by developing unified curricula (72% of institutions), promoting strategic approaches to staff development (16%) and unified student admissions (5%). The influence of Tempus can also be seen in the improved relations between universities and ministries (70%), quality management and assessment systems (21%) and the analysis of the weak points of higher education (5%).

Tempus still has to support a full implementation of ECTS by strengthening student and administrative services and improving central management.

4. Recommendations

In their replies to the questionnaires and their feedback during the interviews, stakeholders have provided a wealth of recommendations for the current phase of Tempus and its successor. However it should be borne in mind that these recommendations are conditioned by each country's specific political and economic situation as well as by the situation of the institutions or people interviewed.

4.1 Recommendations for the current phase of the Tempus programme

Given that the current phase of Tempus will end soon, only recommendations concerning practical matters to do with implementation or which are very local have been included in this section. Recommendations concerning structural and/or content aspects of the programme are listed under point 4.3. – recommendations for a future Tempus programme.

Similarly, only those recommendations which were voiced several times are included in this section.

- A large number of interviewees stated a preference for Structural and Complementary Measures (SCMs) since there is less money involved and so they are less likely to be the cause of jealousy from colleagues. SCMs are also easier to manage because of their reduced scope and timeframe compared to Joint European Projects (JEPs). Since the objectives of SCMs differ from those of JEPs, it would be a good idea to introduce smaller JEPs running over one or two years with less funding.

- More effort should be put into the national and international transferability of credits. This should be accompanied by an analysis of the existing curricula in a given region and harmonisation of these curricula to allow for greater flexibility and increased regional cooperation. It would also be a good idea to offer more and better information on the Bologna Process, especially ECTS.

- It would be better to bring academics from EU universities to teach a whole module rather than just a few lectures. This would improve recognition mechanisms and lead to a better integration of EU teaching staff at host universities. Academic tourism should be discouraged, whether it be for teaching, project management or consulting services.

- Universities should be encouraged to provide career guidance to students. They should also track Tempus students after graduation so that this guidance can be aligned with the needs of the labour market.

- Tempus should allow for easy project management: simple, clear and transparent. To this end, bureaucracy should be kept to a minimum and the power of decision in any given project should be equally distributed between the grant holder, the co-ordinator and the partners. Delays in delivering funding should be avoided at all costs.

- The number of participants in a single project should be kept within reasonable limits; on average no more than six institutions. The degree of management complexity increases with the number of institutions involved.

- To make sure a project achieves its objectives and to extend its impact beyond its official lifespan, there should be the possibility of extending financial support beyond the maximum of three years without having to go through a new selection procedure.

- The European Commission should provide more support for solving visa problems.

- There should be much more emphasis on providing language courses for both staff and students. There seems to be an urgent need for courses on English for Special Purposes (ESP), especially in technical universities, as these have made the most progress with developing double diploma programmes calling for a sound knowledge of English. However, it should be noted that the demand for ESP varies according to subject areas.

4.2 Shortcomings of the current phase of the Tempus programme

To a much great extent than the recommendations, the weaknesses of the Tempus programme differ from one region to the next and seem to depend heavily on the commitment of national authorities, EU institutions, grant holders and partner institutions. For this reason, the name of the region in question is included in brackets after each point.

- Tempus appears to have had a limited impact on modernising educational structures at national and policy levels in some of the regions; (Caucasus, Mashrek).

- The introduction of the Bologna principles should be better monitored; (Mashrek).

- EU partners often do not have sufficient experience of Bologna criteria and therefore cannot set a good example for the partner university; (Central Asia).

- Only limited change has been achieved in the central management systems of universities; (Mashrek).

- In some cases, courses and specialisations have been developed or upgraded which are not in great demand by employers and the labour market. Closer cooperation with

employers is required to improve the relevance of educational outputs; (Caucasus, Central Asia).

- Tempus curriculum development still places too much emphasis on producing academic rather than professional profiles with the result that few students enter the labour market after completing their first cycle of studies; (Western Balkans).

- New technologies and methods learnt by teachers abroad are sometimes difficult to apply or irrelevant to the home university; (Central Asia).

- Older staff do change their general working methods to a certain degree as a result of Tempus, but they rarely change their teaching practices; (Western Balkans).

- More funds should be earmarked for teacher training at EU universities; (Central Asia).

- While Tempus curriculum development projects have introduced different methods of assessing students in some cases, this change has not been systematically implemented. There are two main reasons for this; resistance to change by older staff and the lack of resources and time to manage these processes. Most faculties do not provide staff with training in teaching methodology. This is sometimes provided within the framework of the Tempus programme, but not always; (Western Balkans).

- Tempus has acquainted many lecturers with new teaching methods, but lack of funding to support the use of these methods may threaten their long-term sustainability. The same number of staff are being asked to do more assessment and spend more time with students and in the laboratories and often new staff can not be recruited; (Western Balkans).

- IMGs mainly have an impact on personal development rather than institutional development; (Central Asia).

- The selection procedure for new projects is too long and complicated. Delays between notification of selection results, signing contracts and the start of projects are excessive and can be extremely counterproductive; (Mashrek, Central Asia).

- Projects are too short to have a real impact. A longer duration, such as five years, would be preferable; (Central Asia).

- The requirements for financial management of Tempus projects are sometimes problematic; (Maghreb).

- Increasing practical work calls for good infrastructure and equipment. Some projects financed by Tempus provide this kind of funding but many do not. Generally speaking people participating in Tempus projects have worked out ways of maintaining the equipment afterwards (usually through the faculty), but not in 100% of cases; (Western Balkans).

- Although many universities have been able to invest in new equipment, the impact of Tempus on overall infrastructure upgrade is limited if these purchases are not tied to an overall strategy for ICT implementation for instance; (Caucasus).

- Very few dissemination activities have been organised within the framework of a Tempus project; (Central Asia).

4.3 Recommendations for a future Tempus programme

There is a general consensus that the Tempus programme must continue, but many respondents had suggestions for improving the successor programme.

These recommendations have been divided into two groups; general recommendations relevant to the majority of the regions, and others which are more region-specific. These are grouped according to region at the end of this chapter.

4.3.1 General recommendations

- **Student mobility should be given priority**: Existing student mobility projects should be extended and projects which do not currently include a mobility component should consider introducing one. Incoming student mobility needs to be made more attractive as partner countries currently only receive a limited number of foreign students. What is more, study periods abroad are not always automatically recognised when students return to the home country. Therefore, more effort should be made to promote the mutual recognition of study completed at other universities, in line with ECTS principles and the Bologna criteria in general. Joint degrees should also be encouraged. Some joint degrees financed through Tempus do exist, but there are still many obstacles to the development of new ones, such as language, the comparability of study programmes, credits, quality assurance and legal issues. The new Tempus programme must also address these issues.

- **Teacher mobility should also be encouraged.** All reports from the regions without exception speak of the advantages of teacher mobility: better teaching practices, closer correspondence between teaching practices in the partner country and the EU, increased familiarity with EU education systems, a boost to the credibility of the teacher's knowledge and upgraded qualifications. In some regions, teacher mobility is put into the broader context of staff development activities, which should also cater for administrative and other support staff.

- **Stronger links with the labour market**. Links and networks with the social partners need to be either set up or strengthened. Networks should include a wide range of stakeholders so as to help promote good quality studies, including quality assurance, and ensure employability by developing curricula which are geared to the real needs of the market. Stronger links to the labour market would also help universities find

appropriate and sustainable means of providing services and continuing education to the business sector.

National priorities must take into account the real needs of higher education systems. All too often, higher education authorities set national priorities without proper consultation with universities or follow the latest EU developments with scant regard for local fit. A plea was heard from several regions to place more emphasis in future on subject areas such as social sciences, communications, history and languages.

The Tempus programme needs more funds. Tempus has an ambitious agenda but limited resources. When Tempus only achieves a limited impact, all too often implementation has been hampered by financial restraints. When stakeholders were asked how resources should be allocated in future, two very distinct solutions were given: the first favours a thin spread over many small projects, while the second advocates clustering projects within a limited number of institutions, but with funding beyond the current maximum timeframe of three years.

Research must not be forgotten in the new Tempus programme. While stakeholders acknowledge there may be legal constraints on including research activities in Tempus projects, they underlined how important research is for the higher education system. The split between education and research is a purely artificial one and, in most cases, both are so tightly interlinked that the divide imposed by Tempus bears no relation to reality. Student mobility at PhD level should become an intregral part of Tempus projects.

4.3.2 Regional recommendations

This section contains recommendations which are specific to a particular region. Some recommendations may appear more than once.

1. The Russian Federation

For the Russian Federation, the next phase of Tempus should:

- support regional cooperation. In order to increase the impact of Tempus projects, more efforts should be made to establish collaboration between higher education institutions of the same region or geographically close regions. This could facilitate the exchange of information, educational material and allow participation in each others' courses;

- promote distance education and the use of electronic resources and services;

- establish inter-institutional career service centres, equipped with modern technology in order to provide services at local level as well as in remote areas;

- support language training in general and English language training in particular.

In the long term, Tempus should aim for an equal balance between the EU and the Russian Federation in terms of activities and exchanges. There is much to learn from the partner countries' educational programmes, but the basis for an equal relationship has not yet been achieved in terms of infrastructure such as living and working conditions or equipment or in terms sharing a common language.

2. Western NIS

For Western NIS, the next phase of Tempus should:

- offer long term stays abroad for undergraduates and an increased focus on mobility for students completing work placements;
- provide more possibilities to develop joint and/or common degrees.

3. Caucasus

For Caucasus, the next phase of Tempus should:

- ensure that aims such as developing human capital or making projects sustainable always take priority over bureaucratic procedures;
- promote regional cooperation, mainly among institutions in rural areas, with an increased focus on distance learning and e-services;
- set up career guidance centres equipped with modern technology at universities, in order to provide services at local level and to remote areas;
- focus on the implementation of modern learning and teaching methods, including the teaching and learning of modern languages;
- increase the provision of foreign language training in general in order to facilitate the implementation of new curricula, increase career opportunities for students and allow for more international cooperation between universities, even outside Tempus.

As with the Russian Federation, the Caucasus region sees as a long term aim for Tempus achieving more balanced bilateral inputs and outputs between EU countries and partner countries.

4. Central Asia

For Central Asia the next phase of Tempus programme should:

- support the development of regional education centres, offering programmes on regional, interregional and trans-boundary issues as a contribution to fruitful regional cooperation;

- link Tempus projects to other international projects so that the multiplier effect increases;

- give priority to projects leading to a double degree or at least to a degree of recognition in both the EU and the partner country;

- give the responsibility to the National Tempus Offices to disseminate information on and organise information events on the Tempus programme and developments in higher education in the EU.

5. Maghreb

Stakeholders from the Maghreb region believe that the Tempus programme has suceeded in introducing a culture of quality to the region's higher education systems. Therefore, their recommendations are more focused on consolidation than change.

These are as follows:

- maintain the current management scheme which is based on transparency, clarity and simplicity;

- give priority to SCM which constitute a very good way of solving specific problems related to university reform and which can have a direct impact by causing structural changes;

- encourage academic staff from the Maghreb region to become grant holders for Tempus projects

- encourage e-learning and virtual teaching, either to deliver specialised courses in universities or as an option for low-cost continuing education for professionals ;

- include more exact sciences such as new technologies or biotechnology in national priorities.

6. Mashrek

For Mashrek, the next phase of Tempus should:

- introduce career guidance centres at universities;

- work on improving central university management systems and internal quality control practices;

- support the development of joint degree programmes between the EU and partner universities;

- ensure projects are sustainable;

- lessen the influence of country priorities during the selection process.

7. Western Balkans

These priorities mainly relate to the Bologna Process. More specifically, the recommendations concern the following aspects of Bologna:

- Tempus should be used to fund curriculum development projects that ensure an integrated approach and cover all processes linked to courses, especially the relevance of curricula to the labour market;

- Projects should support the full implementation of quality management;

- Tempus should support the harmonisation of higher education degree structures with Bologna and should ensure compatibility with those of neighbouring and EU countries;

- The regional component of Tempus should be maintained and even strengthened;

- Universities should be encouraged to develop joint degrees with EU partners as well as Master's and Doctoral programmes in line with the Bologna criteria;

- Tempus should also support the development of higher vocational education and its integration with the existing higher education system;

- Tempus should strive to boost cooperation between universities in the countries themselves, providing special support for those institutions which are currently participating less;

- Stakeholders must be systematically involved in projects and a more structured information flow between faculties, universities and the ministry should be achieved. Dissemination should also be enhanced and there should be more exchange of good practice between stakeholders.

5. Conclusions

Summing up by definition is always a matter of selection, compression and omission. In the case of the present study, it is especially difficult to do so when dealing with such a wealth of information – the result of so many completed online questionnaires and indepth face-to-face interviews with such a wide variety of stakeholders. When you take into account that these stakeholders come from a total of 28 countries, grouped for the purpose of this study into seven regions, each with its own distinct culture and conditions, the task of picking out the common threads becomes even harder.

That said, there is one common denominator to be found throughout and that is the overwhelmingly positive appraisal of the Tempus programme. This opinion appears time and time again in interviews and questionnaires and is shared by university managers, ministers, employers, academics, administrative staff and students alike. Although respondents do have criticisms of specific aspects of the programme and offer plenty of suggestions as to how it could be improved, they are generally very supportive of the aims of Tempus and seem to be more or less in agreement with the means employed for achieving these ends. As this section is concerned with assessing and summing up what has been achieved so far, their suggestions for the next phase of Tempus are contained in a separate section on recommendations.

So while Tempus as a whole gets a positive verdict – how can we summarise the impact of the programme? As has been said before, Tempus is an ambitious programme which aims to harness the limited funding available to bring about positive change in many different areas of university life in the partner countries. The direct beneficiaries of these positive changes are students, academics and other university staff, faculties and the institutions as a whole. The indirect beneficiaries may include non-participating faculties, employers, civil society and the partner countries in general. In order to avoid too much generalisation, these conclusions will concentrate on Tempus's impact on specific aspects of university life such as modernisation and the introduction of the Bologna principles, curriculum development or the improvements to students' qualifications. It will attempt to bear in mind who benefits from these changes and, where there is considerable variation between regions, where the impact has been strongest and where it has yet to make a difference.

5.1 Modernisation

Most universities across all regions point out that responsibility for making higher education policy is firmly in the hands of ministries, and that universities may not have much say in this process nor in the overall process of modernising the sector. However, most university authorities report that Tempus has had a very positive impact on management, teaching and administrative processes within their institutions, making for

more professional and transparent management and better services to the university community. Managers and academic staff report that it has helped them to develop a more critical approach and identify strategic objectives such as improving library facilities, fundraising or strengthening links with industry.

Two tangible but very different signs of this improvement come in the form of statutes and enrolments. Over 70% of universities said Tempus had some bearing on the introduction of new statutes, with the greatest impact in the Western Balkans and the smallest in Central Asia. Participating in Tempus has also boosted the prestige of faculties and departments who have seen enrolments rise as a result of the introduction of new curricula. This effect was particularly marked in the Russian Federation, Western NIS and Western Balkans, but much less so in Central Asia and Maghreb. Other areas where the hand of Tempus can be clearly seen is the advent of funding allocation according to performance, using criteria such as exam results and quality indicators, and the introduction of central quality systems in almost all regions, with a particularly strong impact in Eastern Europe and Central Asia and Western Balkans.

Even faculties which did not participate in Tempus have benefited from the experience gained by other faculties and have noticed some positive changes as a result. These benefits tend to be less systematic and the pace of change is usually much slower.

One final benefit from participating in Tempus has been a marked improvement in relations between universities and ministries. When asked to single out one area where Tempus has had the strongest influence, all regions with the exception of Caucasus, pointed to the role of Tempus in building links, establishing contacts and generally improving cooperation with their national education authorities.

5.2 Supporting the introduction of Bologna principles

The starting point for the different countries in terms of alignment or convergeance with Bologna is very different. While the Russian Federation and countries from Western NIS, Caucasus and Western Balkans are eligible to sign the Bologna Declaration, those from Central Asia, Maghreb and Mashrek are not. Within the group of eligible countries, many are already signatories - although having joined at different times, their degree of compliance with Bologna varies - and others are currently considering signing up. Another group of countries is at a very early stage in the discussion, whereas a few countries have begun setting up structures such as accreditation procedures which do not follow the Bologna model.

In spite of this extreme diversity of starting positions, stakeholders from all regions do see the Bologna Process as a driving force for developing their higher education systems. Tempus is seen as a useful way of putting the Bologna issues on the agenda both in the national debate and within universities and exploring the implications of implementing these changes.

The impact of Tempus has been strongest in terms of curriculum development, with respondents from Caucasus and the Western Balkans reporting a strong or moderate impact, and Western NIS not far behind. Tempus seems to have had a greater impact in terms of helping create new courses of study than revamping existing curricula.

The Western Balkans showed the highest interest in bringing its curricula fully in line with the Bologna principles, with around 50% of courses fulfilling this criteria and, at some universities, 75%. Unsurprisingly, regions such as Central Asia, Mashrek and Maghreb – who are not eligible to join Bologna – produced the lowest totals of Bologna-aligned curricula. Nevertheless, whether they are Bologna signatories or not, most universities across all regions made frequent use of EU examples when developing new courses.

One less positive note in this picture of change is the problems universities in some regions reported in getting their new courses approved and accredited by national authorities, often due to different course structures and the use of credit transfer systems . This shows the importance of winning high level political support within countries if reforms introduced by an EU programme are to be sustainable.

In terms of quality, a second important pillar of the Bologna principles, Tempus seems to have had some influence in those countries where no quality assurance system previously existed. It has either helped to begin the process of introducing one or, at the very least, has helped launch the debate. Countries which already have some form of quality mechanism reported that Tempus encouraged them to improve it. The practice of evaluating curricula seems to be more widespread than the evaluation of teaching practices.

5.3 Exposure to an EU environment

Exposure to an EU environment is the Tempus programme's primary method of bringing about change. This contact can consist of periods of work or study abroad for staff and students, receiving the visits of foreign academics or other forms of cooperation with EU universities. Respondents report that it has had a profound effect on many different areas of university life. In order to measure this impact, it is perhaps useful to look at the effects on the different beneficiaries of Tempus – institutions as a whole, staff, students and the wider community including employers.

5.3.1 Impact on institutions

The introduction of Bologna principles and the impact on modernisation have been discussed earlier. A third area is that of internationalisation of universities and individual faculties.

Staff mobility, both outgoing and incoming, was seen as a good way of building long-term relations with EU universities, which in many cases led to cooperation in areas of research

and often strengthened the role of offices of international relations. Universities seemed to prefer to use Tempus to build on existing relationships rather than starting new ones, as in 75% of cases some form of contact had already taken place prior to Tempus. Eastern Europe and Central Asia is the region which has reaped the greatest benefits from visiting EU staff, while Mashrek and the Western Balkans gained the least.

The experience of mobility also brought about changes in working and teaching practices; 76% of respondents to the online questionnaire reported that visiting an EU university had a big impact and 20% a moderate impact on these. However, while this effect can be observed across all regions, the results were not uniform. The majority of participants across all regions reported a far greater impact on their way of working than on teaching practices, Mashrek provides the most extreme example as over 70% reported a change in working practices but only just over 10% saw changes in their teaching practices. The reason for this is not clear. Western NIS and Western Balkans produced the most positive score for changes in teaching practices, but even this is a fairly disappointing result. Nevertheless, when you take into account that staff report additional benefits such as including more practical content in course materials, new, less formal relations with students and a different atmosphere in the classroom, it could be that the benefits for teaching practices are greater than the respondents themselves imagine.

In terms of changes to management, more than 85% of respondents to the online questionnaire reported that Tempus had helped modernise university administration through improving management procedures such as performance-related budget allocation, IT-supported accounting or streamlining student enrolments.

5.3.2 Impact on staff

For the vast majority of staff, Tempus mobility provided them with the first opportunity to visit an EU university. Working at an EU university is seen as bringing multiple benefits, with 76% overall saying that they benefited strongly from the experience. These include changes to working and teaching practices as described above as well as introducing lecturers to new teaching materials and increasing their motivation. Over 60% of staff believed they had improved their qualifications as a result of their time abroad, with only Mashrek and Maghreb reporting a negligible impact. Improved career opportunities were also reported by many staff, although these tended to come within the individual's home institution, often in the form of increased responsibilities, rather than further afield. This indicates that participating in a Tempus programme does not lead to greater mobility of academics between universities on their return home. Many academics were invited to sit upon university or even national committees as a result of their Tempus experience so Tempus is clearly having an impact in less tangible but equally valuable ways by contributing to the available pool of expertise in partner countries.

5.3.3 Impact on students

While student mobility through Tempus certainly achieved some positive results, the actual numbers of students spending time studying abroad was fairly disappointing, something which necessarily reduces the impact. However, one has to bear in mind that student mobility was not one of the main objectives of Tempus III. The Western Balkans, followed by the Russian Federation were the highest scorers with over 80% and over 70% of universities sending five or more students for study abroad. In Maghreb, Mashrek and Central Asia, student numbers were lowest. University authorities in regions or countries such as Western NIS or the Russian Federation report that, perhaps unsurprisingly, the numbers of incoming students from EU universities were negligible. A second problem was the paucity of arrangements for recognising study abroad periods and awarding appropriate credit when students returned home. On average, only 30% of students were given this recognition, with Mashrek providing the highest level of recognition at 45%, followed by Central Asia and the Western Balkans.

However these reservations should in no way be allowed to detract from the very positive impact on those students who did study abroad as the vast majority were very enthusiastic about their experience. Most reported positive benefits from exposure to EU teaching methods and new academic concepts. In terms of personal development, Tempus provided them with the chance to get to know a different culture, improve language skills and to become more independent both in their attitude to learning and in their personal lives. Students from the Russian Federation, Caucasus and Western Balkans were the most convinced that Tempus mobility had helped them improve their qualifications compared to fellow students who did not study abroad. Around 15% across the regions stated that Tempus mobility would give a boost to their future career prospects.

Some students remarked that participating in Tempus had encouraged them to take a PhD and aim for an academic career, with the subject of their PhD often influenced by their study abroad experience. Thus Tempus can to seen to be contributing to the development of the next generation of teaching staff.

As with the knock-on effects of Tempus on non-participating faculties and departments as described earlier, mobility, in this case of staff, can be seen to have had an impact on all students, including those who did not study abroad. Many students noticed better teaching practices when their lecturers had participated in Tempus and most found these lecturers also became more accessible. This more intense interaction between lecturers and students in the classroom, combined with new methods of assessing students meant grades and success rates improved.

Finally, in line with the more independent and critical mindset that student mobility helped create, many students, particularly those from Caucasus and Cards, returned from study abroad with suggestions for improving the learning environment at home. Suggestions ranged from increasing foreign language tuition or the use of e-learning to introducing student evaluation of lecturers or more interactive teaching methods such as student-centred learning.

In terms of employability, students who undertook study abroad acquired new skills and attitudes as described above. Many students benefited from more modern teaching methods and upgraded or new curricula, leading to improved qualifications whether they studied abroad or stayed at home. However, for reasons discussed in the following section, more information is needed on to the extent to which this boosted their employability.

5.3.4 Impact on the wider community

It has already been reported that university management found that Tempus helped improve relations with national education authorities, something which obviously benefits both parties. However Tempus has also helped make university managers and staff more aware of the need to interact with their more immediate environment. Many have reported that participating in Tempus has made them aware of the need for universities to become more flexible, decentralised and entrepreneurial. Many examples of best practice have been identified including universities acting as consultants for local businesses, training and outreach centres and business incubators, although it is not clear how directly their establishment is linked to participation in Tempus.

In terms of improving graduate employability, it is widely accepted that making curricula relevant to labour market needs is one of the main ways of achieving progress. However this study revealed that university authorities do not always check the relevance of new or upgraded curricula against these needs, with the Russian Federation and Western NIS recording above average scores on this account and the Western Balkans paying the least attention to this requirement. Here Tempus can be seen to making a real difference as, when it came to curricula created or upgraded as part of a Tempus project, over 80% of universities did check their labour market relevance. The Eastern Europe and Central Asia region was the most concerned with this requirement, while the Western Balkans once more showed the least concern. This success story comes with some reservations however, as replies to the questionnaires indicated there is still insufficient involvement of outside actors such as professional associations, social partners or national authorities responsible for defining the overall educational goals and objectives, in the process of curriculum development.

This form of structured dialogue is not only vital for producing relevant curricula, it can also be used by universities to arrange for work placements for students and to provide information to feed into career guidance services. On this count, the Eastern Europe and Central Asia regions were once more ahead of other regions as they tend to make use of this structured dialogue in 80% of cases, compared to 60% for the North Africa and the Middle East regions and less for the Western Balkans. Here too Tempus has had an impact, although to varying degrees across the regions. In Caucasus and Western NIS, 90% and over 60% of respondents respectively say Tempus has had a big impact on this dialogue, but respondents report far less impact in the Russian Federation and Central Asia.

The extent to which these developments have helped improve graduate employability is harder to measure. Respondents report that the degree of recognition of Tempus

experience by employers varies according to the type of employer. Tempus graduates tend to be appreciated by public sector employers and those with technical qualifications are also well-received by industry. However most regions had little information on where their graduates ended up working as regions such as Mashrek or the Russian Federation report that the student career centres in universities, as one of the instruments to follow up on students, and which could provide the relevant statistics have not yet been set up.

Respondents were also asked whether their institution had a strategy in place to promote continuing education and lifelong learning. The answer was very positive, with almost 80% replying they did and the Eastern Europe and Central Asia regions producing scores of over 80%. However, Tempus seems to have a limited influence on whether faculties decide to introduce such a strategy, with only 23% reporting a strong impact from Tempus and a further 20% reporting no link whatsover.

5.4 Summing up

All of this goes to show that Tempus has managed to achieve some very positive results in terms of encouraging reform and the process of modernisation in individual universities, faculties and departments and that these positive changes have had knock-on effects and indirect benefits even for faculties and departments who did not participate in Tempus. The impact of exposure to an EU environment on university staff – including managers, administrators and above all academics - has been profound and far-reaching. Although the number of students participating in Tempus mobility is not as high as it could have been, the impact on those students who did participate has been striking. This would seem to support the recommendation, already made by numerous participants in this study, that the next phase of Tempus should encourage more mobility in general and more student mobility in particular.

But while Tempus has achieved impressive results in its most immediate area of influence – universities – this impact study shows there is still some way to go in terms of providing positive benefits to the wider community, especially employers. The findings of this study show that Tempus has made a positive start in terms of building awareness and encouraging universities to start looking outwards to the wider community they serve. However, the more detailed findings on criteria such as relevant curricula and graduate employability, the structured dialogue with industry or having a coherent strategy on lifelong learning would seem to indicate that more could be done to put in place the mechanisms to support a more dynamic and lasting interaction between universities and their surroundings.

6. Glossary

Bologna Process	A process underway since 1999 by means of which signatory countries are reforming the structures of their higher education systems aiming for convergeence. The aim is to create a common European higher education area by 2010.
CARDS	The Tempus programme provides part of the European Community's assistance to the transition process in the partner countries, which is more generally governed by three programmes, CARDS, MEDA and Tacis. The CARDS programme covers the Western Balkan countries: Albania, Bosnia Herzegovina, Croatia, the former Yugoslav Republic of Macedonia, Kosovo, Montenegro and Serbia.
DG EAC	The European Commission's Directorate General for Education and Culture
ECTS	The European Credit Transfer System is a standard for comparing the study attainment and performance of higher education students across the EU.
MEDA	The Tempus programme provides part of the European Community's assistance to the transition process in the partner countries, which is more generally governed by three programmes, CARDS, MEDA and Tacis. The MEDA programme covers the North Africa and the Middle East countries: Algeria, Egypt, Jordan, Morocco, the Palestinian Authority, Syria and Tunisia.
National Tempus Offices	Tempus information points in the partner countries
NIS	The New Independent States are the independent nations that were created when the Union of Soviet Socialist Republics broke up in 1991. For the purposes of this study, Western NIS is made up of Belarus, Moldova and Ukraine.
Tacis	The Tempus programme provides part of the European Community's assistance to the transition process in the partner countries, which is more generally governed by three programmes, CARDS, MEDA and Tacis. The Tacis programme covers the Eastern Europe and Central Asia countries: Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, the Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

Tempus	The Trans-European Mobility Programme for University Studies
Tempus projects	Joint European Projects (JEPs) aim to increase cooperation and build networks between actors in higher education in EU Member States and partner countries and help higher education institutions share their knowledge with the wider community. One of the three kinds of Tempus projects, JEPs can focus on curriculum development, university management or institution-building. Structural and Complementary Measures (SCMs) are designed to feed into national higher education policies. Structural Measures are short-term policy advice interventions which typically address issues linked to the Bologna Process such as quality assurance, credit systems and restructuring qualification frameworks. Complementary Measures are designed to disseminate good practice, especially good quality education programmes and effective management practices. Individual Mobility Grants (IMGs) aim to help academic and administrative staff take part in training and conferences abroad and to help European academics organise training courses in partner countries.

EUROPEAN COMMISSION

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Luxembourg: Office for Official Publications of the
European Communities

2008 - 64 pp. - 21.0 x 29.7 cm

ISBN: 978-92-9157-549-7

TA-30-08-352-EN-C

Publications Office

Publications.europa.eu

ISBN 978-92-9157-549-7