OECD/CERI STUDY OF SYSTEMIC INNOVATION IN VET

Systemic Innovation in the Hungarian VET System
Country Case Study Report
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Introduction

This is the second in a series of country reports prepared as part of the study on Systemic Innovation in Vocational Education and Training (VET) being conducted by CERI/OECD during 2007-08. It focuses on two recent case studies of systemic innovation in the Hungarian VET system and draws on: a) background information provided by Hungarian officials on the two case studies and b) meetings and interviews conducted during a visit to Hungary that took place on 16-20 March 2008. The visiting team consisted of Jordi Planas, Professor at the Autonomous University of Barcelona, Berno Stoffel, Director of Research and Development, Swiss Federal Institute for Vocational Training and Education (SFIVET), and Tracey Burns and Viktoria Kis from the OECD Secretariat. During their visit the team met with thirty-two stakeholders involved in one or both of the case studies of Systemic Innovation in VET. A complete list of participants is given in Annex 1.

The overall aim of the study is to examine systemic innovation in VET. The definition of systemic innovation adopted here is: any kind of dynamic, system-wide change that is intended to add value to the educational processes and outcomes. The aim is to analyse innovation systems and strategies in VET by bringing together evidence of the drivers for systemic innovation in six different countries. All countries participating in the study have selected two or three cases studies of recent innovations in VET for in-depth analysis by the expert team. The following is a list of issues that the study focuses on in particular:

- How countries go about innovation.
- The processes involved, leadership and the relationships between the main actors.
- The knowledge base that is drawn on.
- The procedures and criteria for assessing progress and outcomes.

This introductory section provides a brief overview of the Hungarian VET system followed by a short description of the two case studies selected for the study. As these form the main focus of this report they are described and discussed in more depth in later sections of the report. The two cases were selected by Hungarian officials, in collaboration with the OECD/CERI Secretariat.

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1 Australia, Denmark, Germany, Hungary, Mexico and Switzerland.
The Hungarian VET system

Context

There has been an immense transition in the Hungarian economy since the end of Communism in 1989. These changes have obviously had an impact on the structure, the quality-demands and the basic principles of employment. On the surface, the situation can be illustrated by the sharp fall in the share of employed working age population (79.75% in 1989 versus 59.7% in 2005 according to the Hungarian Central Statistical Office). However it must be noted that these two numbers are not fully comparable, as the retirement age was higher in 2005 and thus the relative employment rates have not dropped as much as these numbers might suggest.

The employment rate of the working age population in Hungary is relatively low compared to the OECD average (see Figure 1.). This is largely due to the high proportion of inactive population, as unemployment rates are not especially high compared to the OECD average and the average of European OECD countries (see Figure 2).

![Figure 1](image)

Labour force participation rate

At the government level, the Lisbon principles have been applied since before Hungary’s accession (1st May 2004), with the harmonisation process of employment acts as well as through the setting of employment policy guidelines. These processes were explicitly formulated in the National Action Plan for Employment of 2004, which was coordinated by the Ministry of Employment and Labour. The Action Plan puts specific emphasis on strengthening social cohesion, reception and the negotiation between the executive participating parties. In addition, in order to harmonise economic development and growth with employment, a uniform plan – the National Reform Programme for Growth – was established in 2005 to guide action plans until 2008. To help the implementation of the programme, the government paid particular attention to national and European-level partnerships in the widest sense possible, as well as to partnerships within public, private, and independent sectors.

**Structure**

Vocational education and training in Hungary can be delivered within or outside the school system – the latter is provided to those who have already completed compulsory education at the age of 18. School-based VET is offered mainly at two types of institution, which differ in their objectives and the level of qualifications they offer. The bulk of initial VET is concentrated in these typical forms of programme (ISCED 3 and 4), although qualifications exist also at lower (ISCED 2) level as well as at tertiary (ISCED 5) level.

Vocational training schools offer their students a vocational qualification at the end of a successfully completed programme but not the
**maturata** (secondary school leaving certificate required for entry into tertiary education).

Vocational secondary schools prepare students for the **maturata**, but students do not obtain a vocational qualification at the end of the four years. After obtaining the **maturata**, they may enrol in a post-secondary VET programme (ISCED 4) in order to obtain a vocational qualification or enter tertiary education.

Over the past 15 years, demand – on behalf of both the labour market and students – for the lower track of VET has sharply declined and two other types of school (vocational secondary schools and gymnasiums), which deliver the **maturata**, have become increasingly popular, as returns to the lower track of VET declined and an increasing share of secondary school leavers continued their studies in tertiary education (see Figure 3).

**Figure 3**

![Diagram showing applicants and admitted students in full-time higher education in Hungary (1990-2005)]

*Source: Ministry of Education (2006, p. 6).*

Students who successfully complete a VET programme, whether through initial or continuing training, can obtain state recognised qualifications, which are listed in the National Vocational Qualifications Register. This register specifies professional and examination requirements for each qualification, as well as the standard curricula.
Innovation in the Hungarian VET system

Traditionally VET in Hungary was industry-oriented with practical training provided on-the-job. However, in the years following the fall of communism and with the closure of state-owned companies, over fifty percent of the total on-the-job training capacity ceased to operate. The resulting predominantly school-based VET system has been criticised by employers who consider that it is too theory-oriented and is not able to meet labour market needs.

The political and economic transition brought about considerable changes in the adult education and training system as well. A number of factors fostered these developments, such as training needs resulting from the economic transition; the emergence of mass unemployment and state efforts to tackle this problem with targeted training policies; and the expansion of a training market with a growing number of providers and programmes offered (Toth, 1998). The share of adult learners (including both formal and non-formal learning) in Hungary is below the OECD average (OECD, 2007).

Improving VET and enhancing adult training has gained strategic importance over the past 15 years and numerous policy initiatives have aimed at addressing the emerging challenges. These include the Development Programme for Vocational Training Schools in 2003, the development of the VET Development Strategy in 2005 and a number of programmes launched under the National Development Plan. Interviews with ministry officials suggest that there is very little room for bottom-up innovations to reach a systemic scale. Most systemic innovations are initiated by the government in a top-down approach, while local innovations tend to remain at a local level. Conferences and workshops may provide an opportunity for such local innovations to be seen and shared, but typically they are not scaled up to national level.

Two innovative initiatives were selected for analysis in this project: the new National Vocational Qualifications Register (NVQR) and Step one forward, a project aimed at giving individuals most at risk for social exclusion the chance to progress in either their educational or professional qualifications.

The first selected case study, the new National Vocational Qualifications Register is considered a milestone by its developers because of its innovative features (e.g. modularised and competence-based qualifications) and broad, system-wide coverage. It is expected to facilitate transition between different trades, and also better meet labour market needs, since it was developed following job-analyses.
The second case study, *Step One Forward* was selected because of its broad scope: it is an adult training scheme that enrols a higher number of adults than any other similar scheme. In addition, unlike many other adult training schemes, it is not limited to unemployed, but is available also to those in employment or inactive adults. As its name suggests, the goal is to allow both underemployed and unemployed adults to receive the training and education they need to take the next step in their educational or professional development. *Step One Forward* aims specifically to integrate those populations most at risk in the Hungarian context: the long-term unemployed, early school leavers, the Roma, and those with special needs.

**The case studies**

*Case Study 1: National Vocational Qualifications Registry (NVQR)*

**Background**

The current reform of the NVQR is dedicated to developing an improved version of the first NVQR, which appeared in 1993 and was funded by the World Bank. The current project was launched because the first NVQR was considered no longer adapted to the needs of the labour market. This new NVQR uses a modular and competency based approach and covers the training activity in all VET fields and programmes offered by both public and private providers.

The two main goals of the new NVQR are: a) to increase the responsiveness of qualifications to labour market requirements by providing a vocational qualification register covering the middle level of occupations in the Hungarian Standard Classification of Occupations (HSCO), including new jobs created by the economy in recent years; and b) to organise VET in Hungary by linking it to the NVQR definitions of the qualifications.

Firstly, the new NVQR aims to provide students with skills and competences required by the labour market. Its approach is expected to increase the legibility and legitimacy of the VET qualifications in the labour market. Given its competence-based approach, the new NVQR also provides a framework for the assessment of previously acquired competences. This will facilitate the recognition of non-formal and informal learning, which in addition to the opportunities offered by sub-qualifications and built-on qualifications, will contribute to the promotion of lifelong learning.

Secondly, the new NVQR is structured on a modular basis. This facilitates the acquisition of new qualifications for those who already have a
qualification and those who study towards their first qualification will find it easier to change to another qualification. The modular structure of the new NVQR is also expected to facilitate the continuous updating of the register. The new NVQR was designed to be flexible and includes an updating mechanism based on a periodical revision of the qualifications and examination requirements. The modular structure is expected to facilitate such revision processes, since within a qualification only some modules are subject to rapid change (e.g. modules related to the use of up-to-date technology), while others are less likely to change over time. Therefore the periodical updating will concern only some modules of a qualification rather than the revision of the entire qualification.

In addition, the new NVQR is learning outcome oriented and involves a centrally coordinated examination process. The professional and examination requirements are competence-based and are defined by the NVQR for each qualification. The elaboration of these requirements is currently in progress and the new NVQR will be implemented in all VET programmes in September 2008.

Importance in the context of the national VET policy

The economic transition after 1989 required new ways of establishing links between VET and the labour market to ensure that the qualifications offered by VET responded to labour market demand. The original NVQR was developed during the first years of the political and economic transition, when many firms went bankrupt while others emerged and stakeholder groups had very little experience in effectively representing their interests. As one of the interviewees from NIVE (National Institute of Vocational Education) suggested, many employer representatives were actually teachers and had difficulties in representing the interests of firms, or business, as opposed to the interests of teachers. In this peculiar context the elaboration of a good qualifications register was a particularly challenging task.

Since its elaboration in 1993, it has become obvious that the original NVQR could no longer satisfy the needs of employers. A number of factors lie behind this dissatisfaction and the need the revise it. First, the original NVQR included an excessive number of qualifications (800), which were often overlapping with each other. Furthermore it was outdated in that a number of recent professions were not included. The result was, according to the Hungarian authorities’ background report (Hungarian Ministry of Labour and Social Affairs, 2008), “… as a consequence finally the NVQR has become gradually unable to cover the economic and social life in a reliable way”, and thus needed urgent revision.
The new NVQR is viewed by many stakeholders as a milestone in the development of Hungarian VET policies. It is considered a major tool in the progress towards meeting an important policy objective: increasing the responsiveness of VET to labour market needs.

**The process of initiating/designing the innovation**

The main drivers of the current reform of the NVQR are external to the VET system. Firstly, calls from the Hungarian labour market played a crucial role in pushing for the change. As discussed in the previous section, the view that the old NVQR did not meet the needs of the labour market was a key factor in initiating the innovation process.

Funds from the European Union provided an opportunity and the necessary financial resources to develop and implement the innovation. The NVQR project has been financially supported by the European Social Fund under the Human Resources Development Operational Program (21.2 million Euros in the time period of 2004-2006, including a 25% contribution from Hungary. In the second phase (2007-2013) the Hungarian contribution will be 15%). However, the influence of the EU on the innovation process is not limited to financial assistance; the EU also affects the broader, international context of VET policies, in that the new Hungarian NVQR must take into account both the various national qualification frameworks and also the European Qualifications Framework promoted by European authorities. This context may drive innovation but it also may be a source of tension, in that the timing and reporting requirements of the EU may strain the process (this will be developed more fully below).

The innovation has been driven by a top down model, with the involvement of stakeholders from central institutions with NIVE playing the core role. The process, the output and the outcomes have been detailed by the professional staff of the NIVE. The elaboration and implementation of the programme has been coordinated by the NIVE, accompanied by an Advisory Board composed of 30 members (e.g. representatives of the relevant ministries, employers’ representatives and trade unions, NGOs). The Advisory Board held monthly meetings and provided opportunities to stakeholders to express and discuss their views.

In the process of defining the current NVQR, the National Development Agency has also played a role in the harmonisation and cooperation of the projects coming from the different areas of the administration by organising committees to coordinate and plan the projects.
The first phase of the elaboration of the new NVQR involved numerous stakeholders with particular attention to labour market representatives. The main stakeholders involved at this stage were the Ministry of Labour and Social Affairs and the Ministry of Education, the employers’ and employees’ associations (including the Chamber of Commerce and Industry), and the trade unions. Although the overall process was very much a top-down one, there was some space for consultation of “low-level stakeholders”, as their views formed the basis for the job analysis. This job analysis was used to develop the content of the modules and the examination requirements. Rather than being “dictated from the top”, the skills and competences required by different jobs were elaborated through extensive consultation with skilled workers working in those jobs.

The process of implementation did not involve a piloting phase, although the new NVQR was implemented in 2006 at a smaller scale in the 16 regional integrated VET centres (TISZKs). Given the tight schedule of the implementation process, the short period between the small scale implementation in 2006 and the large scale implementation in 2008 did not allow enough time for a preliminary evaluation to be conducted. Carrying out a pilot would have required careful evaluation of the outcomes and a subsequent revision of the innovation. Most of those who started learning according to the new NVQR in the regional integrated VET centres have not completed their courses yet, which made the evaluation of outcomes impossible.

It should be noted that although the implementation of the new NVQR in the regional integrated VET centres was not used as a pilot in a strict sense, it did provide some information that could be used in the large scale implementation process. Also, the regional integrated VET centres have played an important role in disseminating experience about the new NVQR.

The implementation of the new NVQR involves several steps, such as registering qualifications included in the new NVQR, elaborating the contents of the modularised qualifications and defining the professional and examination requirements. Currently the definition of the professional and examination requirements is in progress.

Use of the knowledge base

The question of how to ensure an adequate and sufficient flow of information during the process of policy reform is extremely challenging. There are questions concerning who is considered qualified and reliable enough to provide the information, and the types of information which are considered useful and relevant to decision makers. The role of different knowledge sources (e.g. formal/academic, semi-formal, popular/media
knowledge, general tacit knowledge) in identifying and developing innovation policy is an essential component to the understanding of the processes underlying systemic innovation.

The use of formal knowledge seemed to be rather limited throughout the innovation and development process of the NVQR. Some research evidence was available in the form of employers’ and students’ opinions, but state-financed, large-scale research was not commissioned to support the project (Hungarian Ministry of Labour and Social Affairs, 2008). The limited use of formal knowledge contrasts the crucial importance of this innovation and the scope of its impact.

Semi-formal knowledge sources seemed to be the primary basis for the new NVQR: consultations with various stakeholders provided the main tool to assess the needs of the labour market and explore the views of employers, trade unions, NGOs, etc. A key knowledge source for the elaboration of the new NVQR was the “job analysis”, an analysis of tasks completed in and the skills and competences required by particular trades. As indicated by interviews with experts from NIVE, these analyses used the DACUM method, previously used during the World Bank funded elaboration of the first NVQR in the early 1990s. Facilitators, who were responsible for conducting the job analysis with a given group, received several days of training on DACUM, while the participants involved received several hours of training on the methods. While this method allows for exploring the technical contents of various jobs, its weakness is that it provides little information on the opinions and behaviours of the main agents (employers and learners) in the labour market.

Another potential weakness was the fact that the NIVE involved a large number of different kinds of experts in the “job analysis” work. The results of occupation/job analyses were validated by 20 persons per occupation/job (Hungarian authorities’ “Background report”). “NIVE sent out the validation documents to 9,395 experts, the data of the 8,080 validation documents returned were electronically processed”. In our interviews it became clear that the term “expert” referred to all stakeholders involved in the process, including representatives of trades (builders, plumbers, turners). Although this commitment to inclusion is to be applauded, it is not clear to what extent, in a relatively short space of time, this enormous number of experts could receive adequate training to be involved in a DACUM process of defining the contents of qualifications. It was also not clear how the results of the processes of such a large number of experts and expert groups were systematised for comparability. Also, although it was developed within an EU framework, we were not given any concrete information on how information on relevant EU initiatives and knowledge was taken into account.
Implementation

As indicated above, the implementation of the NVQR was overseen by the National Institute of Vocational Education (NIVE). In implementing the innovation the NIVE takes into account the views and standpoints of ministries, the employers’ and employees’ associations, as well as school representatives.

There were a number of barriers identified in the implementation of the NVQRs. First, as indicated by interviews with national and regional authorities, the main potential barrier for the effective implementation of the NVQR has been resistance from teachers and schools. However, the successful implementation of this innovation requires support from these stakeholders, who have a key role in organising and delivering the curricula and conducting examinations.

There are various incentives for stakeholders to implement the new NVQR. For students the key motivating factor is that this is the only framework that delivers nationally recognised qualifications. Thus schools and teachers are de facto obliged to follow the new NVQR, since if they do not deliver nationally recognised qualifications, students may opt for other institutions. The key question in the successful implementation of the innovation concerns the quality of teachers’ and schools’ participation.

Several interviews indicated that schools and teachers often showed resistance to the innovation. This is hardly surprising given the depth of the reform and its implications for the teachers – efforts required to get used to a new system, increased workload to elaborate lessons that follow the new structure, etc. During the interviews members of the Advisory Board suggested that resistance from schools could be significantly reduced by clearly exposing the benefits of the new system. In order to help the effective implementation of the innovation, the implementation phase included significant efforts in terms of capacity building. As part of this the NIVE launched a 6 months awareness and training programme, which involved a small number of teachers from each school, who then were expected to assist their colleagues. In addition, a separate division at NIVE was (and is) available to provide advice and tutoring to teachers and trainers through workshops and school visits.

While efforts have been made to prepare teachers and schools for the new NVQR, some points remain problematic. For instance, teachers have not yet received much pedagogical support, such as textbooks that follow the new NVQR. This is one of the consequences of the extremely tight time schedule of this innovation (see below). Also, teachers were not involved at the beginning of the innovation process – in the first phase of the elaboration of the new NVQR – which may have increased resistance to the innovation.
However, interviews suggested, that the lack of involvement of teachers and schools in the first phase was a deliberate decision on behalf of policy makers to give priority to the needs of the labour market. As one school representative said “If I had been among the decision makers, I would not have involved ourselves either”.

Another factor affecting the implementation process is the very tight schedule imposed by EU programme timescales. This issue was mentioned by various stakeholders during the interviews including national authorities and experts from NIVE. The tight schedule did not leave enough time to evaluate the outcomes of the small scale implementation of the new NVQR in the regional integrated VET centres before the large scale implementation. This is particularly unfortunate given the wide implications of such a reform. The tight schedule was also cited as the reason for the lack of new textbooks that follow the modularised structure of the new NVQR. This means that teachers and trainers will have to start working according to the new NVQR without supporting textbooks. This illustrates the tension between external requirements (lack of flexibility of EU timescales) and the national dynamics of innovation. The tightness of the EU schedule created pressure on the Hungarian system – including policy makers, background institutions, schools and teachers – that had to keep the deadlines set by EU funds.

**Monitoring and evaluation**

The new NVQR is still in its implementation phase and will not be rolled out nationally until September 2008, with the evaluation planned for 2010-11. As a result, we were only able to focus on the monitoring of the first part of the process and preparations for the evaluation of the project as a whole. Effective responsibility for following-up the project has been assigned to the Advisory Board of the NVQR, composed of 30 members, including representatives of the different ministries involved, employers’ and employees’ organisations, and the trade organisations.

At this stage, the overall opinion of the authorities responsible for the NVQR is that the direction of the innovation process is correct and progress is also in the right direction, even if there have been some difficulties in the implementation process. During the interviews employers seemed to have positive expectations regarding this innovation, although they were aware that at this stage it was hard to tell if it would bring positive final outcomes. Other stakeholders, such as researchers and officials from public authorities also seemed to consider the reform of the NVQR a necessary step, though they also acknowledged the need to wait before being able to assess its consequences.
As previously mentioned, there has been some resistance from teachers in the implementation of the NVQR, with particular emphasis on the lack of textbooks to aid them and the form the exams will take. As the exams have not yet been developed, it is unclear how they will test the competencies required by the labour market as opposed to those required by academic instruction. Although the goal of the new NVQR is to bring these two together, there was some concern among teachers and policy makers alike that it would be difficult for the educational system to test skills and abilities that are, by definition, external to formal education.

Lessons learned

The main and most positive lesson from this case study is the huge effort and courage involved in undertaking to reform the VET system as a whole, especially given the very limited timeframe. Having a goal to improve the responsiveness of the vocational education and training system to labour market needs required an immense capacity for change. From the level of the project design, the management of the innovation process, and the time and energy required to mobilise the stakeholders and main agents involved, it is a very impressive task.

There were several positive lessons learned from the process, including:

- The effort to focus the innovation of VET towards the employers’ needs and consequently the large investment in the definition of the Qualifications Register based on a “job analysis” methodology was widely appreciated and very positively perceived.
- The inclusion of over 9 000 “experts” representing their trade and job skills acted as a way to ensure that bottom-up knowledge in the system was not lost in the development of a system-wide programme, and allowed efficient transmission of field-level knowledge to centralised planning structures.
- The huge scale of the innovation, addressing as it does the system as a whole (rather than making piecemeal changes), took both enormous courage and long-term political vision. This process is not without risk as this scale of change could have unexpected consequences, but is widely argued to be the most meaningful manner to develop policy and guide system change.

However, there are some contextual conditions that, taking into account reported experience, could be improved. The lessons learned directly related to the NVQR project are:
The knowledge base used for initiating and designing the innovation could be improved to provide a relevant, systematic and objective set of information supporting the NVQR project. This should be extended to the monitoring and evaluation tasks. Required data should also include information on the system as a whole, such as regular labour market outcome surveys and data collection.

There is also a need to increase incentives to the most enthusiastic teachers to give them a leadership role in the innovation process. This could improve the participation of the teachers in the NVQR project and remove this major barrier to its implementation.

As the implementation of the new NVQR rolls out there will undoubtedly be other lessons learned that could be added. It should be noted in particular that these lessons have been developed before the evaluation of the project, and should be revised once those results are available. We recommend in particular that the evaluation should focus on the impact and acceptance of the new qualification certificates on the labour market.

**Case Study 2: Step One Forward**

**Background**

*Step One Forward* was launched as a labour market measure in conjunction with the restructuring of the VET system through the NVQR (Case Study 1). Since a large share of those not in employment do not have any vocational qualifications, *Step One Forward* aims to help them acquire marketable qualifications. The government offers free training, through an EU funded programme, to those people who did not finish elementary (primary and lower-secondary) school and to those who have finished elementary education but do not have a vocational qualification. In addition, this training is available to individuals with unmarketable qualifications and individuals who completed upper-secondary school but who do not have a vocational qualification. It is also available to those already in employment who would like to advance to the next step. As the name implies, the goal of this programme is to allow the unskilled and poorly skilled to take a step forward, in both their educational and professional qualifications.

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2 Marketable professions are separately defined on the basis of regional characteristics.
Importance in the context of the national VET policy

*Step One Forward* aims specifically to integrate those populations most at risk for exclusion into the labour market as well as into the educational system. In the Hungarian context, these are the long-term unemployed, early school leavers, the Roma, and people with special needs. They are thus the main target of *Step One Forward*.

Tackling the problem of the long-term unemployed as well as the inactive non-seekers is one of the major challenges faced by the Hungarian labour market (Berde, 2007). According to data from the Central Hungarian Statistical Office, in 2007 almost half (48%) of the unemployed were jobless for more than one year (KSH, 2008). This situation is a long-term consequence of the radical transition from a planned economy to a competitive economy. Many of the qualifications obtained during the communist era, particularly agricultural qualifications, have become obsolete and acquiring new qualifications was difficult for many people because of a lack of incentives and trust in future work possibilities.

The large number of early school leavers is also a problematic issue in Hungary. The problem of early school leavers is aggravated by the fact that many people after finishing primary school remain unskilled. Our interviewees indicated that 7-8% of youth never finish primary school and thus never learn what regular work means, although this figure is necessarily somewhat speculative as there have been no data on drop-outs since 1999.

The share of early school leavers is particularly high among the Roma population. Their tradition is that women get married or give birth at 13 or 14 years old, which means that they often leave school after the 6th grade. Once their childbearing years are over they often seek to enter the labour market, but find that this is almost impossible. As the Roma make up a high proportion the disadvantaged population and current estimates number the population between 600 000 and one million or 6-10% of the Hungarian population, the plight of the Roma is a serious and pressing concern (Berde, 2007). Although they have been a long-standing minority in Hungary, the Roma are among the main losers of the economic transition from communist to market economy. One of the underlying reasons is that even though they could not integrate into the mainstream society in the previous regime, most of them still had jobs, due to the existence of workplaces in the socialist industry requiring low qualifications and the obligation to work. Following the transition, by losing their work, the majority of them entered a vicious circle; without any opportunity to earn money their housing conditions have worsened to a considerable extent, which has had a negative impact on the educational opportunities of their children and made their emergence from a disadvantageous situation even more difficult (Berde, 2007).
The Hungarian peculiarity regarding people with disabilities, as expressed in our interviews, is the tendency to offer financial support to the disabled rather than equal treatment or the possibility to integrate the labour market. Social employment centres work in all regional units but only offer a limited range of working opportunities. However, the elements encouraging employment of the disabled are more and more emphasised within active labour market programmes. Since the end of 2005, employers hiring people with disabilities can ask for a so-called accreditation and thereby can receive substantial state support.

The process of initiating/designing the innovation

*Step One Forward* was launched after only six months of programme design and development. As with the other case study chosen for review in Hungary, it was driven in a top-down approach, although stakeholders at various levels (national, regional, local) played a key role in the implementation phase.

The programme was initiated by the government, which commissioned the National Institute of Vocational Education and Adult Training (NIVE) and the Employment and Social Office (ESO) to assess the feasibility and the organisation of such a programme.

The programme was designed in a way to respect regional labour market specificities and the needs of the target groups. On a national level the programme was steered by the ESO with consultation of the seven regional labour offices. The nine regional training centres had a key role coordinating the delivery of the training to the participants, although it should be noted that approximately 40% of the training itself was handled by private providers (with the rest provided by the labour offices). Although they were not central to the development of the innovation, ESO deliberately involved the regional employment and training institutions in order to profit from regional networks and to better reach the target groups.

*Step One Forward* was 75% EU financed and 25% financed by the Hungarian government during the first round of the programme (2005-2007). The total costs were approximately 20 million Euros. In the second round the costs are shared equally between the EU and the government. The training centres took over the development costs on their own, but received a per-capita contribution according to the length of the training. The integration of a large number of stakeholders – including training centres, Roma representatives, municipalities, employers and employees – aimed to attract the maximum of participants. They key stakeholders included:
• **Employer organisations**, who were asked to identify the training needs and to be flexible in order to allow employees already in employment to participate in training. Some participants reported that employers played a key role in preventing drop-out and motivating their employees who had started the programme.

• **Local authorities** (Roma self-government, municipality), who played a crucial role in reaching participants. Some interviewees reported that if the authorities of a village were motivated, it was quite easy for them to motivate people to join. Conversely, if the local authorities were not motivated, people from that village were less likely to participate.

• **Mentors** were appointed to help reach the target groups by building connections with NGOs, minority self governments, with municipalities, regional representatives, schools and other civil services. They created a bridge between participants, local authorities, employers and the regional training centre.

• **Regional training centres** – which target their activities at adults and enrol 25-35000 participants a year – played an important role as a platform to coordinate the activities with local authorities, to keep in close relation with the employers, to provide appropriate training to the trainees and to inform the regional employment centres about the programme’s processes. The nine regional training centres in Hungary offer programmes in a wide range of fields and the variety of programmes provided by each centre follows the economic structure of the region. This allows the training centres to meet both individuals’ and labour market needs.

The use of the knowledge base

Labour market figures, unemployment rates, the characteristics of the unemployed population, and the study of individual needs of at risk and disabled people on national and regional level were the basis for launching Step One Forward. However, there was no mention of research based practices in the design and implementation of the programme on national and regional levels. There were some important changes made to the second phase based on learning from the first phase, although time constraints in the process made it difficult to incorporate all the information available (see also the “Implementation: Challenges” section below).

On the regional level several stakeholders illustrated good use of tacit knowledge during the implementation of the programme. For instance, the mayor of a small village reported on how easy it was for them to reach and
motivate potential participants. Similarly, the representative of Roma self-government reported the following: “We tried to convince them [participants] to choose something in labour market demand, it worked out well, they followed our suggestions. There were even some people who would have wanted to participate but they weren’t in the 18-54 age range.”

Our site visit to the training centre in Pécs, however, revealed that there were local level initiatives to try to introduce a systematic use of research results and explicit knowledge in the design of their training. A methodology department follows the research trends in education in Europe and endeavours to implement them in the training programs. As an example they were starting to integrate the recognition of informal learning for adult programs, acquired Equal Projects and are an Equal certificated institution.

Implementation

The first phase of Step One Forward ran from November 2005 until May 2007. The second phase started in September 2007 and incorporated some changes in design and implementation based on the successes and failures of the first phase.

Success factors

1) Stakeholder involvement and participant recruitment

The implementation needed extensive coordination between the different stakeholders. Employers were first asked to define the qualification needs and to build up training programmes in close cooperation with the training centres. These programmes were then centrally coordinated by the ESO. As soon as the programmes were accepted the registration to the courses at the training centres could start.

As previously mentioned, the recruitment of the participants was considered the most challenging process. The educational distance of these at risk groups, the fear of failing the training and the scepticism of the professional benefit of the programme were seen as major obstacles in convincing people to participate. The method used during the implementation phase proved to be rather successful. In rural regions the villages are small and within the Roma population the social hierarchies quite strong, which means that a potential key to success is convincing the key individuals, who can then in turn convince the targeted participants. With the help of the mentors, who could make the link between the local governments, civil organisations and the training centres, and key Roma representatives, who could influence their communities, it was possible to
overcome the difficulties and attract participants. 15,000 persons went through the first phase of the programme and for the second programme the training is planned for 20,000 participants.

2) Individualised offers

An important success factor was that the training offer responded to the needs of the employers and took the expectations of the participants into account. Expectations included both the types of courses offered as well as adapting the timing and location of the training to best serve the population. For example, many programmes were organised locally, which solved the problem of commuting (a major obstacle for many potential participants). Furthermore, *Step One Forward* – unlike most other free training courses – was also available to those already in employment. In order to accommodate the needs of those in employment, some courses were organised in the evening or at week-ends. This has enabled those who are underemployed to improve their chances to retain their job or even helping them increase their income. Teachers, participants and employers all confirmed that they appreciated this.

3) Financial support and flexibility

Financial support was certainly one of the motivating factors for potential participants, and this was improved from the first phase to the second. In the first phase, all participants who successfully completed a course received a scholarship equivalent of the monthly minimum wage. However, as this could take some time and the payment only came at the end, it was decided to change this in the second phase. In the second phase, students receive the equivalent of the monthly minimum wage each time they complete 150 hours of training. This varies according to the type of training but can, for example, result in a student receiving this amount 2, 3, or even 5 times over the course of completing a qualification. This is a serious incentive to the students and is a very well appreciated modification from the first to second phase.

In addition to this scholarship, participants did not lose entitlement to other social benefits (e.g. unemployment, health benefits, wages if they are currently in employment, etc.). This was an important distinction from the standard programmes offered by the regional labour offices and cited as a main factor in the successful retention of participants.

4) Training methods

A major success factor was the design of the training courses and the appropriate use of teaching strategies and learning forms. Regional training centres were accustomed to training adults with different educational and professional biographies and were able to introduce new didactic forms.
This is only possible in a dynamic and continuous self-evaluating and monitoring framework. Two examples of the successful adaptation of the programme in this respect:

1. The regional training centre in Pécs hired training managers for the participants of Step One Forward. They assisted the participants during the training, provided information about the individual’s needs for training, and carried out assessment needs.

2. The offer of localised courses. Due to considerable distances between cities and rural villages, aggravated by limited public transport facilities (and physical difficulties in the case of disabled persons) a centralised form of training would have created major barriers to access. The flexibility and mobility of the courses on offer was a key feature in its success.

Challenging factors

1) Administrative burden

The administrative work was considered a big burden during the whole programme. Training centres were required to provide assistance to the candidates in filling out the application forms in correct Hungarian. This was important given the target group, as individuals with very low skills are necessarily capable (or motivated) of completing complicated forms with official terminology, but of course it placed a considerable burden on the individuals and institutions involved.

2) Time pressure

There were only six months from the start time of the programme to the start of the training. The design of the training, the information campaign, the recruiting and selecting process all had to be accomplished in this time period. Many stakeholders mentioned the time pressure as a limiting factor in the effective implementation of the programme, in particular because there was no time to run a pilot to smooth out any implementation difficulties. Capacity building (e.g. systematic training for the mentors) was also negatively affected by the limited time frame.

In addition, although the intention was to reduce the waiting time between application and training (there is a 3 month waiting period for training from the regional labour centres, for example), the waiting time was still 60 days between registration and the beginning of the programme. This was mentioned as a barrier to keeping participants motivated and available as they may have forgotten or applied for other training in the meantime. Another risk mentioned in conjunction with this wait is that participants
might find a job in the meantime and their employer might not let them take the programme so they have to withdraw – although this is not a risk per se in the short term, missing an opportunity to expand skills and obtain further qualifications often has long term consequences for promotion and retention.

3) IT assistance

A specific example of the interaction between the time pressures and the administrative burden is provided by a new IT-Administration tool called ULTIMUS. As the administrative burden was identified as a challenge in phase one, this software was designed to address this for phase two by providing smooth and easier handling of the entire administrative process, both through the schools and the labour offices. However, the software was programmed and implemented without trial, and no training was given to the users before implementation. In addition, there was no beta or testing phase for the software (when users react to the software and the programmers adapt the programme based on their comments).

Monitoring

In accordance with the requirements regarding EU Structural Funds and training programme instructions a Monitoring Committee was established. The Monitoring Committee – although not a decision making body – monitors the progress of the programme. The Monitoring Committee is composed of high profile individuals: directors, deputy state secretaries, deputy heads of commercial and industrial chambers, high level representatives of employers and employees. If necessary it can initiate measures within the intermediary organisation and/or within the supervising authority. Their compulsory tasks are to check if the necessary financial support is available for the programme, how the relevant grants are spent, if the financial support is hindered and how the deadlines of the programme are respected or modified.

Quarterly reports have to be sent from the beneficiary (Labour Office) to the National Development Agency, which are then forwarded to the European institutions in order to report on the status of the programme (e.g. achievement of the intermediate milestones, the keeping of the schedule, the number of participants, and the achievement of the objectives). Additional data were collected regarding gender, and on Roma and disabled participants.

The regional training centre we visited did conduct continuous monitoring of the programme, which was integrated systematically in the quality process according to the ISO certification instructions. This monitoring focussed on descriptive data (e.g. number of participants, drop
outs, financial milestones) rather than satisfaction or learning outcomes, which are meant to be assessed in the final evaluation. These monitoring data were used to inform the programme and improve it as it was running: for example, the data on drop outs, who represented 10% of the participants, indicated that half of them dropped out for family reasons, while the other half dropped out due to health problems. The training centre tried to support them by providing legal or psychological help.

**Evaluation**

The evaluation programme was set up by the Qualifying body. At the end of the first phase of the programme, the National Institute of Vocational Education and Adult Training (NIVE) started an overall evaluation. This evaluation has not yet been finished and so we were unable to judge the overall efficacy of the first phase of the programme. It will be very interesting to see the completed evaluation as the main topics to be evaluated are:

- Definition of the main results, its objectives and methodology.
- Interviews with approximately 700 participants which targeted the following questions:
  - Personal data (gender, age-group, school accomplishment, labour market status)
  - Personal motivation
  - Satisfaction with the quality of the training: local labour office, quality of guidance, whether the lessons were understandable and the practical trainings enjoyable, views on the written learning material, difficulties in the learning process, satisfaction with the machines, tools, equipment of the training institution.
  - Current professional status: whether the training helped in preserving the participant’s position, whether the person could step forward compared to his/her earlier job, in the case of job-seekers whether they could you find a job
  - Future professional plans: whether they would take part in a similar training again or recommend taking part to other people convincingly.

In addition, questionnaires were sent to the participants and firms 6 and 12 months after the end of the training. The response rate of the
questionnaire was 50%, with lower response rates at lower qualification levels. Although the results of this survey were in general quite positive (with 98% of the participants very satisfied with the training and willing to come back for further training), the low response rate raises questions about the generalisability of the results. It is possible, for example, that the least satisfied students were those who were least likely to answer the survey.

In the training centre we visited 15% of the participants were skilled and unemployed. One month after finishing the training, 40% of the skilled unemployed participants had found a job, while two months later this figure was 60%. It should be noted, however, that many courses aimed to provide participants with an elementary school leaving certificate rather than direct employment (due to the high number of participants who had not completed elementary school). For these participants, acquiring a vocational qualification was not immediately possible as they will need to participate in a second round of training, which will improve their chances to integrate into the labour market.

Overall, all the stakeholders we met reported very positive results and high levels of satisfaction with the programme. This is matched by the results of the questionnaire, which indicate high level of satisfaction, although – as discussed above – the 50% response rate and a possible self-selection among respondents may mean that the results were biased.

The following major elements were highlighted by stakeholders as innovative aspects of Step One Forward:

Firstly, the programme is considered different from previous ones organised by regional training centres because its target group goes beyond the registered unemployed population and includes inactive and employed people as well. In addition, it aims to increase educational levels rather than just improving employment rates.

Secondly, the programme is based on individual needs, with several key adaptations aimed to make the programme more appealing to the target groups. This is illustrated by the innovative efforts made to reach the target groups (those most disadvantaged, those least skilled), who are particularly hard to reach, taking into account the special needs of the population (e.g. low levels of literacy, physical barriers, social expectations and norms): “We try to go to the people rather than waiting for them to come to us”.

In addition, training centres were asked to provide appropriate and motivating courses, and also to make the training more accessible to rural participants. The training was provided free of charge to all participants, including (in phase 2) a subsidy to cover the costs of textbooks. Special financial incentives were introduced to inspire participation. The
participants who successfully completed a programme received a scholarship equal to a 1 month minimum wage. This incentive was adapted in the second phase of the programme to better meet the needs of the students (see also Successful Factors: Financial Support [above]).

The overall goal of the programme was to reach out to those most in need and provide them with the tools to take a step forward in their education and/or employment. As such, the focus on the individual, flexibility, and the intention to give participants the incentives to figure out what THEY want (rather than being institution centred) have all combined to make this a successful initiative.

Lessons learned

As explained above, the key lessons learned can be divided into positive and negative ones. The positive lessons can be summarised as follows:

- The inclusion of the different stakeholders on different levels was a key factor in the programme’s success. On a national level it allowed the different partners the opportunity to foster the educational and professional level of disadvantaged groups. On a regional level, the integration of all stakeholders made it possible to identify local needs of qualification and to reach those most at risk.

- The integration of VET training centres, which already deal with adults is a very important factor. It is worth mentioning that in earlier cases the training was organised by the employment offices only. For the participants, integration into the labour market by VET training is much more motivating than simple training as an employment measure.

- The importance of flexibility to define local needs and local opportunities. The aims on the national level to integrate the training into the VET system do not always match with the aims on the regional level to respond to particular needs in the regional economy (with or without a strong link to VET), and the system needs the flexibility to respond to both to be effective.

The most challenging or difficult lessons learned are:

- The speed of the implementation process, which led to various practical and logistical problems as well as cutting the pilot phase. Extending the development phase of such projects could have a good impact on the quality of the activities of the different stakeholders involved and on harmonising the activities on a national level.
The importance of monitoring and evaluation in general, and in particular the importance of a pilot phase. Two basic improvements that could have been suggested by a pilot phase (but were instead picked up only by the second phase of the project): a) paying the equivalent of one month’s minimum wage after 150 lessons instead of at the end of the training; and b) the importance of supplying students with a textbook subsidy as institutions were charging students for the books, which was a barrier for some of them.

Overall assessment

There are three main themes that come out of the analysis of the case studies. They are: a) the role of EU funding as a driver of change, but also (inadvertently) in promoting top-down processes, b) the weak evidence base, and c) stakeholder involvement and capacity building. This section will discuss each of these in turn.

The role of EU funding

It was very characteristic in the present Hungarian context that both case studies were EU projects. EU policy and funding has had and continues to have an enormous impact on development policies in Eastern Europe as in Hungary.

EU projects are not only seen as a kind of facilitator to push forward some aspects of the development but also as opportunities to develop the market economy and the social conditions of the population. The Ministry of Labour and Social Affairs considers EU Programmes as a serious opportunity to develop the entire VET system. The NVQR in particular was cited as a milestone in the history of VET in Hungary.

In the decision-making process to join EU projects different stakeholders are actively involved. The Ministry of Labour and Social Affairs consults the National VET Council, which consists of 38 members representing the major partners of the VET. The National VET Council analyses – on the basis of studies and expertises provided by the NIVE – the potential impact of the different EU programmes and prepares decisions for the ministry. The National VET Council is then consulted by the NIVE and other experts.

EU funds act therefore as a main driver of innovation and change in Hungarian VET and are essential to the innovation process. However the highly centralised and very competitive nature of the funding process supports a very top-down approach to innovation. This has important
implications for the origins and dynamism of systemic innovation in the VET system and, especially, the degree of openness in the system to bottom-up or grassroots initiatives.

Additional limiting factors of EU funding relate to time scales and sustainability. For the success of such large projects it is important to allow enough time for preparation, to reflect all steps and to involve all stakeholders from the beginning. In the case of the NVQR, there did not appear to be enough time for the implementation phase and in particular the design of professional and examination requirements and the elaboration of new textbooks. The early involvement of teachers and participation of the experts from the labour market throughout the process are crucial elements in determining the success of this reform. With reference to Step One Forward, additional time would have allowed for a pilot programme that could have adjusted the problems observed in phase one. It would also have permitted offering systematic training to the mentors and testing and piloting of the administrative processes and tools.

For both of the innovation case studies, the short time dedicated to the preparatory phase may harm the quality of implementation of the final outcomes. Given the tight deadlines imposed by the EU project schedule, the workload has been very high and there was not enough time to conduct pilot projects and gather research evidence that would underpin policies and project development.

Another major concern with the strong adherence to EU projects concerns the sustainability of such projects, and indeed the sustainability of innovation in the system as a whole. Continuous new projects can have the unintended effect of hindering the development of previous reforms and innovations. This has implications for long-term planning and strategising, the use of evaluation and research results, and carries with it the danger of “innovation fatigue” from the population and user groups. This is a particular risk given the transition and change of the system since 1989, and was reflected in a number of comments from diverse stakeholders (we hear often: “here we go again”).

All reform and innovation processes need a certain time to be fully implemented and to measure their outcomes and impact. A sustainable innovation policy should be based on the evaluation of the outcomes and impact of earlier projects or programmes. New systemic innovations should also be introduced based on solid research evidence and outcome measures as they are necessary for sustainable development with a certain degree of quality assurance. Without the integration of the sustainability dimension the risk of innovation fatigue increases with the number of new projects.
A weak evidence base

The question of how to ensure an adequate and sufficient flow of information during the process of policy reform is extremely challenging. There are questions concerning who is considered qualified and reliable enough to provide the information, and the types of information that are considered useful and relevant to decision makers. The role of different knowledge sources (e.g. formal/academic, semi-formal, popular/media knowledge, general tacit knowledge) in identifying and developing innovation policy is an essential component to the understanding of the processes underlying systemic innovation. When we speak of “evidence”, then, it is important to note that this includes both formal research from academic and other bodies as well as information from other, less formal, sources, including tacit knowledge from field-level stakeholders involved in implementing the innovation.

On regional level several stakeholders illustrated good tacit knowledge of ways of introducing the programmes. However the overall knowledge base of the stakeholders’ (employers, learners, teachers and providers) opinion and behaviours as used to implement the projects was quite limited. Given a top-down system approach, it was difficult to create the pathways to encourage successful knowledge transition from the local to the national level.

The initiatives chosen as case studies for this project address two central issues that all countries must tackle in their knowledge societies: a) how to increase the responsiveness of the VET systems to the labour market and individuals needs and b) how to avoid the social exclusion of the unskilled and low skilled.

It is imperative that projects with such wide scope and deep impact in the Hungarian VET system and labour market be supported by solid data and rigorous research analysis during their design, monitoring and evaluation process. Such data should be open to the public and presented to the main stakeholders. However discussions with various stakeholders suggested that there is a weak research base for systemic innovation in VET in Hungary. This is true for the knowledge base that is drawn on for the development of the innovation, including a lack of reliable and robust outcomes data for students taking VET (see ETP team’s Policy Review of Hungary recommendation #4). This also interrelated with the role of EU funds and the top-down nature of the system, as well as all subsequent stages of innovation. We observed an overall:

- lack of evaluating and piloting, which had
- implications for scaling-up and implementation, which had
an impact on the timing and impact of the innovation.

In a systemic innovation process the system needs regular, relevant and objective data to monitor the process. This data comes from different sources and includes specific information that has been produced related to a particular innovation, but should also extend to data coming from a general information system that a modern society needs such as regular surveys (on labour market, education outcomes and processed) or data collection.

However, it is important to note that some research was used in the development and design of the innovations. Both case studies were based on statistical figures of the labour market development and the unemployment situation. In addition, employers’ and learners’ opinions and behaviours were taken into account (for the NVQR) and the characteristics of the unemployment population and a good perception of individual needs of the disadvantaged on national and regional level (for Step one forward).

The weakness in available data and in research supporting the initiating and designing of the innovations and giving the necessary information to monitoring and evaluating the innovations may constitute a weakness of the projects in itself if considered from a systemic point of view. The research analysis consist in the capacity of the system as a whole to reflect, to think carefully, on the innovation process supported by the data collected and other available information.

A few qualifiers on this observation: both of our case studies were new innovations and did not have the final cycles or evaluation in yet; and also as we did not succeed in speaking with actual researchers of innovation we did not have their appraisal of the system.

Stakeholder involvement and capacity building

A system’s ability to bridge relationships between stakeholders and ensure effective mechanisms for capacity building affects the outcomes of the innovation. Stakeholders’ involvement during the preparatory phase and the elaboration of the innovation may help increase their sense of ownership, which also facilitates the subsequent implementation of the innovation. Furthermore, active involvement of stakeholders can also help reach target groups, in particular in the case of disadvantaged populations, as the implementation of Step One Forward demonstrated.

Our interviews revealed that considerable efforts have been made in terms of bridging relationships between stakeholders and capacity building in both case studies. At the same time, there is room for improvement in
some aspects of stakeholder involvement and capacity building. The following sections discuss each in turn.

**Stakeholder involvement.** The active involvement of stakeholders in the development of the innovation was particularly visible in the case of the new NVQR. Particular attention was given to employers’ representatives, in accordance with the government’s aim to increase the responsiveness of VET to labour market needs. Representatives from other domains (e.g. the independent sector, other government ministries involved in VET training (i.e., health, justice) were also included. Although the process was intentionally widely representative, school representatives were not involved in the first phase of the design. Rather, they were involved once the broad framework for the new NVQR was ready. Interviews during the visit suggest that this may have been the result of a deliberate decision on behalf of policy makers to give priority to labour market representatives.

In the second case study, *Step one forward*, stakeholders were not actively involved in the design of the innovation, but efforts were made to construct links between the various levels and groups involved. This case study also provides examples of successful links between different levels and stakeholder groups (national, regional, municipal and individual level), and in particular reaching out to at risk target groups. There were innovative attempts made to include diverse stakeholders through non-traditional means (e.g., mentors for *Step one forward*, facilitators for NVQR). The bridges and connections (not to mention goodwill) established through these efforts seemed crucial in ensuring an effective implementation process and opportunities for continuous feedback.

**Capacity building:** Before the implementation of the new NVQR efforts were made to prepare teachers and trainers. However, some forms of support were notably missing. For example, teachers did not receive textbooks that follow the new modular structure (this may be due to the speed of the process not allowing for elaborating such textbooks). In *Step one forward*, mentors in different regions attended regular meetings in order to share experiences, and this will be done even more regularly in phase 2. However they did not start these meetings until three months into their position (in phase one) and have not received any actual training on how to do their jobs best (that is, on practical issues, e.g. what other opportunities are available to applicants in terms of benefits and options, how to deal with physically disabled clients, etc.). Both of these examples illustrate a need for more careful capacity building for the stakeholders involved in the implementation of innovations, and also suggest a challenge for the system as it is currently designed. This also speaks to a general issue for systemic innovation: how, in a top-down system, can capacity building of field-level
professionals be adequately developed? This will be further developed in our reflections on systemic innovation as a whole.

Recommendations

- We recommend that innovation in VET should continue to focus on a long-term perspective and continue to develop in close collaboration with labour market developments. The evolving nature of professional VET qualifications requires a system that is capable of innovative and timely adaptation.

- The impetus of innovation by EU is a welcome opportunity to implement reforms in the VET System. It is however important that the reforms do not stop with the ending of the EU funding. A domestic follow-up programme with evaluation of the quality and the impact is necessary to guarantee the sustainability of the innovations.

- Setting priorities in the choice of the EU programmes is an important feature to guarantee a good quality of the implementation and to prevent innovation fatigue. It is important to ensure that enough time is given to carefully design the innovation, conduct a pilot and include appropriate capacity building in the implementation phase of the innovation.

- From both research and public accountability perspectives there is a need for external, objective, perspectives on the assessment, design, and evaluation of VET innovations. We recommend more integration of researchers external to the central institutions in the process in order to increase the effectiveness and accountability of the innovations.

- The bottom-up process of innovation should be a source of innovative ideas and at the same time a way to increase the mutual trust between people with central responsibility and the individual teachers and centres. We recommend increasing opportunities for grassroots participation in the innovation process. Increasing benchmarking activities could be a good tool to disseminate good practice and reward the most enthusiastic teachers and centres.

For NVQR:

- We recommend in particular that the evaluation should focus on the impact and acceptance of the new qualification certificates on the labour market.
Implications for the study of systemic innovation in VET

In a systemic innovation process it is essential that stakeholders learn to use the available data and research in their project and implementation proposals. A challenge for both the case studies and the system as a whole is the need to improve the learning process related to the use of the data by the individuals responsible, and also more generally for all the people involved in the design, implementation, and evaluation of systemic innovations in vocational education and training. This issue is particularly interesting to explore in a context of weak culture of the use of research as a basis for project design and development in VET, often also related to the general availability of data and the capacity of use it to designing and monitoring innovation projects in a wider perspective.

In general (in Hungary and all other countries participating in the Systemic Innovation in VET project) we must improve our knowledge of the relationship between the specific innovations and other social systems related to them. We can call this a Contextual Systemic Framework that should be defined specifically in each case. The contextual systemic framework of each innovation can have an international dimension, as clearly observed in the Hungarian cases by the conditional relationship with the EU’s programs framework. In other cases or other contexts it could be less important or simply other international frameworks.

Paying attention to bottom-up tacit knowledge as a part of the process of innovation is also an important issue. Top-down processes driven by central government and EU programmes carry a risk of losing the knowledge and professional expertise developed and shared by all stakeholders in the system, including VET practitioners and employers. They can also lose the element of dynamism and flexibility that comes from unplanned spontaneous innovation but is rarely observed in very structured designs and implementations of innovations. The case of the NVQR shows how efforts can be made to successfully include VET workers in a top-down process and it is important to ensure that stakeholders are involved in all innovation processes.

Another element of top-down innovation is the choices that are made regarding who to include and when to include them, and resulting implications for ownership of the process. Deciding to prioritise labour market needs over educational needs or the educational lobby (or vice versa) and develop an innovation without initial buy-in from all stakeholders can result in resistance during the implementation process. In cases such as these it is important to think through the various incentives that can be offered to encourage compliance and reduce resistance from particular stakeholder
groups, particularly if the resistance can be foreseen to some extent as a consequence of inclusion/exclusion choices made earlier in the process.

Innovations in VET typically pay attention to labour market needs. However, basing training and qualifications on the existing structures of the labour market creates a tension between the existing structures and skill needs in new, emerging business areas. Even though the NVQR is purposely modular in order to increase flexibility and adaptability, it must of necessity always be reactive to labour market needs. In some systems attempts have been made to design proactive strategies to predict emerging skill sets and job areas. This sort of “blue skies research” is necessarily speculative but allows for planning and designing programmes for emerging skills which can not be predicted using standard labour market forecasting, and is an interesting study of both the dynamics of the innovation process and the levels of risk management a system is prepared to take. This does not seem to be done in Hungary at the present time.

A sustainable innovation policy should be based on the evaluation of the outcomes and impact of earlier projects or programmes. New innovations should also be introduced based on solid research evidence and outcome measures as they are necessary for sustainable development with a certain degree of quality assurance. Without the integration of a sustainability dimension the risk of innovation fatigue increases with the number of new projects. Of course, there is often a tension inherent in the system in that funding is often reserved for “new” ideas and projects, with successful long-running projects losing out on funding opportunities because they are not perceived as innovative. In this sense innovation can be forced to some extent as tight competition for limited funding requires innovation for survival. Although it can play a positive role in ensuring dynamism and change in the system, it must be carefully balanced to avoid falling into the trap of innovation for the sake of innovation.
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## ANNEX 1

### LIST OF PARTICIPANTS

17-20 March 2008, Budapest and Pécs

<table>
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<tbody>
<tr>
<td>Mrs Gyarmati (Eva Horváth)</td>
<td>Local employer</td>
</tr>
<tr>
<td>Ms. Mónika Kovács</td>
<td>mayor of a local village</td>
</tr>
<tr>
<td>Mr. Imre Horváth</td>
<td>President of a Roma self-government</td>
</tr>
<tr>
<td>Mrs Kerényi</td>
<td>Director (of an institution employing disabled adults)</td>
</tr>
<tr>
<td>Beata Hoffmann</td>
<td>Mentor, Step One Forward</td>
</tr>
<tr>
<td>Imre Szilagyi</td>
<td>Mentor, Step One Forward</td>
</tr>
<tr>
<td>A Graduate of programme</td>
<td>Plumber</td>
</tr>
<tr>
<td>A current student</td>
<td>(working on finishing Grade 8 equivalency)</td>
</tr>
<tr>
<td>20 March 2008</td>
<td></td>
</tr>
<tr>
<td>System Questions</td>
<td></td>
</tr>
<tr>
<td>Ms. Melinda Boros</td>
<td>Head of Training Finance group, ESA Hungary (European Social Fund)</td>
</tr>
</tbody>
</table>