Chapter 3

Enhancing the organisational capacity of Hungary’s higher education institutions

This chapter expands on the findings of Chapter 2 related to organisational capacity, mission readiness, funding, people and incentives. Transforming Hungarian Higher Education Institutions (HEIs), of which many have long-standing traditions, is a long-term process and not free of barriers. Decreasing public funding for higher education is coupled with decreasing numbers of students and graduates. The current administrative and academic structures, core institutional funding, and the allocation of staff time are still oriented towards a dual mission model. The chapter explores current strategies and practices to further anchor entrepreneurship, innovation and the third mission, and provides recommendations and learning models on how strategy, resources and support structures can create and sustain synergies across the HEI’s different functions.
Introduction

Hungary has a strong tradition in higher education which dates back over several centuries. After foundation attempts in the 13th century, the first Hungarian university, with faculties of law and medicine, was established in the town of Pécs in 1367. Pope Orban V, in his Bill of Endorsement, ordained that this university shall last forever; regrettably the prevailing political environment meant that it only survived for a decade (Hungarian Government, 2002).

Hungary’s modern higher education system emerged in the 20th century and reflects the evolution of a higher education system with a rich history in which its academic community both past and present have made significant contributions to the advancement of the collective knowledge of global society. The country’s huge contribution to the world’s intellectual heritage includes many Hungarian-educated Nobel Prize winners from the first, Philipp Lenard (1905), for his work on Cathode rays, to the most recent, Avram Hershko (2004), for his work on protein degradation. Famous Hungarian inventions include the ball-point pen (Biro), phosphorous matches (Irinyi), the electric train (Kandó) and the telephone exchange (Puskás). Aside from scientific creativity, Hungary has also produced a long list of famous composers, painters and artists, including Zoltán Kodály, Béla Bartók, Victor Vasarely and Jenő Ormandy (Hungarian Rector’s Conference, 2015).

Since its creation, the Hungarian higher education system has experienced many changes, both positive and negative. One of the most significant changes, for which the higher education system appears to be still catching up, was implemented as part of Hungary’s integration into the Soviet Block. Following the Second World War, Hungarian universities were subject to a series of reforms aiming to eliminate academic freedom. Soviet schoolbooks and curricula were implemented, and Marxism and Russian language were made obligatory subjects. The principals of admission were based on the ideologies of the administration, and strict central governance eliminated the autonomy of the universities (Hungarian Government, 2002). Hungary emerged from the Soviet Block as an independent nation some 25 years ago. Since then, successive governments have implemented extensive development and integration strategies in order to advance the economic, social and cultural integration of the state within the EU. Higher education has not been exempted from this process with numerous new policies, strategies and laws being implemented and enacted.

Hungary has made significant advances since its entry to the EU, but still lags behind other western EU member countries in terms of tertiary education indicators. For example, tertiary education attainment among young adults (25-34 year-olds) in Hungary stands at 32%, which is 9 points behind the 2014 OECD average of 41% (OECD, 2015a). Furthermore, the dropout rate in higher education remains very high in comparison with other jurisdictions at 47% in 2011 (OECD, 2015b). In terms of adult participation in lifelong learning, participation remains very low at 3.2% compared to an EU average of 10.7% in 2014 (ibid.).

In a further bid to improve performance relative to other EU countries, in December 2014 the government approved the Higher Education Strategy “A Change in Pace in Higher
Education” and amended legislation accordingly (Hungarian Government, 2014). The strategy sets the agenda for the development of the Hungarian higher education system over the next 15 years, aiming to achieve a 35% tertiary attainment rate by 2023. The objectives of the strategy are to i) establish a performance-based higher education system and improve its quality; ii) boost the research element of higher education and research careers; and iii) strengthen links between local/regional businesses and higher education. The main action areas of the strategy can be summarised as follows:

* Rationalisation of the programme structure and content: based on the new Graduate Tracking System, the number of programmes will be cut by 15% by 2020.

* Increasing entry and outcome requirements as well as opening up pathways to higher education based on recognition of prior learning.

* Establish a new type of institution, the “higher education centre for community based studies” with a view to making higher education more accessible in regions without higher education institutions.

* Quality assurance: launching new programmes will become easier, but checking on processes and outcomes will be stricter.

* Governance structures: aiming to strengthen the non-academic management of institutions, two new structures have been introduced, namely the chancellor’s office and the consistory.

* Co-operation with businesses and research will be facilitated through regulations promoting more flexible use of state funding and attracting private funding. There will be a career system for researchers and more opportunities for start-ups and participation in innovative projects.

Allied to the above strategy, a key consideration going forward is the mission of the higher education institutions (HEIs) in Hungary which is currently largely based on a traditional dual mission model focused on teaching and learning, and research activities. In the current technological and globalisation era, a new third mission encompassing engagement with industry, business and society has emerged as an essential component of the mission and strategy of any higher education institution. HEIs and their associated stakeholders, including governments around the world, have recognised the need to advance the engagement mission of HEIs.

This need has clearly been recognised by the Hungarian Government in two ways. Firstly, in the implementation of the Higher Education Strategy which seeks to boost the research element of higher education and strengthen links between local/regional businesses and higher education. For example, among the main changes introduced recently as part of the implementation of this strategy was the introduction of new practically oriented bachelor programmes, the dual training system (see Chapter 1). And, secondly, through the implementation of new governance and management structures focused on the creation of a more strategic and entrepreneurial approach within the HE sector. Previously, rectors had final responsibility for all decisions made by universities. Since 2014, there is a chancellor appointed by the Prime Minister in each public higher education institution. Chancellors are executive heads with final responsibility for financial and economic decisions, while rectors retain final responsibility for teaching and research decisions. As academic and financial decisions are typically closely linked, the chancellor has a crucial position in the steering of the HEI, including effective allocation of resources. A five-member body, three members delegated by the minister responsible for higher education plus the
rector and chancellor of the institution, sets long-term strategic goals for the HEI, including adopting the medium-term institutional development plan and the annual budget programme.

In developing the third mission of the higher education system in Hungary certain limitations and potential boundaries need to be understood and taken into account, including:

- The current weak financial position of the state and its associated institutions, including HEIs, which has seen the expenditure per student at tertiary level decrease by 15% between 2008 and 2012, while the number of students decreased by 7%.
- The legal and contractual framework applying to HEIs and their employees which is very focused on the dual mission model in terms of staff workload.
- The significant restructuring and re-organisation of the HE structure within Hungary, which although may be seen as necessary by some, creates a significant workload in its own right and is often not integrated in a strategic way with HEI mission-based activities. As such, it can act as a significant distraction to the delivery of the core mission of HEIs.
- Current administrative and academic structures within HEIs which are often not appropriate to the delivery of third mission activities.
- The availability of external support from relevant stakeholders, including business and industry, which is limited in comparison to other jurisdictions.

The remainder of this chapter explores the views presented by various stakeholders in relation to the above themes, examples of good practice and achievements, key challenges, recommendations and learning models for consideration.

Analysis and findings

Commitment to third mission development

In terms of organisational capacity and mission readiness, the Hungarian higher education system can point to several strengths and achievements which are most clearly demonstrated in the strong desire, commitment and recognition by all stakeholders of the need to develop and continue to evolve a vibrant and sustainable third mission within the Hungarian higher education system. For example, in interviews with government agencies the commitment of government to the development of a three-mission culture within the higher education system was highlighted through the recent adoption and implementation of several key strategies, policies and initiatives, such as the new national strategy for higher education “A Change of Pace in Higher Education” (Hungarian Government, 2014) and the National Research and Development and Innovation Strategy for the period 2013-20, “Investment in the Future, National Research and Development and Innovation Strategy” (Hungarian Government, 2013). In their view the implementation of the third mission agenda will not be an immediate process and will require careful consideration, implementation and on-going review.

The senior management teams at the HEIs visited also demonstrated their commitment to the development of the third mission for the benefit of all stakeholders including the student body. It was also evident that senior management support government policy and initiatives created for the development of the HEI third mission agenda and are developing institutional strategies in support of this. In their view, the embedding of third mission activities will further enhance the position of HEIs as key drivers in the economic, social and cultural development of their cities, regions and country. Further, they believe the expansion
of third mission activities may also contribute to the improvement of the financial position of HEIs.

A promising step in this direction is the Teacher and Researcher Quality Assessment Scoring System (OKMR) at the Eszterházy Károly University of Applied Sciences (Box 3.1). The deployment of this type of system across all HEIs within Hungary would clearly benefit the development of a three-mission model. In the first instance, it provides a consultative platform which allows for discussion and agreement on engagement in third mission activities, but it also allows for the development of detailed, discipline specific knowledge maps which would identify available staff strengths for deployment in support of external engagement and third mission activities.

Box 3.1. Quality Assurance at Eszterházy Károly University of Applied Sciences

The OKMR system developed at the Eszterházy Károly University of Applied Sciences forms an integral part of the mechanisms the institute intends to deploy to meet the objectives of its institutional strategy. Key to its success has been its development in consultation with staff, and the fact it took on board best practices that existed in other assessment systems from other HEIs.

The OKMR system – through a consultation process between line managers and staff members – allows not only for the creation of a personal evaluation profile and work-plan, but also a personalised staff development profile focused on how best to improve the professional and personal development of the individual staff member. Participation and performance in the OKMR process does not affect the salary of individual staff members, but it is intended that outcomes could be used for promotional purposes. Not only will the system profile individuals, but the intention is to create knowledge maps in disciplines which will provide detailed information on staff expertise available within specific departments which could be deployed in support of the development of third mission activities.

Source: Interviews at Eszterházy Károly University of Applied Sciences during the study visit in March 2016.

It was universally accepted that third mission activities will benefit the learning experience of the student body. Hungarian students who were interviewed as part of this study were very aware of the personal and career benefits arising from their exposure to third mission activities as part of their studies. Students are actively seeking and will increasingly demand courses which provide them with these types of opportunities. Indeed, students interviewed as part of this study believe their courses could be improved and made more fit for purpose in terms of work readiness and expressed concern that students in other jurisdictions have a distinct advantage over them due to their higher level of exposure and greater level of support with respect to business, industry and third mission activities. A learning model for other HEIs in Hungary is the Audi Hungarian Faculty of Automotive Engineering at the Széchenyi István University (Box 3.2).

In terms of the future, there is no doubt significant further potential and strength exists internally in HEIs within the student and staff body and externally in industry and business to enable evolution of the third mission agenda. Indeed, external stakeholders expressed an overwhelming desire to deepen their engagement and joint activities with Hungarian HEIs and they believe HEIs are well resourced in terms of academic know-how, specialised technologies and equipment which business and industry could avail of. Similar to state and
government agencies, external agencies agree that without the participation of HEIs the development of the country’s innovation system will be in jeopardy.

A less recognisable strength lies in the fact that the Hungarian system is currently at a developmental stage in terms of the third mission agenda and has the advantage of having a blank canvas, which presents a real opportunity to learn from the good practices of others. An example of a learning model that could be explored in terms of engagement and the third mission is the approach taken in Ireland (Box 3.3).

Box 3.2. **Audi Hungarian Faculty at the Széchenyi István University**

Széchenyi István University, in association with Audi Hungary, has developed a multi-level partnership which has led to the creation of the Audi Hungary faculty of Automotive Engineering within the university. The main aim behind the development of the faculty, is the provision of education and applied research programmes targeted at strengthening and further developing the skills and expertise available in the region to support the expansion and development of its automotive industry. Audi Hungary has provided investment through the provision of direct finance, equipment and expertise.

The university has prioritised the development of the faculty in terms of staff deployment and infrastructure development. Both partners have seen benefits accrue from the partnership with, for example, the university students gaining invaluable experience and exposure to cutting edge automotive technology and training and Audi Hungary being able to access academic expertise within the University to assist in the development of new technologies relevant to their industry.

The greatest beneficiary of this collaborative third mission initiative between the largest employer in the region and the principal provider of higher education is the region itself, as this initiative seeks to ensure the supply and development of the most appropriate skills and expertise needed to ensure the continued presence and expansion of the automotive industry in the region. A model of this type could be employed in other regions in Hungary between higher education providers and industry with a view to developing centres of academic expertise to support the development of skills and knowledge required to strengthen and grow specific regional industries.

Source: Interviews at Széchenyi István University during the study visit in March 2016.

Box 3.3. **HEI engagement with wider society and internationally in Ireland**

In its most recent national strategy for higher education, the Irish Government defines the mission of higher education institutions as encompassing three inter-connected elements, which are i) teaching and learning; ii) research; iii) engagement with wider society and internationally. The strategy recognises that engagement by higher education with wider society takes many forms. It includes engagement with business and industry, with the civic life of the community, with public policy and practice, with artistic, cultural and sporting life and with other educational providers in the community and region, and it includes an increasing emphasis on international engagement.

The national strategy seeks to ensure that engagement with the wider community becomes more firmly embedded in the mission of higher education institutions. To achieve this, the strategy outlines the actions which higher education institutions will need to take, which include:
Finally, although it was clear there were differing views among the stakeholders in terms of mission readiness and organisational capacity, strong common themes resounded among all stakeholders namely the need to further develop third mission capacity and associated activities within HEIs, and the desire of all stakeholders to be involved in the development process.

**Future challenges**

There is no doubt that significant change will be required in the culture, mission objectives, organisational structure and capacity of the higher education system in order for it to embrace and regularise the third mission agenda within the ecosystem of all HEIs. The issue essentially revolves around ensuring the evolution of the higher education system to a three-mission model (education, research, third mission) from a predominantly two-mission model where the culture and modus operandi of HEIs remains focused on the dual mission of education and basic research.

In support of this view, government agencies highlighted their understanding that HEIs in the country have a long and established traditional two-mission focus on teaching and learning, and basic research. However, in their view, the mission of HEIs needs to evolve to include engagement and entrepreneurship activities at their core, with a view to HEIs further contributing to improving the economic and social fabric of Hungary. Government also views the development of the third mission as a potential way to enhance and improve the financial profile of HEIs through interaction with industry, business and the international community.

Industry and local/regional government partners of HEIs agreed that HEIs have made a significant contribution to the state, economy and society through the provision of well-qualified graduates and the creation of academic knowledge. However, they expressed a view that HEIs appear to have a preference to remain engaged in only teaching and learning, and basic research and remain focused on citation indexes as opposed to customer needs.

To achieve the three-mission model will not be an insignificant task and will require significant consultation and investment, careful planning and sequential implementation.
over a relatively long time period. The challenges presented in the successful evolution of the system are also hampered by what some describe as the excessive re-organisation and restructuring currently underway in the sector. This is placing significant stress on the system and is proving to be a resource intensive distraction which appears to have no positive impact on the delivery of third mission activities.

A further significant challenge is the lack of a co-ordinated approach in HEIs to the communication of strategic objectives both internally and externally. Little awareness exists among the staff or students of government and HEI senior management third mission development plans. Furthermore, limited, if any, consultation has occurred between HEI management and government agencies, and staff and student stakeholders in the development of these plans and strategies. For example, the public consultation process conducted as part of the development of the new Higher Education Strategy was rather truncated, lasting only two weeks, which would be seen as a very short time period in comparison with consultation processes in other jurisdictions.

Aside from an apparent lack of consultation, there also appears to be limited confidence, trust or buy-in among internal stakeholders in the strategies and plans of government and HEI management. With respect to the engagement agenda, limited evidence of internal communication, implementation or review mechanisms existed within the HEIs visited, which are essential to drive the development of the third mission agenda. Allied to the above, few fora, if any, exist to enable regular consultation and communication to occur between internal and external stakeholders at both a strategic and operational level.

Connecting the implementation of strategic plans and stakeholder activities, both internally and externally, will be key to the successful implementation of the third mission agenda and associated activities. This is currently significantly hampered as no regional or area plans or fora are in place within Hungary which could drive economic development or utilise the third mission capabilities of all HEIs.

Resourcing the change agenda will also be very challenging given the current financial position of the state, the decline in student enrolments in recent years, which can only negatively impact on calls for increased investment in higher education, and the lack of significant alternative funding sources from business, industry or enterprise in comparison to other jurisdictions. Students are very aware of the poor financial position of their HEIs. They are concerned about how this occurred, and hope investment in higher education will be prioritised in the future. Academic staff expressed their concerns about the financial position and sustainability of HEIs and their ability to expand third mission activities due to a lack of resources. In terms of HEIs being able to deliver on their strategies, academics also expressed concern that significant numbers of experienced academic staff are leaving academia due to the lack of competitiveness of state salaries in comparison to industry.

Another regrettable occurrence in the complex resourcing matrix is the fact that the funds generated through third mission activities are often used as a way to shore up existing financial gaps, as opposed to dedicating these funds to the creation of the new third mission approach to education for the benefit of all stakeholders, and in particular the student body.

Further challenges include the current lack of effective structures to support third mission activities as well as the selection of the most appropriate structure going forward. In support of this opinion, external agencies expressed the view that no systemic entrepreneurship and innovation support structure currently exists within the higher
education system and few mechanisms and avenues exist to allow external stakeholders to connect with HEIs. Academics also believe there is limited or no organisational structure in place to effectively support third mission activities and they would have limited trust in any new systems being proposed by management or government. In their view, there were no mechanisms available to incentivise involvement in research let alone third mission activities. Further, existing support systems for research and innovation are overly centralised, bureaucratic and restrictive and do not promote involvement in activities outside of teaching and learning. In the view of third mission support staff, there are insufficient resources available to support their activities and there is no readily available organisational structure to enable successful engagement with academic staff and external stakeholders. They also believe there has been little traction in the creation of innovation and entrepreneurship activities among the academic community due to their existing commitments and a lack of incentives to entice them to participate in third mission activities.

Key to the development of effective structures to support third mission activities will be the definition of the roles of staff operating within these structures and the introduction of staff incentive and support mechanisms to encourage third mission participation, which are currently lacking. Going forward, how new staff are recruited, deployed and trained will be an important consideration in the successful development of the third mission agenda within HEIs.

Finally, creating greater collaboration among HEIs in order to maximise the potential impact of the higher education system is essential to the future success of any third mission agenda. Currently there appears to be no desire among HEIs in Hungary to pool or cluster efforts in a bid to drive the third mission agenda. Significant competition remains in certain disciplines within the higher education system, which is regrettable considering, for example, Hungary's strong reputation in areas such as medicine and the associated health sciences which could only be improved and augmented through a collaborative approach. As part of the current round of HEInnovate country reviews, a number of excellent examples of this were observed. An example is the collaboration of different higher education institutions in Amsterdam (Box 3.4).

---

**Box 3.4. Joining efforts in knowledge exchange: Higher education institutions in Amsterdam**

Knowledge dissemination and exploitation, or what in the Netherlands is commonly referred to as "valorisation", has a strong standing in the Dutch higher education system. In the Amsterdam region, the management of the main HEIs, that is, the University of Amsterdam (UvA), the Vrije University of Amsterdam (VUA), and the Amsterdam University of Applied Sciences (AUAS) join efforts and resources in a pan-Amsterdam valorisation strategy. These HEIs are all different in terms of their study programmes and student profiles, but they are all firmly rooted in the city of Amsterdam.

A key location for valorisation in Amsterdam, is the Amsterdam Science Park, which is home to the science faculties of UvA and VU and one of the largest concentrations of natural sciences in Europe. This unique juncture of prestigious education, high-quality research and knowledge-intensive business has been carefully cultivated to stimulate innovation and collaboration.

---
A key future development target for the Hungarian higher education system is the need to develop a new educational model for the benefit of all stakeholders, but in particular the student body. This involves HEIs transitioning to an embedded three-mission model rather than the current traditional two-mission model.

Achieving this is to be considered as a long-term objective and immediate deficiencies and weaknesses in the system should not be allowed to dominate or interfere with the successful implementation of the principal aim. Given that this is a significant change management project, which will fundamentally change the culture of HEIs in Hungary, significant new communication, organisational, implementation and review systems will have to be put in place. This will require significant investment in terms of resources but also stakeholder commitment. In terms of organisational capacity and mission readiness the following actions are recommended.

**Strategic planning and implementation**

All stakeholders need to be involved in the development and roll out of strategies focused on the development of third mission activities to ensure buy-in, participation and appropriate communication. Within the HEIs this will require the establishment of a strategic planning group made up of representation from management, staff, students and external experts both from Hungary and, if possible, abroad. This body should be charged with the development, implementation, communication and review of a comprehensive and integrated strategy to deliver on the third mission agenda. Given the priority attached to this objective, this group should have a senior manager appointed as a sponsor who has the appropriate authority and resources to deliver on the plan.

Where possible, HEIs should identify a mentor/partner HEI from outside the jurisdiction to provide advice, guidance and assistance with the development and implementation of the strategy. Suitable mentor/partner institutions could be identified from the HEInnovate network of HEIs or the European Consortium of Innovative Universities.

The creation of strategic planning groups should not be limited to the HEIs. The Ministry for Human Capacities and the Directorate of Higher Education should establish a high-level advisory and implementation group charged with monitoring the ongoing development of a national strategy for third mission activities. This group should include membership from government agencies, HEIs, their partner organisations, international experts, and the student body.

---

**Box 3.4. Joining efforts in knowledge exchange: Higher education institutions in Amsterdam (cont.)**

The Amsterdam Center for Entrepreneurship (ACE) is located in the Amsterdam Science Park. ACE started in 2006 within UvA in the Faculty of Economics and Business as a new research center. In 2010, the separate entrepreneurship centres were merged into ACE. Supported by the municipality of Amsterdam, the Ministry of Economics and new business partners Rabobank and Ernst & Young, ACE has become a leading address for entrepreneurship support for students and researchers. It was the first Dutch organisation to win the European Enterprise Award in the category "Invest in Skills" in 2011.

Source: OECD/EC (2017b).
Vital to the implementation of any strategy, either at an institutional or national level, will be the level of autonomy and flexibility available to HEIs to make strategic decisions to enable delivery on third mission activities, including financial decisions, with a view to allowing them to respond to external stakeholder needs as quickly and effectively as possible. Currently, HEIs hold a view that their level of autonomy and associated flexibility could be enhanced. As such, it is recommended to organise, as soon as possible, a collective engagement between government agencies and HEIs with a view to identifying and agreeing ways to remove potential barriers to greater autonomy and improved flexibility within the boundaries of existing legislative and governance requirements.

At a regional level, groups comprising representatives from local government, HEIs, industry and business should also be established with a view to developing and implementing third mission strategies focused on economic development activities. Given their considerable potential and broad capabilities, consideration should be given to allowing universities to lead regional development activities, particularly in areas outside of Budapest which currently lack regional development fora. Examples of stakeholder involvement in the strategic planning and implementation can be found in the Action Plan for Jobs and the Regional Skills Fora in Ireland (Box 3.5). The advantages of applying the above learning models in Hungary include ensuring stakeholder participation in the development of national and regional strategies, the setting of goals on a collective basis, and participation by stakeholders in the delivery and monitoring of progress, thus promoting a partnership approach to national and regional development agenda.

**Box 3.5. Action Plan for Jobs and Regional Skills Fora in Ireland**

Since the Action Plan for Jobs was introduced in 2012, it has been one of the Irish Government’s key instruments to support job creation. The Action Plan for Jobs is a whole-of-Government initiative under which all Government Departments and Agencies work together to deliver on the agreed action points for each year. An Action Plan for Jobs is published every year, setting out clear actions and targets to help create positive conditions for job creation. Results are reviewed quarterly and progress reports are published.

National and Regional Actions Plans for jobs have been developed under the direction of the Department of Jobs, Enterprise and Innovation. At a national level, an implementation success rate of over 90% has been achieved and this performance has been seen as instrumental in: exports reaching record levels, the creation of 80 000 additional new jobs, and significantly improving Ireland’s competitiveness.

Key to the success of the National Plan is the implementation of Regional Action Plans, which sees stakeholders in the regions coming together to agree and implement activities which are identified as key to driving improved economic performance in their respective regions. Stakeholders include: national agencies, including Enterprise Ireland and the Industrial Development Agency; local government agencies; education providers, both further and higher education; and industry and business representatives. Progress in relation to achieving stated targets and objectives is reported on a quarterly basis by the appropriate stakeholder(s). Review meetings are also held on a quarterly basis, with all stakeholders, with a view to updating or adapting plans depending on developments and progress to-date.

The Network of Regional Skills Fora, which has recently been created as part of the Irish Government’s National Skills Strategy, provides an opportunity for employers and the
Financial considerations

Showing commitment in terms of financial investment is a key first step in terms of motivating participation in the third mission agenda. The current lack of reference to the third mission within core funding models at the national and the institutional levels regrettably contributes to the impression that the third mission is of lesser importance in comparison to teaching and learning or research activities. The relative amount of investment in comparison to the other mission pillars is not critical. In fact, it would be recommended not to take a “big bang approach”, but rather a more cautious sequential step approach in terms of investing in the third mission in comparison to other areas, so as not to create any unnecessary shocks to an already fragile financial system.

Third mission activities will not be sustainable without initial, and indeed continued, investment from core funding. Any thoughts that funding generated from third mission activities will be sufficient to sustain them going forward would be unfounded. Certain third mission organisational and structural arrangements should always be supported by core funding given the considerable financial fluctuations that can occur in revenue generation associated with external third mission activities.

In relation to revenue generated from third mission activities, it is recommended that the current common practice of using these to shore up existing financial deficits should cease and be replaced by a strategy which enables strategic reserves to be created from income generation activities, which can then be deployed to support the development of strategic third mission initiatives. In other jurisdictions, it is quite common practice to have strategic reserves ring-fenced for the purpose of investment in either capital infrastructure projects or strategic development initiatives. This approach needs to be encouraged and facilitated by public policy intervention, as part of the engagement process with HEIs regarding their budgetary position, and by senior management, as part of the HEIs’ strategic planning processes.

Current state investment in third mission activities is to be applauded given the prevailing fragile economic position. However, it is recommended to review the distribution of funding with a view to increasing the proportion to be applied to investment
in projects as opposed to capital infrastructure. Although it is important to invest in capital infrastructure in the long term, the current priority needs to favour investment in specific third mission projects which will stimulate and enhance engagement between HEIs and external business, industry and social partners in the short to medium term. Given the recent significant decline in student numbers, it would not be unreasonable to consider refurbishing existing space which has become available to house third mission activities at a significantly lower cost than any proposed new build, thus releasing further funding for investment in collaborative projects.

Organisational support structures

Although current structures available to support the third mission, and the amount invested in them, were considered to be insufficient by stakeholders interviewed as part of this review, it is also fair to say that Hungary is at an early stage of development in terms of the financial model and organisational structures it wishes to put in place. Given this advantageous almost blank canvas position, the question arises on which organisational structure Hungarian HEIs should select to support the third mission agenda.

The current HEInnovate round of country reviews, with the participation of Bulgaria, Ireland, Poland, the Netherlands and Hungary, has had the opportunity to examine the organisational structures used to support a three-mission model in different institutional contexts. Based upon the findings to date, it would be fair to say that there is no “one-size-fits-all” solution to selecting the most appropriate organisational structure to put in place. Even in countries such as the Netherlands and Ireland, where there have been very successful approaches taken to the development and integration of third mission activities, different organisational structures and systems have been used depending on the type of HEI, the strengths available within the HEIs, their history in terms of engagement activities, and regional considerations.

Some of the more traditional research universities in the Netherlands, such as the Erasmus University of Rotterdam, established a new centralised office to co-ordinate the implementation of the valorisation programme across all faculties, whereas the more recently established universities, such as Twente, utilise an enhanced version of their existing research development and innovation infrastructure, which is dispersed across its more successful research units, to support valorisation activities. In the Universities of Applied Sciences, so-called Knowledge Centres have been established with a cross-faculty remit for innovation and entrepreneurship OECD/EC (2017b).

In Ireland, the engagement agenda within the universities resides under the control of the office of the Dean of Research, Development and Innovation and its support offices provide assistance to the faculties. Teaching and learning activities associated with external engagement, such as industry training programmes and work based learning, are usually organised through the faculties themselves. The situation differs for the Institutes of Technology, where the office of the Head of Development has overall responsibility for all external engagement activities, including research development and innovation, as well as any relevant third mission teaching and learning initiatives. This is likely to change in the coming years as the volume of external engagement activities increases OECD/EC (2017a).

From a Hungarian perspective, it is important to understand that the HEIs observed as part of this country review appeared to be very much at a developmental stage in terms of embedding third mission activities and as a result, the following actions are recommended...
in terms of the development of an organisational structure to support the third mission within HEIs.

Firstly, the temptation naturally exists for third mission activities to be given either as an additional task to an existing manager or spread across the workload of a number of existing managers, given the current volume of activity in the area in comparison to other jurisdictions. This approach should be avoided given the future importance being attached to third mission activities by both government and HEIs. It is recommended, in the short to medium term, that responsibility for management of the overall third mission agenda needs to reside with one senior manager, whose role is this and only this and who is given the appropriate authority and resources to deliver on the agenda.

In terms of the support structure and support offices to be put in place, individual HEIs should be allowed to have the autonomy and flexibility to develop the most appropriate system for them as per the experience in other countries. The imposition of a common support structure across all HEIs should be avoided and instead, individual HEIs should be allowed to make applications for resources based on an institute specific plan which takes into account the type of institution, its history of engagement, its relative strengths, and other local and regional considerations. Having said this, the HEInnovate framework, with its 37 statements, provides excellent guidance on how to establish support structures, processes and procedures.

Finally, in relation to organisational structures within individual HEIs, all HEIs should be encouraged and supported in exploring and understanding existing successful models in other jurisdictions with a view to identifying and creating an international network of collaborative mentor and partner institutes who could advise and assist in the development and embedding of the third mission agenda.

**National support structure**

From a national perspective, much has been done in terms of the development of strategic plans related to third mission activities in the higher education sector by relevant ministries. However, the availability of data and analysis which both underpin and monitor progress in relation to the implementation of these strategies is lacking. It is therefore recommended that further development and integration of various data systems and subsequent capacity for analysis is developed. To this end, it may be necessary to expand or establish new government based units or agencies within appropriate ministries who are tasked with identifying, monitoring and analysing data and information relevant to higher third mission activities which can be used to provide updates and reports to inform progress and contribute to planning any future strategic direction for this vital mission area. An example of such an agency and potential learning model observed as part of the HEInnovate review in Ireland is the Expert Group on Future Skills Needs (Box 3.6).

In the implementation of the HEI strategic plans, the Ministry of Human Capacities could consider agreeing performance compacts with each HEI which contain specific metrics and targets the HEI should meet and which are relevant to the delivery of regional and national third mission targets and objectives. Following on from and allied to this approach could be the development of a national impact assessment model, which would provide not only important quantitative data but equally important qualitative data to better inform future higher education policy and also provide tangible evidence in support of increased investment in higher education. The creation of an impact assessment model
should be seen as a medium-term objective given that other countries who have had performance compacts in place over the last three to five years are only now in a position to consider developing an appropriate impact assessment model.

The creation of HEI clusters in specific disciplines, with a focus on third mission activities with industry, business and the international community, should be encouraged, promoted and facilitated by government agencies in order to enhance national capabilities and maximise opportunities. In this regard, the competition culture which currently exists among HEIs in disciplines where Hungary has a recognised international reputation needs to be addressed, particularly when good practice examples of HEI cluster activities are now emerging both within and outside the EU.

**Participation of staff**

Key to the implementation of successful third mission strategies is the availability and participation of appropriate staff, be they academic, technical or administrative, in the delivery of the third mission agenda. As previously outlined, the vast majority of staff in HEIs operate in a dual-mission model where their contracts of employment and workloads are oriented towards teaching and research activities only. Given existing busy workloads and the lack of any significant staff incentive schemes to facilitate participation in the third mission, it is understandable that there has been little traction in the expansion of this mission agenda among all staff groups in recent years, with the exception of the development of associated strategies by senior management teams.

---

**Box 3.6. Expert Group on Future Skills Needs (Ireland)**

The Expert Group on Future Skills Needs (EGFSN) advises the Irish Government on the current and future skills needs of the economy and on other labour market issues that impact on Ireland’s enterprise and employment growth. It has a central role in ensuring that labour market needs for skilled workers are anticipated and met. Established in 1997, the EGFSN reports to the Minister for Jobs, Enterprise and Innovation and the Minister for Education and Skills.

The Department of Jobs, Enterprise and Innovation, in conjunction with SOLAS the state training agency, provides the EGFSN with research and secretariat support. The SOLAS Skills and Labour Market Research Unit provides the Group with data, analysis and research and manages the National Skills Database. The Department of Jobs, Enterprise and Innovation provides the Group with research and secretariat support. The Group’s work programme is managed by the Head of Secretariat based in the Department of Jobs, Enterprise and Innovation. The EGFSN’s budget comes from the National Training Fund.

The Expert Group on Future Skills Needs provides advice to Government on skills issues impacting enterprise through:

- Skills foresight & benchmarking
- Strategic advice on building skills through education and training
- Data collection and analysis on demand and supply of skilled labour
- Influencing and monitoring implementation

Going forward, it will be essential to consider the following:

- Renegotiate existing staff contracts where there is a desire to do so, with a view to balancing staff activities across the three mission areas. This will most likely require an incentivisation approach whereby teaching and research activities will need to be reduced in order to facilitate the introduction of additional third mission activities. This will not be an easy task to achieve given existing financial constraints, current teaching and research commitments, and other historical considerations.

- Create and roll out different contracts of employment for any new staff to be employed by the HEIs which will allow for participation in third mission activities and provide future flexibility in terms of the ability of the HEIs to increase or decrease individual staff deployment across all three mission areas.

- Make professional development programmes available to all staff, which focus on improving the understanding of the third mission agenda, as well as improving the skills base available to deliver on this agenda.

- Invest in staff mobility programmes for the purpose of gaining further knowledge and insight into business, industry and community requirements, as well as international partner HEIs’ expertise. This will be an essential component of any professional development programme.

- Invest in incentive and recognition schemes. Similar to competitive research funding calls, the introduction of competitive calls within HEIs to fund third mission project proposals linked to education and research activities would clearly incentivise and promote the third mission agenda.

- Give greater recognition to staff participation and performance in third mission activities through promotional opportunities (e.g. professorship in entrepreneurship or innovation), staff performance management and development systems, and staff awards schemes (e.g. President’s award for innovation or community engagement).

**Increasing the available learning opportunities for students**

A final recommendation for consideration which would benefit the most important stakeholders, the student body, would be to consider increasing the available learning opportunities for students through the introduction of a multi-step ladder system of qualifications at undergraduate level as exists, for example, within the Dutch, Portuguese and Irish national frameworks of qualifications. In common with other jurisdictions, the Hungarian framework of qualifications allows students to obtain a Bachelor degree, however there is no facility in place to allow students to step in and out of undergraduate education that could be facilitated by the availability of a multi-level undergraduate system incorporating ordinary and/or associate degrees which exist in other jurisdictions. Such an approach could also improve retention and progression rates within the HE system by allowing students to obtain a full qualification at an earlier stage within the undergraduate cycle.

The advantages of having such a multi-level system include:

- Students could decide how they would progress with their undergraduate studies in terms of the level they would enter and exit.

- The ability of students to enter and exit at different levels would offer students the opportunity to gain exposure to industry and business both at home or abroad and return to their studies at a later stage.
Facilitating student exposure to different types of undergraduate programmes, which in other jurisdictions incorporate significant exposure to real world, workplace and third mission activities which are not available in traditional bachelor degree programmes.

References
