

VSB – Technical University of Ostrava

FOLLOW-UP EVALUATION REPORT

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1. Introduction

This report is the result of the follow-up evaluation of VSB – Technical University of Ostrava, which took place in 2024. The initial IEP evaluation took place in 2021.

1.2 1.1 Institutional Evaluation Programme

The Institutional Evaluation Programme (IEP) is an independent membership service of the European University Association (EUA) that offers evaluations to support participating institutions in the continuing development of their strategic management and internal quality culture. IEP is a full member of the European Association for Quality Assurance in Higher Education (ENQA) and is listed in the European Quality Assurance Register for Higher Education (EQAR).

The distinctive features of IEP are:

- a strong emphasis on the self-evaluation phase;
- a European and international perspective;
- a peer-review approach; and
- support for improvement.

The focus of IEP is the institution as a whole and not the individual study programmes or units. It focuses on:

- decision-making processes, institutional structures and effectiveness of strategic management; and
- relevance of internal quality processes and the degree to which their outcomes are used in decision-making and strategic management, as well as perceived gaps in these internal mechanisms.

All aspects of the evaluation are guided by four key questions, which are based on a “fitness for (and of) purpose” approach:

- What is the institution trying to do?
- How is the institution trying to do it?
- How does the institution know it works?
- How does the institution change in order to improve?

1.3 VSB–Technical University of Ostrava’s profile

VSB–Technical University of Ostrava (VSB-TUO) is a public university situated in Ostrava, located in the north-eastern part of the Czech Republic, close to the Polish and Slovak borders. With roughly 280,000 inhabitants, Ostrava is the third largest city in the country. It is the administrative centre of the Moravian-Silesian Region, and until the 1990s was important centre for coal mining, heavy industry and metallurgy. The region has since been undergoing a deep process of transformation and restructuring, which has also had a direct impact on the university, since its historical origins lay in coal mining and metallurgy.

VSB-TUO consists of seven faculties (Mining and Geology, Materials Science and Technology, Mechanical Engineering, Economics, Electrical Engineering and Computer Science, Civil Engineering, Safety Engineering) and two major research institutes (IT4Innovations National Supercomputing Centre – IT4I, and the Centre for Energy and Environmental Technologies - CEET). In recent years, the university has evolved to include a focus on energy, new materials, and computer science. In late 2024, a new quantum computer will be installed at the IT4Innovations National Supercomputing Center.

Originally founded in 1849 in Příbram and transferred to Ostrava almost 100 years later, VSB-TUO looks back at 175 years of history and continues to be one of the driving forces in the ongoing economic and social transformation of the city and the region, including a leading role in the €100M REFRESH project for regional transformation, in partnership with the local and regional authorities and a range of other stakeholders. This project will enable the university to hire new teams of researchers, including postdocs and PhD students, to support innovation across the region and transform VSB-TUO as a living laboratory, including in areas such as geothermal energy, waste to energy, water management, sustainable housing (including the student residences), all the while educating students to be change factors in the ongoing transformation of the region.

It was fitting to note that in 2024, on the 60th anniversary year of the VSB-TUO campus, the Faculty of Economics will have fully moved from the city centre to a new building on the campus, completing the geographical consolidation of the university. Coupled with the planned redevelopment of the student centre and the library, this will facilitate a new wave of innovation and transformation across the university and in the range of services it provides for many external stakeholders.

In the academic year 2023/2024, 12,473 students (4,073 women) were enrolled at VSB-TUO for study, including 8,256 Bachelors (2,611 women), 3,294 Masters (1,207 women) and 923 PhD (255 women), in 330 study programmes, more than half of which are accredited in English.

VSB-TUO employs 2,447 staff (2023), of which over 55% (1,369) are academic (921) or research (448) staff. Of all academic and research staff, roughly 30% are women (academic: 32%, research staff: 23%). The numbers of foreign academic and research staff have been growing slowly in recent years, and now totals 129 (2023), with researchers now accounting for three quarters of these.

One of the main challenges facing VSB-TUO at the time of the 2021 IEP evaluation was a quite drastic decrease in student numbers over the preceding years due not just to general demographic decline, but also to significant regional emigration as part of the post-communist transition period, coupled with low interest in STEM study programmes. This decrease has now been reversed, not because of any significant demographic turnaround but because of pro-active measures taken by VSB-TUO, with stronger central university branding, enhanced visibility and improved student-centred systems, and a recognition of the key economic, cultural and social roles that VSB-TUO plays in ensuring that Ostrava and the broader Moravian-Silesian Region remain attractive and dynamic.

1.4 1.3 The evaluation process

This IEP evaluation of VSB-TUO was a follow-up to the initial IEP evaluation which took place in 2021. The 2021 evaluation was conducted entirely online, owing to the Covid-19 related restrictions in place at the time.

The institutional self-evaluation process for this follow-up exercise was led by a group which retained some members from the 2021 self-evaluation group, but which – given the special focus on research and innovation which the university had requested - was now composed mainly of persons relevant to the research and innovation functions at the university.

This self-evaluation group was chaired by the Vice-Rector for Science and Research and composed of ten members representing the management of all faculties and university institutes and the Student Chamber. The group worked in a structured and timely way, focusing on developments and changes at the university since 2021 and directly addressing the various recommendations made by IEP at that time. This SER structure was appreciated by the IEP team, although the SER group reported that their exercise had not been an easy one.

The self-evaluation report, together with the appendices, was sent to the evaluation team in March 2024, in good time for the IEP evaluation team visit, which took place from 22 to 26 April 2024. The team visit concluded with an oral report delivered to the university on 26 April, which summarised the IEP team's main findings. This written report is the formal output of the IEP evaluation process. The university is further invited to participate in a videoconference with the IEP secretariat around three months following the delivery of this evaluation report, and to submit a short progress report one year following the evaluation.

The evaluation team (hereinafter named the team) consisted of:

- Sokratis Katsikas, Professor at the Norwegian University of Science and Technology, former Rector of the Open University of Cyprus, and former Rector of the University of the Aegean, team chair;
- Erdal Emel, former Vice-Rector, University of Uludag, Turkey;
- Paula Lozano, PhD student, Karlsruhe Institute of Technology, Germany;
- Lewis Purser, Director of Learning, Teaching and Academic Affairs, Irish Universities Association, Ireland, team coordinator.

The IEP team was accompanied during its site visit to VSB-TUO by Clare Phelan of the EUA, as an observer.

The team would like to thank the Rector Václav Snášel and the Vice-Rectors, especially the Vice-Rector for Science and Research, Jana Kukutschová, for their generous hospitality and continuous cooperation during the visit to VSB-TUO. The team is likewise grateful to the numerous university staff, students and stakeholders who met the team and engaged in helpful and constructive discussions. The team would particularly like to thank Kateřina Angus, International Evaluation and Rankings Officer at VSB-TUO, who as the team's designated contact person helped and facilitated the team at every step of preparing and carrying out the visit.

2. Governance and institutional decision-making

This 2024 IEP evaluation followed-up on the main findings and recommendations of the 2021 evaluation in the area of governance and institutional decision-making, and also identified some additional areas which the team recommends that the university take into consideration.

In its meetings with student representatives and ordinary students at all levels across the university, the IEP team explored the issue of student involvement in university governance structures and the overall representation of the student voice in the development of VSB-TUO. While this was a central recommendation from the 2021 IEP evaluation, this issue no longer appeared to be an area of particular concern, although it was noted by the IEP team that only a small number of persons appeared to represent students in university-level structures. This representation was naturally much less concentrated at faculty and lower levels within VSB-TUO.

University structures:

The 2021 IEP evaluation stated that a number of initiatives were underway at that time to consolidate and integrate university structures and services and recommended that these continue, in order to enable VSB-TUO to achieve its strategic ambitions. In the intervening years, the 2024 IEP team noted that good progress has been achieved in this area, consolidating central university services and standardizing processes across the university. Some of these strategic developments have been financed through project funding, and some larger infrastructure developments, for example the new Faculty of Economics building, which was about to open during the 2024 IEP visit, from central ministry funding. Indeed, the move by the Faculty of Economics to the main VSB-TUO campus will offer opportunities to further consolidate and strengthen student services such as the medical centre, sports facilities, and restaurants, while at the same time allowing for financial and operational efficiencies through a more coherent campus infrastructure.

The 2021 IEP evaluation likewise recommended that VSB-TUO *“reconsider and consolidate the structure within faculties in terms of the number of departments, the size of management teams (vice-deans) and related offices and services”*, and that *“Break[ing] down the silos” should be an overarching theme for VSB-TUO in the future; it is recommended that the university strengthen communication and collaboration within and between faculties and research institutes as much as possible.* The discussions held on these topics during the 2024 IEP evaluation showed that, despite strong leadership to raise awareness of these challenges across the university, consolidation within the faculty structures is a work in progress. Likewise, although the IEP team found evidence of good practice within the university-level structures, cooperation and communication across the broader university and between faculties remain an ongoing challenge.

The possible implications of the planned new Higher Education Act in the Czech Republic were outlined to the IEP team by the university leadership. While it was noted that VSB-TUO, like other Czech universities, must raise a considerable amount of its income through its own efforts, and therefore needs to develop a strategy to ensure financial and operational stability which is not dependent on national funding, the IEP team was informed that the proposed new Act may bring significant changes to university structures, in particular to the university/faculty relationship. The current situation, whereby faculties continue to enjoy significant legal distinctions from the university, is not conducive to effective and successful long-term strategic development, as it weakens the overall coherence of institutional governance and decision-making. The dynamic progress of universities in neighbouring countries, which have transitioned in recent years from a similar situation to a more integrated institutional model, was noted. Such a development in Czech legislation would

provide considerable opportunities at VSB-TUO to further consolidate university structures, to allow optimal alignment with the evolving strategic context and to meet the changing needs of students and society.

Human Resources

The topic of human resource management received considerable attention during the 2024 IEP evaluation, as follow-up to the 2021 IEP recommendation to *“Ensure that there is open, transparent, competitive and international advertisement for all academic and research positions. VSB-TUO needs consistent and clear HR policies, practices and procedures. Use the process of obtaining the HR Award as a good opportunity to think things over, moving towards more coherence and fairness within institutional HR policy.”*

This was an area where the IEP team noted that significant progress had been made in the intervening period, notably the introduction of a standardised approach for recruitment across faculties, in particular for general staff, supported by an effective and professionalised HR function, centralised at university level for the whole institution with digitized processes in place. This has led to all open positions now being advertised centrally, including on the European Euraxess portal, a new manual for personnel management, mentoring for faculty members involved in recruitment processes, standardised supports for new employees, and significantly improved reporting functionalities, accountability and transparency.

At the time of the IEP visit, the final elements of this digitalisation process were being completed, and staff training in the recently adapted processes, methodologies and interview procedures was well underway.

The 2021 IEP evaluation also recommended a greater emphasis on staff development, providing employees with opportunities to grow. Certain progress has been made in this direction and many examples of such opportunities were provided to the 2024 IEP team. Some examples were also given which demonstrate an understandable resistance in some quarters to change, notably to the university-wide digital administration project, which aims to transform outdated administration procedures and practices across the entire institution, saving significant time, effort and money in doing so. There is always a need for staff development, particularly in a large organisation in the middle of multiple strategic change projects, so this 2021 recommendation remains valid. Such investment in staff development should be focused on consolidating the considerable strategic objectives underway across the university, including the digital administration project, the modernisation of teaching methods, further training for doctoral supervisors, and the introduction of sabbaticals to support academic staff in the production of high quality research outputs.

The IEP team was surprised to remark that Equality, Diversity and Inclusion (EDI) were not given a high profile at the VSB-TUO. While there were no specific issues raised in relation to this topic, the IEP team feels it important to point out that these are important components of HR policies and processes, also at the European level in terms of eligibility for participation in relevant programmes and funding opportunities. The team therefore recommends that VSB-TUO ensure that best practices in these areas are incorporated into its own practices, if this is not already the case.

Governance and management of research

The 2021 IEP evaluation made a series of recommendations regarding the governance and management of research. These included the incentivisation of high-quality research, annual

evaluations or appraisals of academic/research staff, and support for high-quality publications. While some of these will be picked up later in this report in the Research and Innovation section, the 2024 IEP team noted that a significant development – the Science Portal - was due to be launched shortly at VSB-TUO.

This data tool was already being used on a pilot basis for employee evaluations, with data available to individual employees and their managers (heads of departments, vice-deans). While the initial focus has been on publications and bibliometrics, which are important for the national HE funding model, the broader elements of the Science Portal were reported to be in preparation for later in 2024, with the ambition to have a fully functioning system to monitor scientific performance across the whole university.

The small team building the Science Portal also conducts a limited amount of on-demand analysis for faculties and can build self-service dashboard facilities for use by relevant university structures.

Apart from the data scientist working full time on the Science Portal, it appeared that only a very limited amount of the specialised data analysis capacity was available to the university, resulting in what the IEP team noted was an under-use of data evidence to inform decision-making processes across the university.

The recommendations from the 2024 IEP follow-up evaluation regarding governance and institutional decision making are summarized as follows:

- Take the opportunities presented by the move of the Faculty of Economics to the main campus.
- Now that HR processes have been standardised, complete the staff recruitment digitalisation project.
- Invest consistently in staff development in pursuit of strategic objectives: digital administration project, sabbaticals, training for doctoral supervisors, teaching methods, etc.
- Make greater use of institutional data to inform the decision-making process.
- Consider all forms of research outputs to assess staff research performance; consider how these should influence staff pay.
- Use this information to monitor research groups and inform the distribution of research performance funding.
- Ensure that best practices in the areas of Equality, Diversity and Inclusion are incorporated into the university's own practices, if this is not already the case.

3. Quality culture

During the 2024 follow-up evaluation, the IEP team sought to explore the issue of quality culture at VSB-TUO, while at the same time gaining an enhanced understanding of the quality systems and structures in place at the university, and to ascertain what progress had been made on the findings and recommendations of the 2021 IEP evaluation.

Arising from the self-evaluation report and the extensive discussions during the site visit, the IEP team learned that quality assurance concepts and practices are in evidence – to a greater or lesser extent - across a range of university activities, including education, research, student wellbeing, campus development and infrastructure, etc. At local level, in particular, the IEP team found nice examples of quality enhancement-led processes, based on student, staff and stakeholder feedback. The team also remarked that students felt listened to, and that student feedback was acted upon. These are positive indicators of a quality culture which is organic and embedded in the life of the university.

The IEP team found however that these positive indicators were not universal across VSB-TUO, and that not all activity classed as quality assurance was seen as leading to the enhancement of quality. The IEP team would like to emphasise the IEP recommendation from 2021, which encouraged greater use of the simple “PDCA-cycle *“Plan-Do-Check-Act”*, with an emphasis on closing the loop from “check” to “act”; and mov[ing] towards a culture defined by pro-activeness to learn and improve”.

One way to encourage this might be to consider the use of light-touch mid-term evaluations, which would allow for more rapid identification of progress and/or challenges, and ensure that feedback from students and staff can be taken into account immediately, rather than just at the end of the quality cycle. For such exercises, the use of reference groups or alternative feedback methods, rather than relying solely on the standardised teaching evaluations, might yield useful results.

While VSB-TUO conducts regular surveys of those graduates registered with the university’s Alumni Network, it was unclear to the IEP team how the data obtained from these surveys contributes to the university’s quality assurance processes. Likewise, while there is continuous contact between many parts of the university and various enterprises, it is unclear how the feedback from employers contributes to VSB-TUO quality enhancement processes. The university will also need to consider how to better include research, development and innovation within its quality assurance processes, as at present there is an unbalanced emphasis on education to the detriment of research.

These recommendations echo findings from the 2021 IEP evaluation, which encouraged the university to *“think of formats for reflection and exchange across the institution. VSB-TUO should work on its internal institution-wide quality culture, with an emphasis on discussion and action...”*

The IEP team noticed that, while regular reference was made to the VSB-TUO strategic plan, there was little structured evidence regarding progress towards implementation of this plan. The team found that more regular monitoring of this plan against the main performance indicators and its other key deliverables would be useful, to ensure that corrective or preventive actions could be taken as required, and to inform broader strategic considerations across the university, including in the quality assurance and quality enhancement context.

Internal Evaluation Council

In 2019, the University was granted institutional accreditation status by the National Accreditation Bureau for Higher Education for a ten year period, and thus the right to decide on its own study programmes, their scope and quantity, within defined areas of education, during this period. In 2023,

this institutional accreditation was expanded to include another area of education – cybernetics. VSB-TUO is therefore currently entitled to develop and approve study programmes in eleven areas of education, i.e. (i) security studies; (ii) economics; (iii) electrical engineering; (iv) energy; (v) computer science; (vi) cybernetics; (vii) mathematics; (viii) civil engineering; (ix) engineering, technology and materials; (x) mining and mineral processing; and (xi) earth sciences.

Resulting from this institutional accreditation, the responsibility for programme evaluation within VSB-TUO is delegated to the Internal Evaluation Council (IEC), which is a self-governing academic body of the university. The IEC is chaired by the Rector, as stipulated by law. According to the university's website¹, the IEC's main areas of activity are *"approving the rules of the quality assurance system for education, managing the internal quality evaluations in educational activities, processing reports on the internal evaluation of the quality of the educational activities, approving study programs in the framework of institutional accreditation, and approving the intentions to put forward requests to accredit associate professorship or professorship appointments"*.

According to information gathered by the IEP team during the evaluation visit, the IEC has developed specific criteria for evaluating the quality of education within these eleven areas of education, including in relation to staffing, infrastructure, student feedback, etc. Given that regular evaluations of study programmes are obligatory under the law, and that all programmes should be evaluated twice within a ten year period, each faculty selects which programmes are to be evaluated by the IEC in any particular year. Any modification of study programmes as a result of these internal evaluations has to be notified to the National Accreditation Bureau.

The IEC appoints evaluation commissions for each of these evaluations, with four members in each commission. Three of these are internal from the university, with relevant expertise, together with one external member from another university or from a relevant employer organisation.

The IEP team was informed that reports arising from these IEC evaluations are addressed mainly to the heads of study programmes and to faculty management, and that the focus is not only on re-accreditation of these study programmes, but also on quality enhancement. The evaluation does not however address the broader strategic direction or context in which the study programme is situated.

The IEP team spent a considerable amount of time during its visit exploring the work and functioning of the IEC, both with members of the IEC itself and with staff and students from various parts of the university, and in particular to discuss what has been the impact of the IEC so far within VSB-TUO. It was noted that the work of the IEC was still in a development phase, and that it had arisen from a national project in which VSB-TUO had participated along with other Czech universities, all of which were currently in the same process of implementing internal quality assurance and evaluation systems.

Although a number of enhancements were pointed out to the IEP team as having resulted from the IEC evaluations and that experience in these matters was now being built up across the university, the IEP team had difficulty in pinpointing what the impact of this significant activity has been to date. Furthermore, there was no obvious link between the work of the IEC and the strategic rationalisation of study programmes underway in some faculties. In addition, the IEP team considered that the current IEC system, as operated within VSB-TUO, presented clear risks of conflict of interest regarding

¹ <https://www.vsb.cz/en/university/organizational-structure/internal-evaluation-council>

study programme accreditation, given the preponderance of internal members in the composition of the IEC-appointed evaluation commissions.

Importantly, the IEP team was surprised to note the complete absence of reference within the work of the IEC, or the discussions during the IEP site visit, to the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG), which have been the common reference for internal and external quality assurance processes across Europe since 2005. This may be explained by the fact that the Czech National Accreditation Bureau for Higher Education is an affiliate but not a member of ENQA, and is not registered on the European Quality Assurance Register, and that the ESG are not used in the Czech Republic at either national or institutional level.

The IEP team noted that this situation was likely to lead to complications with European partners regarding recognition of Czech qualifications, the operation of joint programmes, the smooth transfer of ECTS credits between Erasmus+ partner universities, etc, particularly in the context of VSB-TUO's participation in the U!REKA European University Alliance. The team was informed that this situation had already become a topic of discussion at the university.

Recommendations:

- Remember that all QA activity should lead to enhancement (use the Plan-Do-Check-Act cycle). This recommendation is a repeat of one made in 2021, and therefore needs particular attention.
- Continue to learn from relevant peer universities through bench-marking, using the U!REKA network and other suitable networks. This recommendation likewise repeats one made in 2021.
- Ensure that feedback gathered from recent graduates and employers is integrated into the university's quality enhancement processes.
- Reflect on the functioning and outcomes of the IEC, in view of University's strategic ambitions.

4. Teaching and learning

The 2021 IEP evaluation made a number of findings and recommendations related to teaching and learning at VSB-TUO, looking at how the university could refresh the teaching offer through broadening the curriculum, offering greater options to students, exploring how some teaching could be offered on a shared basis across faculties, and generally moving towards a more student-centred and flexible approach to learning. It was considered that such initiatives, combined with benchmarking and the integration of relevant good practice from other universities facing similar challenges, could be effective in addressing the serious issue facing VSB-TUO at that time of declining student numbers and low interest in STEM courses.

In 2024, the IEP team found that good progress had been made in some of these areas, but that longer-term strategic efforts were needed to carry through this work to completion.

Student numbers

Notably, the IEP team was informed that student numbers had stabilised since 2021 and were now recovering, with good progress in some study fields. It was noted that this stabilization and incipient growth in student numbers was significantly more positive than the natural demographic growth rate in Ostrava and the Moravian-Silesian region. The IEP team learned that this was also due to improved visibility of VSB-TUO among students, resulting in improved preference ranking among domestic students and increased enrolments of foreign students. While students continue to be drawn towards universities in larger cities such as Prague and Brno, the systematic efforts of VSB-TUO to encourage and support students to remain in the region is proving successful.

Linked to this, however, the IEP team was informed that the issue of student retention had been identified by the university as an area in need of significant improvement. A proportion of registered students never engaged with their study programmes at all and can therefore be considered a statistical anomaly. Importantly however, to support student progression and success among those students who may be facing difficulties with their study programme, the university has put in place (with the support of EU Cohesion funding and other sources) a number of student support centres in the fields of maths, chemistry, physics, languages and academic writing. The IEP team noted that these centres were pro-active in reaching out to students and were well known and appreciated by the students themselves. The IEP team was informed that, as part of the redevelopment of the student centre and library which was at an advanced planning stage during the IEP visit, VSB-TUO will be the first Czech university to structure the full range of student supports in a concentrated physical hub to support students, and that this was seen as a strategic priority by the university leadership.

Flexible curriculum

On the challenge of broadening the curriculum and offering greater flexibility to students, including the sharing of teaching across faculties, the IEP team found that no noticeable progress had been made by the university in this area since the 2021 evaluation. There was still no university-wide approach to facilitating greater student choice among relevant courses and modules, and this remained a challenge even within some faculties; the system continues to be programme-driven, rather than student-centred.

Students informed the IEP team that they had very limited flexibility to choose options within programme, and that where such options existed, they were administratively complicated, so that most students did not avail of them. Students who had international experience noted that they had

had more flexible pathways and options when studying in other countries and also in other Czech universities, and that they would like to see these in place at VSB-TUO also.

In parallel to this, the IEP team learned that some programme consolidation is taking place at Faculty level, as part of a broader effort to rationalise the teaching offer within faculties, while ensuring that strategically important subjects are retained. Interestingly, this is leading to small numbers of courses which are now becoming available across two or three faculties. The IEP team was informed that there is a strategic ambition to generalize this across the entire university, and that large-scale projects such as REFRESH present opportunities for much greater institution-wide cooperation for innovation in educational provision. A system of major and minor options is now being used in some other Czech universities, which ensures that each study programme allows for courses offered by other faculties to be taken by the students. It was suggested that such a system would also support the strategic rationalisation of redundant or duplicate modules or courses across different VSB-TUO faculties.

While greater interdisciplinarity in certain programmes would likewise facilitate sharing between faculties, the IEP team was also informed that a reform of the university's budget allocation process would be necessary if a significant increase in inter-faculty programmes was to happen. However, in the IEP team's discussions with faculty leaders these were not seen as insurmountable problems, and if there was a shared strategic understanding and agreement regarding the advantages of greater inter-faculty cooperation, such issues could be resolved and indeed had already been resolved for courses which are shared with other universities, whether elsewhere in the Czech Republic or more broadly through the Erasmus+ programme. It was noted that the move of the Faculty of Economics to the main campus would provide additional opportunities for collaboration and that this was one of the strategic motivations for completing this campus consolidation.

There may be scope as part of this flexibilization of curricula to develop greater synergies with the wide range of Lifelong Learning courses already available at VSB-TUO. This lifelong learning offer has been under development since the IEP 2021 evaluation, when it was recommended that the portfolio be presented better and developed further. The IEP team found that in 2024 there was still considerable scope to ensure that the broad range of courses on offer was widely publicised and available to a broader range of possible learners.

Disabilities and special needs

One of the 2021 IEP recommendations was to make better use of good practice examples to support students with special needs across the university. The IEP team found in 2024 that there was now greater awareness of students with disabilities and other needs, and that a number of support and counselling services were now in place. These services are open to all students, including international students at VSB-TUO, but with a main focus on those with special needs. The numbers of students seeking such support has been growing, in particular since Covid. This may be due to greater openness among students to declare their needs, and also greater awareness of the supports that are available.

New teaching methodologies

The topic of staff development to modernise teaching, learning and assessment practices was raised during the 2021 IEP evaluation, with a recommendation aimed at developing communities of practice and providing training for all academic staff to enhance teaching and learning methods and practices at VSB-TUO. It was suggested that this could be facilitated and coordinated by a university-wide centre for teaching and learning.

In 2024, the IEP team heard of the importance of emphasising the role of teachers, and the ongoing need for supports at university level to enhance the quality of teaching, particularly in incorporating new technologies, practices and methods. The team was informed that many teachers were actively seeking to enhance their teaching, including for working with more diverse classrooms (special needs, international students, etc) while others were in clear need of supports. However, the IEP team found that this recommendation from 2021 remained largely unimplemented, and that no strategic university-wide approach to support staff development in this area was in place. This is an activity which could best be facilitated and coordinated by a university-level Teaching Support Centre.

In discussions with students, the IEP team found that there was very little interaction between domestic and international students, as the latter were mostly on programmes taught through English, which were not available to Czech students. This was seen as a lost opportunity for the university and for all students, particularly in terms of working together in classrooms. The IEP team would encourage the university to examine how to improve this situation, for example by allocating some funding for Czech students to take individual modules taught through English, and by using the proposed flexible curriculum developments to facilitate greater interaction between student groups.

The following is a summary of the IEP team's recommendations in the area of teaching and learning:

- There is considerable scope for further synergies in shared provision of modules and programmes across faculties, particularly in core subjects. VSB-TUO should examine how peer universities structure their undergraduate teaching programmes. A major/minor type programme structure might help address this.
- Establish a Teaching Support Centre at university level to facilitate and coordinate staff development in new teaching methodologies, new technologies, how to work with diverse classrooms, etc.
- Ensure that the broad range of lifelong learning courses on offer is widely publicised and available to a broader range of possible learners.
- Find ways to encourage greater interaction between students on Czech and English language programmes, to ensure that all students can benefit from the ongoing internationalisation of the VSB-TUO campus.

5. Research

The IEP team noted that considerable progress had been made in the recommendations regarding research in the 2021 IEP evaluation. This progress included, notably, the successful consolidation by CEET of a number of research groups, creating critical mass.

Other recommendations from 2021 regarding research support structures and doctoral studies were still a work in progress, and will be addressed further in this section.

Research outputs

There was considerable attention paid during the IEP visit to the evolving situation regarding research outputs at VSB-TUO, the research culture surrounding these, and how these are assessed and rewarded/incentivised.

It was noted that the volume of research outputs at VSB-TUO has increased in recent years, particularly in Q1 and Q2 of each year. The IEP team was informed that the university is now working to improve research impact scores, through a focus on quality rather than quantity, increasing the number of citations, and the communication of scientific outputs. Recent data provided to the IEP team showed some early successes in this endeavour, with more papers from VSB-TUO now appearing in the 1st and 2nd quartile of research publications, and with very few remaining in the 4th quartile. The university is also trying to attract highly cited researchers to VSB-TUO, as a strategy to help local employees to grow and develop within the university.

To support this objective, the university operates a incentivization scheme for academics and researchers to publish more in high impact factor journals. This incentive awards extra money directly to employees on a competitive basis and is open to all VSB-TUO staff who publish through the faculties and research centres. While the annual budget is limited, and rewards are awarded on a “first come first served” basis, the IEP team was informed that this has raised interest and awareness across the university. The competitive criteria were recently adjusted to take into account the increase in high impact publications now taking place.

In addition to this, the IEP team learned that some faculties have their own internal competitions, which provide financial incentives for publication activity, project activity, etc, with different faculties having different priorities. The team was informed that the Faculty of Economics has compiled data to show that these incentives are having a positive effect.

Nevertheless, while research outputs (in the form of publications) have improved, in both quality and quantity, considerable differences across the faculties still remain. There was consensus during the discussions with the IEP team that a move towards better research assessment methods, not just administrative counting of publications and citations, would be desirable, and discussions are underway regarding what the correct balance for this might be.

This is however difficult for VSB-TUO to do in isolation from the rest of the Czech higher education and research system. The IEP team informed the university that similar discussions were underway at European level, notably regarding through the Coalition for Advancing Research Assessment (COARA)², and encouraged VSB-TUO to inform itself of these discussions and where relevant to engage. The IEP team would encourage the VSB-TUO to build on the constructive discussions already

² <https://coara.eu/>

underway to develop a common, university-wide research culture with high levels of productivity. This will help enhance both visibility and competitiveness.

Research funding

As part of the broader strategic developments at VSB-TUO regarding research, the university is also trying to ensure the longer-term financial sustainability of research at the university. The IEP team was informed that core research funding allocation models at the Czech ministry remain heavily influenced by classical publication and citation rather than other output indicators. This core funding is in turn distributed within the faculties and research centres at VSB-TUO, using a similar methodology based mainly on publications, with a small weighting for citations and the results of applied research indicators, updated annually. The IEP team heard from some research stakeholders at the university that this methodology did not incentivize researchers to apply for European projects.

The IEP team also learned that a variety of methodologies are used within the VSB-TUO faculties to distribute this funding further, to department level. This has reportedly created significant differences and in some cases difficulties between departments, some of which have larger research outputs and smaller student numbers, while others have larger student numbers and smaller research outputs. The IEP team heard calls for the deans to moderate these internal methodologies to avoid unintended consequences.

These discussions regarding the distribution of core funding for research at VSB-TUO are by no means unique, as most universities across Europe have to tackle similar issues and deal with sub-optimal funding conditions. The IEP team would encourage VSB-TUO to continue its consideration of various cost-allocation and budget-allocation models in order to facilitate the longer-term sustainability of research and research institutes, existing and future, at the university.

Research centres

As already mentioned, there have been some notable achievements in the development of research centres at VSB-TUO since the 2021 IEP evaluation. This includes the successful consolidation of a number of research groups into CEET (Centre for Energy and Environmental Technologies).

Together with IT4I (IT4Innovation), the other significant research centre at VSB-TUO, these offer a structural model to create critical mass across all research groups, enhance visibility and develop a more sustainable research environment at the university. This model has also facilitated greater levels of research and innovation cooperation and contract research with industry, both with enterprises but also with subsidiaries of much larger European/global companies. The IEP team was informed that these structural developments are now leading to improved success rates for VSB-TUO proposals for Horizon Europe funding. The model also offers a solution for greater consolidation of smaller research groups involved in new initiatives, such as the REFRESH project, building critical mass around new project areas and attracting high potential researchers from abroad to the university.

The IEP team learned that clear procedures have now been agreed to facilitate cooperation between research centres and faculties, and a number of such agreements are already in place between centres and various faculties. These procedures cover, for example, how the centres can contribute to study programmes offered through the faculties, and how professors engage with teaching or supervisory roles.

However, the financial sustainability of these centres remains a challenge. This is due to the current reliance for funding on successful participation in competitive EU research calls (currently around 50% of their income is derived from these sources), and the difficulty of obtaining similar levels of matching funding from local or national sources. As mentioned above, the national and institutional funding distribution methodologies take relatively little account of externally sourced competitive funding, from either the EU programmes or industry sources, where the IEP team was informed that good opportunities currently exist, for example as a result of enterprise interest in Artificial Intelligence.

Based on the evidence presented in the self-evaluation documentation, and during the site visit, the IEP team found that there was scope for considerable further consolidation and alignment -based on the model now in place with CEET and IT4I - of research groups and activities across the broader university, while at the same time strengthening research and teaching links.

Research support structures

The IEP 2021 evaluation recommended that VSB-TUO *“further centralise and integrate services around funding for research / managing of research results, their application outside the university and career development as much as possible, and keep support offers at faculty level to the minimum needed”*.

In 2024, the IEP team found that the Project Support Centre (PSC) had since been strengthened to manage a range of university-wide projects, and that in some cases local research support services also existed at faculty level. The PSC, which the IEP team was informed had a staff count of around thirty people, is open to all VSB-TUO staff, including those in the research centres, who ask for support or advice with the preparation of proposals and the implementation of successful projects. These include both international and national projects. The PSC can also assist with consortium building and developing contacts with potential international partners. The IEP team was informed that the PSC was in the process of building up VSB-TUO expertise and experience in EU project administration, starting as a partner in various consortia before applying in the future as a project coordinator.

The PSC also gathers project data from all Principal Investigators for all projects, including at application phase, not just those supported by centre, as part of developing a useful database of VSB-TUO involvement in projects for planning, reporting and capacity building purposes, for example in developing informed evidence for project budget planning etc.

VSB-TUO also has a Technology Transfer Centre (TTC), to support university engagement with companies interested in acquiring expertise from the university, and to help academics apply for Czech or EU patents, with around thirty patents filed per annum. The IEP team was informed that risk appetites among Czech companies were quite low, so that TTC can also approach potential investors outside of the Czech Republic, in other EU or sometimes non-EU countries. The TTC cooperates with the Ostrava technology park and incubator centre which are situated near the VSB-TUO campus.

In addition to these main support services, research at VSB-TUO is also supported by the library, which maintains approximately twenty digital databases, and is part of a Czech consortium to procure additional digital resources. It also contributes to the PhD Academy (see below) with courses on relevant topics for early-stage researchers.

A VSB-TUO data scientist, who reports to the Vice-Rector for Research, focuses on bibliometrics and works closely with the Central Library. As mentioned earlier in the Governance and Institutional Decision-Making section, this ensures that university bibliometric data is submitted to Czech Ministry to inform the national funding model, and the data scientist assists with the process of budget

formation (also based on bibliometric data) and some on-demand data work for faculties and the research centres where possible.

While good progress in terms of research support structures has certainly been made since 2021, the IEP team found that there is still scope for greater synergies across these support structures, to ensure the full range of project supports are available, with relevant expertise. There is also further scope to leverage the expertise and experience which has now become available across CEET and IT4I to enhance project support across the university.

Doctoral studies

A major topic covered as part of the 2021 IEP evaluation was that of doctoral education and the PhD Academy. The various recommendations from that evaluation will be revisited under the following subsections of this report, but the 2024 IEP team would like to acknowledge a number of significant developments which have taken place in the field of doctoral education at VSB-TUO since then.

These changes since 2021 include

- The PhD Academy is now well established, providing over forty courses for junior researchers at VSB-TUO, and inviting speakers with recognised expertise from a range of European universities and organisations.
- Based on the experience so far, work is underway to optimise these courses, centring them around the core topics of most relevance to doctoral students and building up internal expertise in the delivery of these courses.
- There is now scope to expand participation in PhD Academy activities to more students across all faculties, which was not the case initially. This raises the issue of the role faculties currently play in defining PhD study programmes, and whether these should be placed in a shared university structure, rather than in faculty structures as is currently the case.
- Despite decreases in the overall number of PhD students at VSB-TUO, the number of international PhD students has been increasing steadily. The REFRESH and other large projects offer scope to expand this further.
- The number of PhD scholarships has increased in recent years, and these scholarships have become more attractive.
- PhD students at VSB-TUO are generally now obliged to spend at least one month abroad as part of their doctoral programme, and are usually supported by Erasmus+ funding for this.
- There has been a shift towards PhD students and junior researchers publishing in higher quality journals, away from lower quality journals and conference proceedings.
- VSB-TUO's participation in the U!REKA network is intended to allow PhD students to benefit from particular opportunities across partner HEIs, and double-degree opportunities are currently under development, although various structural challenges within VSB-TUO still need to be overcome for both these ambitions to be achieved.

These are all important developments in strengthening the provision of doctoral education and training at VSB-TUO in recent years. The following subsections will explore some of these issues and others a little further.

PhD governance and supervision

Like all other programmes at VSB-TUO, PhD programmes and students are attached to a particular faculty rather than to the university. As discussed elsewhere in this report, faculties have absolute

responsibility for programmes, and the regulations for these are set at faculty rather than university level. This often leads to significant bureaucratic obstacles to inter-faculty and inter-university collaboration. The IEP team was informed that this situation was also true regarding doctoral education, where the inflexibilities associated with these traditional structures were not conducive to innovative new practice. These obstacles mean, for example, that VSB-TUO would not be able to be recognised for their participation in training opportunities provided by other universities, including through the U!REKA alliance, without changes in faculty regulations to allow this. The situation whereby responsibility for PhD provision varies considerably across different faculties, falling under a range of different vice-deans, doubtless leads to further incompatibilities in terms of how doctoral studies are governed within the faculties.

In addition, while faculties are funded on a per capita basis for PhD students, the IEP team was informed that the levels of support provided to PhD students vary dramatically depending on departments and faculties. These differences exacerbate the broader situation where PhD funding remains vulnerable and uncompetitive in a dynamic labour market, and lead to obvious consequences in terms of PhD student recruitment and retention.

For these reasons, the IEP 2021 report recommended *“Mak[ing] improving doctoral programmes a strategic priority in the next years and consider placing doctoral studies under the VR for Science and Research”*, and noted that *“doctoral programmes [should be considered] as a means to foster interdisciplinary cooperation within / across faculties”*, recommending that there should be *“fewer doctoral programmes, with more room for choice”*.

The 2024 IEP team noted that these structural challenges remain, and that the university strategy for forward planning in this area was not clear to it. The team would like to emphasise that university-wide PhD regulations are still needed, and that there remains considerable scope to develop doctoral programmes in a more strategic way at VSB-TUO, which would allow doctoral programmes to become more flexible and for each PhD student to benefit from resources across different Departments and Faculties (even other Universities), while at the same time increasing interdisciplinarity.

Regarding PhD supervision and ensuring training for supervisors, the IEP team was informed that this topic was now on the agenda within VSB-TUO, but that no structure or policy for this was in place across the university as - again - this is decided at faculty level. In its discussions regarding doctoral education, the IEP team heard clearly from various groups that a clear signal is needed from the university to faculty members whose performance as PhD supervisors is unsatisfactory, and to support them with training to improve, or otherwise for them to be replaced by more suitable colleagues in order to raise the quality of PhD supervision across all programmes. The IEP team endorses this recommendation to ensure that all PhD supervisors are trained and supported in their role.

PhD Academy

While the 2021 IEP evaluation recommended that the university *“consider evolving the PhD Academy to a doctoral school – particularly in terms of open, transparent and competitive admission through a unified international call, progression and graduation.”*, the 2024 IEP team found that the PhD Academy has given doctoral students a new visibility and identity within the university, despite the structural challenges discussed earlier. Indeed, the team was able to witness a scientific writing camp for junior researchers which took place during the same week as the IEP team’s site visit, and the obvious benefits which participants from various parts of the university were deriving from this training opportunity.

During its visit, the IEP team also met with PhD students from across a number of faculties, who expressed a range of experiences regarding their involvement with courses organised by the PhD Academy. Some noted that it had been useful, in particular writing for publication, and how to send papers to journals. Others noted that some of the courses they had been interested in attending had disappeared from the list, while others stated that sometimes new students were doing courses solely for the purpose of accumulating credit.

While it is clear that the PhD academy should learn from its early years of operations and ensure that the services it provides to doctoral students remain of the highest quality possible, the overall verdict of these early years is one of success. The IEP team recommends that the university continue to provide academic support structures for PhD students, and consider how best to extend this to academic staff also.

Recommendations:

- Develop a common, university-wide research culture with high levels of productivity, which will help enhance both visibility and competitiveness.
- Continue the practice of considering various cost-allocation and budget-allocation models to facilitate the longer-term sustainability of research institutes, existing and future.
- Pursue considerable further consolidation and alignment of research groups and activity across the broader university, while strengthening research and teaching links.
- Explore greater synergies across these project support structures, to ensure the full range of project supports are available, with relevant expertise.
- Leverage the expertise now available across CEET and IT4I to enhance project support across the University.
- Develop university-wide PhD regulations.
- Make doctoral programmes more flexible, allowing each PhD student to benefit from resources across different Departments and Faculties (even other Universities), and increase interdisciplinarity.
- Ensure all PhD supervisors are trained and supported in their role.
- Continue to provide academic support structures for PhD students, and consider how best to extend this to academic staff also.

6. Service to society

As noted in the 2021 IEP evaluation, VSB-TUO is tightly linked to the development of the city of Ostrava and the Moravian-Silesian region and, through its service to society (third mission), acts as a driver for the economic, social, environmental and cultural transformation of the city and region. This is achieved through a strong emphasis on collaboration with industry, both in teaching and learning, where the university aims to offer curricula that are relevant to industry and ensure employability of its graduates, as well as in research across a range of relevant areas and the transfer of research and innovation outputs. To assist it in this mission, the university has created an enterprise advisory board, and some faculties also have maintained similar structures where considered useful.

The 2021 IEP evaluation noted the opportunity for VSB-TUO to *work more closely with the city and the region in the context of a strategy for regional development that encompasses education, and that it should involve these major partners more in the VSB-TUOs own strategic planning process.*

In the 2024 follow-up evaluation, the IEP team was able to confirm that the university is a central player in regional development strategies and initiatives, including digitalization, MedTech and a technology park, with strong links to industry and a range of local and regional bodies. The team also learned of a broad range of outreach activities to popularize science and innovation, with a series of different partners for various target groups, and a range of activities to encourage student entrepreneurship and a start-up culture as part of a strong regional focus on entrepreneurial activity. While the feedback heard by the IEP team from a range of public and private sector stakeholders regarding these activities was universally positive, it was also noted that this outreach work was not yet spread uniformly across the entire university.

The team also heard that the university is a key partner in keeping young people in the Moravian-Silesian region and fostering economic development, and that the university also plays an important role in attracting talent to the region. Crucially, this serves both to raise education levels in this region which has historically had comparatively lower educational attainment rates, and also to support the region's innovation and entrepreneurship policies, including digitalisation. As part of this broader effort to promote innovation, entrepreneurship and economic development, the VSB-TUO Career Centre maintains an active suite of initiatives and supports for both students and employers.

The team was also informed of the university's involvement in various reskilling and upskilling initiatives. These included support for SME skills development, and for transition by enterprises towards low-carbon and other sustainability practices. Given the economic profile of the region, and the continued importance of manufacturing and other industrial employment, the need for such initiatives will remain high over the coming years. Some of this engagement by the university is funded by the European Union's Just Transition Fund and various other national and European sources of funding. The team was informed of an emerging national Lifelong Learning strategy which was under early implementation, and of the university's interest in contributing to this in a substantive way.

A number of areas where stronger such links would be mutually beneficial to both the university and its stakeholders emerged during the IEP visit. The IEP team therefore recommends:

- There is scope for the university to develop significant additional cooperation in research and innovation with the private sector, and to leverage university Intellectual Property as part of enhancing regional innovation. The IEP team was informed that many companies do not know how to obtain this, or how to use it in practical terms.

- While the practice of student placements and internships with relevant private and public organisations has been growing, there is considerable scope to develop this further and strengthen links with a broader range of employers and other stakeholders.
- Despite the good progress made, the team consistently heard that there remains a pressing need to raise awareness and enhance student entrepreneurship competences. In this regard, there is scope to capitalize on the forthcoming move of the Faculty of Economics to the main campus in order to strengthen and consolidate the current suite of student-facing activities and to encourage a societal change of mindset.
- The university's efforts to develop a sustainable campus, along with the research expertise in CEET, could be leveraged better as an example for the city and the region. Students can play a key multiplier role here, and the forthcoming university sustainability strategy can also provide an opportunity to engage more closely on this topic with relevant stakeholders.

7. Internationalisation

A number of significant developments have taken place at VSB-TUO regarding internationalisation since the initial IEP evaluation in 2021. The most high-level of these is the publication of the new VSB-TUO University Strategy 2021 - 2027, in which several strategic objectives with specific relevance to the research and innovation focus of this 2024 IEP evaluation are outlined: *“to increase the number of experienced foreign academics and R&D researchers in order to strengthen its [the university’s] academic and R&D capacities”,* and *“to achieve greater engagement of the university in major education and R&D projects in Europe and elsewhere in the world. Thus a strategy has been developed for cooperation and partnership with foreign academic and research institutions”*³.

While VSB-TUO had already joined the U!REKA consortium of European universities in 2019, the awarding in 2023 of European University Alliance status and funding for this consortium of universities across eleven different European countries, together with their respective municipal and/or regional councils, to work on “sustainable, human inclusive, future proof transition” is a significant boost for VSB-TUO, and will help enhance its visibility in both the education and research spheres as well as achieving its own strategic objectives. The establishment of the Rector’s International Scientific Advisory Board in 2023 is also an important step in positioning VSB-TUO in an internationally competitive education, research and innovation environment.

This improved visibility and more active international engagement on key themes also tie in with the needs of the region, to support economic and societal transformation and development. Significant amounts of funding for large projects such as REFRESH and MATUR are now available, to transform and revitalize the region through addressing technological and social challenges and supporting sustainable development. Such projects explicitly facilitate national and international research cooperation with other academic and enterprise partners, including the recruitment of research staff with international backgrounds, and have the potential to transform research at VSB-TUO in a sustainable long-term way.

A number of other important initiatives are also underway which will help strengthen the internationalisation of research and innovation activities at VSB-TUO. These include the FIP-AI@VSB-TUO with German partners (in particular with the Fraunhofer Gesellschaft), aimed at strengthening innovation in Materials & Manufacturing through the use of applied artificial intelligence.

While these examples show the very positive dynamic underway at VSB-TUO, the IEP team noted that this was not yet mainstreamed across the entire institution, and that greater international participation and exposure would benefit the research and innovation activity across many parts of the university. For example, while these are now being embedded in the work of the PhD Academy, there is scope for greater international awareness and engagement across some of the VSB-TUO Research Centres and for a greater concerted effort to internationalise the university’s PhD population across all faculties. The significant collaborative research programmes mentioned above can provide one mechanism for doing this.

While the focus of the 2024 IEP follow-up evaluation is on research and innovation, many of the recommendations of the 2021 IEP evaluation regarding internationalisation referred to the situation

³ <https://www.vsb.cz/en/university/strategic-plan/#:~:text=VSB%2DTUO%20supports%20the%20international,to%20implement%20their%20paperless%20administration.>

regarding teaching and learning. The first of these was the need to ensure consistency and clarity across the institution regarding the practical recognition of credits from studies abroad. Other recommendations referred to the opportunities to leverage the role of the Institute of Languages and the experiences of students who had been abroad to support curriculum design, greater engagement in language learning by students and staff, and therefore to enhance the overall student experience at VSB-TUO.

While there continues to be consistent participation by Czech students from VSB-TUO in student mobility programmes and ongoing successful recruitment of degree-seeking international students to VSB-TUO programmes at bachelor, master and PhD levels, the IEP team found that the challenges identified in 2021 still persisted. In particular, as identified in the university's 2024 self-evaluation report, and confirmed to the IEP team by different groups of students, significant challenges still remain, particular within certain faculties, regarding the recognition of ECTS for mobile students returning to VSB-TUO after a study period abroad. The reasons for this appear to be varied, but centre around the lack of an agreed university-wide and centrally monitored methodology to ensure these credits are recognised. From the IEP team's perspective, this appears to be a significant cultural issue which will take a concerted university-led effort to address, otherwise VSB-TUO's own ambitions regarding student mobility will not be achievable.

Likewise, while there continues to be ongoing engagement with international languages by VSB-TUO students, including significant uptake of Czech language classes by international students, there would still appear to be some structural barriers to a more universal approach to foreign language competency across all students and staff at VSB-TUO. The IEP team was informed that, while the university helps with the provision of language proficiency certification as required for visas and to meet academic mobility requirements, the more generic language lessons provided were for mixed-ability groups, which obviously makes it difficult for teachers to help all students with different language level needs within these groups. The Institute of Languages also provides language classes for university staff who wish to improve their own levels of English or other foreign language competency, but the IEP team was informed that take-up of these was low apart from staff in those faculties where they were incentivised to participate, either through payment of the classes by the faculty, or through a bonus applied for those academics who subsequently teach through English.

The IEP team also learned that the university has successfully attracted increasingly large numbers of international students to Ostrava, mostly from South East Asia, and now provides over eighty programmes taught through English which are actively promoted to potential international students abroad. However, in most cases, only international students have the right to attend classes taught through English, which limits the opportunities for domestic Czech students but also reduces the possibilities for interaction and engagement between international and Czech students. The IEP team heard directly from international students who regretted not having more Czech students in their classes with whom they could work as part of their learning experience.

In terms of recommendations:

- The team found that there were lots of individual activities underway to internationalise, but these were mostly at local levels within the university. There is an opportunity to bring these together as part of a strategic and coherent whole to support and promote the internationalisation of learning, teaching, research and service to society, within the framework of the university's 2027 Strategy.

- The various strands of the university's strategic ambitions relating to internationalisation, including greater engagement by VSB-TUO in large-scale projects and the recruitment of international academic and research staff, need to be supported by well-structured follow-up and monitoring activities.
- In order to address the significant ongoing challenges regarding the recognition of ECTS credits of mobile students (including virtual mobility), the university should create a central task force, led at the most senior level, to develop and implement an agreed institution-wide approach, based on best European practice.
- There is significant scope to capitalize on the opportunities presented by the U!REKA European University Alliance to help consolidate international activity in teaching and research with key university partners across Europe.

8. Conclusion

At the conclusion of this follow-up evaluation, the IEP team would like to confirm that there have been many noticeable positive developments at VSB-TUO since 2021 across a range of strategic priorities. This report highlights some of the most important of those, but there are others. There are also areas where, naturally, progress has been less rapid, or where more significant challenges remain. The IEP team would like to emphasise that there are *important opportunities for further positive change, given the significant regional investments underway and the close collaboration in place with both the regional and the city authorities.*

From the perspective of the IEP team, the following are the priority areas where there is still most need for improvement:

- *Proven critical mass is now evident at VSB-TUO in key research areas: there is scope for more!*
- *The internal university structures are not optimized to address strategic challenges and sustain change. It will be necessary to address this. Once in place, the right structures and processes will enable rapid growth in capacity and funding from a broader range of sources.*
- *The whole institution is much more than the sum of its parts...*

The IEP team is confident that there is significant ongoing potential for and commitment to further change throughout VSB-TUO and wishes the university every success in pursuing this.

1.5 Summary of the recommendations

In terms of Governance and Institutional decision making:

- *Take the opportunities presented by the move of the Faculty of Economics to the main campus.*
- *Now that HR processes have been standardised, complete the staff recruitment digitalisation project.*
- *Invest consistently in staff development in pursuit of strategic objectives: digital administration project, sabbaticals, training for doctoral supervisors, teaching methods, etc.*

- *Make greater use of institutional data to inform the decision-making process.*
- *Consider all forms of research outputs to assess staff research performance; consider how these should influence staff pay.*
- *Use this information to monitor research groups and inform the distribution of research performance funding.*
- *Ensure that best practices in the areas of Equality, Diversity and Inclusion are incorporated into the university's own practices, if this is not already the case.*

In terms of Quality Culture:

- *Remember that all QA activity should lead to enhancement (use the Plan-Do-Check-Act cycle). This recommendation is a repeat of one made in 2021, and therefore needs particular attention.*
- *Continue to learn from relevant peer universities through bench-marking, using the U!REKA network and other suitable networks. This recommendation likewise repeats one made in 2021.*
- *Ensure that feedback gathered from recent graduates and employers is integrated into the university's quality enhancement processes.*
- *Reflect on the functioning and outcomes of the Internal Evaluation Council, in view of University's strategic ambitions.*

In terms of Teaching and Learning:

- *There is considerable scope for further synergies in shared provision of modules and programmes across faculties, particularly in core subjects. VSB-TUO should examine how peer universities structure their undergraduate teaching programmes. A major/minor type programme structure might help address this*
- *Establish a Teaching Support Centre at university level to facilitate and coordinate staff development in new teaching methodologies, new technologies, how to work with diverse classrooms, etc.*
- *Ensure that the broad range of lifelong learning courses on offer is widely publicised and available to a broader range of possible learners.*
- *Find ways to encourage greater interaction between students on Czech and English language programmes, to ensure that all students can benefit from the ongoing internationalisation of the VSB-TUO campus.*

In terms of Research:

- *Develop a common, university-wide research culture with high levels of productivity, which will help enhance both visibility and competitiveness.*
- *Continue the practice of considering various cost-allocation and budget-allocation models to facilitate the longer-term sustainability of research institutes, existing and future.*
- *Pursue considerable further consolidation and alignment of research groups and activity across the broader university, while strengthening research and teaching links.*
- *Explore greater synergies across these project support structures, to ensure the full range of project supports are available, with relevant expertise.*

- *Leverage the expertise now available across CEET and IT4I to enhance project support across the University.*
- *Develop university-wide PhD regulations.*
- *Make doctoral programmes more flexible, allowing each PhD student to benefit from resources across different Departments and Faculties (even other Universities), and increase interdisciplinarity.*
- *Ensure all PhD supervisors are trained and supported in their role.*
- *Continue to provide academic support structures for PhD students, and consider how best to extend this to academic staff also.*

In terms of Service to Society:

- *There is scope for the university to develop significant additional cooperation in research and innovation with the private sector, and to leverage university Intellectual Property as part of enhancing regional innovation. The IEP team was informed that many companies do not know how to obtain this, or how to use it in practical terms.*
- *While the practice of student placements and internships with relevant private and public organisations has been growing, there is considerable scope to develop this further and strengthen links with a broader range of employers and other stakeholders.*
- *Despite the good progress made, the team consistently heard that there remains a pressing need to raise awareness and enhance student entrepreneurship competences. In this regard, there is scope to capitalize on the forthcoming move of the Faculty of Economics to the main campus in order to strengthen and consolidate the current suite of student-facing activities and to encourage a societal change of mindset.*
- *The university's efforts to develop a sustainable campus, along with the research expertise in CEET, could be leveraged better as an example for the city and the region. Students can play a key multiplier role here, and the forthcoming university sustainability strategy can also provide an opportunity to engage more closely on this topic with relevant stakeholders.*

In terms of Internationalisation:

- *The team found that there were lots of individual activities underway to internationalise, but these were mostly at local levels within the university. There is an opportunity to bring these together as part of a strategic and coherent whole to support and promote the internationalisation of learning, teaching, research and service to society, within the framework of the university's 2027 Strategy.*
- *The various strands of the university's strategic ambitions relating to internationalisation, including greater engagement by VSB-TUO in large-scale projects and the recruitment of international academic and research staff, need to be supported by well-structured follow-up and monitoring activities.*
- *In order to address the significant ongoing challenges regarding the recognition of ECTS credits of mobile students (including virtual mobility), the university should create a central task force, led at the most senior level, to develop and implement an agreed institution-wide approach, based on best European practice.*
- *There is significant scope to capitalize on the opportunities presented by the U!REKA European University Alliance to help consolidate international activity in teaching and research with key university partners across Europe.*