



1st Progress Review Conference of the Universities participating in the “Excellence Initiative – Research University” programme

PRE-EVENT QUESTIONNAIRE

POLITECHNIKA ŚLĄSKA / SILESIAAN UNIVERSITY OF TECHNOLOGY

- 1) **What evidence can be provided for early cultural change within the university, following selection in the first round of IDUB (e.g. acceptance of an enhanced and widely held ambition to perform cutting edge research)? Which measures have been undertaken to date for creating, supporting and maintaining an atmosphere and attitude of change and positive development throughout the institution?**

The University has accepted a very ambitious development plan towards scientific excellence and international recognition, which could make it a widely recognised research university by 2025. The Senate has almost unanimously adopted a new statute, opening the way to many changes, most of them introduced in 2020, as well as a very demanding interim evaluation system expecting each employee to be strongly involved in the University's development. The determination to develop dynamically and to widely accept the plan included in the IDUB application, thoroughly discussed at open meetings with the University Community, is confirmed by the election of Prof. Arkadiusz Mężyk for the second term of office of the Rector with around 90% support of the Electoral Assembly, as well as the appointment of Vice-Rectors in the current composition.

The introduced package of over 30 pro-quality programmes motivates to change the approach to research, cooperation, dissemination of results, the choice of financing sources, and career development. All competitions are resolved in a transparent manner and the rules and results are published on the University's website. The employees boldly submit their ideas through their representatives in various forums, at open meetings or anonymously as part of the " University Close to Everyone" Programme.

The clear effects observed after just 8 months of the IDUB plan implementation include the following:

- focus on publishing in TOP10 journals;
- development of international scientific cooperation resulting in publications with foreign partners especially affiliated to leading centres;
- consolidation of potential within the POBs;
- much more frequent application for international projects;
- making bold research hypotheses and implementing the breakthrough research;
- broad involvement of students and doctoral students in scientific research;
- dynamic growth of bibliometric indicators, significantly exceeding the growth in previous years.

2) How is the implementation of the plan proposed by the university being governed? Who are the leaders of the implementation process? What are the measures for internal monitoring of progress in implementation of the plans?

- The Rector supervises the implementation.
- Pro-quality programmes and organisational changes are introduced as Rector's Ordinances.
- The Steering Committee for IDUB was established. It includes the Rector as the chairman, and the Vice-Rectors as the members, also Rector's Plenipotentiaries for POBs, representatives of the Students and Doctoral Students Self-Governments.
- The Head of the Project Team is the Vice-Rector for Science and Development, and its members are the heads of key units at the University, which ensures efficient operation.
- The function of the budget controller is performed by the Project Management Centre.
- International Team of Advisors for Strategy Implementation was established and met on-line.
- 27 tasks declared in the plan were divided into 9 strategic projects implemented in accordance with the Management Control System. Each project is handled by a dedicated leader, a project team, a detailed schedule and indicators monitored quarterly.
- Ongoing monitoring of the implementation progress is carried out by specialised units.
- Each quarter, the Development Office prepares a written summary report on the implementation of IDUB, including a list of actions taken and the indicators.
- Pro-quality competitive programmes are decided by a 28-person commission representing all discipline councils, basic units, students, doctoral students and trade unions. Information on all programmes and activities is made available to the University Community.

3) What measures has the university undertaken to disseminate and promote the plan among the academic community?

- Open meetings with the University Community, detailed presentation of the project objectives, plan and budget for each of the tasks.

- Presentation of activities and consultations during regular meetings of Steering Committee, Int. Team of Advisors for Strategy Implementation, Management Board, Science Council, Senate, University Council, Social Council.
- Publication of detailed information about all programmes, rules of participation and decisions on the website.
- Answers to all current questions asked anonymously as part of the University Close to Everyone programme.
- Meetings with the media and publication of announcements in Polish and English on the website, in the Newsletter and in the Bulletin;
- Implementation of a modern communication system "e-Politechnika".
- Update of the visual identity system with the IDUB logo.
- Publication of the plan in the Rector's Report on the implementation of the Development Strategy.
- Informing around 300 foreign universities about IDUB.

4) What are the main measures taken by the university to improve the quality of university governance and management, including quality-enhancing organizational changes?

- Flattening the organisational structure at the University by transforming institutes and divisions within faculties into departments.
- Establishing the HR Office and building competences in the field of acquiring the best staff and ensuring its development.
- Completing the first stage of implementation of the Shared Services Centre through inventory and description of administrative processes carried out by individual units at the University.
- Establishing the Implementation Office for University-wide and Key Projects in order to provide full professional administrative service for the most important projects.
- Establishing new organisational units - College of Studies, Doctoral School.
- Implementation of Individual Development Plans for each academic teacher to define and monitor their development paths.
- Making the teaching load more flexible in order to make better use of employees' abilities.
- Introduction of more than 30 pro-quality programmes.
- Launching the consultation programme "University Close to Everyone", where any comments and suggestions can be sent anonymously via Internet or using mailboxes installed on the campus. Answers to all questions are published on the website.
- Changing the library IT system at the University in order to analyse the achievements of employees on a current basis and to support organisational and human resources decisions.
- Implementation (final stage) of the system for internal and external communication "e-Politechnika".

5) What are the main administrative measures taken by the university in the Priority Research Areas (POBs) including focusing and integration of research teams? What additional sources of research funding dedicated to POBs have been secured to date following success in the IDUB competition?

- Appointment of Rector's Plenipotentiaries for each of the 6 POBs and including them in the Steering Committee of IDUB.
- Organising teams at the faculties who declare that they conduct research in POB.
- Inclusion of Plenipotentiaries for POBs in the process of evaluation of applications in pro-quality programmes, and thus the allocation of funds under IDUB.
- Proposing members for International Advisory Boards for POBs.
- Selection of key domestic and foreign partners for POBs.
- Involvement of members of the Social Council to support POBs.
- Assigning research centres to individual POBs and entrusting them with tasks for the development of POB.
- Project initiatives and participation in clusters within the POB.
- Planning open conferences referring to each POB (Sept./Oct. 2020).
- Implementation of a bibliometric system enabling the assignment of each employee and each achievement at the University to POB.
- Grants for starting a new activity in POB and for breakthrough research.
- Additional financial commitment refers to:
 - Activities of research centres (subsidy; research projects);
 - Providing a unique apparatus (subsidy; structural funds; own revenues);
 - Additional pro-quality programmes (own scholarship fund; subsidy; PO WER project);
 - Organisational changes (subsidy; PO WER project).
- In the IDUB budget, the University declared about 5% of its own contribution; the University does not charge any indirect costs for activities financed under the IDUB.

6) What consideration has been given to inter-institutional collaborations within Poland to enhance, for example, research that crosses traditional disciplinary boundaries? What progress has been made regarding establishment of a federation or merging with other institutions from the region, especially in case of universities which received relevant recommendations?

- Initial talks with universities and research institutes in the region on strengthening cooperation and the possibility of creating a federation - due to elections at universities and the COVID-19, the activity of teams in individual disciplines conducting analyses in this area and further talks will be conducted after 01/10/2020.
- Selection of IT tools to conduct benchmarking analyses, allowing to assess the benefits in terms of increasing indicators of scientific excellence and international recognition, resulting from the establishment of a federation - tender procedures for the purchase of two databases were launched: Datapoints (Times Higher Education) and Rankings Tracker and Academic Reputation Dataset (QS Analytics); a modern bibliometric system was introduced.

- Strengthening scientific cooperation with 3 institutes of the Polish Academy of Sciences, the Central Mining Institute and the National Research Institute of Oncology by establishing a joint doctoral school.
- Taking the chairmanship of the Silesian Universities Network Consortium (term of office from 01/10/2020).
- Involvement in the activities related to POBs by representatives of the social and economic environment gathered in the Social Council.
- Launching pro-quality programmes supporting breakthrough research and institutional cooperation.
- Establishing cooperation with entities in the fields of biology and medicine for research on combating the COVID-19 pandemic and its consequences.

7) What measures have been undertaken to identify, train, and support the next generation of international-quality researchers? How implementation of the IDUB plan contributed to enhancement of doctoral training, including recruitment to doctoral schools?

- Running a joint doctoral school with 3 institutes of the Polish Academy of Sciences, the Central Mining Institute and the National Research Institute of Oncology, providing access to unique equipment, technology and experts.
- Implementation of the recruitment system for the doctoral school only on the subjects offered by the promoters, selected in competition with the participation of Scientific Discipline Councils, in particular enabling cooperation with foreign institutions and participation in projects; interview with candidates for doctoral students.
- Launching a benefits programme for the best doctoral students in the form of a 100% increase in the current PhD student's scholarship and a mobility package for participation in foreign internships and international conferences.
- Launching a grant for foreign doctoral students to co-finance the costs of living.
- Publishing vacancies for doctoral studies in international research portals and searching for the best candidates among current students at the University - a significant increase in the number of foreign candidates for the doctoral school.
- Launching a grant for promoters (supervisors) encouraging joint/double doctorates with foreign institutions, appreciating foreign doctoral students in particular.
- Identifying outstanding doctoral students and offering them research teams, where they could pursue a double/joint doctorate.
- A package of over 20 pro-quality programmes facilitating the identification of young talents and scientific leaders as well as supporting scientific excellence and international mobility, in particular to universities ranked in the first 150 places in the main ARWU, QS or THE ranking lists.
- Development of a programme of employment of outstanding young scientists from Poland and abroad in the fields of POBs (to be launched in September 2020).
- Preparation of an application in the NAWA STER programme regarding the internationalisation of the doctoral school.

8) What progress has been made to date in implementing human resources development programmes and in recruitment of researchers (whether Polish citizens or not) from universities outside Poland?

- Introduction of Individual Development Plans for each employee and monitoring the achievements.
- Introduction of a pro-development periodic assessment system and remuneration regulations.
- Introduction of transparent workload reduction system for research leaders.
- Recruitment to project teams as part of the concluded cooperation agreements in order to activate wide groups of employees.
- Organising training in entrepreneurship and specialised training on subjects requested by employees.
- Grants to finance the starting of the spin-off and spin-out companies.
- Grants supporting the employment of outstanding young and experienced researchers and providing them with attractive development opportunities, comparable to those at leading world-class universities; using employees' contacts to search for the best candidates.
- Scholarships for all foreign doctoral students, research scholarships and mobility grants for the best doctoral students.
- Grant for people employing researchers, especially foreigners, from external funding.
- Grant for promoters conducting joint/double doctorates, especially in the case of foreign doctoral students;
- A package of pro-quality programmes developing and rewarding scientific excellence.
- Establishing the HR Office in order to recruit the best specialists.
- Substantial bonuses for university units developing internationalisation of research.
- Implementation of all provisions of the HR Excellence in Research strategy.

9) What specific steps have been taken and what progress in implementation of the plan has been made to date to enhance international engagement (e.g. research collaborations with foreign universities or research institutes)?

- Establishing strategic partnerships with the Polytechnic University of Turin, the Polytechnic University of Valencia, the University of Porto and Qatar University - their current or former authorities form the International Team of Advisors for Strategy Implementation; use of best practices.
- Becoming a laureate in the competition for the creation of a European University EURECA-PRO.
- The use of NAWA programmes (Polish Returns, Strategic Partnerships, STER) and ERASMUS+ (Capacity Building).
- Grants for visits of the winners of prestigious awards, ERC grants, and Highly Cited Researchers.

- Financing internships abroad, especially in institutions ranked within top 150 places in the ARWU, QS or THE rankings.
- A package of pro-quality programmes supporting the internationalisation of research.
- Grants to increase the effectiveness of acquiring international projects.
- Significant support for employees implementing projects under the Horizon programme, especially as a leader.
- Grants for scientific cooperation with prestigious foreign research centres.
- Substantial bonuses for faculties developing internationalisation of research.
- Promoting joint doctorates with foreign institutions.
- Development of the website in English promoting research in POBs.
- Creating advisory teams and strategic partnerships dedicated to each POB.
- Changing the practice of concluding agreements with foreign partners, from MOUs to agreements containing detailed tasks and a schedule.

10) What kind of changes has the university initiated in the education system on undergraduate and graduate level?

- Implementation, hitherto this year, of over 100 PBL projects and 140 projects of Student Scientific Associations (; launching competitions for new projects.
- The decision to modify study programmes based on the gradual introduction of project-based learning for each field of study.
- Introducing the possibility of shaping a student' individual learning path during master's studies.
- Developing the dual education programme in subsequent fields of study in cooperation with partners from the civic and economic environment.
- Changing the organisation of classes into a modular and block system, to improve the implementation of advanced subjects during classes, problem-based learning and internationalisation.
- Organisational preparations for the implementation of the Oxford organisation of classes and the Harvard method of interactive teaching at selected subjects, starting from the new academic year.
- Involvement of students in the design works of the Centre of Creativity.

11) The worldwide impact of measures and limitations introduced as a consequence of the COVID19 pandemic should be taken into account in the implementation planning, and institutions should be driven by the will to maintain strategic development as planned. The good use of digital means of communication has a crucial role to play. Thus, universities should see to it that they are up to this challenge. What actions have been taken by your university in order to reduce the negative impact of the pandemic on the implementation of the university development strategy?

- Appointment of the Crisis Management Team, who responds to all threats, thus enabling the achievement of the University's strategic goals and ongoing operations.

- Introduction of regulations enabling remote defence of doctoral dissertations and habilitation procedures.
- Adopting a remote or hybrid form of holding meetings of all teams related to the implementation of IDUB.
- Conducting a detailed risk analysis for 9 strategic projects covering all areas related to the implementation of all IDUB tasks.
- The use of the Centre for Distance Learning, a part of the structure of the University, which manages its own Distance Learning Platform, as well as the IT Centre and the SUT Computer Centre providing all ICT support.
- Implementation of extended licenses of Microsoft Teams and Zoom videoconferencing platforms, as well as the eSesja system for the remote meetings and voting.
- Introduction of electronic circulation of all documents concerning IDUB, including those related to pro-quality programmes.

All the activities planned under IDUB were launched and implemented as planned, with the following reservations: international mobility was limited or replaced by remote communication; the recruitment of outstanding experienced and young scientists was postponed till September; the competition announcements concerning the employment of outstanding scientists provide the possibility of remote work to a large extent.

In terms of combating the pandemic and its consequences:

- conclusion of the competition for projects financed from the University's own funds for co-financing R&D and implementation works related to combating COVID-19, as well as for PBL student projects and Student Scientific Associations projects, especially related to COVID-19,
- support was provided to medical entities by producing personal protective equipment, installation of equipment identifying people with selected COVID-19 symptoms, as well as disinfection equipment.