

Gdańsk University of Technology

Assessment report in the first competition under the “Excellence Initiative – Research University” programme

1st criterion - substantive quality of an application:

- a) the quality of a SWOT analysis with respect to the objectives referred to in paragraph 4 of Communication from the Minister of Science and Higher Education of 26 March 2019 on the first competition under the “Excellence Initiative – Research University” programme, including the quality of the analysis used to identify priority research areas;
- b) conciseness and concreteness of the SWOT analysis and the plan;
- c) relevance of the identification of the specific objectives referred to in paragraph 6(2)(a) and paragraph 8 of Communication from the Minister of Science and Higher Education of 26 March 2019 on the first competition under the “Excellence Initiative – Research University” programme in relation to the SWOT analysis results;
- d) appropriateness of the indicators chosen to describe the university’s potential and to measure the extent of the objectives’ attainment;

Substantiation

a) Gdansk University of Technology presents a detailed, well-written and objective SWOT analysis and shows they have clear criteria for selecting 4 priority research areas (PRAs), including details of the current citation rate and publications in the PRAs. GUT has a realistic development plan and meets the objectives of paragraph 4.

b) The SWOT and its useful table are concise and concrete in analysis and lead to logical recommendations forming the basis of their plans, which reflect the objectives in paragraph 4.

c) The specific objectives are relevant and this leads to a series of well related actions. There is good relevance in actions identified to meet the objectives in paragraphs 6(2)(a) and 8, raising the quality of research and education, monitoring progress, and raising the international significance of its activities through doubling international student numbers, attracting greater numbers of international staff and clear proposals/objectives to improve the potential of the staff, increasing publications in top decile journals and increasing grant income.

d) The indicators are appropriate, but in some cases optimistic and ambitious, such as doubling of the percentage published articles in the top 10% in five years. It takes a long time to change cultures, international visibility and publish/citations. The reduction in the staff-student ratio is achievable. The commercialisation revenues are impressive and any surplus in this area help fund the plan.

2nd criterion - relevance of assumed objectives to enhancing the international significance of the university's activity:

- a) the extent to which specific objectives contribute to attaining the objectives referred to in paragraph 4 of Communication from the Minister of Science and Higher Education of 26 March 2019 on the first competition under the “Excellence Initiative – Research University” programme;**
- b) sustainability of specific objectives after the plan implementation period, taking into account, in particular, actions to be carried out in 2026.**

Substantiation

a) The objectives for enhancing international significance appear achievable, well-focused and realistic. The plan recognises the importance of human capital and intends to raise the quality of research, build international research teams, improve GUT's international visibility, opening new avenues for funding through international collaborative work, financing foreign visitors and staff participation in research activities abroad. GUT proposes to develop contacts with leading foreign centres and support scientific consortia and networks. The generally well-conceived plan identifies changes in recruitment with a focus on ‘foreign-born academic staff’ and scholarships for international PhD candidates. Changes in recruitment and promotion procedures with enhanced support, and measures to motivate staff to use professional development are all convincing. The plan aims to increase international staff, and increase international doctoral students by almost 50%. GUT plans to transform the administration in order to support the objectives.

b) The proposed actions could be sustained beyond 2026 and increases in collaborative international funding could underpin support from GUT (supplemented by surpluses from commercialisation?). Plans to increase foreign accreditations from 12 to 22 by 2025 would help support sustainability. The Tri-City initiative should be prioritised and a merger before 2026 considered, making better use of research capacity in Gdansk and increasing GUTs visibility and the discussion on this topic at the interview was very positive.

3rd criterion - adequacy of described actions to the assumed objectives:

- a) appropriateness of the actions selected, including actions of ground-breaking and innovative nature, in the context of the specific objectives' implementation;**
- b) feasibility of the activities given the university's potential and budget;**

Substantiation

a) There are a well-balanced, relevant and realistic set of strategic actions which are well aligned with the four overarching goals of increasing the impact of research, enhancing international research collaboration, improving the quality of education for students and providing professional development of the university's staff, especially young scientists. It is laudable that GUT plans to

recruit students and staff from all over Poland and abroad. The program for students and doctoral program are appropriate. The focus at undergraduate level appears to have research careers in mind, but it will be important to prepare students for wider roles in society. The planned actions for staff development, managerial reorganisation are appropriate but further actions may be needed to strengthen top-management. A number of innovations are proposed, including capitalising on the attractiveness of the location of GUT, Tri-City and Baltic collaborations. Support for international cooperation and preparing grant applications are relevant but both will depend on high quality research based around GUT's best researchers. Incentives to publish in top journals are encouraging and facilitating international research teamwork should lead to a better publication profile.

b) Bearing in mind the size of GUT and the focus, the proposed activities could be achieved within the budget given the commitment of GUT to reshape the University. The focused approach would allow the plans to be delivered. The interview strongly supported the University's plans, demonstrating the feasibility of their proposed actions.

4th criterion - potential of the university in terms of:

- a) the impact of the university's research activity on the development of world science, especially in priority research areas;**
- b) research collaboration with research institutions of high international reputation, especially in priority research areas;**
- c) the quality of education provision for students and doctoral training, especially in fields of study and disciplines of science related to priority research areas;**
- d) the solutions deployed for the professional development of the university's staff, especially young scientists;**
- e) the quality of university governance and management;**
- f) other specific objectives to raise the international significance of the university's activities if these objectives have been determined in the plan.**

Substantiation

a) GUT has potential to impact world science in the PRAs, but it will take time. Five years is a short period in research and publication. At the interview GUT were able to show how they plan to achieve this and were convincing in their explanation.

b) Research collaboration with institutions of high international reputation is in the plan and based on prior track record in the PRAs, together with existing foreign accreditations, this could be achieved.

c) The proposed actions in education and training of doctoral students in the PRAs are relevant and feasible. Undergraduates would benefit from reducing the student:staff ratio and increasing internationalisation as well as other initiatives which were expanded upon in the interview.

d) GUT appears to have strong young scientists and all staff will benefit from reduced teaching loads and new motivational, representational and fast-track initiatives are planned as well as staff development. GUT is on right track to change its institutional culture and has strong leadership.

e) University management seems to be strong, and the proposed new structures are well-balanced with the objectives of the development plan. The plan clearly identifies a number of actions to improve the governance and management at GUT including a Council with external perspectives, managing greater internationalization, quality improvement, HR initiatives, management quality improvement and improvements in technology transfer efficiency. GUT is also planning a scientific advisory body.

f) The plan for a series of international summer schools is very good and could be extended to staff as well and further support is also proposed for international research projects.

Summary of assessment

Gdansk University of Technology have presented a concise, objective and relevant self-assessment and realistic proposal with a sound plan and objectives that could deliver a significant uplift in research performance, internationalisation, student education and management/governance, relative to their current baseline. This will serve the University well and take it towards 2026 and beyond. The case is well-written and convincing in that the university can reach its goal, but possibly may not meet all the indicator targets by 2025, because developing universities takes a long time, and changing cultures even longer. It is important to be realistic how rapidly all of this could be achieved, since publication and recognition may take a number of years, but the goals and the rational approach that GUT propose are to be welcomed, and the past trend of improving performance would support the likelihood of success with the proposals. Further discussions in the interview confirmed the potential of the University to succeed in their goals. This application to the Excellence Initiative shows a conscientious and deep analysis. It has the potential to build upon current research capabilities as well as to developing new ones. It is a coherent application in which the university sets ambitious objectives, yet devises clear and in most cases potentially deliverable paths to achieving them. The analysis was focussed on three areas: research activity of the academic staff, international cooperation, and commercialisation of R&D results. This has led to concentration in four priority research areas, which are built on GUT's existing capacity. To support these towards the goals of the university 18 specific actions will be implemented. There is a logical line between the current situation, the envisaged goal (2026) and the proposed actions. The coherent approach taken with 4 priority research areas is convincing and would appear to offer a good chance of being sustained into the future, beyond 2026. GUT have presented a coherent development plan with a focus on the human capital aspects, with a well-intended change process that, if successful, would diversify the staff and student body. The University should aim at getting to a similar stage of openness and international staff quality as peer institutions in Europe. The plan would become even

stronger if it included measures to further integrate the three universities in Gdansk, and this should also address the highly difficult issues regarding a future shared top management structure, and shared resources such as equipment, premises, and staff. It was clear in the interview that the leadership were already actively considering this opportunity. The commercialization revenues at GUT are by far the strongest of all the 20 universities and could provide a surplus to help fund the proposed programmes. These revenues from commercialization potentially indicate a strong capacity to do research that translates into valuable market value propositions. This is a very strong point since it signals a great, rare, and relevant operational capacity on the part of the University. The panel recommends GUT to:

- Ensure delivery of its plans in research quality improvement and internationalisation
- Focus on the Priority Research Areas
- Pursue merger with the Medical University of Gdańsk

Overall, this is a well-structured proposal and most goals are achievable in a realistic timescale.

Total score

35.0 / 40

Recommendation

Positive

Position on the ranking list of positively assessed applications

2