

Wrocław University of Science and 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) The SWOT shows a sizable amount of work done by WUST, which is appreciated. However, the SWOT is difficult to follow; it contains several repetitions and complains. The analysis of the structural, governance and human resources strengths, weaknesses, opportunities, and threats could be deeper and more to the point. The recommendations are too general. The summary is not very informative. The SWOT was not found to be very useful altogether for highlighting the important issues. In determining POBs, WUST has looked at the right issues and indicators (such as bibliometric data, patents, funding etcetera). It is difficult, however, to verify the process that has led them to establish their priorities. They highlight equipment that has already purchased (as a strength) and the need for much more equipment (as a weakness). They end the summary noting the need for equipment. The SWOT is not very relevant to the objectives of the Excellence Initiative.
- b) The SWOT analysis cannot be qualified as concise and concrete.
- c) The general recommendation at the end of the detailed SWOT analysis is turned into concrete recommendations for the PBOs without convincing explanations, especially the “recommendations” to purchase equipment.
- d) The mandatory and the optional indicators are appropriate. The target values of the mandatory indicators are realistic, but the target values of some of the optional indicators (e.g. international staff) can be questioned. Both mandatory and optional are reasonable. WUST has chosen three

indicators related to the number of administrative staff covered by the training programme, international experts participating in the university decision-making processes and number of lifelong learning participants. They are fine but a little exotic since most of the extra money will go to equipment and research support.

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 tools chosen by the university to be competitive at an international level are not considered to be adequate. Spending a lot of money on purchasing and modernising of equipment is not a guarantee for the university international development. Actions proposed are not ambitious and not realistic enough to expect improvement. The number of internationally renowned researchers remains weak and the list of the most prominent scientists is not convincing. It is not realistic for this type of competition to devote more than half of the funding to the purchase equipment. The proposal allocates most of the planned fund to purchase equipment (62 %!). However, according WUST reservations it is only 23%. The rest are expenses indirectly related to infrastructure investments including commissioning, adaptation of rooms and relocation of teams among other things. Furthermore the proposal states, that the university has acquired a lot of equipment already. They describe 6 goals including key tasks and outcomes for each goal. The objectives are reasonable but too wide in scope in most cases. They include 7 actions. The number is reasonable and manageable. Action 2 and 3, they take about 88% of the budget. Action 2. This is where most of the new funding (61.8%) goes; specifically to buying equipment and modernising labs and buildings. Having more and latest generation instruments is not the solution to improving the university research performance. Action 3 gives support to research. It takes 26.4% of the resources. Proposed actions look fine, but too many to have significant impact.

b) The section devoted to sustainability of results planned for 2026 is too premature at the moment. It should be taken care of by the monitoring of progress in implementing the plan. The 6 actions they propose are fine. They put emphasis in the internationalisation and intensification of research which is only natural. They also include an action for infrastructure.

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) The descriptions of the actions are too general and the appropriateness between the objectives and the budget is not obvious especially when the main budget will be focused on infrastructure. equipment and associated costs. They do specify some of the equipment they intend to acquire. The action to support publishing in the top 10 percent journals is an excellent objective, but it is not clear from the proposal how they will do it. It is hard to believe that the main problem is funding the publication itself, when the main goal and objective is to produce results worth publishing. Some of the actions e.g. "Motivational fund for the applicants of European research projects, including ERC" are unfortunately phrased. If somebody is not motivated to get an ERC grant, some extra money certainly will motivate to write a proposal, but with predictably little success. Some of the "actions" are quite far from increasing science output e.g. "a reduction in the number of plastics used within the campus". The actions selected by WUST really concentrate in buying equipment and giving support to research. None of the actions proposed are ground-breaking. Rather they seem to concentrate in upgrading equipment and some aspects of research within WUST. Giving support for publishing better is very good. However, the action is not powerful enough because it does not tackle the core of the problem (quality). Some attention is also given to internationalisation but diversified in too many (sub)actions.

b) In terms of feasibility, equipment can certainly be bought. However, proper use of the equipment for high quality research requires other actions (like training technicians and providing maintenance) are not described in the proposal. Small actions related to research and internationalisation might be accomplished, but its benefits will be small.

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) The potential of the university to have significant impact on world science is different in the 7 POBs. Since the objectives in the proposal do not make it clear what is new in what they want to do, one has to rely on their last five year activities and the achievement of researchers they submitted as most prominent senior and young researchers. There is not a single POB where the proposal named 5 “most prominent” scientist either in the senior or in the young categories. Based on this seemingly lack of prominent scientist the potential and the impact of the university cannot be significant. The reviewers understand that there is more potential than the one showed in the proposal. Actions proposed by WUST will not contribute to a significant change in the quality of the research that has been carried out so far. It is difficult to deny that WUST has a momentum and extra resources, distributed among POBs, will give it a push. However, the way they propose to do it is not convincing.

b) The potential of the university in research collaboration with research institutions of high international reputation can be improved. In the proposal mainly tasks of sending staff members to foreign laboratories is emphasized, which is not really collaboration.

c) The quality of education provision for students and doctoral training cannot be firmly judged from the proposal.

d) It is not obvious to assess from the proposal the quality of the solutions deployed for the professional development of the university's staff and the quality of university governance and management. The general words about the solutions deployed for the professional development of the university's staff, especially young scientists, is in the proposal.

e) The quality of university governance and management certainly has to improve, but the proposal gives only generalities, which indicates that there is no novelty.

Summary of assessment

The panel appreciates the considerable amount of work spend in writing the proposal. However, the panel was not convinced that, based on the proposal, as submitted, WUST was yet ready to be qualified as a research university in the context of the competition of the Excellence Initiative. The reviewers believe that the university has the potential to be an international (European) research university in the medium term, provided that it improves its development plans. It was considered that WUST has done a good job in putting together a number of studies that have provided more than enough data for a diagnostic. It was found, however, that the SWOT analysis was not well balanced. The SWOT is difficult to follow and it contains several repetitions and complains. The analysis of the structural, governance and human resources strengths, weaknesses, opportunities, and threats could be deeper and more to the point. In terms of POBs, WUST have looked at relevant

issues and indicators (such as bibliometric data, patents and funding among others). It is difficult, however, to verify the process that has led the university to establish its priorities. They highlight equipment that have already been purchased (as a strength) and the need for much more equipment (as a weakness). They end the summary of the SWOT noting again the need for equipment. More specifically, the proposal allocates 62% of the funding to purchase equipment. However, according to WUST reservations the amount is only 23%. The rest are expenses indirectly related to infrastructure investments including commissioning, adaptation of rooms and relocation of teams among other things. It is the opinion of the reviewers that having more, and the latest generation of, instruments it is not the solution to improving the university research performance. This action, per se, would not lead to increased science output. The imbalance between improving human capital and prioritisation of infrastructure makes it difficult to believe that the university could significantly increase its impact on world science in the short term. The target values of the mandatory indicators are realistic, but the target values of some of the optional indicators (e.g. international staff) may not be. The objectives are in general relevant, but concrete actions are missing. Actions proposed are not ambitious and realistic enough to expect a development at the international level. The number of internationally renowned researchers is not yet sufficient and the university needs to cultivate and recruit prominent scientists in order to fulfil its ambitions. The quality of university governance and management certainly has to improve, but the proposal in this respect is only general, and would need much further consideration. Actions related to improving doctoral training, professional development of staff and improvement of the governance are too timid to convince the panel. The panel encourages WUST to revisit its plans and to rebalance the focus towards governance, recruitment and collaborative research actions. The reviewers truly believe that WUST has much potential to become a research university. The reviewers are aware of the rankings available but have based their opinion solely in the proposal received within the competition established by the Excellence Initiative. The reviewers, again, encourage WUST to persist in its efforts to become a research university.

Total score

21.5 / 40

Recommendation

Negative