Principles, Procedures, and Main Topics for Institute Evaluations of ISTA

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A regular and periodic evaluation of ISTA is required by the Law of ISTA.

§5 (Quality Assurance) of the Law says:

(1) The Institute of Science and Technology – Austria shall set up quality assurance procedures in accordance with internationally applicable standards for top research institutions.

(2) The activities of the Institute of Science and Technology – Austria shall be evaluated at seven-year intervals. The evaluation reports shall be submitted to the National Council (Nationalrat) by the Federal Government.

In §9 (Scientific Board) the Law says:

"The Scientific Board shall draw up proposals for scientific orientation and for ensuring top-quality scientific performance."

The first evaluation according to §5(2) of the Law happened in 2011, the second in 2015, the third in 2019.

The Scientific Board of ISTA recommends the following principles, procedures, and topics for the Institute evaluations.

Principles

The following principles shall govern every evaluation of ISTA. They are internationally accepted "best practices" for the evaluation of scientific institutions.

- **Quality**: In accordance with the high standards of ISTA, any evaluation procedure, and in particular the composition of review panels, must comply with the highest international quality standards.
- **Transparency**: Criteria and procedures, including the names of reviewers, shall be known to all parties involved, including Austria's Federal Ministry of Education, Science and Research.
- **International scope**: The composition of all review panels and all reference measures must take into account that the benchmarks of ISTA are internationally leading universities and research institutions.
- **Avoidance of conflicts of interest:** The composition of the review panel has to guarantee an objective and expert evaluation.

- **Focus on qualitative assessments**: The Institute's work shall be evaluated relative to international performance levels (scientific significance, innovative power, quality). In accordance with the Agreement on Reforming Research Assessment of CoARA, quantitative tools such as bibliometric analyses have only supportive character.

Procedures

The Scientific Board shall be responsible for the organization of any scientific evaluation of ISTA and for the selection of potential members of the review panel.

The following procedure shall be followed:

1. An international review panel of 5-7 members shall be established. All members of the review panel must be outstanding international scientists, currently working outside of Austria. Some of them shall have significant experience with administrative tasks like the leadership of a major research institute or university. The panel shall be geographically balanced and reflect an appropriate gender balance. The composition of the panel shall cover the natural sciences, in addition to mathematics and computer science, that are relevant to ISTA research activities.
2. In order to ensure an objective evaluation, no member of any board or committee of ISTA shall be selected as member of the review panel. No scientists who were thesis advisors of, or students of, or are active collaborators of, or are related to, or have any financial interest in the work of, any of the current professors of ISTA, or have any other conflict of interest, shall be selected.
3. The Scientific Board will propose a list of possible panel members, covering all major scientific disciplines. The list shall contain at least 15 candidate names.
4. The Executive Committee of the Board of Trustees shall decide on a shortlist of options for the chair and the members of the review panel from within the list of candidates provided by the Scientific Board. The Chair of the Executive Committee shall approach the candidates for chair and members of the review panel.
5. In case that the total number of panel members who were selected by the Scientific Board and who accepted the assignment are not sufficient, or in case that a given discipline, a large geographic area, or gender is under-represented by those members who accepted, the Chair of the Scientific Board is authorized by the full Scientific Board to propose an additional list of candidates, which will then enable the Chair of the Executive Committee to put together a complete review panel.
6. Once the final selection of the panel has been completed, it shall be brought for final approval to the full Board of Trustees of ISTA and the letters of appointment shall be issued by the Chair of the Board of Trustees.
7. The review panel will receive a status report prepared by ISTA before it convenes for a site visit on the campus of ISTA. The previous Institute evaluation report and the parts of all

area evaluation reports since the last Institute evaluation, excluding confidential parts on individual professors and their performance, shall be included in the status report.

8. The site visit of the review panel shall last for 2-3 days. Preliminary feedback should be given to the Chairs of the Board of Trustees, the Scientific Board, the Executive Committee, the management of ISTA, and a representative of the Austrian Minister of Science before the end of the visit.
9. ISTA shall be given an opportunity to comment on the review panel's findings.
10. The final review report will include the comments of the Institute. It shall be submitted to the Chair of the ISTA Board of Trustees, the President of ISTA, Austria's Federal Ministry of Education, Science and Research, and thereafter to the Austrian National Council and may be published.
11. In addition to its report, the review panel may send a confidential letter to the President of ISTA. The contents of this letter shall be discussed with the persons concerned. Any problems and deficits described in the letter must at least be alluded to in suitable form in the official review report.
12. Approximately three years after the discussion of the report in the Austrian National Council, ISTA shall send an update to the review panel, including a progress report and a response to the main recommendations of the evaluation report.
13. The review panel, or a subset thereof, shall send a comment on this update to the Chairs of the Board of Trustees, the Scientific Board, and the Executive Committee, as well as the President of ISTA, and the Austrian Federal Ministry of Education, Science and Research.

Topics for the Evaluations

The main topics to be addressed in the evaluations are:

1. **Overall scientific output and quality**: The evaluation shall consider if ISTA is performing well in terms of scientific quality and productivity compared to international peer institutions.
2. **Research fields and faculty recruitment**: The evaluation shall consider if the distribution of the research activities of the Institute and the procedures leading to the faculty recruitments are appropriate.
3. **Graduate School:** The evaluation shall consider if the Graduate School and the PhD program(s) have appropriate rules and operations in order to produce intellectually broad, curious, open-minded scientists who are able to approach problems from multiple perspectives and who can compete with scientists trained in the best Graduate Schools worldwide.
4. **National and international cooperation**: The evaluation shall consider if ISTA is well connected to the national and international scientific communities and if scientific cooperation with other institutions is appropriate.

5. **Societal benefits:** The evaluation shall consider if ISTA takes appropriate measures that have a broader impact for the benefit of society such as outreach, science education, and technology transfer.
6. **Responsible conduct of research:** The evaluation shall consider if ISTA established appropriate procedures in order to safeguard high standards of scientific integrity, research ethics and professional behaviour.
7. **General working conditions**: The evaluation shall consider if ISTA offers its scientists intellectual, organizational, and material working conditions that are competitive on an international scale and can also be justified to the taxpayer. This includes the technical infrastructure, salaries, budgets of research groups (including the distribution of guaranteed funds, internal competitive funds, and external funds), and general support structures (scientific service units, administrative support, campus services, career development, support of families and international employees).
8. **Campus planning and construction**: The evaluation shall consider if past campus development was adequate and if the current status allows for enough flexibility for future developments.
9. **Internal structures**: The evaluation shall consider the career structures (types of scientific positions, their regulations and promotion procedures), performance control mechanisms, the rules governing the relation between the Institute's management, the leaders of research groups, and the other employees, and the organizational development of the Institute.
10. **Plans for the next seven years**: The evaluation shall consider the strategic plans of the Institute's leadership.