Institute of Digital Sciences Austria Strategic principles of the IDSA

Orientation points and guidelines for the approach, organisation and further development of the IDSA

Decision of the Founding Convention of 15 June 2023

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Preamble

This document was written during a special phase of the institution in several respects and under exceptional circumstances. According to the legal mandate, the Founding Convention is the strategic body of the new university in the founding phase and has, among other things, the task of defining "strategic principles" for the institution in this phase.

The founding convention took on this task parallel to the appointment process of the Founding President, since strategic cornerstones must apply independently of specific persons and their special abilities, and a certain degree of framework setting will be helpful and necessary for the prompt creative activities of the future executives and staff in the coming development phase.

The Federal Ministry of Education, Science and Research initiated a range of preliminary conceptual work in the preparatory phase in 2020 and 2021, in particular setting up a conceptual group, which has submitted a final report pointing the way ahead. So far, however, all preliminary work has only had an advisory character and is ultimately legally non-binding for the future

designers of this university. The "strategic principles" presented here therefore also have the function of working out which conceptual elements from the preparatory phases are to be regarded as binding, although other contents can of course also have important functions as a design basis in the development process.

Legislation itself provides a central, guiding orientation point for the approach of the new university: building on the principles described by legislation in §§ 2 and 3, the university shall "develop structures that take into account the special challenges of the thematic orientation of the university (§ 2) and serve the further development of the Austrian higher education system" (§ 3 par. 3). In the opinion of the Founding Convention, legislation thus clearly articulates the model character that IDSA is to develop for the Austrian higher education system.

Against the background of these circumstances, the Founding Convention pursues a specific objective with this document: without wanting to unduly restrict the strategic room for manoeuvre of the Founding President, with a special view to the model character of the institution, essential orientation points and guidelines for the orientation, the organisation and the further development of the IDSA are to be defined, within which the organisation is to move in its further development process.

In this context, the members of the Founding Convention aim in particular to encourage all those involved in the further development process to tread the path as a model institution with clear focal points and not to shy away from crossing the boundaries of existing traditions and entering new territory. Following the recommendation of the German Science Council for the foundation of the Nuremberg University of Technology (UTN), IDSA is to "use all the opportunities of a contemporary new foundation as a new university and establish new structures in terms of both content and organisation and break new ground". In the process, IDSA can "serve to test a number of higher education and science policy elements and, in the long term, develop a model character for the Austrian higher education system".

This document is intended as an element implementing the law and supplementing its contents. Therefore, the principles established by the law (§§ 2 and 3) are not repeated.

In the form of presentation, the Founding Convention is committed to compactness and wishes to limit itself to few, but clearly outlined guiding ideas.

Wilfried Eichlseder

Martin Hitz

Dieter Kranzlmüller

laudia von der Linden Christopher Lindinger

Johanna Pirker

1 Orientation points and guidelines for the content-related strategic approach

Focus and orientation: "Digital Transformation"

- IDSA is not a traditional technical university structured according to disciplines, but is intended to position itself as a mission-orientated university "sui generis" with an independent, distinctive profile.
- IDSA's "mission" is to open up new paths towards digital transformation in its connection with other societal transformation processes and through pioneering scientific approaches, leading to human-centred societal progress, a sustainable and resilient economy. IDSA should be perceived internationally as an institution that makes substantial contributions to the emergence of new scientific disciplines and demonstrates that excellent science can also be systematically transformed into profitable products and services as well as social innovations in Europe.
- Digital transformation encompasses more than "digitisation" and goes far beyond the traditional technical content of computer science. IDSA should therefore claim to be "Beyond Informatics" and distinguish itself from other providers of tertiary education primarily through the special competence profile of its graduates.
- Their future "Areas of Expertise" are methods and knowledge areas that have the potential to make substantial contributions to successfully and sustainably mastering the current and future challenges in the context of the digital transformation of business, industry and society.
- IDSA is intended to transcend traditional disciplinary boundaries, bundle a wide range of specialist knowledge and expertise in a novel manner, focus on research into cross-disciplinary approaches to solutions and thereby make an exceptional contribution to Austria as an internationally visible location for innovation. In the process, artistic disciplines can also make significant contributions and, in turn, IDSA research findings can have transformative effects on art and culture.

The graduates: experts with 21-st century skills who can effectively shape the digital transformation of business, industry and society

- IDSA aims to produce generalists with a deep understanding of digital transformation, the interplay of different relevant disciplines and a societal evolution towards sustainability for an era shaped by Al, autonomous acting systems and robotics.
- IDSA graduates will be leading digital designers and generalists or entrepreneurs in their field, should bring a generalist overall view of digitisation and transformation processes, work together with specialists and draw on a wide range of topics, expertise and methods. Their essential core competence will be to link these elements in a solution-orientated manner, creating previously unthought-of links between known and new fields of action and knowledge.
- In this sense, the aim is for IDSA to be known for rethinking education and providing a balance between sound technological skills to assess a task context and competencies such as complex problem solving, critical thinking, creativity, self and project management and leadership skills
- The educational goal of IDSA will be to ensure employability not only for today's, but especially for future job profiles, for which an ever increasing number of methods, technologies, tools and new fields of knowledge will be available.
- With this special educational profile, IDSA aims to appeal to students interested in the impact of technology and its interaction with society as well as business and industry. Supplementing existing universities, IDSA is intended to be particularly attractive both for students who would otherwise decide against a purely technical degree programme and for international students.
- A particular ambition is to open up paths regarding women in the context of technology and creativity that are a positive surprise because they go beyond established tools and formats.

Principles of learning and teaching: enquiry-based learning with high quality support and individual learning paths

- IDSA should break new ground in terms of content as well as methodological-didactic aspects and apply methods that are suitable for developing the competences presented and include digitisation at the core of its "DNA".
- Competence development takes place primarily through research-based, independent knowledge development, in which questions and tasks are consistently placed at the beginning of the learning experience. Projectorientated learning on the basis of real-life issues has a high priority, whereby interaction with practitioners should play an important role in understanding the problem and context.
- IDSA teachers see themselves primarily as learning process facilitators who ensure a high quality of personal support, curate educational content and support knowledge acquisition from internal and external learning resources within the framework of an individual learning path.
- IDSA aims to be an internationally perceived leader in student support ratios. The prerequisite for this is to achieve a ratio of 1:5 (faculty members as supervisors to students) in the area of Master's degrees.
- Exemplary digital learning environments and tools as well as hybrid learning formats and settings are a matter of course for IDSA, enable state-of-the-art knowledge and competence building and combine the strengths of analogue and digital learning into a coherent learning experience.

Develop a high quality of encounter: attracting, networking, challenging and supporting exceptional talent

• IDSA aims to become a vibrant platform for exceptional talent and to be known as a place where people with diverse backgrounds, approaches, skills and inclinations are brought together who would scarcely meet in traditional work contexts, but through this diversity develop new solution qualities together. A high quality of encounter and an international orientation practiced in every aspect should be part of the IDSA "DNA".

- Attracting the best brains should be the primary concern of IDSA's personnel policy and clearly more important than covering individual special topics due to curricular necessities. Teaching content can also be delivered through collaborations with partner universities or through the global market for digital educational resources and collaborations. "Opportunity Hiring" and Open Calls for professorships are to be essential cornerstones of the personnel policy.
- Education and research are of equal importance to IDSA faculty members. IDSA needs researchers, visionaries, bridge builders and designers of the digital transformation who have an open mind, who are as enthusiastic about innovation in higher education and high-quality didactics as they are about internationally competitive cutting-edge research.
- Due to the special orientation and ambitions towards self-responsible learning, IDSA needs students who consciously choose this educational path and have the potential to face the methodological and content-related challenges. Therefore, IDSA shall consistently apply quality-assuring aptitude assessment procedures to find talents with high motivation for their challenging educational programmes.

2 Orientation points and guidelines for the organisation and structure

Organisational model: Mission-orientated, flexible cooperation in networks with agile cooperative structures

- At the level of the scientific units, IDSA is to develop a structure that is not orientated towards classical disciplines but towards topics, challenges or fields of action that connect individual disciplines.
- As a special distinguishing feature, IDSA is to develop agile structures and be organised as a flat hierarchy. Scientists interact in a mission-orientated manner in fluid research structures that are constituted according to needs and, depending on their degree of maturity, can also be dissolved again.
- Affinity groups, communities of practice and the establishment of abstract curricula encourage curiosity, take up the dynamics of knowledge markets and prevent rigidities in disciplinary silos. Teaching also needs to be thought of from an overarching point of view.
- According to a broad and modern definition of scientific excellence, the group of scientific staff also includes external experts, practitioners or career changers without a typical scientific curriculum vitae.
- For IDSA scientists, customer-oriented, efficient services and a digital administrative process landscape should create the greatest possible freedom for scientific activities.
- When configuring the administrative organisation, structures should be as lean as possible and own resources should only be built up in those areas for which internal staffing also makes sense in the long term on the basis of developments on the labour market. Also in this area, IDSA should take advantage of the opportunities offered by a new foundation and follow innovative paths that really benefit the scientific units and do not lead to additional burdens. Strategic partnerships and working in stable networks are to be strived for.

Inter-organisational cooperation: Synergies, networking and strategic partnerships

- IDSA sees itself as a university that was established to complement the
 existing Austrian science landscape and will therefore be embedded in
 the entire science and innovation system through cooperation with other
 universities and non-university research institutions.
- Scientific services in research, teaching and knowledge and technology transfer are provided in a vibrant network of partners in which synergies are tapped and expertise is developed in a complementary manner.
- It will be a matter of course that IDSA research groups cooperate with associated groups of other scientific institutions and that IDSA scientists take on responsible, formative functions in other institutions.
- In general, IDSA should use already existing structures, scientific competences in teaching and research, core facilities and tools of the scientific partners for the mutual benefit of all.
- In addition, IDSA leadership should strive to enter into few but substantial and deep strategic partnerships.

Strong focal points in the area of knowledge and technology transfer

- The mission of higher education institutions to contribute to the advancement of social challenges, development interests and goals by transferring their existing scientific potential and thus to achieve sustainable societal effects ("impact") beyond their own scientific community is inherent to IDSA.
- IDSA will set strong focal points in communication with business and societal stakeholders, in particular offer mission-orientated possibilities for lifelong learning, develop into a think tank for the effective design of transformation processes and provide an attractive incubator environment for the development of start-ups.
- Clear, transparent and fair IPR guidelines create an attractive and competitive environment and the conditions for long-term cooperation with professional industrial players.

Governance and quality assurance

- IDSA should implement clear management and decision-making structures in order to make responsibility identifiable and clearly attributable (accountability) and to enable entrepreneurial action in line with an "Entrepreneurial University".
- Top management should be subject to "checks and balances" both within and from outside the university and be measured against objective criteria of success. Diversity should also be an active practice in the management team.
- The KPIs to be developed must encompass the entire ambition of the university in research, teaching and knowledge and technology transfer and reflect both international excellence in research and achievements in educational work as well as regional transfer effects. The internal incentive system must be in harmony with the requirements set in this way.
- As the strategic body of the Society in the founding phase, the Founding Convention shall oversee the development of the institution and support the Founding President in the management of the institution. Decisions of fundamental importance, such as decisions on strategic documents, budgets and appointments to top management, are therefore subject to approval.
- The more detailed interaction of the organs and the most essential governance processes are to be set out in the provisional statutes and the provisional organisational plan. These can be developed and submitted in part for decision-making for reasons of better manageability. In any case, those parts are to be developed in a timely manner that contain the provisions on the advertisement and filling of scientific positions, the implementation of a scientific international advisory board and the development, negotiation and resolution of the multi-year strategic documents (strategic multi-year plans and performance agreements with the responsible Federal Ministry for Education, Science and Research).
- Participation and co-creation have a high priority and should be set out within the framework of the organisational plan or statutes in such a way that the flexibility and agility of the organisation are maintained, it can

react quickly to changing conditions and without diluting management and decision-making structures and responsibilities. Students and staff should be consulted at all levels and on all matters that directly affect them. Overall, mutual appreciation should be tangible as an essential cultural value.

3 Orientation points and guidelines for the further development process of the IDSA

Boldly breaking new ground and setting clear focal points

- According to the legal mandate, IDSA shall develop structures that take into account the special challenges of the thematic orientation of the university (§ 2) and serve the further development of Austrian higher education.
- IDSA should bravely follow this envisaged path as a model institution, making use of the potentials and opportunities of a contemporary new foundation and not shying away from crossing the boundaries of existing traditions and entering new territory.
- The perople shaping the programme should set clear focal points in terms of content, methodology and didactics as well as in terms of organisational structure, and thus develop charisma. IDSA is intended to be a highly visible beacon in the European university landscape.

Required process qualities on the way to a successful model

- The high standards associated with the model character of IDSA require a high process quality in the further procedure.
- The development of the IDSA organisational model as well as the statutes and the organisational plan as central documents, should be set up within the framework of a process which will be led by the Founding President, but which should take place in close consultation with the Founding Convention already in the development phase.
- As part of the development of the statutes and organisational model, processes and standards for decision-making on strategically essential issues must be worked out, which are orientated towards good governance practices and which must contain a balanced relationship of "checks and balances", without unduly weakening the entrepreneurial

- responsibility and creative freedom of the top management. Here, too, the creators of the future governance system should think out-of-the-box.
- In this open dialogue process, experiences from projects with similar ambitions (e.g. UTN) or international model universities should also be taken into account.

Cooperation of the institutional bodies in the further process

- With regard to the further buildup phase of the institution, which must first develop its identity and rules, the Founding Convention sees itself as having a greater responsibility than that of a mere supervisory and control body. In particular, the members understand their function in the sense of accompanying and reflective support of the institution's top management and taking on a corrective function with regard to legislative ambition to develop a trend-setting model university for the Austrian higher education area.
- The Founding Convention is also prepared to continue its active involvement and will, in particular, actively fulfil its legally defined function as the interface with the Advisory Board in order to ensure the systemic integration of IDSA into the existing Austrian scientific landscape.
- With regard to the cooperation and communication processes between the Founding President and the Founding Convention, open formats for exchange and for working on the conceptual challenges must be established together, which go beyond classic reporting and control structures and formats, and which enable substantial exchange processes in terms of content.