INITIAL ACCREDITATION PROCESS FOR HIGHER EDUCATION SCHOOLS

SUBJECT: Transparency requirements – Programmatic document about school policy

The planning of the School’s policies is carried out through two key documents, i.e. the Strategic Plan and the Integrated Plan.

In September 2016, following a comprehensive information-sharing process with the entire SISSA community (professors and researchers, administrative and technical personnel, students, postdocs), as well as with the main external stakeholders (Region, Municipality, Prefecture, labor-market institutions, trade unions, etc.), the governing bodies of the School approved SISSA’s Strategic Plan 2016-2020. The Plan defines the strategic actions that the School intends to pursue in the five-year period in the following sectors: Research, Teaching, “Third Mission” (Innovation), and Cross-cutting Objectives.

Based on the five-year Strategic Plan and actions, the detailed planning to steer the organisation towards their fulfilment is then identified on an annual basis. Hence, the strategic actions are implemented in the three-year operational planning documents (on an annual rolling basis). Among these, the Integrated Plan is the document that systematically develops the planning of the School’s activities with regard to performance, transparency and anti-corruption measures, in accordance with the Strategic Plan and the planning of financial assets and economic resources (annual and three-year budget).

The Strategic Plan 2016-2020 and an abstract of the Integrated Plan 2019-2021, i.e. the two programmatic documents that set forth the School’s policies, are attached.

Documents and explanatory texts uploaded in the SUA_Scuole database are available on the Quality page of SISSA website, in the section relative to accreditation: https://www.sissa.it/cevs
Strategic Plan

International School of Advanced Studies
2016-2020

(approved by the Academic Senate on 20th September 2016 and by the Board of Directors on 27th September 2016)
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INTRODUCTION: MISSION AND VALUES

The Scuola Internazionale Superiore di Studi Avanzati or SISSA (International School of Advanced Studies) of Trieste is a research and higher education institution.

The School’s main purpose is to promote research driven by intellectual curiosity, and the development of scientific culture and knowledge, as well as to train young people from all over the world for careers in scientific research and university teaching. For this purpose, the courses are held in English.

Open to international collaborations, the School welcomes students and principal investigators of any nationality, religious belief and ideology, and builds its actions on an intellectual fellowship spread through the universal language of science.

The School establishes a lean, informal yet rigorous work environment, wherein each student is supervised individually in close interaction with a professor. Students are given complete freedom to choose their training courses, with professors suggesting possible routes and students making their own choice with creativity and independence.

The School pursues its objectives by carrying out basic and applied research, and training PhD students in innovative disciplines and emerging interdisciplinary areas. Furthermore, the School can organise professional Master courses, and other higher training courses together with other universities.

In order to provide the productive world with its expertise and the results achieved through research, the School engages in technological transfer, patent and startup and spin-off creation activities, and in the training of innovative entrepreneurial skills.

SISSA’s researchers have received many accolades, notably the 19 prestigious grants awarded by the European Research Council since 2007, the starting year of the programme.
PART 1: THE CONTEXT AND SISSA TODAY

This section of the Plan aims to give a brief overview of the context in which the School operates, making a distinction by macro-areas, and to highlight some features related to both the organisation and the performance that characterise SISSA, also by referring to the assessment provided by the ISAC during its latest visit.

RESEARCH

The operational structure SISSA adopts in order to carry out its scientific research activity, is similar to that of many institutions based in English-speaking countries. Said structure is based on a limited number of internal scientists/professors, each of whom is a Principal Investigator (PI) who develops their research activity independently and clearly separated from other PIs, together with collaborators who are normally assigned temporary positions and PhD students.

The research activity of each investigator is coordinated within the Scientific Areas, which have replaced and grouped the smaller scientific sectors on which the School was structured in the past. The activity of each Area can be organised in Research Groups that carry out scientific and training activities, generally contributing to the management of PhD courses.

The context in which the research activity is carried out, is characterised by a fierce competition to obtain grants, especially at international level (e.g. EU), and to a smaller extent (in absolute terms) at national level, both in the public and private sector.

The School’s research activity is acknowledged at both national and international level as being of the highest quality, as shown by the data on Research Quality Assessment (VQR) and on fund raising.

The latest report issued by the International Scientific Advisory Committee (ISAC) highlights the high level of quality in the research carried out by the School’s investigators¹, and, at the same time, it points out the need to find a balance between the development and the consolidation of the current lines of research and the implementation of new ones².

Strengths:

1) VQR 04-10 placement

In the latest research quality assessment conducted by ANVUR (VQR 04-10), SISSA achieved excellent results, establishing its position at the top of national rankings, both overall and considering each Area.

2) High scientific productivity of the School’s investigators [Note: data will be added which is not yet present in other reports; said data is being processed.]

3) ERC placement

¹ “In every group the professor and researchers are extremely active scientists as witnessed by all the standard indicators – publications in leading journals, impact factors, invitations to conference, and so on. The success of the investigators in Italian and EU calls for proposal, and the outstanding successes in winning ERC grants against extremely though competition, demonstrate that the quality of research is very high”

² “The interdisciplinary nature of its organisation combining pure and applied mathematics, physics and astrophysics, biology, neurobiology and cognitive science, has led to a unique institution with very few equivalents worldwide. SISSA should thus be encouraged to balance constantly the strengthening of the existing expertise versus embarking in new directions. This can only be achieved if the collective interest takes precedence over other considerations.”
The report ‘ERC funding activities 2007-2013’ issued by the European Commission shows the excellent performance - i.e. number of grants obtained and success rate - of SISSA, even though the number of researchers is quite lower compared to other institutions. More specifically, the School ranks 85th (at European level) considering the number of grants received, while it ranks 28th considering the success rate.

4) Active projects and funding in 2015

In 2015, SISSA had 135 active grants. Following a transition period in 2014, also due to the start-up phase of Horizon 2020, in 2015 there was a growth in the value of the grants allotted to SISSA which amounted to 6,247,606 EUR (total project values of grants obtained in 2015.)

5) Research internationalisation

The high level of internationalisation in SISSA’s research is also shown by the number of collaboration agreements (283) signed in 2015 with important international research institutes. These include, but are not limited to, the Imperial College, the Weizmann Institute of Science, Stanford, Oxford, and the École Normale.

EDUCATION

The Scientific Areas, which are given teaching and scientific independence, as well as the administrative autonomy to manage the funds for education and research allotted by the Board of Directors, are also in charge of the organisation of PhD courses, each provided with a Teaching Board and a coordinator. There also are PhD courses organised by more than one research group. Their activity is characterised by limited number of selected students, structured and high-quality training offer, and significant volume of research activities students have to engage in throughout their course of study.

The training activity carried out in the 12 active PhD courses is at the highest standards, as shown by the scientific production and the positions achieved by students after the doctorate, as certified during the accreditation process of PhD courses in 2014 and as evidenced by the monitoring procedures carried out by ANVUR for 2015.

Currently, the reference regulatory framework is changing, especially as regards the assessment phase (which follows the accreditation phase.) The School, along with other higher education and research institutes, will have to oversee this system-building phase so as to prevent the risk of making this process too bureaucratic, at ministerial level, thereby compromising the development of the training activity.

It should also be noted that students taking up scientific and academic careers have to face increasing competition at international level in terms of both postdoc positions and permanent positions.

Strengths:

1) High-quality Teaching Boards, students’ internationalisation and availability of services and resources

The assessment carried out by the Italian Ministry of Education, University and Research (MIUR) when assigning funds for fellowships, places SISSA at the top of national rankings considering the quality of Teaching Boards, students’ internationalisation, and availability of services and
resources (as shown in the table below – in Italian). Said excellence becomes clear when comparing the weight of the School (calculated as the ratio of the no. of SISSA’s students to the total no. of students of other higher education schools) and the value of each indicator, given that the sum of % by column is equal to 100%. In line with its mission, the School shows a lower performance when it comes to the collaboration with the territory in education (based on the bursaries financed externally.)

<table>
<thead>
<tr>
<th>istituzione</th>
<th>qualità ricerca</th>
<th>membri collegio</th>
<th>internazionalizzazione</th>
<th>collaborazione sistema imprese</th>
<th>dotazione servizi e risorse</th>
<th>peso su Scuole (12/13)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SISSA</td>
<td>28,36%</td>
<td>36,40%</td>
<td>19,65%</td>
<td>31,08%</td>
<td>23,59%</td>
<td></td>
</tr>
<tr>
<td>IMT</td>
<td>6,23%</td>
<td>17,09%</td>
<td>16,25%</td>
<td>12,18%</td>
<td>11,33%</td>
<td></td>
</tr>
<tr>
<td>IUSS</td>
<td>10,75%</td>
<td>6,98%</td>
<td>8,87%</td>
<td>4,62%</td>
<td>6,73%</td>
<td></td>
</tr>
<tr>
<td>NORMALE</td>
<td>27,40%</td>
<td>17,26%</td>
<td>28,06%</td>
<td>26,73%</td>
<td>25,05%</td>
<td></td>
</tr>
<tr>
<td>S.ANNA</td>
<td>27,26%</td>
<td>22,22%</td>
<td>27,18%</td>
<td>25,39%</td>
<td>33,33%</td>
<td></td>
</tr>
</tbody>
</table>

2) Intense and structured training activity

SISSA provides an intense training activity throughout the entire course of study, both during the first year with classroom teaching, and in the following years through tutoring, single-subject courses, experimental research training, etc.

3) High attractiveness of PhD courses, also at international level

The quality of training offer and teaching staff is highlighted by the attractiveness towards potential students, calculated by the number of applications submitted to the calls for admission to PhD courses, and the quality of participants (which is also the result of the important international relations mentioned above), as shown in the table below (in Italian).

<table>
<thead>
<tr>
<th>Corso di PhD</th>
<th>Candidati</th>
<th>Idonei</th>
<th>Posti banditi</th>
<th>Posti coperti</th>
<th>Rapporto candidati/posti banditi</th>
<th>Rapporto idonei/posti banditi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geometry and Mathematical Physics</td>
<td>98</td>
<td>15</td>
<td>8</td>
<td>8</td>
<td>12,25</td>
<td>1,88</td>
</tr>
<tr>
<td>Mathematical Analysis, Models and Applications</td>
<td>135</td>
<td>12</td>
<td>8</td>
<td>8</td>
<td>16,88</td>
<td>1,50</td>
</tr>
<tr>
<td>Astrophysics</td>
<td>91</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>22,75</td>
<td>1,50</td>
</tr>
<tr>
<td>Astrophysics</td>
<td>79</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>15,80</td>
<td>1,20</td>
</tr>
<tr>
<td>Physics and Chemistry of Biological Systems</td>
<td>85</td>
<td>6</td>
<td>5</td>
<td>4</td>
<td>17,00</td>
<td>1,20</td>
</tr>
<tr>
<td>Statistical Physics</td>
<td>42</td>
<td>14</td>
<td>5</td>
<td>6</td>
<td>8,40</td>
<td>2,80</td>
</tr>
<tr>
<td>Theory and Numerical Simulation of Condensed Matter</td>
<td>63</td>
<td>10</td>
<td>7</td>
<td>7</td>
<td>9,00</td>
<td>1,43</td>
</tr>
<tr>
<td>Theoretical Particle Physics</td>
<td>125</td>
<td>10</td>
<td>5</td>
<td>5</td>
<td>25,00</td>
<td>2,00</td>
</tr>
<tr>
<td>Cognitive Neuroscience</td>
<td>111</td>
<td>17</td>
<td>7</td>
<td>7</td>
<td>15,86</td>
<td>2,43</td>
</tr>
<tr>
<td>Functional and Structural Genomics</td>
<td>101</td>
<td>10</td>
<td>7</td>
<td>6</td>
<td>14,43</td>
<td>1,43</td>
</tr>
<tr>
<td>Molecular Biology</td>
<td>125</td>
<td>9</td>
<td>8</td>
<td>7</td>
<td>15,63</td>
<td>1,13</td>
</tr>
<tr>
<td>Neurobiology</td>
<td>125</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>15,63</td>
<td>1,00</td>
</tr>
<tr>
<td>SISSA</td>
<td>1180</td>
<td>123</td>
<td>77</td>
<td>74</td>
<td>15,32</td>
<td>1,60</td>
</tr>
</tbody>
</table>
4) Recognition, during scientific placement, of the students’ skills that give them the opportunity to be competitive in the selection for postdoc positions, even at prestigious international research institutes.

The latest report of the International Scientific Advisory Committee (ISAC) points out some problems, especially regarding the number and the structure of PhD courses, and recommends actions aimed at sharing research activities and experiences of senior students to a greater extent with an interdisciplinary approach.

“THIRD MISSION” - INNOVATION

According to the definition given by ANVUR, the so called “third mission” means ‘the valorisation of research (patents, spin-offs, third-party research and agreements, intermediaries) [...] the production of social and cultural public goods (public engagement, cultural heritage, continuous training, clinical trials)’.

Even though the School by vocation allocates its main resources and expertise to research and training activities, it also engages in activities that can be considered as part of the “third mission”, especially in terms of quality of results.

The so-called "third Mission" of SISSA aims to respond at the societal and economic challenges, using the knowledge from research and education of the School's activities. This implies taking responsibility, actively and consciously, for the society in which SISSA is immersed. Therefore, "INNOVATION" means technology transfer and knowledge dissemination.

The cultural dissemination initiatives organised by the Interdisciplinary Laboratory and the scientific culture awareness-raising activities carried out through Medialab (meetings with schools, etc.) are worthy of mention.

Furthermore, SISSA participated in the creation of 2 spin-offs, that are still active and in which the university holds equity and has a patent portfolio consisting of 6 patents.

The current local, national and European context is characterised by a negative business generation rate, a change in the competition paradigm (also of the so-called emerging countries, e.g. China) that shifts competition from cost to innovation. This creates the need for new and more skilled professions to be introduced in the productive process of goods and services, and a strong interest for innovative and enabling technologies (e.g. HPC, mechatronics, etc.) These factors, together with the structuring by the EU and local bodies (e.g. the Region) of substantial funding programmes for networks formed by...
research centres and enterprises (e.g. ERDF ROP), open up new prospects that, seized in accordance with the School mission, can create important opportunities for SISSA’s researchers and students.

In order to complete the analysis of the reference context, it is necessary to describe the economic/financial and personnel situation.

**HUMAN RESOURCES**

SISSA is characterised by a relatively limited number of professors, researchers, and administrative and technical staff. As of 31st December 2015, 67 professors and researchers, 4 fixed-term researchers, 115 (FTE) postdocs were employed at SISSA. The administrative and technical staff were made up of 102 units: 92 with a permanent contract and 10 with a fixed-term contract, plus the Secretary General who acts as sole manager.

Nevertheless, quality is high, as highlighted by the performance described above, both in the scientific domain and for what concerns support services. Over the last four years, the School has invested in human resources, through external recruitment and enhancement of internal staff.

It should be noted that in the 2014-2017 period, there was a significant growth in the number of researchers with permanent positions, or tenures, and of the administrative staff - in accordance with the economic and financial sustainability, and the current regulation. This, as far as researchers are concerned, was also the result of the reward criteria on which the allocation of hiring capacity awarded by the MIUR is based, and of the possibility for the School to get incentives for the recruitment of researchers working abroad or grantees (e.g. ERC.)

Strengths:

1) Low ratio of personnel costs to revenues (< 50%)
2) Quality of recruitment processes
3) High level of internationalisation of the scientific component (recruitment that favours international careers)
4) Full compliance with the ministerial parameters that regulate the recruitment process, with possibility to get important incentives (co-financing of hires, possibility to hire beyond the turnover limit)
5) National context of incentives to internationalisation (direct recruitment, the so-called Natta chairs, etc.) fully consistent with the School’s recruitment policies

In its assessment, the ISAC underlines the necessity to balance the need to ensure internal careers, based on merit, with external hires, and considers the recruitment policy of foreign principal investigators extremely positive, since it can foster new international collaborations, thereby facilitating the scientific career of students and postdocs.

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4 “As in any institution, SISSA has to ensure high quality career development for its staff and at the same time to make sure that this does not hinder the necessity of allowing for new research directions and for bringing younger scientists into the School. At the moment some associate professors have reached a level of seniority and of international visibility which has entitled them, for quite some time now, to be promoted to full professorships. However, a careful balance must be maintained between internal promotions, the necessity of appointing outstanding new people and introducing new areas of research. The ISAC is very concerned that the present system of allocating points to a position is a strong obstacle to flexibility. Indeed hiring a Professor from outside ‘costs’ more than three promotions of associate Professors, creating pressure for internal promotion as opposed to external hiring.”
ECONOMIC AND FINANCIAL CONTEXT

Despite the difficult national context, the School’s economic and financial situation is stable, as highlighted by the financial statements and related reports (for more information, go to http://www.adm.sissa.it/bilanci/indice).

More specifically, SISSA is able to keep an excellent economic and financial balance, also thanks to considerable external funding for research (most of which from competitive tenders), as well as to ensure the necessary resources for researchers and students to carry out their activity. At the same time, the School is able to plan considerable investments both in world-class scientific infrastructure and in human resources development.

In its report issued in 2015 concerning the three-year period between 2012 and 2014, the Evaluation Committee dedicated an entire section to the analysis of the School’s financial statements, focusing on the 2014 financial statements (the first in economic and assets accounting). Said report, which uses innovative analysis tools (see the note for further information), makes an extremely positive assessment of the economic and financial balance, pointing out the School’s ability to self-generate resources to support current expenditure and investments.5

The presence of scientists educated and trained abroad in the faculty is a big asset for SISSA: it brings diverse views and experience of other systems to the school, important and profitable international connections and more possibilities to advise students and post-docs about their future careers.5

__5__ Using the typical indicators of business economics theory, the Evaluation Unit described the economic situation of 2014 as follows: “It is possible to appreciate the result of different management areas, with the operational management recording a positive result of 3,530,161 EUR [...]; if we exclude cost items that do not result in a cash outlay, we have a gross operating margin (EBITDA) of 6,772,384 EUR, that is 19.6% of the operating income. EBITDA is a very significant indicator as it gives a clear indication of the economic and financial management; it identifies the flow of resources that can be absorbed by working capital increases and/or that allow for the financing of operational and financial management needs. Given that data refers to one year only, caution is necessary. However, if these results were confirmed in 2015 and in the following financial years, the economic balance assessment would be extremely positive.” The notes read that “to appreciate the data, we should take into account that the Sant’Anna School of Advanced Studies (Pisa), which also recorded extremely positive economic results, shows an EBITDA/operating income ratio of 12.5%.” The data calculated for 2015, while showing an expected decrease compared to 2014 for the reasons explained above, still maintains an extremely positive value, equal to 14.5%.

As regards the analysis of the asset and liability statement, the Evaluation Unit used three indicators to measure the emerging trends in terms of economic and financial balance:

- Asset elasticity index (how many resources tend to become liquid, hence ‘accessible’), given by the ratio between current assets and total assets: 54.7 in 2014, 55.5 in 2015
- Ratio between debts and total liabilities and equity: 30% in 2014, 30% in 2015
- Comparison between total stock [receivables + cash equivalents] and liabilities, and particularly with short-term payables: receivables and cash equivalents largely exceed total liabilities and short-term payables
- Net equity on total liabilities + equity and strengthening trend: 20% in 2014, 22.3% in 2015
PART 2: THE DEFINITION OF THE STRATEGIC PLAN

The process chosen and approved by the governing bodies (March 2016) was characterised by the participation, at different stages, of the entire SISSA’s community (professors and researchers, administrative and technical staff, students, postdocs) and of the main external stakeholders (Region, Municipality, Prefecture and government representatives, industry, trade unions, etc.)

The Plan was defined over a period of approximately 6 months.

This participatory approach, aside from being consistent with the values of SISSA, aimed at promoting a profound dialogue within the School on its development over the next 5 years, as well as at sharing the actions necessary to support said development.

The table below shows how the process was structured, coordinated by the Director and the governing bodies, and implemented through the Planning and Control Area.

<table>
<thead>
<tr>
<th>Period</th>
<th>Activity</th>
<th>Actors involved</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 2016</td>
<td>Presentation and approval of the Strategic Plan definition process</td>
<td>Governing bodies</td>
</tr>
<tr>
<td>Spring 2016 (March – April)</td>
<td>Interviews with members of the SISSA community</td>
<td>Area Coordinators, Interdisciplinary Laboratory Director, student representatives, postdoc representatives, PTA representatives</td>
</tr>
<tr>
<td>April 2016</td>
<td>Presentation of the results of the first cycle of meetings</td>
<td>Governing bodies</td>
</tr>
<tr>
<td>April – May 2016</td>
<td>Meetings with external stakeholders</td>
<td>Prefecture, Region, Municipality, labor-market institutions, trade union</td>
</tr>
<tr>
<td>April – June 2016</td>
<td>Discussion within the Scientific Areas and the SISSA Community of the results of the first cycle of meetings</td>
<td>Aree scientifiche</td>
</tr>
<tr>
<td>June 2016</td>
<td>Interviews with members of the SISSA community, in order to take into account the results of the discussion</td>
<td>Area Coordinators, Interdisciplinary Laboratory Director, student representatives, postdoc representatives, PTA representatives</td>
</tr>
<tr>
<td>July – August 2016</td>
<td>Consolidation of the Strategic Plan</td>
<td>Area Coordinators, Direction, Planning and Control Area</td>
</tr>
<tr>
<td>September 2016</td>
<td>Presentation to the governing bodies</td>
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</tbody>
</table>
As for the method used, the aim was to:

1) Draft a lean plan, focused on the contents, that once approved could be easily adjusted and effectively spread (in Italian and English) also through an innovative graphic design.

2) Use the CANVAS method (adapting it to the circumstances of the university system) to stimulate and gather elements useful to draft the Plan, as it is considered extremely consistent with a participatory process.

3) Define, from the outset, the level of integration of the planning process with its operational development, by giving the Strategic Plan the task to define the framework of the strategic actions to be issued, on a three-year basis, in Integrated Plans, Annual and Three-Year Budgets, and Personnel Three-Year Plans.
PART 3: STRATEGIC ACTIONS 2016-2020

This section of the Plan aims to illustrate, based on the outcome of the analysis, definition, discussion, and information-sharing process described above, the strategic actions the School intends to carry out during the period concerned. Said strategic actions will then be implemented through the three-year planning documents (integrated plan, personnel plan, three-year budget, investment plan, etc.).

There are processes which are at the core of the School: search for excellence, high-level training, technological transfer (in a broad sense), spreading of culture and science.

The School needs to implement actions that allow its core processes to achieve increasingly better results. All of these ‘discretionary’ and ‘available’ actions, that aim at increasing the value that SISSA generates while pursuing its institutional objectives, form the School’s ‘strategic plan.’

Below is a list of strategic actions (divided by macro-area), consistent with the School’s value generation model, identified through a dialogue with the stakeholders involved, the preliminary discussion among the School’s bodies, and the Governing Bodies’ vision.

RESEARCH

- Support principal investigators and research groups in carrying out superior research activity, by providing services, and structural and instrumental resources
- Foster the School’s dedication to basic research, by providing services, and structural and instrumental resources
- Promote and support principal investigators in fund raising activities for competitive calls
- Promote actions (reward and result recognition systems, quality facilities and services, allocation of resources based on merit) aimed at creating an attractive environment for principal investigators
- Support principal investigators in establishing and maintaining international collaborations with prestigious research institutions
- Define, upon proposal of the Scientific Areas, a plan for the development of lines of research, consistent with the resources available, that consolidates the position of the School as a centre of excellence both nationally and internationally
- Promote and support the development of interdisciplinary frontier research activities (by allotting resources/incentives to ‘interdisciplinary’ research carried out by PIs, developing initiatives to spread the ‘interdisciplinary’ knowledge of research groups/PIs, drafting the personnel plan allocating a portion of resources to interdisciplinary activities)
- Prepare a ‘micro-grant’ plan for interdisciplinary and non-interdisciplinary groups of postdocs and PhD students
- Invest resources in a Plan for Visiting Scientists
- Develop initiatives to spread the ‘interdisciplinary’ knowledge of research groups/PIs
- Support research activities that are in the territory’s interest
- Draft a plan for the development of scientific equipment
- Consolidate the presence in regional technological clusters
- Consolidate regional infrastructure/project within UNITY FVG
TEACHING/TRAINING

- Promote and ensure excellence in teaching through high-quality teaching staff
- Ensure that students will receive constant training throughout the entire course of study, also by maintaining an appropriate student-teacher ratio
- Develop the national and international student recruitment network and widen its scope, also by increasing the visibility of SISSA’s PhDs. Where necessary, establish and develop agreements aimed at improving the efficacy of the student recruitment process
- Invest resources in a Plan for Visiting Scientists
- Formalise the School’s training offer, to make it accessible by adopting an interdisciplinary approach
- Enhance the training offer in the first part of the course of study with skills necessary for research, including interdisciplinary skills
- Offer supplementary training programmes at the end of the course of study to develop skills useful for placement in the scientific/industrial field
- Develop initiatives to spread the ‘inter-area’ knowledge of research groups/PIs
- Give evidence, also through suitable representation tools, of the activities carried out by students during training
- Offer services/opportunities for job offer/demand
- Support ‘individual promotion’ in the scientific world
- Organise relations with former students in a more effective manner

“THIRD MISSION” - INNOVATION

- Promote the creation of a network of collaborations with the manufacturing system, at regional, national and international level, that ‘mirrors’ the scientific network
- Implement framework agreements to establish a system aimed at representing and enhancing internal skills, also through the promotion of the UNITY FVG knowledge portal
- Develop shared services for technological transfer within the UNITY FVG project
- Explore opportunities to strengthen technological infrastructure useful for the development of applied research, also in collaboration with other sectors, both locally and with institutes/centres of excellence at national and international level
- Organise and participate in international initiatives for the promotion of skills (innovation fairs, etc.)
- Promote the placement of PhD students outside of academic institutions and in businesses, as entrepreneurs and/or professionals (primary role of students through problem-solving abilities and for knowledge transfer)
- Support the initiatives of SISSA’s community members for the enhancement and promotion of research outcomes (patents, spin-offs, etc.), by providing them with training, financial support and high-quality services
- Promote the School within the field of continuous and permanent HPC training, science dissemination, and health
- Define an organised and coordinated communication strategy for cultural initiatives (cultural brand)
- Promote initiatives to disseminate scientific culture, also in primary and secondary schools
- Contribute to the creation and promotion of the Triveneto university hub in order to qualify as one of the competence centres that will be identified within the National Industry 4.0 Plan of the Renzi Cabinet. Together with the other FVG universities, the School has already set up research and technological transfer projects that can be considered part of the Industry 4.0 Plan, such as the Lama regional lab (mechatronics) and the regional HPC infrastructure installed at SISSA).

CROSS-CUTTING ACTIONS

- Strengthen internal and external communication in a coordinated manner to ensure effective and accessible information
- Innovate the organisation of administrative and technical services by strengthening specialist and management skills, consistently with the roles expected
- Promote actions for organisational wellbeing, i.e. the improvement of work-life balance, the clarity of roles and objectives, and the identification of related professional development processes.
PART 4: OPERATIONAL DEVELOPMENT

Once the Plan and the actions set out therein are approved, it is necessary to prepare a detailed planning to guide the organisation towards their fulfilment. For this purpose, the following documents will be drafted:

A) The Integrated Plan (on annual rolling basis), setting out:

1) The detailed objectives into which the strategic actions are organised, also with reference to the implementation thereof in the various Areas

2) The resources allotted to said goals, compliance with the annual and three-year economic and financial planning, and with the personnel planning

3) The planning of the timing for completion

B) The Personnel Plan (on an annual rolling basis), setting out:

1) The allocation of resources based on the objectives established in the Integrated Plan, detailing the elements useful to put selective procedures into practice (e.g. SSD, category, etc.)

2) The timing (year) for the start of individual recruitment procedures

3) The economic and financial impacts of the Plan implementation

C) The annual and three-year budget (on an annual rolling basis), setting out:

1) The allocations in support of the implementation of the operational plan, considering investments and the personnel plan

As for timing planning, the Operational Plan will be submitted to the governing bodies for approval at the end of October, while the personnel and budget plans will be presented at a later date.
INTEGRATED PLAN 2019 – 2021 (Abstract)

The School implements policy planning through two key documents: the Strategic Plan and the Integrated Plan.

The Integrated Plan 2019-2021 is the three-year operational planning document (on an annual rolling basis) that leads the organisation towards the pursuit of the strategic actions of the School as set in the Strategic Plan 2016-2020.

Each Italian public administration is required to draw up annually the Performance Plan (provided for by art.10, c.1, letter a) of Legislative Decree 150/2009) and the three-year plan for the prevention of corruption (provided for by art.1, c.8 of Law 190/2012).

As foreseen by Anvur in the "Guidelines for the integrated management of the performance cycle" released in July 2015, starting from the Performance Plan 2017-2019 SISSA draws up a "single" document (Integrated Plan) for the planning of the activities of the School in terms of performance, transparency and anti-corruption, in accordance with the strategic planning of the School, but also with the planning of the economic and financial resources.

Starting in September each year, on the basis of the strategic actions identified by SISSA Strategic Plan 2016-2020, of the actions defined in the "Guidelines for SISSA Quality Policies", and in line with the general objectives of the university system, the Director identifies the guidelines for defining implementation actions and operational developments related to the three-year time horizon.

Based on these lines, the Area Coordinators start the consultation and planning phase of the development plans within the Area Board. Each scientific Area thus defines, within the framework of the strategic actions and quality policies defined by the School, its own operational objectives in terms of research, teaching/training and innovation, and identifies the human, instrumental and economic resources that are necessary for their achievement.

At the same time, on the basis of the strategic actions set by the Strategic Plan 2016-2020, of the School's Quality Policies, of the general objectives of the university system, and of the guidelines identified by the Director, the Secretary General starts defining the operational objectives of the administrative structures in terms of procedural monitoring and improvement, innovation, organizational well-being, transparency and anti-corruption.

The Integrated Plan document thus defines and consolidates all the specific, detailed targets necessary to implement the general objectives, quality actions and strategic actions of the School, with reference to effective implementation in each of the three scientific Areas, in the Interdisciplinary Laboratory and in the administrative and technical structures.

The Integrated Plan is the final product of the planning phase in the performance cycle. It is a "single" document that develops the planning of the School's activities in a systemic key, taking into account the strategy relative to institutional activities, the consequent effects of the same at the level of administrative and technical services, the economic and financial planning, the personnel planning, and the three-year MIUR programme.

The overall result is to provide a more complete and integrated view of the connection, in the planning phase, between to the two “souls” that constitute universities: the academic and the technical-administrative. The phases of monitoring and final reporting of the objectives are also developed with a single-framework vision, an added value to the entire performance system of the School.