TU Delft Vision on Integrity 2018-2024

Committee Reassessment Integrity Policy

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TUDelft

Preface

On January 23, 2018, the TU Delft Executive Board established the Terms of Reference for a reassessment of its integrity policy. The main aim of this reassessment is to perform an integral update of the TU Delft integrity policy and thereby develop a robust integrity infrastructure. The central element of the recalibration process is the development of this integral 'TU Delft Vision on Integrity 2018-2024' by the Committee Reassessment Integrity Policy (*Commissie Herijking Integriteitsbeleid*), reporting to the Rector Magnificus. As described in the Terms of Reference, this document will function as the 'integrity work plan' of the TU Delft Strategic Framework 2018-2024, which states that "We will (..) ensure that our integrity policy is implemented in a robust manner" (p. 26). As such, the Vision on Integrity will become part of the implementation agenda of the TU Delft Strategic Framework 2018-2024. The attention for ethical-evaluative aspects of technology has a long history within TU Delft. The question motivating the reassessment of the integrity policy is how TU Delft is going to continue this as part of its current institutional strategy. Additional reasons for reassessing TU Delft's integrity policy include the overall increased attention for integrity issues, the fact that (inter)national legislation and codes of conduct that TU Delft has committed to have been revised, as well as policy developments in related fields such as Open Science, data management and diversity.

The Committee Reassessment Integrity Policy consisted of the following members: Prof.dr. Sabine Roeser (TPM, chair), Prof.dr.ir. Merle de Kreuk (CEG), Prof.dr. Bernard Dam (AS), Prof.dr.ir. Marja Elsinga (ABE), Prof.dr.ir. Rinze Benedictus (AE). The committee secretary was dr. Lotte Melenhorst (directorate Strategic Development).

The committee first developed a draft version of the Vision on Integrity based on the input that was collected in a broad range of conversations. This consultation version was presented and broadly shared by the committee, in order to discuss it with and collect feedback from all segments of TU Delft. Also, a working conference on this draft Vision on Integrity was organized on the 4th of July 2018, for which all students and staff members of TU Delft were invited. Via this extensive procedure, the committee invited all members of the TU Delft community (academic and support staff as well as students) to reflect on the document. Based on their feedback, the committee finalized the Vision on Integrity that is presented here. The 'TU Delft Vision on Integrity 2018-2024' contains the following chapters:

1. TU Delft Integrity Statement

The first chapter consists of the 'TU Delft Integrity Statement', that represents the core of the Vision on Integrity. This statement contains the main integrity principles of TU Delft. The statement applies to all students, staff and guests of TU Delft. The committee proposes to the Executive Board to make this statement the foundation of the TU Delft integrity policy. The statement is based on the key values in the TU Delft Strategic Framework 2018-2024 and is in line with the core principles of the TU Delft Code of Ethics. As such the Integrity Statement does not contain a *new* set of values, but a more explicit, updated and concise version of the main integrity principles of TU Delft. With this Integrity Statement TU Delft also relates to broader societal debates and developments in higher education.

2. Integrity Infrastructure

The second part contains a proposal to the Executive Board concerning an integrity infrastructure for TU Delft. The proposed integrity infrastructure is a conceptual arrangement and is new as such, although many of the components that are presented as part of the structure already exist. Within TU Delft a widely shared perception is that the aggregate of existing committees, regulations, procedures and confidential advisors, although being very valuable, forms a patchwork that is not easy to grasp for students nor staff members. The proposed integrity infrastructure should form the foundation of a well-organized and understandable organization of integrity policy.

3. Policy Coordination

The Executive Board requested the committee via the Terms of Reference to pay special attention to the themes 'Policy coordination', 'Committees and procedures', 'Code of Ethics 2.0', 'Awareness programme' and 'Communication Strategy'. In this chapter the committee presents its proposal for policy coordination.

4. Working Agendas

In this chapter, the committee presents a Working Agenda for each of the four remaining themes that the Executive Board requested special attention for: A. Committees and procedures, B. Code of Ethics 2.0, C. Awareness programme, and D. Communication Strategy. Each Working Agenda contains a set of proposals, and at the start of each Working Agenda the corresponding guiding question from the Terms of Reference is

presented. Various proposals are also aimed at ensuring compliance with specific institutions' duties of care as described in Chapter 4 of the new Netherlands Code of Conduct for Research Integrity (and can be recognized by the reference *"[NCCRI #]"*).

On behalf of the committee, I would like to thank all staff members and students who have participated in the process that led to this Vision on Integrity. The committee has had very fruitful discussions with a broad range of members from the TU Delft community, both via email as well as in a large number of specially arranged meetings. Also, we are particularly grateful to all those that participated in the working conference on the draft Vision on Integrity. We were impressed by the openness and constructive input of our conversation partners, also taking into account the complexity of the topic and the many sensitive issues it involves.

We are confident that the Vision on Integrity expresses the key, broadly shared principles of the TU Delft community, but also proposes a range of actions that the community deems necessary in order to raise and maintain awareness. We look forward to the implementation of this Vision on Integrity and its Working Agendas, and hope that it stimulates the further development of an open culture in which any integrity questions, dilemmas or concerns can and will be discussed.

Sabine Roeser, *Chair Committee Reassessment Integrity Policy*
Delft, September 2018

1 TU Delft Integrity Statement

The core values of TU Delft as stated in the Strategic Framework 2018-2024 are Diversity, Integrity, Respect, Engagement, Courage and Trust ('DIRECT'). To ensure that the TU Delft community acts on the basis of these values, the following key principles serve as the basic guidelines for all students, academic and support staff, and guests of TU Delft:

a. All members of the TU Delft community treat each other with respect, irrespective of their culture, religion, ethnicity, socio-economic background, gender or sexual orientation.

b. Responsible research and innovation are key at TU Delft, by contributing to important values such as sustainability, safety, wellbeing and respect for persons, and to the UN Sustainable Development Goals.

c. The TU Delft Code of Conduct states the aspirations, responsibilities and rights that inspire and guide all members of the TU Delft community.

d. All people involved in research, teaching and innovation at TU Delft maintain the highest standards of academic integrity, and act upon the leading principles of the Netherlands Code of Conduct for Research Integrity, i.e. honesty, scrupulousness, transparency, independence and responsibility.

e. All people who use (digital) TU Delft facilities are careful and respectful in using, keeping and maintaining university resources, data and information.

f. All members of the TU Delft community are open and transparent about the roles they have and the activities they perform, both within and outside the university, to the extent that they are relevant to one's role within TU Delft.

g. All members of the TU Delft community take care to avoid any conflicts of interest or semblance thereof.

h. TU Delft is explicit and transparent about its ideals, values, principles and responsibilities, also in day-to-day practices, procedures and operations.

i. All members of the TU Delft community aim to inspire each other and are prepared to offer and receive constructive criticism.

j. All members of the TU Delft community ensure that education, research and innovation as well as administrative and decision-making processes are verifiable.

k. All members of the TU Delft community contribute to a healthy work and study environment.

l. All members of the TU Delft community contribute to a 'DIRECT' culture of Diversity, Integrity, Respect, Engagement, Courage and Trust.

2 Integrity Infrastructure

Guiding question: *What is the overall policy vision of TU Delft regarding integrity?*

Objective: *Create a robust ethical infrastructure, on the basis of which our integrity policy can be implemented successfully.*

The guidelines presented in the TU Delft Integrity Statement are the core of the TU Delft Vision on Integrity. In this chapter a robust integrity infrastructure is proposed, as requested in the Terms of Reference (see objective in frame).

The committee proposes the integrity infrastructure as presented in Table 1 (see p. 6) as the foundation of the integrity policy at TU Delft. Within TU Delft a widely shared perception is that the aggregate of existing committees, regulations, procedures and confidential advisors, although being very valuable, forms a patchwork that is not easy to grasp for students nor staff members. The proposed integrity infrastructure should form the foundation of a well-organized and understandable organization of integrity policy.

The committee proposes to structure the integrity policy according to three pillars: academic integrity, social integrity and organizational integrity. Each of these pillars consists of seven components: information, regulation, reflection, permission, consultation, investigation and coordination.

Table 1 indicates:
- Where information on integrity (policy) can be found and which core themes are covered by each pillar;
- The most important regulations that apply, for integrity in the broad sense, as well as per pillar. The lists are not exhaustive and contain only internal TU Delft documents, i.e. no external regulations are included;
- The awareness tools and trainings that are available per pillar for reflection;
- The permissions that must be acquired per pillar;
- The people that can be consulted per pillar;
- The committees and departments that can conduct investigations per pillar;
- The coordination of the TU Delft integrity policy, as well as the coordination per pillar.

Although the proposed integrity infrastructure is new as such, many of the components that are presented as part of the structure already exist. As discussed in the preface, the attention for ethical-evaluative aspects of technology has a long history within TU Delft. However, the Executive Board requested the committee in the Terms of Reference to "Create a robust ethical infrastructure, on the basis of which our integrity policy can be implemented successfully".

The proposed infrastructure contains a mixture of:
- Currently existing components that should be maintained as they are;
- Currently existing components that should be maintained, but in adjusted/updated form;
- New components that should be introduced.

The references in superscript in Table 1 refer to the relevant proposals that are presented in the Working Agendas in Chapter 4. Items with a reference are either currently existing components that should be maintained in adjusted/updated form, or new components that should be introduced. Each reference contains a letter (A-D), that refers to the relevant chapter, and a number in Roman script (I, II, etc.), that refers to the specific proposal in that particular chapter. Items without a reference are currently existing components that should be maintained as they are. Note that not all proposals are directly linked to a specific item in the infrastructure.

Table 1
TU Delft integrity infrastructure (new/adjusted components contain references to proposals in the Working Agendas in Chapter 4; components without references are already in place)

	Academic Integrity	Social Integrity	Organisational Integrity
Information	**Integrity Office & Integrity Roadmap[C.III]**		
	• Research ethics • Research integrity • Educational integrity • Responsible research cooperation • Research data management • Open Science	• (Un)desirable behavior • Diversity & inclusion • Work pressure • Interactions between staff and/or students	• Managerial integrity • Responsible cooperation • Ancillary activities • Responsible operational management • Fair treatment/assessment of students and staff members • Data management
Regulation	**Integrity Statement & Code of Conduct[C] & Declaration of Integrity[C.I]**		
	• Code of Honour (for students)[C.II] • Regulations on Academic Integrity Complaints[A.XI] • Fraud prevention framework[A.III] • Research Data Framework Policy[C.V]	• Regulation Complaints about Undesirable Behaviour • Diversity & Inclusion policy framework[A.XII] • University Action Plan Work Pressure[A.IX]	• Regulations on the reporting of irregularities • (Student) Complaints regulation • Code of Conduct for the use of ICT facilities • Teaching and Examination Regulations • Rules regarding the use of buildings, grounds and facilities
Reflection	• Dilemma game on Academic Integrity[C.V] • Training of staff and students[C.IV-IX] • Advisory IP-committee VC responsible cooperation[A.XIV]	• Dilemma game on Social Integrity[C.V] • Training of staff and students[C.IV-IX]	• Dilemma game on Organisational Integrity[C.V] • Training of staff and students[C.IV-IX]
Permission	• Human Research Ethics Committees[A.VI-VII]	• *Not applicable*	• Data Protection Officer • Authorisation for access and use of devices • Approval of ancillary activities
Consultation	• Confidential advisors academic integrity[A.II] • Data stewards • Human Research Ethics advisors[A.VII]	• Confidential advisors social integrity[A.II] • Academic counsellors, student counsellors and psychologists	• Confidential advisors organisational integrity[A.II] • Central Complaints Desk for Students
Investigation	• Academic integrity committee[A.XI] • Conflict of Interest Committee[A.I] • Integral Safety and Security	• Ombudsperson for staff (pilot)[A.IV] • Complaints committee undesirable behavior • Integral Safety and Security	• Ombudsperson for staff (pilot)[A.IV] • Ombudsperson for students • Examination Appeals Board • Central Objections Committee • Integral Safety and Security
Coordination	**Integrity Officer & Integrity Board**		
	• Academic Integrity Ambassador	• Social Integrity Ambassador	• Organisational Integrity Ambassador

3 Policy coordination

Guiding question: *How can TU Delft sustainably strengthen the policy coordination regarding integrity?*

The coordination of all integrity policy topics should be organized in such a manner that it best supports the students and staff[1] of TU Delft in their daily study and work. All staff members that work on integrity policy in one way or the other in the existing organization should be a part of this integrity policy network. This can best be achieved by replacing the existing 'Coordination Group Integrity' with the Board of a TU Delft Integrity Office (in short: "Integrity Board"). The Executive Board will appoint the members of the Integrity Board (i.e. steering committee), which are members of the academic staff from various Faculties.
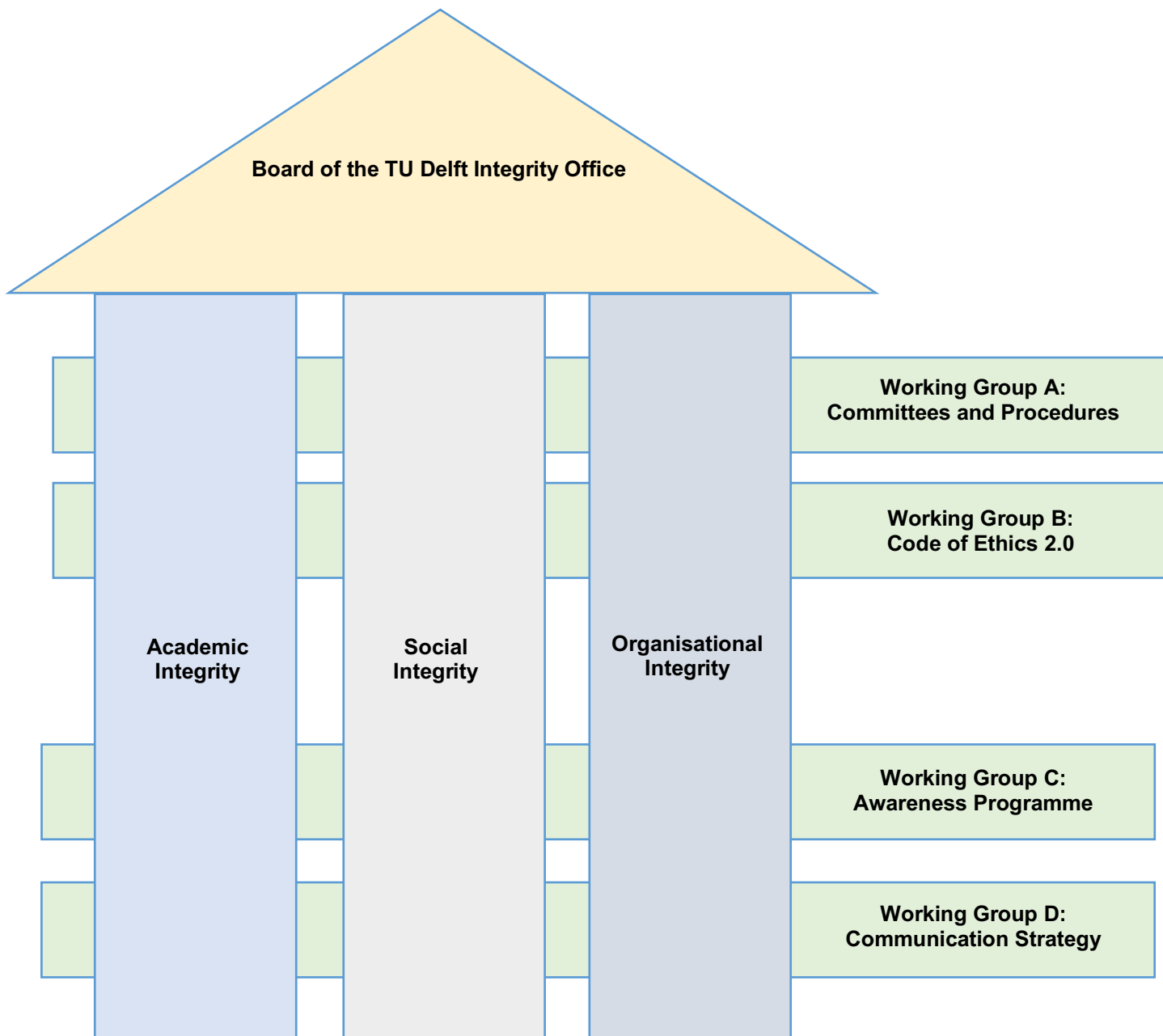
The Integrity Board will function as a steering committee, and reports directly to the Executive Board (Rector Magnificus). As such, the Integrity Board will monitor the development of implementation proposals for this Vision on Integrity. The proposals for each of the four Working Agendas (see Chapter 4) will be prepared by four separate Working Groups, that report directly to the Integrity Board. The Working Groups will consist of representatives of all relevant directorates of the Corporate Policy Office. The integrity policy coordination is visualized in Figure 1. Because each of the four Working Agendas applies to all three pillars of TU Delft's integrity policy, the Working Agendas transect the integrity pillars.

One of the Integrity Board members will be appointed as the chair, and as such act as the TU Delft Integrity Officer. The three pillars of the integrity infrastructure are also reflected in the Integrity Board, via the designation of other Board Members as 'Academic Integrity Ambassador', 'Social Integrity Ambassador' and 'Organisational Integrity Ambassador'. Each of them should facilitate regular communication between and consultation with the key actors within 'their' pillar, e.g. the chairs and secretaries of the involved committees, confidential advisors, trainers, legal officers etc.

The Integrity Board also has the following tasks: the monitoring of the implementation of the TU Delft integrity policy; acting as the first point of contact for students and staff members with questions concerning integrity; and supporting Faculties and directorates in developing their own integrity policies or related policies. The Integrity Board also explicitly has an agenda setting role, and is thus expected to draw the attention of the Executive Board to integrity related concerns within the university. In order to gain such insights and collect feedback, the Integrity Board assembles all staff members that are part of the Integrity Infrastructure in an annual integrity meeting.

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[1] Where this document refers to 'staff' in general terms, both academic and support staff are meant.

Figure 1
Visualisation of integrity policy coordination

Board of the TU Delft Integrity Office

Academic Integrity

Social Integrity

Organisational Integrity

Working Group A: Committees and Procedures

Working Group B: Code of Ethics 2.0

Working Group C: Awareness Programme

Working Group D: Communication Strategy

4 Working Agendas

A. Committees and procedures

> Guiding question: *How can the aggregate of existing committees, regulations, procedures and confidential advisors within TU Delft be continued in a sustainable manner and be expanded or limited if necessary?*

The proposed integrity infrastructure should form the foundation of a well-organized and understandable organization of integrity policy. In order to achieve this, the committee proposes to implement the following measures:

I) Revive the Conflict of Interest Committee in order to ensure that there is a procedure in place for complaints concerning potential conflicts of interest;

II) Further professionalize and diversify the team consisting of all three types of confidential advisors, i.e. confidential advisors academic integrity, social integrity (currently 'undesirable behavior') and organizational integrity (currently 'administrative integrity') *[NCCRI 20]*:
   - Further develop a procedure for the appointment and discharge of all three types of confidential advisors, including a description of their tasks and responsibilities that they receive with their appointment;
   - Offer a training programme to all three types of confidential advisors, including mandatory training for those who are recently appointed, and voluntary training depending on the needs of the advisors;
   - Facilitate an annual meeting between the three types of confidential advisors and the Integrity Board;
   - Recognize and reward the work of all three types of confidential advisors as part of the R&D cycle;
   - Ensure that all three types of confidential advisors write an annual report and discuss this with each other and the portfolio holder of the Executive Board, in order for the organization to learn from the confidential advisors' experiences and develop or adjust policies and guidelines if necessary.

III) Develop a TU wide fraud prevention framework aimed at students together with the Boards of Examiners, including a menu of potential actions and measures; ask all Faculties to develop annual fraud prevention action plans based on this framework.

IV) Monitor and evaluate the pilot with an ombudsperson for staff, with special attention to the ombudsperson's ability to hear both sides in a case and undertake action. Also explore what the ombudsperson's role is or could be in signaling non-compliance with the TU Delft integrity policy, and in consequently suggesting policy adjustments.

V) Further develop and refine the TU Delft Research Data Framework Policy (and related processes, also within Faculties), in consultation with data experts, legal experts and researchers, including ethicists, to incorporate their needs, wishes and recommendations, in order to facilitate good data management as the standard operating procedure *[NCCRI 11]*.
   - This policy should include sustainable methods for managing and archiving data, but also software codes, protocols, research materials and the accompanying meta data of all TU Delft research, as well as sharing data according to the FAIR principles[2] *[NCCRI 12-13-14]*. Part of the policy should be to provide insight into how data, software codes and research materials can be accessed *[NCCRI 15]*.
   - Ensure that all data policy is in line with the General Data Protection Regulation as well as with other legal and ethical requirements, such as concerning human research ethics. Also pay attention to the potential tensions between open data, privacy considerations, company interest and publication timing - in light of both data protection regulations and broader ethical considerations, for example when legislation lags behind technical developments that raise new types of ethical questions.
   - Develop TU Delft policy on dealing with Living Lab data, with the starting point that access to and use of non-open data such as privacy sensitive data must be in accordance with legal and ethical requirements, and can be allowed only for a specific purpose to a specific person, based on a formal application that should be registered in a system such as Labservant.

VI) Explore the need to increase the capacity and support of the central Human Research Ethics Committee in light of the increased need for and emphasis on ethical assessments, based on technological developments and requirements in the Netherlands Code of Conduct on Research Integrity *[NCCRI 18]* and the General Data

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[2] E.g. Findable, Accessible, Interoperable and Reusable; see also http://www.go-fair.org/fair-principles/.

Protection Regulation. Consider in particular appointing a committee assistant who is authorized to examine Minimal Risk Applications, in order for the committee secretary to focus on the secretarial support, and for the chair and members of the Human Research Ethics Committee to assess only High Risk Applications.

VII) Provide an infrastructure for the Faculty Human Research Committees, including a webpage on the application procedures for research conducted by students that involves human subjects, and including human research ethics advisors per Faculty that facilitate the (establishment of) Faculty committees and provide support to students and their supervisors in the application procedure.

VIII) Explore the necessity to develop additional procedures based on the requirements of the Dutch Medical Research Human Subjects Act and the Dutch Medical Device Act.

IX) Reassess the existing TU Delft procedures for the appointment, promotion and rewarding of staff members, with special attention for the transparency and fairness of the procedures [*NCCRI 5*]. Thereby attention should be paid to potentially perverse incentives in these procedures that discourage staff members to adhere to high standards of integrity, and to the relationship between work pressure (as discussed in the University Action Plan Work Pressure) and integrity *[NCCRI 3]*. Also explore the incorporation of integrity as a value in appointment procedures via the introduction of pre-employment screening, as well as incorporation of integrity in the leadership profile of employees.

X) Incorporate attention for integrity, including attention for diversity & inclusion, in the R&D cycle. This concerns both appreciation for the employee's efforts to stimulate (awareness of) integrity, as well as an invitation to discuss integrity dilemmas or concerns the employee has encountered.

XI) Ensure that the Academic Complaints Regulation and thus the procedures of the Academic Integrity Committee are up to date with the Netherlands Code of Conduct on Research Integrity and take measures if there are indications that (there is a risk that) norms are being violated [*NCCRI 7 & 21*].

XII) Support the development and subsequent implementation of a Diversity & Inclusion policy framework, under the lead of the Diversity Officer.

XIII) Develop guidelines for researchers and support staff with regard to responsible cooperation with private partners, public partners and with partners in particular countries. This should ensure that (partnership) agreements with other institutes, commissioners or research funders are only entered when they are compatible with the TU Delft integrity policy and/or contain fair agreements on whether or not to share and make available data and other research materials [*NCCRI 16*].

XIV) Develop an advice procedure at the Intellectual Property team of the Valorisation Centre for researchers that encounter challenges or difficulties in (standing/developing) collaborations *[NCCRI 16]*.

B. Code of Ethics 2.0

> Guiding question: *How can TU Delft, based on current needs, codes of conduct and legislation, develop a 'living' Code of Ethics 2.0?*

The TU Delft Code of Ethics (2012) was developed with the explicit intention to be a 'living document'. This requires permanent efforts for raising and maintaining awareness for the code, as well as regularly updating it. That in turn necessitates a clear demarcation of the responsibility for the content of the Code of Ethics, as well as for the training of students and staff. Proposals for the latter are incorporated in part C on the Awareness programme. With regard to the content of the Code of Ethics 2.0, the committee proposes to implement the following measures:

I) Appoint a taskforce with members of the support staff and the academic staff, including at least the members of the Integrity Board, to update the current Code of Ethics *[NCCRI 8]*, and give the taskforce the following assignment:
   - To structure the document according to the guidelines in the TU Delft Integrity Statement, which forms its foundation, and transform it into the 'TU Delft Code of Conduct', in order to avoid possible confusion about the scope and meaning of the concepts 'ethics' and 'integrity';
   - To update the document to be in line with the TU Delft Strategic Framework 2018-2024 (and to include definitions of the core values stated in it), with other codes (e.g. the Netherlands Code of Conduct for Research Integrity) and with current legislation (e.g. the General Data Protection Regulation);
   - To devote attention to prosocial behavior for staff and students, to diversity and inclusion, and to the responsibilities of PhD supervisors and promotors;
   - To devote attention to Open Science, management and privacy of research data and human research ethics;
   - To devote attention to authorship, of both publications and other research materials, as a further specification of the guidelines in the Netherlands Code of Conduct for Research Integrity;
   - To devote attention to integrity in terms of operational management and provide a more elaborate text with regard to support staff;
   - To devote attention to security of corporate information assets and privacy of personal information, and integrate or refer to the Code of Conduct for the use of ICT facilities;
   - To put more emphasis on creating and maintaining an environment in which people dare to address ethical issues, questions and dilemmas;
   - To define as clearly as possible what is considered to be undesirable behavior;
   - To emphasize the importance of continuous attention for awareness and reflection on integrity dilemmas;
   - To clarify what is and (in particular) what is not negotiable, e.g. the 'orange' versus the 'red' zone.

II) Request the Board of the Integrity Office to update the TU Delft Code of Conduct and the Vision on Integrity at least every six years, based on the most recent TU Delft Strategy.

C. Awareness programme

Guiding question: *How can TU Delft develop an awareness programme aimed at familiarity, prevention and support for students and staff?*

It is of utmost importance that all members of the TU Delft community are aware of TU Delft's integrity policy. But awareness of existing policies is not enough: rather, students and staff should be encouraged and feel safe to discuss integrity dilemmas. This requires continuous attention for the topic within all levels of the organization and for all dimensions of integrity. In order to develop an awareness programme that ensures that students and staff are familiar with integrity policy, and that has a preventive effect and provides support to students and staff in their daily life, the committee proposes the following measures:

I) Ensure that all TU Delft staff members sign a Declaration of Integrity, in which they declare that they are acquainted with and will behave in accordance with the TU Delft Integrity Statement and Code of Conduct. The relevant documents should be shared with new employees beforehand and should be actively discussed *[NCCRI 1-3-6-8-10]*.

II) Develop specific brochures (one-pagers) for different target groups, that serve as a short introduction to the main rules of conduct that apply to them. This should include at least those groups to which the Netherlands Code of Conduct applies, i.e. students (via an updated version of the Code of Honour), internal PhD candidates, external PhD candidates, guest researchers, part time researchers, external professionals that participate in TU Delft research, project leaders, supervisors and (research) managers, support staff, and citizens participating in research *[NCCRI 8]*.

III) Update the existing Integrity Roadmap in order for it to be in line with the new TU Delft integrity infrastructure.

IV) Further develop and coordinate a training programme for staff *[NCCRI 1 & 10]*, that is evaluated regularly, including:
   - Substantial attention for the three dimensions of integrity in the introduction and onboarding programmes for all new staff members;
   - A regular training for staff with a management role, in which the principle 'leading by example' is central, and attention is paid to the important role managers play in making dilemmas the subject of discussion;
   - A regular training via an e-module for all support staff (may be linked to the R&D procedure);
   - A regular training via an e-module on academic integrity for all scientific staff (may be linked to the R&D procedure) *[NCCRI 7 & 8]*;
   - An implicit bias training for staff, that is compulsory for members of search committees;
   - Voluntary "train-the-trainer" courses for support staff managers (e.g. how do discuss dilemmas within one's department), scientific staff managers (e.g. how to discuss dilemmas within one's research group) and teachers (e.g. how to integrate attention for integrity and ethics in courses, and how to treat and assess students with integrity);
   - A training on microaggression that is available for students and staff, including mentors;
   - Particular trainings for specific groups that may be especially vulnerable given their position, such as secretaries, temporary employees etc.;
   - Attention for integrity, including (human) research ethics and diversity & inclusion, in the University Teaching Qualification programme.

V) Revive the TU Delft dilemma game, both digitally and physically, including separate packages on academic integrity *[NCCRI 10]*, social integrity and organizational integrity:
   - The digital dilemma game should be publicly available on the integrity webpage, e.g. via a 'Training and awareness' menu item that also provides information on all available trainings.
   - The physical dilemma game should be available on request, both for independent use by groups and for use by groups with the support of a trainer.
   - Separate parts of the dilemma game could be offered as modules for particular target groups, such as members of support staff, scientific staff, PhD candidates and students.
   - The attention of staff in management positions and teachers should be drawn to the availability of the dilemma game regularly, in order to encourage that integrity dilemmas are discussed in meetings of research groups and departments and during courses for students and staff.

VI) Embed attention for the TU Delft integrity policy and moral dilemmas in existing courses for staff members, including at least the Tenure Track programme, the coaching leadership course and the '*Academisch leiderschap*' course for professors *[NCCRI 3]*;

VII) Further develop the ethics teaching lines, by incorporating training with regard to the Netherlands Code of Conduct for Research Integrity and the TU Delft Code of Conduct *[NCCRI 2]*. Also pay attention to becoming a responsible engineer at all suitable stages in education programs, not only in designated ethics courses/modules, and consider ways to pay attention to this at key moments for students, such as thesis projects and graduation ceremonies.

VIII) Integrate attention for integrity in the OWEE programme, in consultation with the organizing committee.

IX) Develop a more comprehensive, compulsory academic integrity programme for all (internal and external) PhD candidates [*NCCRI 1*]. This includes at least expanding the existing PhD Startup course on Scientific Integrity with follow-up meetings, broadening the scope to Research Data Management, and paying more attention to Human Research Ethics and to the roles and responsibilities of PhD candidates and their supervisors. Also explore the possibilities to incorporate various teaching methods, such as combining lectures with panel discussions and e-learning modules.

X) Develop a quality assurance system for PhD supervision, and develop a training and support programme as part of that, with special attention to research integrity, authorship etc. *[NCCRI 4]*. Monitor the quality and intensity of the supervision of junior researchers, as well as the composition of PhD committees *[NCCRI 9]*.

XI) Further develop guidelines on (un)desirable behavior, including information about procedures and sanctions.

XII) Facilitate discussions about integrity and ethics on a regular basis; with academic staff about the responsibilities of researchers, and between academic and support staff about (integrity dilemmas related to) administrative and operational procedures, such as time accounting and claiming expenses.

XIII) Actively invite students and staff to contact the Board of the Integrity Office with ideas for bottom-up awareness raising initiatives.

D. Communication strategy

> Guiding question: *How can TU Delft develop a clear communication strategy that reaches all those concerned and, in case of a potential crisis, provides clear guidelines?*

Without robust and long-term communication about integrity policy, this policy will not have much effect. Therefore a clear communication strategy is required. The committee proposes the following measures:

I) Transform the webpage integrity.tudelft.nl into a digital 'Integrity Office', i.e. a user-oriented webpage with information tailored to specific target groups. The integrity infrastructure of TU Delft forms the foundation of the webpage. For reasons of transparency, share as much information as possible publicly on the webpage, and incorporate a menu item 'integrity' on the TU Delft home page. Use the integrity page on the new employee portal as a reference page to the public webpage, and as a source of information on internal documents.

II) Ensure that all codes of conduct, regulations and legislation are easily accessible via the digital Integrity Office and provide information on the importance of compliance with all relevant policies *[NCCRI 6]*.

III) Publish the policy regarding the registration and publication of relevant ancillary activities, jobs and interests via the digital Integrity Office, as well as the measures that are taken to implement this policy *[NCCRI 19]*.

IV) Develop an internal communication strategy for the Integrity Office, that includes giving widespread and permanent attention to the Integrity Office as the go-to-place for any questions involving integrity. This involves tuning of communication about the three types of integrity, in order to avoid confusion and an information overload.

V) Develop and provide information materials that can be incorporated in the work place and in the study environment, e.g. visually attractive and informative posters with the core values of TU Delft, the Integrity Statement, or integrity dilemmas. Also think of ways to integrate such information in existing TU Delft documents and communication channels, such as printing the core values on the (back of) the TU Delft campus cards and business cards, presenting dilemmas on the tv screens in TU Delft buildings, or showing a Monday Morning Dilemma on the login page of computers.

VI) Designate the Integrity Officer as the contact person on behalf of the Integrity Board for colleagues and the Executive Board in case of a crisis situation concerning integrity policy; and as the contact person for integrity related questions that may arise in other types of crisis situations.

VII) Develop communication guidelines in accordance with the Integrity Statement for the TU Delft standpoint on complex themes such as collaboration with particular industries (e.g. oil/arms).

VIII) Emphasize the importance of careful and responsible communication of research results to the public in media training for researchers *[NCCRI 17]*.

IX) Serve an exemplary role as members of the Executive Board with regard to integrity. Consider ways in which the importance of an open and inclusive culture can be proactively communicated to the TU Delft community by the Executive Board as well as other senior staff, for example by publicly sharing and discussing integrity dilemma's from one's own experience *[NCCRI 3]*.