

Commission on Scientific Integrity and Plagiarism Control Group

Report: 1 January 2017 to 31 December 2017

1. Scientific integrity at the SNSF - An overview

Research integrity is of high importance to the SNSF. It has appointed the Commission on Research Integrity and the Plagiarism Control Group to prevent and penalise cases of scientific misconduct. In this document, these two bodies report on their activities.

The Plagiarism Control Group checks the research proposals submitted to the SNSF (i) at random (5% of all submissions) and (ii) on being alerted to potential research integrity cases by persons outside the Administrative Offices of the SNSF. In the year under review, the Plagiarism Control Group and the Commission on Scientific Integrity had to investigate a similar number of research integrity cases as in the previous years (Fig. 1). In 2017, the Plagiarism Control Group and the Commission on Research Integrity examined a total of 254 applications. In a first step, the examination consists in searching for identical passages by means of a special software. Detailed investigations into suspected scientific misconduct cases were deemed necessary for 83 applications, as they either contained an increased number of such passages or were reported as suspected cases by persons outside the SNSF.

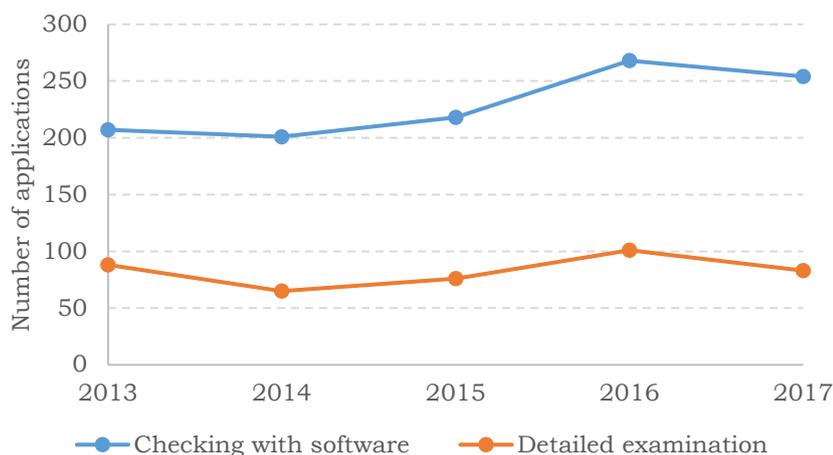


Fig. 1: Overview of the applications examined by the Plagiarism Control Group in 2017. The Group uses a software that analyses research plans submitted with applications for research funding (254 applications in 2017). In suspected cases of scientific misconduct, a detailed investigation is carried out (83 applications in 2017).

The Integrity Commission dealt with four cases in the report year. In all four cases, it recommended imposing sanctions to the Presiding Board of the Research Council and did not abandon any of the proceedings. A comparable number of sanctions were imposed in the report year as in previous years (Fig. 2).

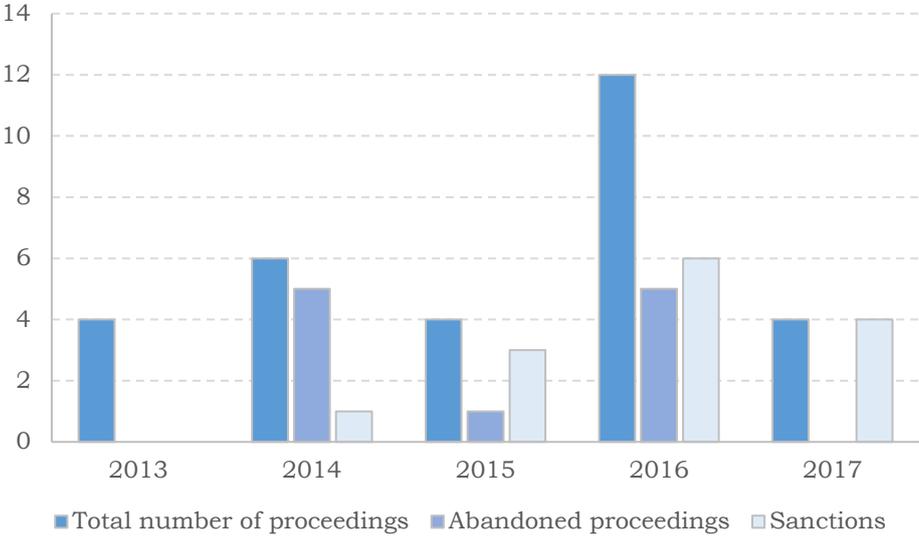


Fig. 2: Overview of the cases that the Integrity Commission dealt with in 2017. The figures refer to proceedings that were opened and/or concluded in the year under review.

2. Framework and bodies

2.1 Plagiarism Control Group

The SNSF started using a software to compare texts and investigate plagiarism in 2010 (*iThenticate* by the Turnitin company). Applications are checked for plagiarism either at random or in response to a report from an evaluator. The Plagiarism Control Group is responsible for coordinating the use of the software across all divisions, for scrutinising suspected cases of plagiarism, and for making decisions on the further course of action with respect to these cases. For this purpose, it collaborates closely with the Commission on Scientific Integrity.

In the year under review, the Plagiarism Control Group evaluated an alternative to *iThenticate*. The results of the evaluation showed that the alternative is more limited with regard to the number of sources, and the Control Group therefore did not recommend changing the software. Both systems underperform when it comes to analysing texts that are not in English.

The licence for *iThenticate* was hence renegotiated for a further year at approximately the same price, factoring in the steadily increasing number of tests (testing one document now costs \$19.80, compared to \$18.60 in the previous year). The licence includes unrestricted access to the repository that enables the highly efficient matching of documents.

2.2 Commission on Research Integrity

2.2.1 Composition and tasks

The Commission on Research Integrity is responsible for identifying cases of scientific misconduct in connection with applications for SNSF grants or the use thereof. Investigating suspected misconduct in the context of the application process is the primary responsibility of the Commission. If the suspected misconduct concerns the use of SNSF funding, the Commission assists the institution where the misconduct is believed to have taken place in its investigation according to the subsidiarity principle¹ (cf. chapter 3.3). By agreement with the President of the Integrity Commission, the investigation is coordinated by the commission member of the legal department and the scientific officer of the concerned body. A group of four is responsible for examining suspected cases (Article 2 of the Organisational Regulations²):

- a. President
- b. Delegate of the relevant evaluation body (division or specialised committee)
- c. Scientific officer from the body concerned
- d. Representative of the Legal department

(c. and d. are also members of the Plagiarism Control Group of the Administrative Offices).

If the Commission comes to the conclusion that scientific misconduct has occurred, it submits a recommendation to impose sanctions to the Presiding Board of the Research Council.

¹ Regulations on scientific misconduct

http://www.snf.ch/SiteCollectionDocuments/ueb_org_fehlverh_gesuchstellende_d.pdf

² Regulations of the Commission on Research Integrity

http://www.snf.ch/SiteCollectionDocuments/organisationsreglement_kommission_wiss_integritaet_d.pdf

2.2.2 President

The term of office of Professor K. Seelmann ended on 31 July 2017. Prior to his departure, the Presiding Board of the Research Council praised his efforts in setting up the Commission in October 2013 and thanked him for his commitment. Professor N. Capus was appointed new President of the Commission as of 1 August 2017. Professor Capus holds the chair for criminal law and criminal procedure at the University of Neuchâtel and is a former SNSF professor.

2.3 Retraction watch

Blogs such as the US retractionwatch.com are gaining in importance. Not every retraction of a publication is due to scientific misconduct, however. Any pointers in this direction need to be examined with the utmost care and it is important not to prejudge those concerned. The SNSF takes note of reports on retractionwatch and decides to either pursue them further or not, as the case may be.

3. Consideration of cases

The plagiarism investigation procedure and the cases examined by the Plagiarism Control Group and the Commission on Scientific Integrity are described below.

3.1 Plagiarism Control Group

3.1.1 Practice

Five per cent of the submitted applications³ are randomly picked and their research plans checked for copied or wrongly quoted text passages or other content (figures, tables, etc.). The Plagiarism Control Group conducts these analyses using the *iThenticate* software, which compares the research plans with texts on the internet and scientific databases (primarily [CrossCheck](#)). Only results with a similarity index⁴ of $\geq 10\%$ and/or the largest possible degree of correspondence⁵ of >200 words are followed up. Besides these spot checks, the Group investigates all suspected cases reported to them by the evaluators (referees and external reviewers) or by the rule-breaking researchers themselves. Based on a detailed analyses, the Group then decides whether the suspicions are justified and whether the case should be forwarded to the Commission for further investigation.

The consequences of cases of plagiarism are decided based on the amount of text copied without proper referencing (share of whole text, number of words), structure (longer passages or individual sentences) and content (general, current state of research, methods or research hypothesis). Incorrectly quoted passages from the applicant's own publications (self-plagiarism) are considered to be less serious than actual plagiarism and no sanctions are imposed in such cases. However, under certain circumstances they might still be regarded as cases of scientific misconduct. The decision to investigate a suspected case also depends on the results of a comparative analysis of the recently examined cases. In borderline cases (minor errors), the Plagiarism Control Group

³ 5% per funding scheme, only for full research applications. Lead agency projects, which are assessed by an external partner, so-called "bonus of excellence" projects, which are subject to a simplified evaluation process, and pre-proposals are excluded.

⁴ Percentage of texts identified by the software as identical with other published sources.

⁵ Largest source identified by the software.

sends applicants a written statement reminding them of the rules of good scientific practice. This reminder does not constitute sanctions of any kind, and it does not affect the evaluation of the application in any way.

When a suspected case of misconduct is forwarded to the Commission, the President decides whether to formally open proceedings or not.

3.1.2 Analyses in 2017

In 2017 the Control Group conducted random checks on 236 applications. For 171 applications, plagiarism could already be ruled out based on the analysis conducted by the software; 65 research plans needed to be checked in detail. The Control Group established that four applications had breached the rules of good scientific practice. However, as (i) only isolated passages and/or (ii) only a few works of the applicants themselves had not been correctly cited, the Plagiarism Control Group sent the applicants a written reminder of the rules of good research practice and subsequently closed the investigation. Three further cases examined in the previous year were closed in this manner in 2017.

All in all, 18 suspected cases of scientific misconduct were reported to the Plagiarism Control Group in 2017 by persons outside the Administrative Offices. Eleven reports were sent by Research Council members and seven by external reviewers. No one self-reported in the report year. All 18 reports were studied in detail by the Control Group. In 13 cases, suspicions of scientific misconduct proved to be unfounded and no further action was taken. In one application, the Control Group found minor irregularities as regards the citation of original sources and concluded the investigation by sending the applicants a written reminder of the rules of good scientific practice. In four cases, a serious breach of scientific integrity was identified based on a detailed investigation, and these cases were therefore forwarded to the Integrity Commission.

Tab. 1: Checks and decisions by the Plagiarism Control Group between 1 January 2017 and 31 December 2017

	Examinations		Decisions	
	Checking with the software	Detailed checking	Minor breach ^a	Forwarded to Integrity Commission
Random checks	236	65	7 ^b	0
Reports by externals	18	18	1	4
Total	254	83	8	4

^a Investigations into minor breaches are closed by sending the applicants a reminder of the rules of good scientific practice.

^b 4 from the 2017 reporting period, 3 transferred from 2016 reporting period

3.2 Commission on Research Integrity

3.2.1 Cases

Sanctions were imposed in all four cases investigated by the Integrity Commission. None of the proceedings was abandoned by the Integrity Commission.

The number of sanctions imposed in the report period was in the order of the previous years (0 to 4 cases per year since 2009, 3 on average). The cases concerned Division II and Division III (two cases each). All of the cases involved experienced researchers.

Tab. 2: Investigations and decisions by the Commission on Research Integrity between 1 January 2017 and 31 December 2017

Investigations	
Investigations carried over from the report period 1 January 2016 to 31 December 2016	1
Investigations launched during the period reported on here.	3
Decisions	
Sanctions imposed in the report period (warning, ban on submissions)	2 warnings, 2 bans on submissions
Abandonment of proceedings	--
Investigations still pending at the end of the report period	--
Total number of cases investigated	
	4

3.2.2 Meetings

After Prof. Capus started her term as President, the Commission convened to discuss two cases in the report year. The other cases were reviewed by circular letter.

3.2.3 Development of practice

In 2017 the Commission was able to develop and consolidate its activities. By explicitly including recurring constellations, for example, the Regulations on scientific misconduct, effective 1 September 2016, facilitate the investigation of suspected misconduct cases. They now also stipulate that sanctions may be imposed in cases of misconduct through negligence. This lowers the bar for the Commission in terms of the proof needed to decide whether a breach of duty has occurred.

3.3 Investigations conducted by research institutions

In the report year, the SNSF also had to deal with three cases which the relevant universities were primarily responsible for investigating.

3.3.1

In one case, a grantee informed the SNSF that irregularities had been detected in the work of a certain postdoc from his/her research group. The person in question had admitted to having manipulated results, whereupon the grantee had immediately reported this misconduct to the university and the editors of the publication. After investigating, the university came to the conclusion that the postdoc was solely responsible for the misconduct and decided to impose sanctions. The university informed the SNSF about the sanctions. As the postdoc was not funded by the SNSF (though other related projects in the same lab were) and the university had already imposed sanctions, the Integrity Commission decided that the SNSF did not need to start its own proceedings.

3.3.2

In a second case, the grantee informed the SNSF in the final report that an employee had breached the rules of good scientific practice in the course of the project. The grantee stated that the institution had conducted an investigation which brought to light data manipulation, for which one person was solely responsible. Similar misconduct was also found in work the same person had done to obtain a doctoral degree; the institution where the doctoral degree was obtained was therefore informed about the investigation. The misconduct had taken place in the context of research work funded by various foundations including the SNSF.

Based on the principle of subsidiarity, the SNSF decided that no additional investigation needed to be conducted. However, it demanded that the grantee inform the SNSF in full about any retraction and/or correction of publications.

3.3.3

In a third case, a grantee informed the SNSF that the publication list submitted together with the application contained administrative errors. After making several queries, the SNSF learnt that the institution had already conducted an investigation and imposed sanctions. As the sanctions concerned the grantee's career development only, the SNSF initiated its own proceedings and imposed sanctions.

4. Activities, events

4.1 Plenary meeting

According to the Regulations of the Commission on Scientific Integrity, the Commission convenes at least once a year for a plenary meeting. In 2017, the plenary meeting took place on 8 June. The main topics were the World Conference on Research Integrity in May 2017 as well as various practice-related questions concerning the cases examined by the Plagiarism Control Group and the Integrity Commission.

4.2 World Conference on Research Integrity

Between 28 and 31 May 2017, a delegation of four SNSF representatives took part in the 5th World Conference on Research Integrity in Amsterdam. Exchanges with different actors in the field of scientific integrity showed that the procedures defined by the SNSF for investigating and discussing/deciding suspected misconduct cases are clear and transparent and meet legal requirements.

However, there is still room for improvement with regard to the following points:

- The SNSF does not require applicants to receive scientific integrity training (e.g. as an eligibility requirement and/or as a part of the sanctions).
- Barely any research is done in Switzerland on scientific integrity.
- It would be useful to have a national Code of Conduct and an independent office which would coordinate at least the more complex cases and to which cases investigated by institutions would have to be reported.

5. Outlook

5.1 Review of misconduct definitions

The Regulations on scientific misconduct of the SNSF are based on the brochure on scientific integrity published by the Academies in 2008. The long-debated refinement of definitions of scientific misconduct should be tackled in collaboration with the Academies and swissuniversities.

5.2 International coordination

The SNSF used to be a member of the Working Group of Science Europe (SE) on scientific integrity. This working group's mandate expired in spring 2017 and it was decided not to renew it for the time being. In order to maintain contacts and network with actors in the field of scientific integrity in Europe, the SNSF is considering becoming a member of ENRIO (European Network of Research Integrity Offices).

Annex I

Composition of the Commission on Research Integrity of the SNSF

In the report year 2017, the composition of the Commission was as follows:

Chair

- Prof. Dr. iur. Dr. h.c. Kurt Seelmann, President (until 31 July 2017)
- Prof. Dr. iur. Nadja Capus, President (as of 1 August 2017)

Delegates from the divisions and Specialised Committees of the National Research Council

- Prof. Corina Caduff, Div. I
- Prof. Andrew Barry, Div. II
- Prof. Didier Trono, Div. III
- Prof. Regina Aebi-Müller, Div. IV
- Prof. Michael Hottiger, FA Careers
- Prof. Dominique Soldati-Favre (until 30 April 2017), Prof. Anna Fontcuberta i Morral (as of 1 May 2017), Specialised Committee International Cooperation
- Prof. Alexander Grob, Specialised Committee Interdisciplinary Research

Scientific officers (also members of the Plagiarism Control Group of the Administrative Offices)

- Gilles Wasser, Div. I
- Dr. Liz Kohl, Div. II
- Dr. Martin von Arx, Div. III
- Dr. Marjory Hunt (until 31 May 2017), Dr. Claudia Rutte (as of 1 June 2017), Div. IV
- Dr. Martin Christen, Dr. Marco Bieri, Careers
- Dr. Patricia Jungo (until 31 March 2017), Elisabeth Schenker (until 31 October 2017), Dr. Stéphanie Boder-Pasche, Dr. Stephanie Hoppeler (both as of 1 November 2017), InterCo

Representative of the Legal Department

- Claudia Lautenschütz (deputy: Inge Blatter)

Administrative secretariat

- Daniela Büschlen, Secretariat Legal Department

31.05.2018/mvo/cla