

# **Mathematical Institute of SANU**

## **The Plan for Achieving and Improving Gender Equality (Gender Equality Plan)**

### **Introduction**

The Mathematical Institute of the Serbian Academy of Sciences and Arts (hereinafter: MI SANU or Institute) is an institute of national importance for the Republic of Serbia. It is dedicated to achieving scientific excellence and top results in the fields of mechanics, mathematical and computer sciences, and their applications, fostering a culture of responsible research and innovation (RRI), and contributing to the achievement of strategic goals of the overall development of the Republic of Serbia.

In achieving these goals, MI SANU recognizes the contribution, individual characteristics, education, specificities and skills of its associates, and is committed to building a culture and environment in which freedom in research, mutual respect and appreciation is nurtured regardless of origin, gender, age, religious or ethnic affiliation, or any other form of identity.

Improving gender equality is an important component in building these values, their sustainability and ensuring equal opportunities that MI SANU guarantees in all spheres of its activity. The principles of Gender Equality (GE) and anti-discrimination policies have been, since the establishment of MI SANU, implied in its work, and the Plan for Achieving and Improving Gender Equality (Plan) aims to introduce measures to promote GE and express the commitment of MI SANU to promote gender equality at all levels, including consistent application of principles, main goals and concrete measures that improve this area.

On May 26, 2021, the Management Board of MI SANU, at the suggestion of the Working Group for Gender Equality (Working Group) and the research team of the Institute participating in the European Horizon 2020 project LeTSGEPs (Leading Towards Sustainable Gender Equality Plans in Research Institutions), adopted its first one-year Plan. This document, the implementation of which is planned for a period of one year, is the basis for the adoption of a new three-year plan, as MI SANU has committed to participate in the project "LeTSGEPs". Despite delays in implementation, which were largely caused by the direct or indirect consequences of the Kovid-19 virus pandemic, one year of implementation experience has been valuable in compiling and defining the objectives of this new Plan.

### **1. The meaning of certain expressions in the Plan**

In the absence of standardized terminology of GE, the meaning of certain terms used in this Plan is uniform, in accordance with the laws and strategic documents adopted in the Republic of Serbia in this domain, and some of these terms have the following meaning:

- a) Gender means socially determined roles, opportunities, behaviors, activities and attributes, which a certain society considers appropriate for women and men, including the relationship between men and women and roles in those relations that are socially determined depending on gender;
- b) Sex is a biological characteristic on the basis of which people are divided into women and men;
- c) Gender Equality implies equal participation of all persons regardless of gender in all areas of social and private life, as well as their equal position, equal opportunities to exercise their rights and equal benefit from the results achieved in accordance with the Constitution of the Republic of Serbia, generally accepted rules of international law, ratified international treaties and laws;
- d) Gender perspective refers to taking into account gender differences, sex differences and different interests, needs and priorities of women and men and their involvement in all phases of planning, preparation, adoption and implementation of policies, regulations, measures and activities;
- e) Gender dimension means integrating sex and gender analysis into research;
- f) Gender-sensitive language is a language that promotes equality between women and men and a means of influencing the consciousness of those who use that language in the direction of achieving equality, including changes in opinions, attitudes and behavior within the language used in personal and professional life;
- g) Gender responsive budgeting is the introduction of the principle of Gender Equality in the budget process or the process of financial planning; implies a gender budget analysis and the inclusion of a gender perspective in all budget processes and the restructuring of revenues and expenditures with a view to promoting gender equality;
- h) Gender balance exists when the representation of one of the sexes is between 40-50% in relation to the other sex, and significantly unbalanced gender representation exists when the representation of one sex is lower than 40% in relation to the other sex, unless a special regulation defines differently;
- i) Gender analysis is an assessment of the impact of the consequences of each planned activity, including legislation, measures and activities, public policies and programs, for women and men and gender equality in all areas and at all levels;
- j) Gender-based violence is any form of physical, sexual, psychological, economic and social violence committed against a person or groups of persons due to belonging to a certain sex or gender, as well as threats of such acts, regardless of whether they occur in public or private life, as well as any form of violence that mainly affects persons belonging to a certain gender;

- k) Harassment is any unwanted conduct that has the purpose or consequence of violating the dignity of a person or group of persons on the basis of sex or gender, and especially if it creates fear or a hostile, intimidating, humiliating and offensive environment;
- l) Sexual harassment is any unwanted verbal, non-verbal or physical act of a sexual nature that has the purpose or consequence of violating personal dignity, especially if it creates fear, hostile, intimidating, humiliating or offensive environment;
- m) Gender stereotypes are traditionally formed and rooted ideas according to which women and men are arbitrarily assigned characteristics and roles that determine and limit their possibilities and position in society.

## **2. Existing legal framework**

Protection against discrimination and respect for gender equality are the basis for the realization of human rights established by international documents confirmed by the Republic of Serbia. The process of including our country in European integration requires that the highest international standards resulting from these documents be respected in the realization and protection of basic human rights.

In its commitment to Gender Equality, MI SANU relies on the international and national legal framework governing this area.

### **2.1 International documents**

The key international instruments this Plan is harmonized with are:

1. The UN Universal Declaration of Human Rights (1948),
2. The Convention on the Elimination of All Forms of Discrimination against Women, UN General Assembly Resolution 34/180, 1979 (“Official Journal of SFRY – International Treaties”, No 11/81),
3. The Optional Protocol to the Convention on the Elimination of All Forms of Discrimination against Women (“Official Journal of FRY – International Treaties”, No 13/02);
4. The International Covenant on Civil and Political Rights, UN General Assembly Resolution 2200 A(XXI), 1966 (“Official Journal of SFRY – International Treaties”, No 7/71);
5. The International Covenant on Economic, Social and Cultural Rights, UN General Assembly Resolution 2200 A(XXI), 1966. (“Official Journal of SFRY – International Treaties”, No 7/71);
6. The Optional Protocol to the International Covenant on Civil and Political Rights (“Official Journal of FRY – International Treaties”, No 4/01);
7. The Optional Protocol to the International Covenant on Social and Economic Rights (“Official Journal of FRY – International Treaties”, No 4/01);

8. The UN Convention on the Rights of Women, 1952;
9. The Convention on the Elimination of All Forms of Racial Discrimination, 1966;
10. The Nairobi Forward-looking Strategies for the Advancement of Women, UN, 1985;
11. The Vienna Declaration and Action Programme, UN, 1993;
12. The Beijing Declaration and Platform for Action, adopted at the Fourth World Conference on Women, 1995;
13. The UN Millennium Development Goals, adopted at the UN Millennium Summit, 2000;
14. The UN Security Council Resolution 1325 (2000),
15. The UN General Assembly Resolution 3521 (XXX) Equality between Men and Women and Elimination of Discrimination against Women, 1975;
16. The Convention against Discrimination in Education, 1960;
17. The Convention concerning Discrimination in Respect of Employment and Occupation (ILO-C-19) 1958;
18. The Maternity Protection Convention (ILO-C-103) 1952;
19. The Convention concerning Equal Opportunities and Equal Treatment for Men and Women Workers (Workers with Family Responsibilities) (ILO-C-156), 1981;
20. The Convention concerning Equal Remuneration for Men and Women Workers for Work of Equal Value (ILO-C-100), 1951;
21. The General Recommendation 33 of the Committee for the Elimination of Discrimination against Women on Access to Justice, 2015.

The Plan is also harmonized with all Council of Europe documents in the field of human rights and gender equality. These documents are:

1. The European Convention for the Protection of Human Rights and Fundamental Freedoms, 1950, amended pursuant to Protocol No 11 (“Official Journal of SMNE – International Treaties”, No 9/03, 5/05 and 7/05 – corr.) with Protocol 7 (1984) and Protocol 12 (2000);
2. European Social Charter, 1961 and Revised European Social Charter, 1996;
3. Declaration on Equality between Women and Men as a Fundamental Criterion of Democracy, 1997;
4. Recommendation of the Committee of Ministers of the Council of Europe No R (97) 20 – on “hate speech”;
5. Recommendation by the Committee of Ministers of the Council of Europe No R (97) 21 – on the media and the promotion of a culture of tolerance;

6. Recommendation of the Committee of Ministers on: education CM/Rec(2007)13; elimination of sexism in language P(90)4; equality between women and men P(1229)1994; reconciling work and family life P(96)5; role of women in science and technology P(1435)1999; balanced participation of women and men in political and public decision-making P(2003)3; standards and mechanisms to achieve gender equality P(2007).

Considering its European Union membership candidate status, the Republic of Serbia is committed to fully adopting the EU acquis. Therefore, this Plan takes into consideration key European Union documents in this field:

1. The Treaty of Amsterdam (1997) regulating human rights, particularly the principle of equal treatment of men and women and the prohibition of sex-based discrimination;
2. The European Union Charter on Fundamental Rights,
3. Council Resolution on Women in Science;
4. Council Recommendation on the promotion of positive action for women;
5. Commission Recommendation on the protection of dignity of women and men at work;
6. Council Resolution on the promotion of equal opportunities for women;
7. Council Resolution on the balanced participation of men and women in decision-making;
8. Resolution of the Council and of the Ministers for Employment and Social Policy on the balanced participation of women and men in family and working life;
9. Directive no. 2000/43/EC of 29 June 2000 implementing the principle of equal treatment between persons irrespective of racial or ethnic origin,
10. Directive no. 2000/78/EC of 27 November 2000 establishing a general framework for equal treatment in employment and occupation;
11. Directive no. 2006/54/EC on the implementation of the principle of equal opportunities and equal treatment of men and women in matters of employment and occupation;
12. Directive 92/85/EEC on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth or are breastfeeding (tenth individual Directive within the meaning of Article 16 (1) of Directive 89/391/EEC);
13. European Parliament Resolution on women in decision making;

as well as other acts of importance for achieving gender equality in society and especially in scientific work.

In addition, the development of the Plan took into account the strategic goals set out in the European Commission Gender Equality Strategy 2020-2025, namely:

- (1) ending gender-based violence,
- (2) challenging gender stereotypes,
- (3) closing gender gaps in the labour market;
- (4) achieving equal participation across different sectors of the economy
- (5) addressing the gender pay and pension gap,
- (6) closing the gender care gap, and
- (7) achieving gender balance in decision-making and politics.

The plan relies in particular on the values, principles and basic elements of the European Commission's Horizon Europe Research and Innovation Program (2020), as well as the current Horizon 2020 Program, in which MI SANU participates as one of the partners in international projects, in the field of Responsible Research and Innovation, which includes Gender Equality in science.

## **2.1 National Documents**

The Constitution of the Republic of Serbia (2006) guarantees human rights established by ratified international treaties, generally accepted rules of international law and laws (Article 18, paragraph 1). In Article 15, the Constitution establishes a policy of equal opportunities as an obligation of the state and guarantees equality between women and men.

In addition to the highest legal act, the national legal framework on which this Plan is based consists, inter alia, of the following regulations and strategic documents:

1. Gender Equality Law (2021)
2. Law on the Prohibition of Discrimination (2009)
3. Law on Preventing the Discrimination of Persons with Disabilities (2006);
4. Law on the Ombudsperson (from 2009)
5. Law on Science and Research (2019)
6. Family Law (2005);
7. Labor Law (2005)
8. Law on Personal Data Protection (2018)
9. National Action Plan for the Implementation of UN Security Council Resolution 1325 - Women, Peace and Security in the Republic of Serbia (2017-2020)
10. Strategy of scientific and technological development of the Republic of Serbia for the period from 2021-2025. - "The power of knowledge"

The abovementioned documents are in accordance with the priorities and goals defined in the Plan of the European Research Area and the integration of the scientific research system of the Republic of Serbia into it. The Strategy of Scientific and

Technological Development, (2021) defines also as one of its aims "Gender Equality in decision making positions, development of policy for gender equality in research organizations".

The Law on Science and Research, in the Article 4, defines as one of its basic principles of scientific work "Gender Equality in science and research, as well as in decision-making bodies".

Finally, the Scientific Council of MI SANU especially recognized the following documents as important for its work - the Code of Conduct in Scientific Research, adopted by the Government of the Republic of Serbia (GoS), and the Code of Ethics of the European Mathematical Society<sup>1</sup>. Both these documents also provide for the prohibition of all forms of discrimination, as well as the fostering of the principle of Gender Equality.

### **3. Why does MI SANU adopt the Plan for Achieving and Improving Gender Equality?**

In the global structure of researchers in mathematics, computer science and mechanics, there are usually fewer women than men, although looking at the Republic of Serbia and MI SANU itself, this statistic is significantly more favorable. Creating conditions that would enable and encourage women to continue their careers in disciplines that are traditionally nurtured in MI SANU is important for its future development and staff empowerment.

Also, a balanced relationship between professional and work responsibilities is important for all researchers and all employees, in order to be able to realize their full potential, of which MI SANU should also take care. In addition, given the numerous initiatives not only in Europe but worldwide around women in STEM disciplines, participation in such initiatives, activities and international networking is undoubtedly beneficial for researchers of both sexes and attracting new scientific projects and collaborations, especially international ones.

One of the main instruments for achieving these goals is the adoption of the Plan. It also documents all the efforts that MI SANU has already undertaken in this direction, while at the same time being a guide for further measures in the development of Gender Equality in MI SANU, and support to the integration of Gender Equality in policies and practices of of umbrella and partner institutions MI SANU.

### **4. Responsibility for implementing the GEP**

The only way to achieve full equality and an affirmative environment in which everyone feels comfortable is the support of all employees and associates of MI SANU to these principles, in all areas and activities in which they operate. That is why the broad participation of employees in creating institutional policy and building this Plan is the most important.

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<sup>1</sup> MI SANU is an institutional member of the European Mathematical Society.

Like the 2021 Plan, this Plan was prepared by the MI SANU Working Group on Gender Equality (Working Group), formed through the participation of MI SANU in the Horizon 2020 project LeTSGEPs, in cooperation with MI SANU Council for Responsible Research and Innovation (MI SANU Council for RRI), and the Center for Science and Innovation "Intersection Point", as an advisor to MI SANU in this project

The implementation of the Plan will be supervised by the Gender Equality Advisor, the Scientific Council of MI SANU and the Working Group, the Director and the Working Group which will continue its work also after the completion of the Horizon project 2020 LeTSGEPs.

### **5. The GEP time-line**

The Gender Equality Plan of MI SANU is one of the strategic documents of MI SANU, scheduled to be valid until December 31, 2024. As already mentioned, an important component in its design had preparatory trainings and research within the Horizon 2020 LeTSGEPs project, supported by MI SANU will have until the completion of the project itself, ie until December 31, 2023. Based on the experience from the implementation of the Plan from 2021, it is estimated that a period of three years is a reasonable framework in which measures could be implemented from the Plan. review the results of its implementation and adopt a new three-year plan. Also, it is possible to supplement and revise this Plan, if necessary.

The leadership of MI SANU, Advisor for Gender Equality and Prevention of Discrimination, the Working Group and MI SANU Council for RRI will ensure that all employees of MI SANU are involved in this process and those current needs, issues and measures to be implemented are continuously considered or adjust.

### **6. GEP Main goals**

MI SANU commits to undertake the activities necessary to create structural changes in order to achieve and maintain a higher degree of Gender Equality at all levels and in all areas of its work and research, with the objectives and goals that are, together with the measures for its achievement, presented in the following table:

<b>Objectives</b>	<b>Smart goals</b>
Institutional capacity building for identification of relevant data and their ongoing maintenance, as well as establishment of systematic procedures and information systems to improve data collection and address data shortages.	Empowerment and motivation of MI SANU associates to run in the elections for members of the Management Board from among the employees, with the aim that in the next election cycle at least one woman will be elected, according to the procedure prescribed by the Statute of MI SANU

	<p>Collection of data on the gender structure of lecturers in departments and seminars, authors of the articles in the MISANU repository, and other data relevant for the work of the Institute and Gender Equality, segregated by gender and age</p> <p>Mentoring program in the field of Gender Equality and research career</p>
<p>Strengthening the visibility of gender equality and raising awareness of the importance and benefits of adequate gender balance at all levels.</p>	<p>Organizing an annual workshop on Gender Equality topics in research,</p> <p>Mentoring program in the field of Gender Equality and research career</p> <p>Celebrating Women in Mathematics Day, Women in Computer Science Days, and Girls' in Information and Communication Technologies (ICT) Day</p>
<p>Promoting gender diversity within academic structures, with a strong emphasis on greater participation of women in decision-making bodies and decision-making processes, in accordance with institutional, national and other regulatory frameworks.</p>	<p>Nomination of Gender Equality and Preventing Discrimination officer,</p> <p>Empowerment and motivation of MI SANU associates to run in the elections for members of the Management Board from among the employees, with the aim that in the next election cycle at least one woman will be elected, according to the procedure prescribed by the Statute of MI SANU</p> <p>Monitoring of the structure of working bodies and evaluation commissions and enhanced of gender equality in their composition</p>
<p>Applications of gender sensitive budgeting</p>	<p>Raised awareness on the importance of gender sensitive budgeting and building capacity for its implementation, through the built partnership with the Ministry of Education, Science and Technological Development, the Ministry of Finance and the UNWomen on mainstreaming gender sensitive budgeting in MI SANU and other research performing organisations</p>

	Preparation of a gender-sensitive financial plan, starting in 2022
Supporting Gender in Research and Innovation content component	Monitoring the degree of integration of the gender dimension in the research of MI SANU (examination of gender norms and stereotypes and research of the needs, attitudes and behavior of both sexes through research work)  Organizing an annual workshop on gender mainstreaming in research and innovation  Support for cooperation with the Association of European Women in Mathematics
Empowering employees to achieve a balance between work and leisure	Approval of remote work in specific family or general circumstances
Prohibition of sexual and other harassment	Adoption of the rulebook on the prohibition of sexual and other harassment

*Table 1. Goals and measures in achieving gender equality*

### **7. Overview of MI SANU's previous activities in improving Gender Equality**

During the 75 years of its existence, MI SANU has nurtured a culture of affirmation of its employees and associates, regardless of gender, ethnic, national and religious affiliation. It is especially important to point out that many of the concrete measures that the European Commission suggests to encourage the development of this culture have been practiced by MI SANU for several years and decades. We will look at some of the most important ones.

MI SANU, together with the Center for the Promotion of Science, has been organizing the May Month of Mathematics (M3) event for 10 years now, which aims to bring mathematical and computer sciences closer to the general public, but also to motivate young people to study and work in these fields. The most accurate proof that our efforts have been successful is the constant increase in the interest of female students in computer science at various faculties in the country, while in mathematics this number is far higher than the average of the European Union countries. In 2020, M3 hosted the exhibition "Women of Europe in Mathematics", and on that occasion the appropriate catalog was promoted. A good part of its circulation was donated to the students of the Mathematical Gymnasium in Belgrade and the Gymnasium "Jovan Jovanović Zmaj" in Novi Sad. Also, from 2020, we

joined the celebration of May 12 as the International Women in Mathematics Day, and two scientific cafes were held with women mathematicians.

The contribution to the promotion and development of the values of RRI was realized through the participation of MI SANU in the project "Nucleus"<sup>2</sup>, financed within the Horizon 2020 program in the period 2016 to 2019, which also dealt with this topic. During this project, the Code of Ethics of MI SANU was adopted by the Scientific Council, which coincided with the instructions of the Ministry in this field.

From the beginning of 2020, MI SANU participates in another Horizon 2020 project - LeTSGEPs, within which this Plan is adopted. As part of these activities, MI SANU held several successful gatherings, internal, national and international, dedicated to Gender Equality and gender budgeting (GB). During 2020, the employees and associates of MI SANU had the opportunity to participate in four large workshops within this project, and training in which 15 associates of the Institute were involved.

The Ministry also foresaw that each scientific research institution should have its own Gender Equality Plan, and that the European Commission envisages it as an obligatory condition when applying for projects financed within the Horizon Europe program, starting in 2022.

In March 2021, an anonymous survey was conducted through the Questionnaire on Everyday Life of MI SANU and the balance of business and private life of employees and associates of MI SANU, which was filled by 46% of permanent employees at MI SANU, This is the first research of its kind conducted at the Institute, and represents the starting point for the development of this Plan, and in this regard will be presented in detail in the following chapters.

Starting in 2017, MI SANU is giving the Annual Award for the best student, master and doctoral theses in mathematics and mechanics, and computer science, and from 2019 also for the best graduation papers of the students of the Mathematical Gymnasium. This award is a significant step forward in stimulating young people to engage in scientific work in the Republic of Serbia and it is worth noting that a large number of female students have already received it<sup>3</sup>, that is, respecting strictly scientific criteria, the gender structure of the winners of this award is more balanced than the gender structure of the winners of similar awards in other European countries.

MI SANU is proud of the fact that the Principal Investigator of the first project in the field of artificial intelligence, which was approved for the Institute for funding by the Science Fund of the Republic of Serbia in 2020, is Dr. Tatjana Davidović, scientific advisor of MI SANU. This project also has a balanced structure of members both in terms of experience and gender.

In the past decades, MI SANU, despite relatively unfavorable economic circumstances, has found ways to support its employees in scientific training, development of

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<sup>2</sup> <http://www.nucleus-project.eu/nucleusproject/>

<sup>3</sup> Since 2017, a total of 16 female and male students have received awards, and 22 male and female students [http://www.mi.sanu.ac.rs/novi\\_sajt/aboutus/student.php](http://www.mi.sanu.ac.rs/novi_sajt/aboutus/student.php)

international cooperation, but also in enabling flexible working hours, so that they can better plan their family and private obligations. It is certainly a measure whose far-reaching effects were many times positive for the development of MI SANU and its attractiveness as a place of employment in competition with the increasingly strong industrial and IT sector in the country and abroad. This is the culture for which the Institute is known, but in this Plan we want to emphasize that this good practice and its sustainability is conditioned by respect and adequate attitude of all employees towards it. This is especially important as this culture is not an implied privilege of all institutes in the country and abroad, as evidenced by the numerous strategies of the European Commission, which have been trying to incorporate it into the practice of research organizations in Europe for years.

It is difficult to list all the individual initiatives that many associates of MI SANU have had in recent years in this area, and which undoubtedly deserve to be recognized by the Plan. Individual initiatives and personal contacts make a big difference, especially in small organizations and countries with limited financial resources for science, and that is why it is important to nurture them. We will list several current initiatives in which our associates participate, who undoubtedly contribute to the development of MI SANU and the improvement of Gender Equality culture: COST action "European Network For Gender Balance in Informatics" with the participation of Dr. Silvija Ghilezan, scientific advisor of MI SANU, "Guidelines for Gender Equality and to improve diversity" with the participation of Dr. Velimir Ilić, research associate of MI SANU, and the participation of Dr. Vesna Todorčević, scientific advisor, in the work of the Association of European Women in Mathematics.

## **8. Review of the activities of MI SANU in the field of gender equality during the implementation of the 2021 Plan**

This Plan implies the continuation of MI SANU's mission to promote gender equality in research, and in this part it explicitly refers to the most important activities in the period from May 26, 2021 to May 31, 2022.

The plan from 2021 foresaw two important novelties concerning the improvement of the gender policy of MI SANU. The first is the establishment of the position of advisor for gender equality and prevention of discrimination, as an additional activity in the Institute. In February 2022, she was appointed to this position by the decision of the director of the Institute, Dr. Zoran Ognjanović, and at the suggestion of the Working Group, Biljana Nedeljkov, advisor for knowledge transfer and promotion. She has attended several international workshops and trainings in the field of gender policy, gender responsive budgeting and the promotion of gender equality in academic institutions. The main novelty of this Plan is that in its Annex it further specifies the role, rights and responsibilities of the advisor for gender equality and discrimination prevention

A big step forward for MI SANU is the introduction of gender-sensitive budgeting. With the help of UN Women Serbia and representatives of the Ministry of Finance of the Republic of Serbia, an online training was held in November, attended by the management of

MI SANU, members of the Working Group and employees in accounting and finance. Although, as one of the institutes of SANU, it was obliged to apply gender budgeting (which will be mandatory for all other institutions financed from the budget of the Republic of Serbia), MI SANU needs technical and professional support to apply this principle in practice. given the existing way of financing scientific research institutions in Serbia. These issues were discussed at the workshop and technical doubts were removed, and the 2021 Plan received praise and the highest marks as an exceptionally good strategic document concerning gender equality. Efforts in the first half of the year resulted in the adoption of the MI SANU budget for 2022, which applied the principle of gender-sensitive budgeting.

MI SANU also, despite the pandemic conditions, together with the Center for the Promotion of Science, in May 2021, successfully marked the 10th anniversary of the May Month of Mathematics event. As part of that program, and on the occasion of Women's Day in Mathematics, two virtual events were organized entitled "Inspirational Conversations" dedicated to Serbian scientists in the field of mechanics, where the work of prof. Vera Nikolić Stanojević, prof. Milena Radnović, prof. Katica Hedrih Stevanović and prof. Livija Cvetičanin. Also, on April 28, 2022, the Day of Girls in Information and Communication Technologies was marked for the first time in the premises of MI SANU and the Indigo Hotel. This event was held in cooperation with the Center for the Promotion of Science, the Eversin company and the Indigo Hotel, and is part of the activities envisaged by the first gender-responsive budget of MI SANU.

MI SANU will host the Sixth Project Meeting Horizon 2020 of the LeTSGEPs project on June 20 and 21. On this occasion, an international workshop "Gender Equality in Research Performing Institutions - Strategies, Negotiating and Sustainability" will be organized for researchers in Serbia. The working group invested a large part of its efforts in the previous year in the preparation and organization of this event, especially because the pandemic conditions significantly hindered international cooperation. In particular, these activities affirm the Institute as a credible national institution which, even in complex conditions, manages to contribute to solving current problems and the progress of science and society in Serbia.

In addition to these activities, two international COST actions "European Network for Gender Balance in Informatics" were successfully implemented, in which prof. Dr. Silvija Gilezan, and "Guidelines for Gender Equality and to Improve Diversity" (Guidelines for Gender Equality and to Improve Diversity), which is attended by Dr. Velimir Ilic, research associate at MI SANU.

During 2021, the Annual Awards of MI SANU were awarded, a total of 13 awards, of which as many as 8 were awarded female students. It should be emphasized here that all the Commissions were guided primarily by scientific criteria in decision-making, and that this is an example of a good result in encouraging women to engage in science. In this context, we

are proud to point out that MI SANU is an example for many institutions in developed countries, which have huge budgets for similar activities, unlike MI SANU.

## **9. Results of the research on the state of Gender Equality at MI SANU**

During 2020, as a part of the LeTSGEPs project, an analysis of indicators on the state of GE at MI SANU was conducted.

The analysis of the indicators showed that the Glass Ceiling Index<sup>4</sup> as a parameter of the change in the percentage of women with progress in titles for MI SANU is equal to 1.03.<sup>5</sup> This is a complex parameter formatted for this research, which takes into account, among other things, women's education, salaries, maternity leave, career advancement and the representation of women in senior and managerial positions. This result speaks of a slight decline in the number of women in high ranks, ie. about the somewhat lower probability that the women researcher will reach the highest research title.

Namely, this indicator is defined as the ratio between the total share of women in research staff and the share of women in the role of scientific advisor / full professor (so-called grade A). The value of this index can vary from 0 to infinity. The value of index 1 indicates that there is no difference between women and men in terms of the probability of reaching the maximum career level (scientific advisor / full professor); an index value less than 1 means that the share of women in the maximum achievable role is higher than their average presence among research staff; an index value greater than 1 instead indicates the presence of an effect known as the “glass ceiling effect,” which sees women less represented in the highest positions than the average presence in research staff. In general, the higher the value assumed above the glass ceiling index, the stronger the glass ceiling effect and the more difficult it is for women to achieve a major role in an academic career.

The national average for Serbia is not available, but the precision of the conditions for election to scientific titles provided by the Rulebook on election to research titles in this context certainly has a positive effect. The Rulebook stipulates explicit minimum qualitative and quantitative conditions for elections to scientific titles that are the same for everyone and leaves no possibility for gender discrimination in terms of their fulfillment.

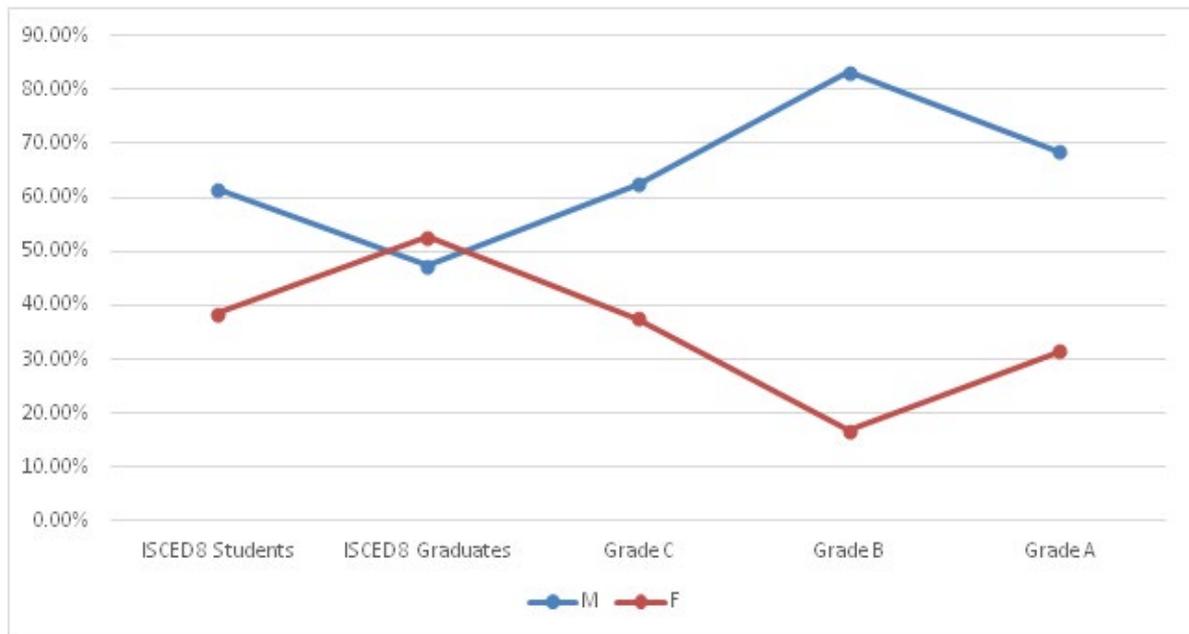
We need to point out several specificities of these indicators in the context of our institution. MI SANU has a relatively small number of employees (78), which from a purely statistical point of view is not a sufficient sample for conclusions based on the law of large numbers. Furthermore, the promotion to research positions that happened after reviewing the situation on the basis of gender indicators in the preparation of this Plan has significantly changed the observed percentages already, so for the analysis of indicators in our context it makes sense to use as a cross-section of the actual situation at the time of the survey.

Results of that study on gender structure are shown on the graphs 1. below, based on the number of researchers in MI SANU on 1<sup>st</sup> June 2020.

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<sup>4</sup> A parameter of the change in the percentage of women with progress in titles, [https://en.wikipedia.org/wiki/Glass\\_ceiling](https://en.wikipedia.org/wiki/Glass_ceiling)

<sup>5</sup> It should be noted that this parameter is important in the analysis of other partners in the project and that at the national level it is 1.63 in France, 1.68 in Italy, 1.77 in Germany, and 1.85 in Spain.



Graph 1. Number of students, graduates and researchers at MISANU (June 1, 2020)

Most of the indicators used in the survey used at the European level and that are used in this survey are primarily constructed with large organizations in mind, such as universities, which include both humanities and technical sciences, and which work with a large number of students of various profiles. As MI SANU does not organize classes, it made no sense to measure indicators for students, except for doctoral students - so in our analysis, undergraduate students were interpreted as trainee researchers and research associates without a doctorate.

Another specificity is that the indicators specifically looked at the percentage of women in the so-called STEM disciplines, while there are naturally much higher values at MI SANU than at the other partners for this indicator and average values at the EU level. For our needs, it is much more expedient to make comparisons with other mathematical institutes in Europe and to differentiate categories according to groups of mathematical and computer disciplines, which will be the approach of the analysis in the next steps.

The following table shows the numbers of employed scientists in the highest ranks by age groups.

INDEX: Rank A:	Percentage (%) of women in highest ranks, by age groups								
	M	%M	F	%F	TOT	%TOT	%F/TOT	Country F/TOT	EU F/TOT
<35	-	0%	-	0%	-	0%	0	N/A	36%
35-44	-	0%	-	0%	-	0%	0	N/A	28%
45-54	3	23%	3	50%	6	32%	50%	N/A	26%

<b>55+</b>	10	77%	3	50%	13	68%	23%	N/A	23%
<b>Total</b>	<b>13</b>	<b>100%</b>	<b>6</b>	<b>100%</b>	<b>19</b>	<b>100%</b>	<b>32%</b>	<b>F/TOT</b>	<b>%</b>

Table 2: Percentage (%) of women in the highest ranks, by age group on June 1, 2020

As can be seen from Table 2, there are no male and female researchers in the highest research positions under the age of 45. Although it is seen that there is a gender balance in the age range of 45 to 55, there are more male researchers in the next age range of 55+. However, taking the total number of female researchers in rank A, the percentage of female researchers in both age ranges is the same, 50%.

However, in the analysis of indicators for MI SANU, it is also important to take into account the historical periods when there was a ban on employment in the public sector, because the lack of researchers at certain ages corresponds to these phenomena.

INDEX:	Women among researchers by field of R&D							
	M	%M	F	%F	TOT	%TOT	%F/TOT	Country F/TOT
Natural sciences	36	76.60%	20	66.67%	56	72.73%	35.71%	7.88%
Engineering and technology	9	19.15%	8	26.67%	17	22.08%	47.06%	10.54%
Social sciences	2	4.26%	1	3.33%	3	3.90%	33.33%	11.52%
Humanities	-	0.00%	1	3.33%	1	1.30%	100.00%	5.49%
<b>Total</b>	<b>47</b>	<b>100.00%</b>	<b>30</b>	<b>100.00%</b>	<b>77</b>	<b>100.00%</b>	<b>38.96%</b>	<b>47.71%</b>

Table 3: Actual situation of the gender structure of researchers by areas in MI SANU in June 2020.

MI SANU has, meanwhile, as already mentioned, in the process of the new sectoral organization foresaw three sectors with managers, deputy managers and secretaries and, looking at the gender structure in these positions today, we can say that in this sense the full gender balance.

As mentioned already, in March 2021, a survey was conducted on everyday life in MI SANU and the balance of business and private life of its employees. This research was

done with LeTSGEPs project partners, and the MI SANU LeTSGEPs team previously translated the questionnaire into Serbian. It took 20-25 minutes to complete the questionnaire. The questionnaire was completed by 37 employees of MI SANU, approximately 46% of the total number of employees. Of the respondents, 82% are employed under the age of 45.

The questionnaire consisted of a set of questions grouped into categories:

- demographic issues: age, gender, marital status, number of children, child care, family income structure, etc.
- professional issues: scientific title, duties in MI SANU, type of employment contract, relationship with superiors, job satisfaction, etc.
- relationship between private and professional life: family responsibilities, child care, time devoted to work, etc.
- social values and attitudes towards gender policy: discrimination, traditional gender roles, ranking of measures to be incorporated into the Gender Equality Plan, etc.
- free time: time spent in leisure activities, travel, vacations, etc.
- implicit association test.

The results of the research were obtained in an aggregate form. Most of the respondents answered the questions about discrimination within MI SANU with "no". Over 80% of respondents answered that they had not faced or witnessed any form of harassment in MI SANU. Two respondents stated that they have been exposed to or witnessed age discrimination, and the same situation was with gender discrimination. Two respondents answered that they were exposed or witnessed ethnically motivated discrimination, and the same number of answers was received for discrimination based on religion.

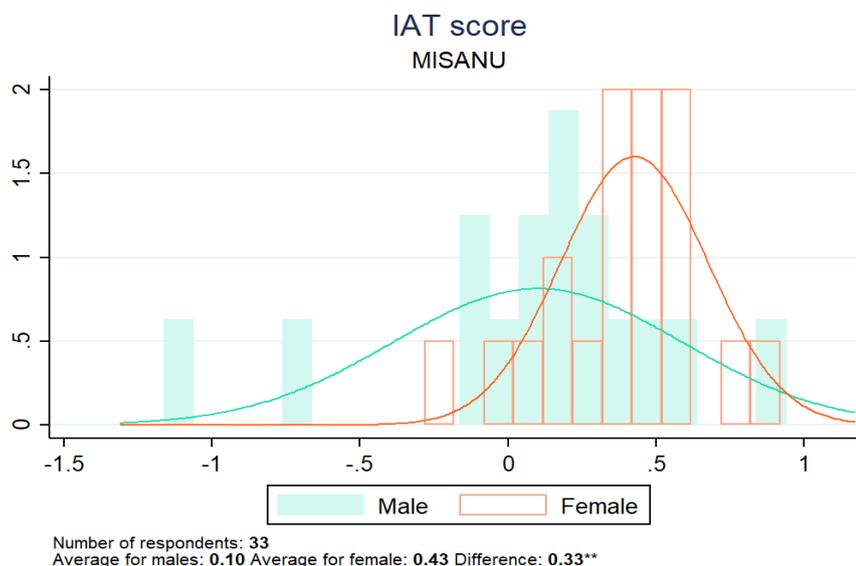
It is noticeable that respondents of both sexes in the range of 65-100% agree that opportunities for career development, availability of equipment, advancement, obtaining a contract for an indefinite period, obtaining leave and the like are equal conditions for men and women, while in some issues there were up to 27% answer that the conditions are a bit easier for men. It is noticeable that the high concordance corresponds to the associates of MI SANU in these issues.

Also, the percentages of employee and associates' answers almost coincide in the answers to the questions that treat the relationship between private and business life and professional burnout. About 40% of respondents worry about work when they are not working at least half the time; about 80% of them are too tired to take care of household chores at the end of the day. About 60% of respondents realize that work prevents them from devoting the time they want to their personal lives. About 40% of respondents feel the need to work during the holidays to meet work demands. These indicators indicate the need to further analyze these circumstances and perceptions and to pay even more attention to achieving a balance between the private and business spheres of life of the Institute's

employees. Also, these results should be compared with other sectors and the rest of the population in Serbia in the following research.

The Implicit Association Test (IAT) suggests that respondents show little bias towards gender roles. Namely, a positive grade means a stronger connection between the name of the male tone and (negative) career attributes, while a negative rating suggests a stronger connection between the name of the male tone and (positive) family attributes. Using typical thresholds in the literature, a score between -0.15 and 0.15 does not indicate bias, a score between 0.15 and 0.35 (in absolute value) indicates that there is a slight correlation between the two concepts and a score higher than 0.35 (in absolute value) suggests that there is a moderate to significant correlation.

The average score of the respondents in MI SANU is 0.25. Respondents (0.43) are significantly more biased than respondents (0.10), i.e. men employed at MI SANU have less implicit prejudices regarding gender roles than women employed at the Institute, which can be seen from the chart below.



Graph 2: Distribution of respondents' grades on the Test of Implicit Associations. The positive value indicates a stronger connection between the "female" - "family" and the "male" - "career". The results for men are marked in green, and the results for women are marked in orange.

Finally, the respondents stated or suggested the following in the survey:

- "Keep up working as before, no gender discrimination"
- "During maternity and family leave, the same status should be guaranteed to all who come to work. If the mother is not permanently employed, the protection of the right to return to work after maternity leave should be increased. "

All these assessments were taken into account during the development of the Plan. Special attention will be paid to employees who start a family and use the leave on that

occasion, which fortunately was taken into account by the legislator in Serbia, and both men and women can pay special attention to children of all ages.

## 10. Results of the research during the implementation of the Plan from 2021.

During the adoption of the Plan from 2021, several large researches were conducted within the project LeTSGEPs, on the results of which this Plan also relies. During 2021, research was started on the gender structure of authors in the Repository of Papers of MI SANU and at some seminars of MI SANU. Certainly, this is a job that requires additional time and resources, and the statistical processing of these data and their monitoring will be the responsibility of the advisor for gender equality and prevention of discrimination.

Dr. Marija Šegan Radonjić, research associate, and Kristina Milojević, librarian, conducted research on the gender structure of authors in the Repository of Papers of the Ministry of Science and Technology of SANU. It showed that the ratio of the number of authors to the number of authors is approximately two to one. For the Student Seminar, Dr. Đordje Baralić made statistics on the ratio of the number of lecturers to the number of lecturers at the seminar in the first five years of work, and the ratio of approximately two to one was obtained again. It is interesting that preliminary research on the gender structure of lecturers at the Departments of MI SANU shows similar values, but for a relevant conclusion much more is needed because the total number of employees in MI SANU is small for a statistical result. The frequent occurrence of number two should actually be related to the ratio of the number of researchers to the number of female researchers permanently employed at MI SANU.

The following table shows the numbers of employed scientists in the relevant scientific and research titles on May 15, 2022.

Rank	Number of male researchers with the title	Number of female researchers with the title	Total
Full Research Professor	15	5	20
Research Associate Professor	5	3	8
Research Assistant Professor	13	6	19
Research Assistant	7	10	17
Research Trainee	5	7	12

## 11. Setting up the GEP

After carrying out initial assessment of gender equality state-of-play at MI SANU, the Institute is ready to set up its Plan for achieving and improving Gender Equality for 2022-2024. The findings of the initial analysis allow identifying the priority areas of intervention to be addressed. Not all areas can however be tackled at the same time, and some may be more

pressing than others. Therefore, this Plan sets out the priorities considering the assessment as well as the available resources, at the same time being holistic, inclusive and integrative. Its participatory approach will hopefully engage the whole MI SANU community in the envisaged activities, and ensure a smooth and effective implementation of the proposed measures in a sustainable way.

## **12. Funds for the implementation of the Plan**

Funds for the implementation of the Plan will be provided partly from the Horizon 2020 project LeTSGEPs, and partly from the own funds of MI SANU, according to the financial plan for the respective year.

## **13. Publication and promotion of the Plan**

After the adoption by the Management Board, and the signing by the authorized persons, the plan will be available on the website of MI SANU, in Serbian and English, and the employees of MI SANU will be informed by a special letter about its adoption. In the coming months, a workshop will be held to which all employees will be invited in order to get acquainted in more detail with the Plan and the planned measures and mechanisms for promoting gender equality at the Institute.

MI SANU will pay special attention to the promotion of the Plan among other research organizations in Serbia, and among other partner institutions.

## **14. Reporting on the implementation of the Plan**

The annual report on the implementation of the Plan is prepared by the Adviser on Gender Equality and Prevention of Discrimination, in cooperation with the MI SANU Working Group on Gender Equality. Data on the implementation of the Plan are an integral part of the annual report on the work of MI SANU.

The report on the implementation of the 2021 Plan is integrated in point 8 and the Annex to this Plan, and is an integral part of it. With this document, the Management Board of MI SANU adopts the annual report on the implementation of the previously valid Plan, at the proposal of the Advisor for Gender Equality and Prevention of Discrimination, as well as conclusions and proposals on how to improve work on this topic.

## **Summary**

With its Plan for achieving and improving Gender Equality, MI SANU commits to contribute to building gender sensitive culture in the research space in Serbia and beyond. The envisaged set of actions, with different degrees of complexity, is meant to articulate this strategic view. As initiatives as adhering to a charter or adopting general Gender Equality

objectives do not constitute *per se*, these commitments defined in the Plan are materialized into a concrete set of steps and actions to be undertaken.

Below is a schematic overview of the fields of envisaged measures, resources and objectives of MI SANU GEP. The concrete set of measures is elaborated in more detail in the Annex.

Fields of actions/ measures in the adopted Plan, and measures	Dedicated resources	Data collection and monitoring	GE awareness raising and training
Increase the participation of women in research and innovation and improvement of their career perspective	+	+	+
Gender balance in leadership and decision-making		+	+
Integration of the gender dimension into research and teaching content	+	+	+
Work-life balance and organizational culture			+
Measures to prevent gender-based violence including sexual harassment	+	+	+

*Table 4. Areas covered by the Plan, measures, intended resources and mechanisms for its implementation. “+” indicates that the Plan and other relevant documents such as the Financial Plan of MI SANU provide for measures related to the area and the corresponding aspect of that area.*

**Annex:**  
**Measures envisaged by the MI SANU GEP**

With its GEP (Plan for Achieving and Improving Gender Equality / Plan), MI SANU supplements and elaborates its existing regulations and development strategies, and in addition fulfills the task that lies ahead for all scientific research organizations in Serbia. In the implementation of this Plan, MI SANU will continue to work closely with the Ministry, the Serbian Academy of Sciences and Arts, the Center for the Promotion of Science, the Center for Science and Innovation "Intersection Point", and other domestic and international partners.

Based on the gained experience, as well as the fact that Measures 1, 2, 10 and 11 from the previous Plan were fully implemented, and Measures 5, 6, 7 and 9 were partially implemented, the starting points for revising the Plan and adapting it to changed circumstances were defined. It is important to point out here that for the most part in 2021 and during the first half of 2022, due to the pandemic, only remote work was done, and one part of the measures that included wider engagement of human resources of MI SANU could not be implemented. The plan from 2021 did not clearly point out that for some sets of measures, a period of several years is assumed.

This Plan envisages three types of measures according to their character: institutional (IM), scientific-research (SRM) and promotional (PM). All these measures strive to support the achievement of work-life balance for MI SANU employees.

Institutional measures are measures that should improve the legal framework of MI SANU in the field of gender equality and prevention of discrimination, as well as the improvement of this aspect at the Institute. Scientific-research measures are measures related to the issue of gender equality in activities related to scientific-research activities, while promotional measures include measures related to the popularization of scientific work and gender equality. Table 3 lists the Measures envisaged for implementation during the implementation of this Plan.

Acronym of measure	Name of Measure
IM1	Application of gender sensitive budgeting
IM2	Support for a gender-balanced Management Board structure
IM3	Adoption of the Rulebook on the approval of work from home and remote working

IM4	Adoption of the Rulebook on Prevention of Sexual and Other Violence
SRM1	Inclusion of MI SANU associates in the relevant international scientific associations of women
SRM2	Monitoring the gender structure of authors in the repository of MI SANU, members of working bodies and election commissions, and lecturers at departments and seminars of MI SANU
SRM3	Support for young researchers in career planning
<b>SRM4</b>	<b>Integration of Gender Dimension in Research and Innovation</b>
PM1	Annual workshop on gender equality issues
PM2	Celebrating Women's Day in Mathematics and Girls' Day in Information and Communication Technologies
PM3	Realization of excursions for employees and associates of MI SANU

*Table 5. Overview of the Measures envisaged by the Plan*

As part of the implementation of the Plan, MI SANU will implement the following 10 measures in the observed period:

### **Institutional measures**

#### **IM1: Application of gender sensitive budgeting**

Gender sensitive budgeting means allocating funds in the institution's budget for measures that should contribute to gender equality in research and overall activities, support for employees in family planning, and other aspects of importance for supporting the achievement of gender equality.

The Republic of Serbia is committed to the implementation and gradual introduction of gender-sensitive budgeting for all budget users, and this activity is coordinated by the Ministry of Finance. From 2021, SANU, the umbrella institution of MI SANU, is included in this program. In the context of MI SANU, this measure means the allocation of funds in the budget in accordance with the possibilities to support the measures provided by this Plan. The first gender-sensitive financial plan was made for 2022, and the Institute will strive to further improve its financial plan in accordance with the possibilities through the fair distribution of funds from the gender aspect and to participate in activities that popularize science.

<b>IM1</b>	<b>Application of gender sensitive budgeting</b>
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Brief description of the measure	Application of gender sensitive budgeting to the financial documents and all MI SANU activities
Objectives of the measure	<ul style="list-style-type: none"> <li>• Raising awareness about GE</li> <li>• Career development and opportunities for advancement</li> <li>• Development of gender sensitive culture</li> <li>• Gender sensitive budgeting</li> </ul>
Impact	Material support for measures to promote gender equality
Target groups	All employees
Institutional places of inequality that should be touched by the measure	Gender budgeting is a way to touch on all places of inequality
Evaluation method	Financial plan
Stakeholders involved	Management of MI SANU, administration of MI SANU
Required resources	Financial resources to support the measures
Expected short-term effects	Introduction of gender sensitive budgeting in MI SANU
Expected med-term effects	Increasing interest in working at MI SANU
Existing measure	Yes
Application period	Starting from 2022.
Success factors	Increasing of the number of researchers at MI SANU
Clarification	Gender sensitive budgeting is the responsibility of all RPOs in Serbia

Responsible person	MI SANU Managing Board
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**IM2: Support for a gender-balanced Management Board structure**

According to the Law on Science and Research and the Law on the Serbian Academy of Sciences and Arts, MI SANU is managed by a Management Board whose two members are elected by SANU from among its members, two members are elected by MI SANU employees by secret ballot, and one is appointed by the Ministry of Education, Science and Technological Development of the Republic of Serbia. The current composition of the Management Board of MI SANU is such that there are no women in it, so by all parameters it represents a place of gender inequality at MI SANU.

However, the achievement of numerical equality or greater representation of women in this area does not depend only on MI SANU, but also on all mentioned bodies, so what should be improved is the election process and encouragement of all employees to elect representatives from among employees in each election cycle, but representatives of both sexes. To this end, MI SANU will work to further encourage its associates to run in the future elections and work on raising awareness of the importance of involving women in the decision-making processes. It is important to point out here that this measure was foreseen by the Plan from 2021 and that, although it was not realized, a lot was done on it. First, the initiative was sent to the Ministry of Education, Science and Technological Development of the Republic of Serbia to take into account gender equality in the formation of the new Board, especially bearing in mind that the Ministry delegates a member of the Board, while SANU cannot influence because there are no women in the relevant department. academic. Also, the Working Group discussed on several occasions the importance of the Institute's associates running for the Management Board in the next election cycle.

<b>IM2</b>	<b>Support for a gender-balanced Management Board structure</b>
Brief description of the measure	Election of at least one colleague from the ranks of employees in the Management Board of MI SANU
Objectives of the measure	<ul style="list-style-type: none"> <li>• Participation of researchers of both sexes in decision making and management of the institute</li> <li>• Raising awareness about gender equality</li> <li>• Career development and opportunities for advancement</li> <li>• Development of gender sensitive culture</li> </ul>

Impact	Gender balance in governing bodies
Target groups	All employees, management of MI SANU
Institutional places of inequality that should be touched by the measure	Lack of women in the Management Board of MI SANU
Evaluation method	Every four years, the employees of MI SANU elect two representatives to the Management Board. The goal is to encourage and elect at least one colleague to this body in the next election cycle.
Stakeholders involved	<ul style="list-style-type: none"> <li>• LeTSGEPs research team</li> <li>• GE Working Group</li> <li>• Management of MI SANU</li> <li>• MI SANU RRI Council</li> <li>• All employees</li> </ul>
Required resources	Employees of MI SANU
Expected short-term effects	Election of one female employee of MI SANU to the Management Board
Expected midterm effects	Creating a gender balance in the management of the institute
Existing measure	Yes
Application period	2022-2022
Success factors	Raising awareness about GE, implementing gender equality, empowering women to participate in the management of the institute and project management, more balanced managing bodies
Clarification	There are no women on the current Managing Board
Responsible person	MI SANU GE Working Group

**IM3: Adoption of the Rulebook on the approval of work from home and remote working**

The balance between private life and work is a vital issue for all employees, especially in extraordinary life circumstances, and that is why the existence of such an opportunity is very important. The possibility of working from home is provided by the Rulebook on the work of MI SANU, and is especially important in the circumstances of caring for small children or caring for close family members during illness and other similar circumstances. This de facto practice has been practiced during the previous decades in MI SANU, but it needs to be formalized, specified and harmonized with other legal acts. MI SANU Working Group for Gender Equality will, in cooperation with MI SANU Council for OII, make a Rulebook on approving work from home and remote working propose it to the Management Board for adoption. We note here that this measure was also envisaged by the 2021 Plan, but that due to the scope of work and the fact that the Recommendation on remote working was in force practically all the time of its implementation, there were no conditions to discuss this measure among a wider circle of employees. . A Gender Equality Adviser will be involved in this process.

<b>IM3</b>	Adoption of the Rulebook on the approval of work from home and remote working
Brief description of the measure	Adoption of the Rulebook on approving work from home in special family or general circumstances
Objectives of the measure	<ul style="list-style-type: none"> <li>• Support to employees in special circumstances</li> <li>• Career development and opportunities for advancement</li> </ul>
Impact	Better balance of private and business obligations
Target groups	All employees, management of MI SANU
Institutional places of inequality that should be touched by the measure	The measure is aimed at employees of both sexes

Evaluation method	Rulebook adopted Number of submitted and approved applications for work from home
Stakeholders involved	<ul style="list-style-type: none"> <li>• Management of MI SANU</li> <li>• All employees</li> </ul>
Required resources	No additional resources needed
Expected short-term effects	Facilitating special life situations for MI SANU associates
Expected med-term effects	Greater satisfaction of MI SANU associates with work and life
Existing measure	Yes, partially
Application period	Continuous, as of 2022
Success factors	Fulfilling work tasks, reconciling family obligations and work
Clarification	Supplement to existing measures
Responsible person	MI SANU RRI Council WG for Gender Equality Director MI SANU Managing Board

**IM4: Adoption of a rulebook on the Prohibition of Sexual and Other Harassment**

The Rulebook on the Prohibition of Sexual and Other Harassment is one of the acts that should be provided for in the Plan according to the instructions for drafting plans for achieving and promoting gender equality given by the European Commission, as well as a set of rules to which the mentioned Law on Gender Equality calls. It is expected that in the near future, the Ministry, as part of the preparations for participation in the calls Horizon "Europe", will prescribe to scientific research organizations the obligation to adopt such a rulebook, or, as in the case of the Code of Ethics, to offer a universal document for all

scientific organizations in Serbia in accordance with the Law on Prohibition of Discrimination and other regulations relevant to gender equality.

The working group believes that, as in the case of the Code of Ethics, it is the right way to adopt such an act and, if necessary, supplement the articles that would make it applicable and consistent with the Rules of Procedure of MI SANU.

During the period of implementation of the Plan from 2021, the working group came to a working version of this document, and therefore the goal of this measure is to continue this work and lead to the adoption of the Rulebook.

<b>IM4</b>	<b>Adoption of the Rulebook on Prohibition of Sexual and Other Harassment</b>
Brief description of the measure	Adoption of the Rulebook on Prohibition of Sexual and Other Harassment
Objectives of the measure	Protection of employees from harassment
Impact	Creating legal mechanisms to protect against harassment
Target groups	All employees
Institutional places of inequality that should be touched by the measure	The measure addresses the sensitive issue of protection from sexual and other harassment
Evaluation method	Adoption of regulations
Stakeholders involved	All employees at MI SANU
Required resources	MI SANU Staff
Expected short-term effects	Formal regulation of harassment protection mechanisms
Expected midterm effects	Development of indicators that take into account the specificity of the institution and the nature of research in mathematics, computing and mechanics

Existing measure	A new measure
Application period	Starting from 2022.
Success factors	Creating legal mechanisms to protect against harassment
Clarification	This measure is an obligatory part of the Gender Equality Plan envisaged by the Horizon "Europe" program
Responsible person	MI SANU WG for GE, MI SANU RRI Council, Director, MI SANU Managing Board

### Scientific-research measures

#### **SRM1: Involvement of MI SANU associates in the work of the Association of Women of Europe in Mathematics**

The Association of European Women in Mathematics (ZEM) was founded in 1986, with the aim of supporting the development of women's careers in mathematics and their networking. As part of its activities, it organizes numerous scientific conferences and workshops and closely cooperates with the European Mathematical Society, of which MI SANU is an institutional member. In addition to these, there are other scientifically specialized societies with similar goals.

Participation in these activities would benefit to raising awareness and empowerment of MI SANU researchers, but it could also be of scientific benefit for the associates of the Institute, and Institute as such, as well as an opportunity for MI SANU to attract foreign funds with which it would additionally support and stimulate its associates to engage in scientific work. This measure was also envisaged by the 2021 Plan, but pandemic conditions, as well as the inevitable saturation of work and distance conferences, and then the situation created by the cancellation of the International Mathematical Congress in 2022 in St. Petersburg, hindered some concrete steps in achieving this more. Bearing in mind that in the last few years the work of MI SANU has been significantly affected by global situations that cannot be influenced in any way, it is recommended that the Institute's management, expert associate for promotion and knowledge transfer and advisor for gender equality consider annually application of this measure in accordance with the financial capabilities of the Institute and the general circumstances at the time.

<b>SRM1</b>	<b>Involvement of MI SANU associates in the work of the Association of European Women in Mathematics (EWM)</b>
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Brief description of the measure	Participation of MI SANU associates in the activities of the EWM association
Objectives of the measure	<ul style="list-style-type: none"> <li>• Raising awareness about GE</li> <li>• Career development and opportunities for advancement</li> <li>• Development of gender sensitive culture</li> </ul>
Impact	Greater visibility of researchers from MI SANU on the international scene, participation of MI SANU in international projects dealing with GE in science
Target groups	All employees, management of MI SANU
Institutional places of inequality that should be touched by the measure	Opportunity for women to be members of international commissions and consortia
Evaluation method	Co-financing of membership fees for their associates and participation in meetings organized by the EWM in accordance with the budget possibilities of MI SANU
Stakeholders involved	<ul style="list-style-type: none"> <li>• Management of MI SANU</li> <li>• MI SANU RRI Council</li> <li>• All employees</li> </ul>
Required resources	Financial support in accordance with the possibilities of MI SANU
Expected short-term effects	Membership of 5 associates of MI SANU in the association EWM
Expected midterm effects	Increasing the international visibility of MI SANU and its associates on the international scene, raised awareness on GE in Research
Existing measure	Yes
Application period	2022-2024

Success factors	Raising awareness about gender equality, implementing GE, empowering women to participate in the management of the institute and project management
Clarification	Until now, MI SANU has not been significantly engaged in the work of this association at institutional level
Responsible person	Expert associate for the promotion and transfer of knowledge

**SRM2: Monitoring the gender structure of authors in the repository of MI SANU and lecturers in Departments and Seminars of MI SANU, and other information and data that are gathered and noted at MI SANU**

The analyzes done so far show MI SANU far above the average of the European Union when we talk about the contribution of women in science. However, it is stated that some deeper statistical analysis that would take into account the specifics of work in mathematics has not been done. With this measure, we want to follow the mentioned indicators in the coming years, because we believe that they are the most representative in the effective realization of the MI SANU mission. Two measures were envisaged in the 2021 Plan: Measure 6 and Measure 7, and as stated in this Plan, the implementation of this measure, which is in charge of the Adviser on Gender Equality and Prevention of Discrimination, has begun.

The aim of this measure is to increase the representation of women in working bodies, election and ad hoc commissions, in accordance with existing laws and rules, and the Institute's intention to promote women's participation in important decision-making bodies, and thus directly, and we hope, indirectly, to increase gender equality and scientific excellence of the Institute.

The results of this analysis would be included in the annual report on the implementation of the Plan.

<b>SRM2</b>	<b>Monitoring the gender structure of authors in the repository of MI SANU and lecturers in Departments and Seminars of MI SANU, and other information and data that are gathered and noted at MI SANU</b>
Brief description of the measure	Monitoring the gender structure of authors in the repository of MI SANU and lecturers in Departments and Seminars of MI SANU, as well as other information and statistical data that are collected and recorded in MI SANU, will be, except collectively, classified and

	expressed by gender and age.
Objectives of the measure	<ul style="list-style-type: none"> <li>• Support to employees in special circumstances</li> <li>• Career development and opportunities for advancement</li> </ul>
Impact	Setting indicators that would be relevant for gender studies related to the work of the institute.
Target groups	All employees, management of MI SANU
Institutional places of inequality that should be touched by the measure	The existence or non-existence of inequality has not been established because no appropriate examination has been done
Evaluation method	Annual report
Stakeholders involved	All researchers employed at MI SANU
Required resources	Researchers, analytics software
Expected short-term effects	Obtaining accurate and valid data
Expected midterm effects	Development of indicators that take into account the specificity of the institution and the nature of research in mathematics, computing and mechanics
Existing measure	A new measure
Application period	Starting from 2021.
Success factors	Raising awareness about gender equality, application of gender equality
Clarification	Indicators analysis
Responsible person	Nominated member of the MI SANU WG for GE

### SRM 3: Support for young researchers in career planning

The mentoring program would allow younger associates of the institute, as well as all others who need it, to consult on gender issues, balancing work and family responsibilities, planning training and careers, and supporting progress.

MI SANU already has an informal similar practice, but this program would enable everyone who needs it to contact the leadership of the Institute, which would then ask some of the prominent scientists to help with their advice and to act as mentors in relation to the mentioned topics. This measure was envisaged by the Plan from 2021, but due to the already mentioned reasons, not much could be done to formalize it. The working group discussed and sought the experiences of partner institutions on the LeTSGEPs project in order to use some already existing good solutions.

SRM3	<b>Support for young researchers in career planning</b>
Brief description of the measure	Support to young associates and associates in career planning through a mentoring counseling program
Objectives of the measure	<ul style="list-style-type: none"> <li>• Support to employees in special circumstances</li> <li>• Career development and opportunities for advancement</li> </ul>
Impact	Support, counseling and guidance of young researchers and especially women in career development and balance of private and business obligations
Target groups	Young researchers, students, research associates
Institutional places of inequality that should be touched by the measure	The existence or non-existence of inequality has not been established because no appropriate examination has been done
Evaluation method	Program reports
Stakeholders involved	All researchers employed at MI SANU
Required resources	Researchers, analytics software

Expected short-term effects	Increasing internal communication between younger and more experienced associates of MI SANU
Expected midterm effects	Strengthening trust and building institutional capacities of MI SANU
Existing measure	A new measure
Application period	Starting from 2022.
Success factors	Raising awareness, applying GE, career development
Clarification	This mentoring program aims to provide support that is not tied to narrowly professional support for scientific work
Responsible person	Assistant Director for International Cooperation, Work with Young Talents in Mathematics, Computer Science and Mechanics and Popularization of Mathematical Sciences, Advisor to MI SANU on the LeTSGEPs Project and MI SANU Council for RRI

#### **SRM4: Integration of Gender Dimension in Research and Innovation**

Gender-sensitive research takes into account the differences between men and women in all aspects of research, from the initial idea, the formulation of research questions, goals and methodologies, to the outcomes and presentation of results. Gender is, therefore, part of research design and is systematically monitored and controlled during the research and innovation process, even when it is not the main focus of the analysis.

In addition to gender mainstreaming, a gender-sensitive approach seeks to ensure an equal share of both women and men in scientific work. Gender-balanced research teams work as cutting-edge in their fields, and a gender-sensitive approach further encourages researchers to use a more sensitive research methodology in general. Gender mainstreaming, therefore, makes research better and more valid through:

- 1) assisting in achieving more relevant research results for society;
- 2) enabling the development of new paradigms of research, teaching and career advancement in research institutions;
- 3) enabling the preparation of more competitive proposals for funding research from national and international sources, since this approach is one of the postulates of modern scientific work.

To this end, MI SANU actively supports the integration of the gender dimension into research and will prepare recommendations for the introduction of a gender-sensitive

approach through suggestions: a) how to take gender into account when composing research teams and b) how to integrate gender into research content.

Also, special attention will be paid to the inclusion of gender equality content in the adoption of plans and programs of work and research, seminars and other activities, so as to exclude gender stereotypes, misogynistic and misandry content and include content related to gender equality in order to overcome gender stereotypes and prejudices, fostering mutual respect, non-violent resolution of conflicts in interpersonal relations, prevention and suppression of gender-based violence and respect for the right to personal integrity.

<b>SRM4</b>	<b>Integration of Gender Dimension in Research and Innovation</b>
Brief description of the measure	Integration of Gender Dimension in Research and Innovation at MI SANU
Objectives of the measure	<ul style="list-style-type: none"> <li>• Ensuring excellence in research and innovation</li> <li>• Utilizing the creative power of gender analysis for science and innovation</li> <li>• Improving the social relevance of produced knowledge, technologies and innovations</li> <li>• Overcoming gender stereotypes and prejudices, fostering mutual respect, non-violent conflict resolution in interpersonal relationships, preventing and combating gender-based violence and respect for the right to personal integrity</li> </ul>
Impact	<ul style="list-style-type: none"> <li>• Consideration of gender norms</li> <li>• Breaking gender stereotypes</li> <li>• Improving the quality of scientific work</li> </ul>
Target groups	All employees
Institutional places of inequality that should be touched by the measure	All places of inequality in research and innovation
Evaluation method	<p>Monitoring the involvement of the gender dimension in the research of MI SANU (examination of gender norms and stereotypes and research of the needs, attitudes and behavior of both sexes through research work)</p> <p>A guide with recommendations for integrating the gender dimension into scientific work and innovation has been prepared</p>

Stakeholders involved	Scientific Council of MISANU, all researchers, MI SANU WG for GE, MI SANU RRI Council
Required resources	Financial resources to support the measures
Expected short-term effects	Integrating the gender dimension into the scientific work of MI SANU Exclusion of gender stereotypical, misogynistic and misandrian content, and inclusion of content related to gender equality
Expected medterm effects	Increasing excellence of research and results of MI SANU
Existing measure	Yes
Application period	Starting from 2021.
Success factors	Increased number of scientific papers with an integrated gender dimension
Clarification	The gender component in science and innovation is a prerequisite for scientific excellence (necessarily based on inclusiveness and intersectionality), and is one of the key requirements for supporting scientific projects at the national and international level.
Responsible person	Director, MI SANU WG for GE, MI SANU RRI Council

## Promotional measures

### PM1: Annual workshop on gender equality issues

With the annual workshop on GE the MI SANU continues its tradition started with the Info Day in the field of RRI, held in 2018, and will organize annual workshops to promote all aspects of RRI, raising the culture of gender sensitivity, and introducing especially to younger colleagues the opportunities for development careers in mathematics and computer science.

The aim of this workshop is, in addition to promoting and introducing GE in all workflows in MI SANU, the preparation of MI SANU for the process of the integration of the research system of the Republic of Serbia into the European Research Area, as well as applying for financial resources to support women in science.

<b>PM1</b>	<b>Annual workshop on GE topics</b>
Brief description of the measure	Workshop dedicated to Gender Equality in Research, and especially to the perspectives and opportunities for career development in mathematics and computer science in relation to gender topics
Objectives of the measure	<ul style="list-style-type: none"> <li>• Raising awareness about GE</li> <li>• Career development and information on training opportunities in GE in research</li> <li>• Incorporating gender component into research</li> <li>• Improving gender culture</li> </ul>
Impact	<ol style="list-style-type: none"> <li>1. Increasing the participation of women in research projects and improving career prospects</li> <li>2. Perception of the gender dimension in research</li> </ol>
Target groups	Researchers, collaborators and staff of MI SANU, students
Institutional places of inequality that should be touched by the measure	Lack of consideration of GE in some aspects of research and other MI SANU activities
Evaluation method	<ul style="list-style-type: none"> <li>• Funds provided in the budget of MI SANU for this purpose.</li> <li>• Workshop successfully organized with a large number of participants.</li> </ul>
Stakeholders involved	<ul style="list-style-type: none"> <li>• LeTSGEPs research team</li> <li>• Gender Equality Working Group</li> <li>• Management of MI SANU</li> <li>• MI SANU RRI Council</li> </ul>
Required resources	Organizational team, financial resources for cocktail and coffee breaks
Expected short-term	The number of workshop participants is above 35, raised

effects	awareness among MI SANU employees on RRI issues
Expected midterm effects	Increasing the number of young researchers at MI SANU, more gender sensitive research projects
Existing measure	Yes
Application period	Annually, starting in 2021.
Success factors	Awareness raising, improved GE at MI SANU, obtaining funds from MI SANU, Ministry, UN Women in Serbia and other funders and development institutions
Clarification	The activity will be carried out in close cooperation with the RRI Council
Responsible person	Assistant Director for International Cooperation, work with young talents in mathematics, computer science and mechanics by popularizing mathematical sciences

**PM2: Celebrating Women's Day in Mathematics, Information Technology Day and Girls in ICT Day**

In recent years, MI SANU has done a lot to promote mathematical and computer sciences in the Republic of Serbia. He joined the initiatives initiated by the European Mathematical Society, and from 2020, special activities dedicated to women in mathematics and the celebration of Day of Women in Mathematics are planned as part of the May Month of Mathematics event. Girls' Day in Information and Communication Technologies was marked on April 26, 2022 for the first time. In the coming period, the plan is to continue this practice, because this measure should encourage young people to continue their careers in these sciences, but also to keep in mind MI SANU as one of the good places where I could continue my professional development.

<b>PM2</b>	<b>Celebrating Day of Women in Mathematics, Information Technology Day and Girls in ICT Day</b>
Brief description of the measure	Celebrating Day of Women in Mathematics and Information Technology Day and Girls in ICT Day

Objectives of the measure	<ul style="list-style-type: none"> <li>• Raising awareness about GE</li> <li>• Career development and opportunities for advancement</li> <li>• Development of gender sensitive culture</li> </ul>
Impact	Popularization of mathematical, computer sciences and mechanics
Target groups	Researchers, students, pupils
Institutional places of inequality that should be touched by the measure	Increasing the number of doctoral students in mathematics, computer science and mechanics
Evaluation method	Events held
Stakeholders involved	Researchers, management of MI SANU
Required resources	Financial resources for organizing events
Expected short-term effects	Popularization of women's careers in mathematics and computer science
Expected medterm effects	Increasing interest in working at MI SANU
Existing measure	In part, the celebration of Women in Maths is being introduced in 2020, and in IT will be introduced in 2022
Application period	Starting from 2021.
Success factors	Increasing the number of young researchers at MI SANU
Clarification	Day of Women in Mathematics is marked as part of the May Month of Mathematics event with special events
Responsible person	MI SANU RRI Council

### **PM3: Realization of excursions for employees and associates of MI SANU**

Like the whole world, MI SANU had to face the challenges of working from home and working remotely from 2020 to 2022. This inevitably produced a physical distance between employees and upsetting the balance between business and private obligations. The working group received a proposal from the employees to organize an excursion or trip for the institute's associates, which would aim to socialize in an informal atmosphere and the opportunity for the Institute's associates to meet and partially compensate for the negative effects of the three-year absence. This practice exists both in the business sector and in many of our partner institutions in the academic sector.

<b>PM3</b>	<b>Realization of excursions for employees and associates of MI SANU</b>
Brief description of the measure	Application of gender sensitive budgeting to the financial documents and all MI SANU activities
Objectives of the measure	<ul style="list-style-type: none"> <li>• Raising awareness of gender equality</li> <li>• Promoting a good and friendly atmosphere among employees</li> <li>• Development of gender sensitive culture</li> </ul>
Impact	Improving good interpersonal relationships Associates of MI SANU
Target groups	All employees
Institutional places of inequality that should be touched by the measure	Balance between private and business obligations of employees
Evaluation method	Events held
Stakeholders involved	Associates of MI SANU
Required resources	Financial resources for organizing events
Expected short-term effects	Improving the working climate in MI SANU
Expected med-term effects	Increasing interest in working at MI SANU

Existing measure	New
Application period	Starting from 2023.
Success factors	Increasing of the number of young researchers at MI SANU
Clarification	The measure was proposed in consultation with MI SANU employees
Responsible person	MI SANU RRI Council