Committee on the peaceful use of outer space

Measures to further promote Women in the Space Sector, with a Special Regard to Scientific Resources and International Law

-Committee Guide-

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I. Introduction

1. Introduction of the committee:

The Committee on the Peaceful Uses of Outer Space (COPUOS) was created by the United Nations General Assembly in 1959 to regulate the exploration and use of outer space for the benefit of all humanity, especially in the areas of peace, security, and development. The Committee was given the task of reviewing international cooperation in the peaceful uses of outer space, studying space-related activities that could be carried out by the United Nations, encouraging space research programmes, and examining legal problems connected to space exploration.

The Committee played an important role in creating the five treaties and five principles of outer space. Every year, the Committee discusses international cooperation in space exploration and the use of space technology to support global development goals. Because space technology is developing very quickly, the space agenda is constantly changing. Therefore, the Committee provides an important international platform to observe and discuss these new developments.

The Committee has two subsidiary bodies: the Scientific and Technical Subcommittee and the Legal Subcommittee, both founded in 1961. In addition, the Committee reports to the Fourth Committee of the General Assembly, which adopts a yearly resolution on international cooperation in the peaceful uses of outer space.

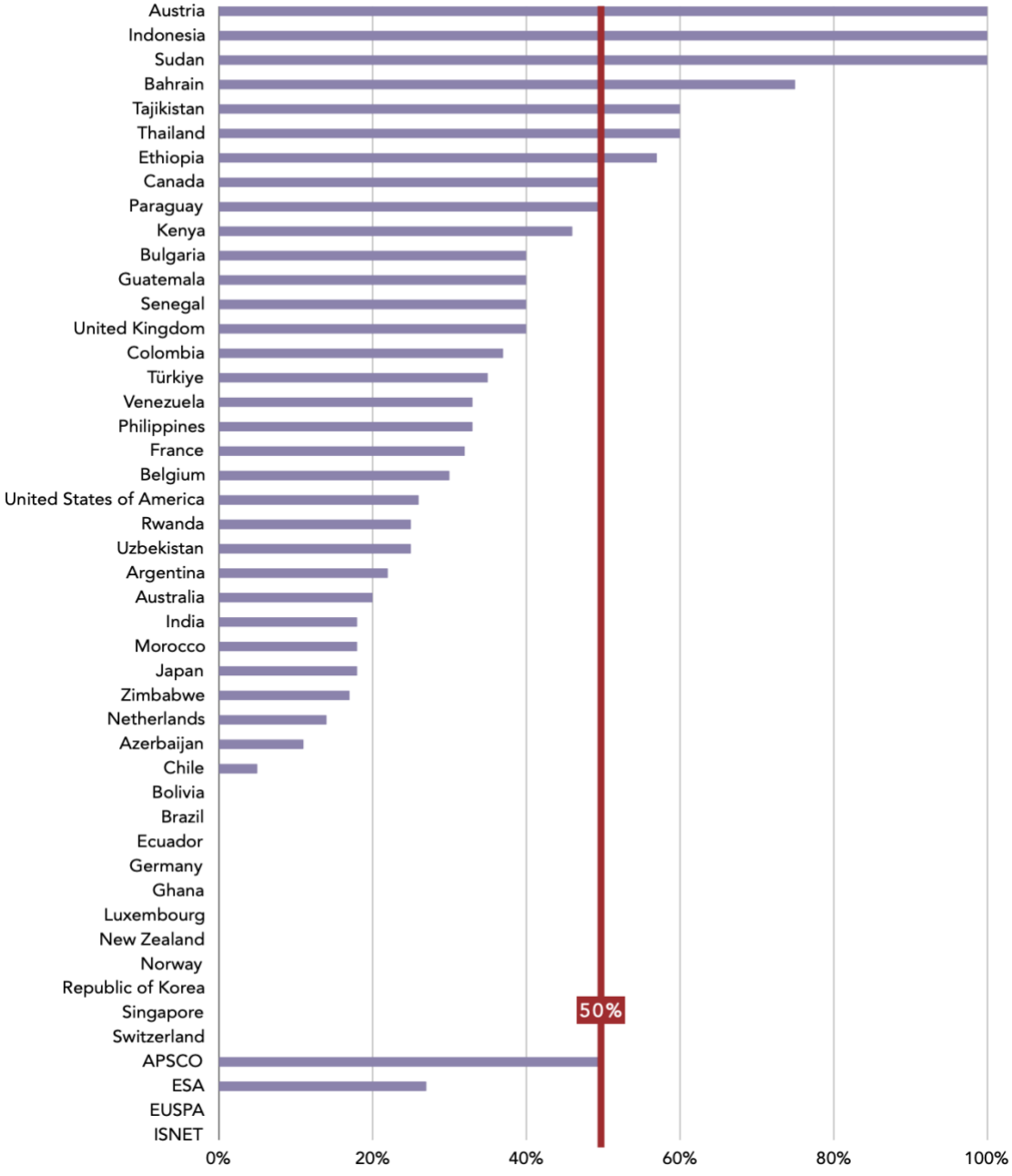
2.Introduction to the Topic:

Despite significant progress in the global space sector, women remain severely under-represented. The reasons for this are, among others, traditional gender roles, societal prejudices, and a lack of support for girls in science-related fields. Women and girls who have poor access to education, scientific resources and career opportunities are particularly disadvantaged in the fields of space and the natural sciences. Although women’s participation in the space sector has been slowly increasing since the 20th century, disparities in career opportunities and representation between the sexes persist.

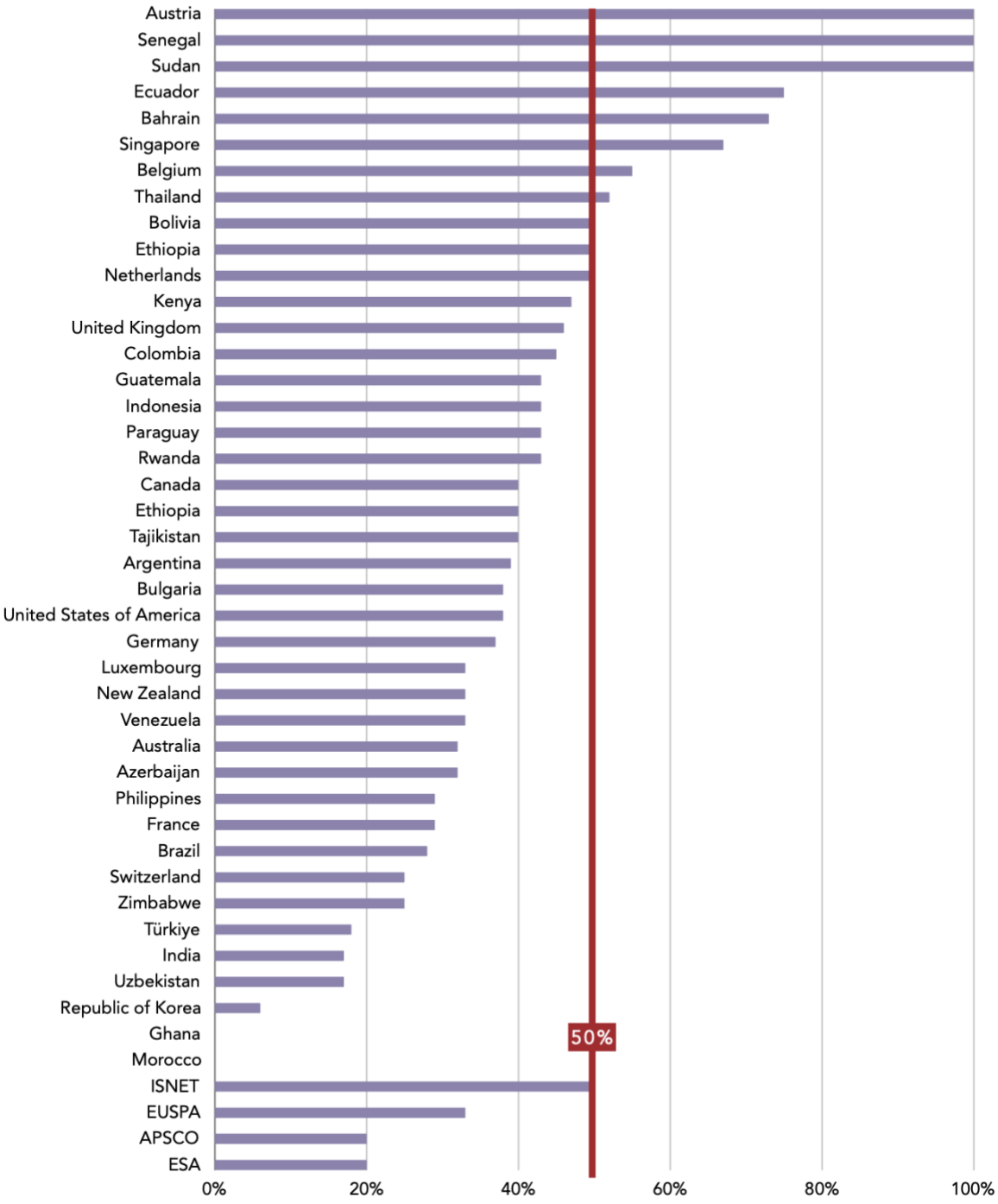
This issue has an international dimension. International accords such as the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW) and the Outer Space Treaty emphasize equality and the peaceful use of outer space for the benefit of all humanity. A key focus for addressing this issue in the future lies in improving access education for women worldwide. This includes international cooperation, support programmes for female students, and greater participation by women in decision-making processes within the space sector. The aim is to reduce existing inequalities and to establish greater gender equality in space policy in the long term.

II. Background (Charts published in October 2024)

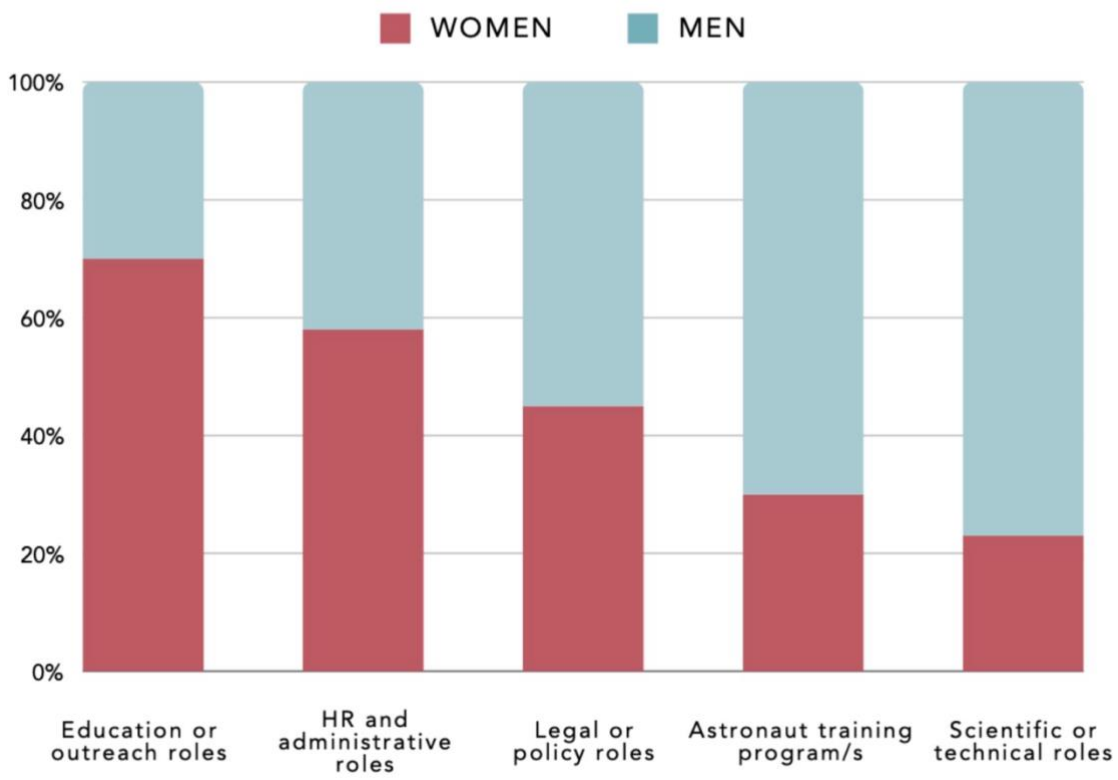
5.2 Women's leadership in public sector space institutions



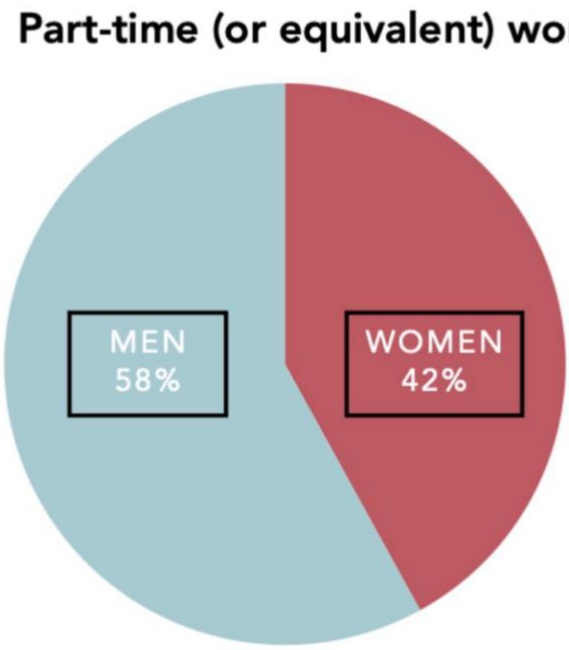
5.4 Women's representation in management in public sector space organizations

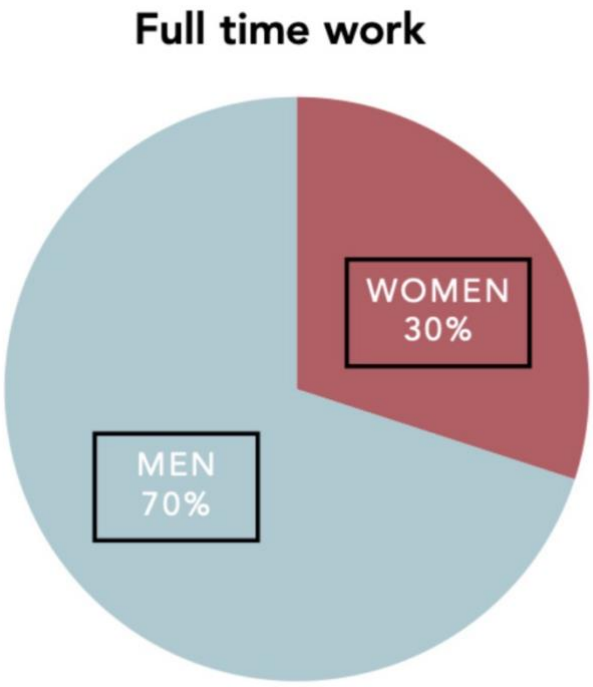


Graph 6: Gender breakdown across roles and portfolios in public sector space organizations



Graphs 7 and 8: Gender breakdown by part-time (or equivalent) and full-time work





Source:https://www.unoosa.org/documents/pdf/SpaceforWomen/Space4Women_-_Landmark_Study_on_Gender_Equality_in_the_Space_Sector.pdf?utm_source=chatgpt.com

III. Current situation

The space sector is currently experiencing strong growth driven by new technologies, private space companies and international cooperation. However, women are still not benefiting to the same extent as men. Women remain significantly under-represented in both technical and scientific professions. They are less frequently found in senior management positions and in engineering and scientific fields. This is demonstrated by research from the United Nations Office for Outer Space Affairs (UNOOSA).

Access to research, funding and international projects varies greatly across the globe. In some countries, there are targeted programmes to effectively support women in the space sector, whilst in others there are still insufficient educational opportunities. This leads to significant

disparities in career opportunities for women within the global space sector.

A lack of diversity can, amongst other things, have negative effects on innovation and scientific progress. The importance of equality and diverse research teams is therefore growing ever more significant. For this reason, mentoring programmes and support initiatives for women in STEM and the space sector have already been established in recent years.

Despite this progress, many challenges remain, including stereotypical role models and the low visibility of female role models.

IV. The major parties involved

1. United States

The United States of America plays a central role in promoting women in the space sector. NASA is the world's leading space agency. It is increasingly focusing on equality and diversity programmes to promote women in both technical and scientific programmes.

Programmes such as Artemis are bringing the participation of female astronauts ever more into the international spotlight.

2. Russian Federation, China and India

Outside the Western world, China, Russia and India are among the most significant spacefaring nations, and thus play a central role in the development of the global space sector.

In 1963, Valentina Tereshkova became the first woman in space. As a result, Russia has also made its mark on this field historically. Through major investments in space programmes,China and India are driving forward the recruitment of women into roles in science and technology.

At the Indian Space Research Organisation (ISRO), numerous women are already involved in research and development for major space missions. Growing space programmes in China are also increasingly staffed by female scientists. However, it remains a contradiction that all three nations face challenges regarding equality, representation, and access to scientific resources.

V. Definition: Key terms of the topic:

1. **STEM-education:** STEM is an umbrella term that groups: Science, Technology, Engineering and Mathematics. STEM education promotes the development of foundational competencies and transversal skills such as problem-solving, critical thinking, and collaborative skills, laying the groundwork for innovative education in the subjects above.

2. **Space4Woman:** Space4Women is a United Nations initiative run by the Office for Outer Space Affairs (UNOOSA) designed to promote gender equality in the space sector. It empowers women and girls by encouraging STEM education and providing a global mentorship network.

3. **SWAY4Edu2:** SWAY4Edu2 (Satellite Way for Education 2) is an educational and digital inclusion initiative supported by the European Space Agency (ESA). It acts as a spin-off and expansion of the original SWAY4Edu project

VI. Past International actions

A variety of approaches have already been implemented to promote women in the space sector. One of the most significant initiatives is the Space4Women programme run by the United Nations Office for Outer Space Affairs (UNOOSA).

The programme encourages women and girls to pursue Science, Technology, Engineering and Mathematics (STEM) education, and raises awareness of career opportunities and the importance of gender equality and empowerment in the space sector.

Through its activities, the programme has built a strong network of individuals who are dedicated to increasing women's participation in the space sector by sharing their expertise and finding solutions. Another initiative is the SWAY4Edu2 project, which was started by the European Space Agency (ESA). The project aims to equip 12 rural schools in the Mpumalanga region of South Africa with satcom systems. It helps both rural young women and men, as well as their teachers, to become more tech-savvy and aware of the benefits that information and communication technologies bring. The project aims to effect change at the root level.

VII. Current challenges:

There are still several major challenges to the promotion of women in the space sector. Although more women are entering STEM subjects, they remain underrepresented in the space industry, particularly in leadership roles and technical careers. Many space agencies and private companies are still male-dominated.

One significant challenge is the persistence of stereotypes and traditional gender roles. In many countries, girls are less encouraged to pursue careers in engineering, physics or aerospace science. Consequently, fewer women pursue professions connected to the space sector.

Another issue is the lack of representation. Despite famous women such as Valentina Tereshkova and Sally Ride becoming pioneers in space exploration, women remain underrepresented in key scientific and political roles. This often results in their achievements being less recognized.

In addition, discrimination and unequal treatment continue to be problems. Women in STEM professions sometimes experience lower salaries, fewer career opportunities and sexism in the workplace. Many also struggle to balance family responsibilities with demanding scientific careers.

Finally, international differences present another challenge. While some countries strongly support gender equality in science, others still provide limited access to education and careers for women. This limits global progress in promoting women in the space sector.

VIII. Guiding Questions for the debate

1. How active is my country in the space unit?
2. What has my country done related to that issue?
3. What will my country be doing regarding that topic?
4. Has my country signed any treaties or is it part of any resolutions regarding that topic?
5. Is my country willing to cooperate with other countries regarding space-related questions?
6. Is my country benefiting financially because of the space sector?
7. Is my country in favor of obliged measures or against it and therefore supporting voluntary guidelines?
8. Are there any guidelines my country is strongly against/ would never agree on?
9. How well are woman represented in leadership positions in my country?
10. Are/Were there any women in leadership positions in my country?
11. How advanced is STEM-education in my country?

IX. Useful links:

https://www.unoosa.org/oosa/en/ourwork/topics/spaceforwomen/index.html
https://www.euspa.europa.eu/newsroom-events/news/future-space-female
https://www.nasa.gov/missions/station/inspiring-women-in-leadership-meet-three-female-space-station-engineers/?utm_source=chatgpt.com

X.Sources:

https://www.unoosa.org/oosa/en/ourwork/topics/spaceforwomen/index.html
https://www.esa.int/About_Us/50_years_of_ESA/50_years_of_humans_in_space/Today_s_women_in_space
https://www.womentech.net/how-to/what-are-challenges-facing-women-in-space-exploration-careers-today
https://www.euspa.europa.eu/newsroom-events/news/future-space-female
https://www.unoosa.org/?utm_source=chatgpt.com
https://www.esa.int/Enabling_Support/Operations/She_flies_satellites._One_day_I_can_too.?utm_source=chatgpt.com
https://www.nasa.gov/missions/station/inspiring-women-in-leadership-meet-three-female-space-station-engineers/?utm_source=chatgpt.com
https://education.ec.europa.eu/focus-topics/stem
https://www.itu.int/en/ITU-D/Initiatives/SSDM/Documents/SSDM_REPORT_2018.pdf