

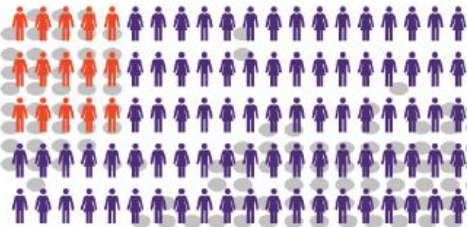


UNITED NATIONS
Office for Outer Space Affairs

The missing D in Diversity:
Addressing disability inclusion through the
UNOOSA Space for Persons with Disabilities project

15%

An estimated 15% of the world's population have a disability.



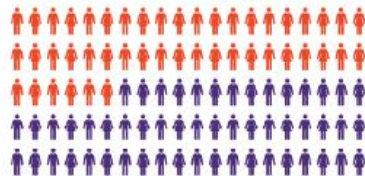
1 in 5

One in five women is likely to experience disability during her life.



46%

46% of persons aged 60 years and over have a disability.



1 in 10

One in ten children is a child with a disability.



Persons with disabilities (PwD) include those who have **long-term physical, mental, intellectual or sensory impairments** which **in interaction with various barriers** may **hinder their full and effective participation** in society on an equal basis with others.

(UN Convention on the Rights of Persons with Disabilities, article 1)

- Disabilities can be visible or invisible
- Distinguish between disability and impairment
- Disabilities can be congenital or adventitious

UNOOSA's Space for Persons with Disabilities project

Global trends

- >1 billion PwD around the world
- Growing numbers due to aging population, longer life expectancy, natural disasters etc.

Challenges in STEM

- Discrimination and social stigma
- Inaccessible tools and work environment

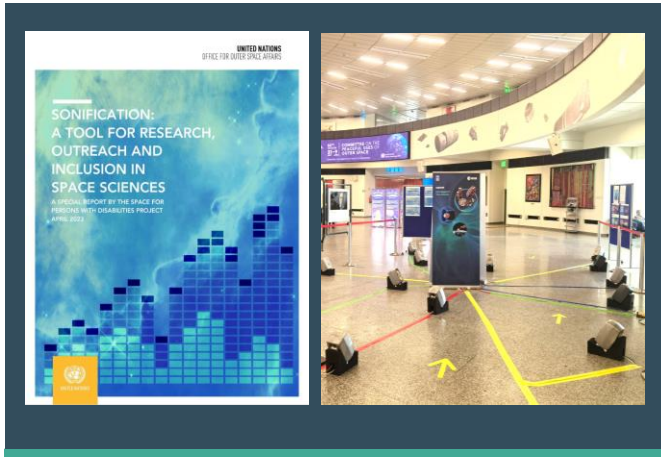
Benefits to society

- Inclusive and diverse groups are more successful than homogeneous ones
- Wider talent pool



- Started in 2021
- Aims to promote inclusive and equitable development in the space sector by fostering cooperation towards disability mainstreaming
- Develops disability-specific programmes through informed and meaningful involvement of PwD in two focus areas:
 1. Innovative tools and technologies enabling accessibility
 2. Inclusive practices for employment and empowerment of PwD in the space sector

Focus area 1: Innovative tools and technologies enabling accessibility



Sonification



Human spaceflight



Space spinoffs

Motivation

- Address the sector's reliance on data visualization for research, outreach, and education
- Raise awareness of sonification and makes recommendations for developing and implementing sonification as a universal tool

- Raise awareness of challenges and opportunities in human spaceflight for PwD
- Highlight the importance of accessible and sustainable design in space architecture

- Raise awareness of the benefits of space spinoffs in addressing challenges of disabilities
- Foster international and interdisciplinary collaborations on technological solutions to advance accessibility

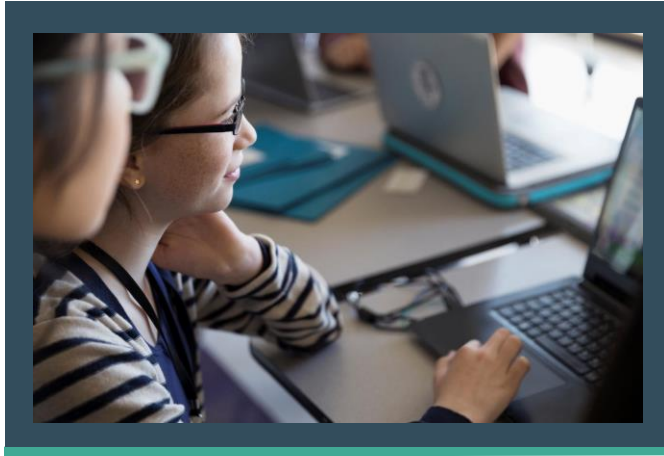
Output

- Nov 2022, online event, project showcase and panel discussion
- May 2023, special report "Sonification: a tool for research, outreach and inclusion in space sciences"
- "Sound of the Earth's Magnetic Field" audio installation at COPUOS by Denmark

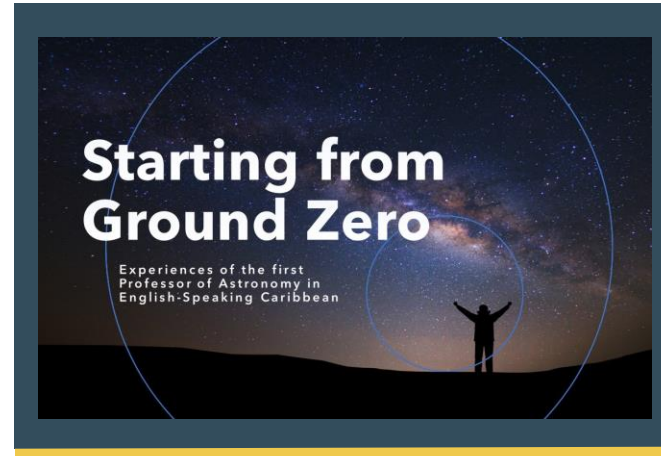
- Mar 2021, organized "Pushing frontiers: Human spaceflight and disability" webinar with support from ESA
- May 2023, presented at ESA's "Accessibility in human spaceflight" webinar

- (Work-in-progress) Outreach activity "From Space to Earth: Space spinoffs and innovations enabling accessibility on Earth"

Focus area 2: Inclusive practices for employment and empowerment



Targeted internship



Space+ : Pathways for all abilities



Roadmap to full participation

Motivation

- PwD are less likely to have internships compared to their abled peers => lower chance of employment after graduation
- Aim to support their professional development with a customized workplan and accessible work environment

Output

- 5 interns have benefitted since inception
- *"Working with ADHD can be challenging in a standard workplace environment. UNOOSA's approach to designing the internship has enabled me to apply myself to the best of my ability and given me the flexibility to work in a way that makes the best use of my skills."*

- Understanding is key to identifying and removing barriers to inclusion
- Challenge societal biases, raise awareness of inadequacies in system
- Encourage and empower more PwD to enter and participate in the space sector, knowing that others with similar backgrounds have managed to navigate the field and that they will be accepted and welcomed just as they are

- (Work-in-progress) Interview articles, story bank (data-driven approach)

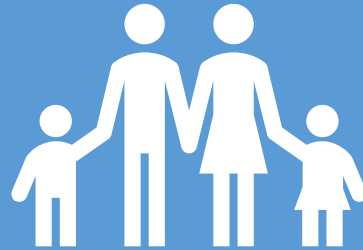
- Brings together key stakeholders in the space sector to share knowledge and experiences
- Identify challenges and opportunities for disability inclusion at all levels
- Provide guidance on future direction

- (Work-in-progress) Calling for partners and experts

10 REDUCED
INEQUALITIES



**The Opportunity: Now
The Vision: Leaving No
One Behind**



17 PARTNERSHIPS
FOR THE GOALS



Partner with us
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