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What Works to Tackle Biases in Artificial Intelligence? Ideas for the Group of Governmental Experts on Lethal Autonomous Weapons Systems

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Setting the Stage for the Discussion

“What Works to Tackle Biases in Artificial Intelligence?”

- Will discuss issues related to bias in autonomous weapons and AI in the framework of the Convention on Certain Conventional Weapons (CCW) Group of Governmental Experts (GGE) on Lethal Autonomous Weapons (LAWS).
- Will build on the working paper “[Address Bias in Autonomous Weapons](#)” submitted to the GGE on LAWS in March 2024 by a group of 10 States.
- Will be further discussed based on the side event “[Fixing Gender Glitches in Military AI: Mitigating Unintended Biases and Tackling Risks](#)” on 6 March 2024
- ✓ Will mark the launch of UNIDIR’s new [Factsheet on Gender and LAWS](#), with data analysis related to gender considerations in LAWS.

Approach & Methodology

Research Question: “Why and How is Gender Perspective Important in the Context of GGE on LAWS?”

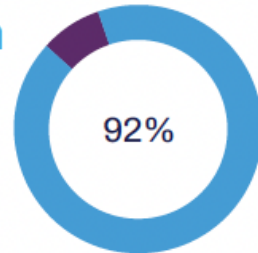
	Three Areas of Focus	Five Areas of Analysis
Qualitative	The Significance of Gender during the GGE on LAWS (since 2016)	- Highlight the Importance of Considering Gender Perspectives in Discussions about LAWS
		- Explore the Potential Impact of Gender Bias on the Development, Deployment, and Use of LAWS
Quantitative	Women Participants in the GGE on LAWS	- Discuss the Roles and Contributions of Women Participants in Shaping the Dialogue around LAWS
		- Examine the Representation of Women in the GGE on LAWS
	Number of References (Gender, Women, and Bias) during the GGE on LAWS	- Analyze the Frequency and Context of References to Gender, Women, and Bias in Discussions and Documents Related to the GGE on LAWS

Gender Matters in LAWS

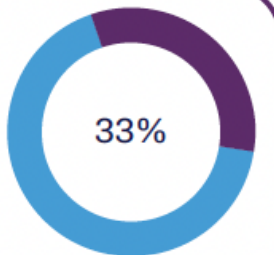
Gender Matters in LAWS



Male-Dominated Tech Workspaces: **92%** of software professionals worldwide are **men**.



Gender Inequality in Diplomacy and Policy-making: **Women** represent only **1/3** of **diplomats** participating in arms control and disarmament meetings such as CCW GGE on LAWS.



Militarised Masculinities: **Women** form a minority of military personnel in most countries, ranging from **0.3%** to **20%**.



Biased Systems: A 2021 review of 133 AI systems employed across sectors shows that **44%** exhibit gender bias and **26%** exhibit both gender and racial biases.



[Gender and Disarmament & Security and Technology Programmes \(2024\) "Factsheet: Gender and Lethal Autonomous Weapons Systems", UNIDIR, Geneva, Switzerland.](#)

Gender in the CCW on LAWS



Gender in the CCW GGE on LAWS

The CCW GGE on LAWS is the sole intergovernmental forum where LAWS are discussed, and gender considerations have been addressed in various ways:

Initial discussions at the GGE (2017 & 2018) mentioned the importance of including gender perspectives and striving towards gender balance amongst the delegations at the CCW.

From 2019 onwards, the issue of biases, including gender and racial bias, in data-sets and algorithms became [a point of discussion](#) in the context of ethics and operational efficiency of LAWS.

Starting from 2021, gender biases were discussed as a subset of risk mitigation, which forms one of the [11 Guiding Principles on LAWS](#) agreed upon by all High Contracting Parties to the CCW by consensus.

In 2022 and 2023, gender biases remained on the agenda as a

consideration under ethics, legal reviews, risk mitigation and confidence-building measures, but were missing from the final documents produced by the GGE.

In 2024, a group of Member States released [a working paper](#) highlighting ways to address biases in autonomous weapons, an ongoing effort at the GGE that UNIDIR supported through [a side event](#) on fixing gender glitches in military AI.



Future Research and Discussion



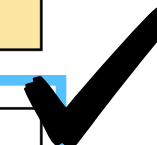
Further Identifying Gaps and Areas for Future Research

2017	Gender	Women	Bias
Final Reports (1)	2	3	
Working Papers (9)			
Total	2	3	0

2018	Gender	Women	Bias
Final Reports (1)	2	2	
Working Papers (14)	1	1	
Total	3	3	0

2019	Gender	Women	Bias
Final Reports (1)		1	1
Working Papers (7)			
Total	0	1	1

2020	Gender	Women	Bias
Working Papers (7)	4	1	18
National Reports (23)			7
Total	4	1	25



Areas for Action

Areas for Action

Technical Measures:

Identify and address biases in data and algorithms,
Fund representative and gender-disaggregated datasets,
Audit military AI systems to ensure bias mitigation.



Gender Parity:

Ensure meaningful representation of [women diplomats](#) as well as gender experts at all stages of policymaking concerning LAWS.



Gender-Sensitization Training:

Provide gender-sensitization training as part of the technical training to all personnel involved in the design, development and deployment of LAWS.



Research and Knowledge-Creation:

Fund and support research to comprehend the evolving gender-specific considerations on LAWS and utilize the findings to guide gender-sensitive policies.



Gender Reviews:

Conduct gender reviews of new and emerging military technologies like LAWS under regular national legal reviews of weapons systems.



International Cooperation:

Encourage international multistakeholder collaboration to tackle gender issues in AI and LAWS, especially by exchanging knowledge and best practices.



Capacity Building:

Support capacity building initiatives to enhance knowledge and expertise in gender considerations on LAWS and military AI, such as the [UNIDIR Women in AI Fellowship](#).



Thank you

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