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Yeshiva University National Model UN

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Disarmament and International Security Committee (DISEC)

Topic 1: Proliferation of Untraceable Firearms: Regulating 3D-Printed Ghost Guns and Digital Blueprints

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Picture a pistol that has never sat in a warehouse, crossed the border, or even passed through a licensed dealer. It began as a file on a screen and, only a few hours later, ended up in someone's hands. That is the reality that each of you will be working with in this committee. Today, a basic 3D printer can cost only a few hundred dollars, and the blueprints required to produce the firearms easily circulate online.

The statistics show a clear trend; an INTERPOL paper reports that New Zealand went from only a few seizures in 2022 to dozens annually in recent years. Worldwide, 108 arrests linked to 3D-printed guns were recorded during the first half of 2023, compared with 66 arrests throughout 2022.[1] A study of 186 reported cases found a sharp rise in incidents beginning in 2021. The weapons themselves vary. INTERPOL groups them into fully printed firearms, hybrids that mix printed and conventional parts, and printed frames for traditional weapons. Not all of them are reliable, since Europol has observed that guns made entirely of plastic usually cannot withstand live ammunition. Even so, a 2019 attack in Halle, Germany, killed two people using a firearm with printed components, and police have since raided printing workshops in the Canary Islands and London. UNIDIR still places these weapons on the periphery of the illicit arms market, but cheaper technology and spreading knowledge are lowering the barriers to entry. The question for this committee is whether States should act now or wait until the problem becomes pervasive.

This topic can be broken down into three problems:

[1]NTERPOL, "Emerging Arm Threats: Update and Way Forward," technical paper, Ninth Biennial Meeting of States on the Programme of Action on Small Arms and Light Weapons (BMS9), New York, June 1-5, 2026, 3, https://docs-library.unoda.org/Programme_of_Action_on_Small_Arms_and_Light_Weapons_-NinthBiennial_Meeting_of_States_(2026)/20260429_INTERPOL_Working_Paper.pdf.

The law was written for physical goods. One legal analysis finds that the Arms Trade Treaty covers completed printed firearms, but leaves a gap for printed components and digital design files, which can be moved piece by piece or sent online.[2] Hybrid firearms complicate matters further because they do not always fit within existing legal definitions.

Tracing is dependent on paper trails, which these weapons lack. The 2005 International Tracing Instrument asks States to ensure weapons are marked, and records are kept. A gun printed at home is never marked and never recorded. A technical annex to the ITI was proposed at the Third Review Conference, but was dropped.

Regulating the file raises a question of rights. UN guidance on the Firearms Protocol suggests that States consider regulating blueprints, including possessing, uploading, downloading, and transferring them. [3] The Dutch National Police want distribution of blueprints banned, and a February 2026 European Commission proposal aims to harmonize definitions and penalties for illicit firearms trafficking. National approaches differ. Many countries do not make possession of the plans an offense, and instead of restricting the production of firearms of any kind, in Canada, a legal expert notes that downloading files that explain how to print guns is not illegal. Delegates will need to weigh whether a design file is a weapon or a form of expression, whether these bans can reach encrypted files hosted abroad, and whether broad penalties would catch researchers, journalists, and hobbyists.

Work is already underway, though it is scattered. After the 2022 conference hosted by Europol and the Dutch National Police, an international network of 3D-printed firearms experts was announced. The EU, Europol, and INTERPOL ran the CEASEFIRE project from 2022 to 2025, using cyber detection tools, AI, and shared databases against the spread of blueprints. The UNGA created an open-ended technical expert group to recommend how the Programme of

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[2]Alex Catalán Flores, "Click, Print, Fire: 3D Printing and the Arms Trade Treaty," *ANU Undergraduate Research Journal*8 (2017): 185-97, https://studentjournals.anu.edu.au/index.php/aurj/article/view/24.

[3] United Nations, Conference of the Parties to the United Nations Convention against Transnational Organized Crime, *Report on the Meeting of the Working Group on Firearms Held in Vienna on 3 and 4 April 2024*, CTOC/COP/WG.6/2024/5 (April 24, 2024), 2, Recommendation 3, https://documents.un.org/doc/undoc/gen/v24/027/44/pdf/v2402744.pdf.

Action and the ITI should respond to polymer weapons and firearms produced by 3D printing. The group held its first meeting during the Ninth Biennial Meeting of States in June 2026, where an outcome document reaffirming commitment to the Program of Action and ITI was adopted by a majority vote.[4] The Secretary General named 3D-printed arms and untraceable ghost guns among the emerging threats in his message to that meeting. No binding global rule yet governs the digital file itself.

The file is already in circulation, and the printers are already on desks; the open question is whether the law will catch up before the next seizure becomes the next headline.

Questions to guide your research:

1. Which existing instruments, such as the ITI, the firearms protocol, and the Army Treaty, could be amended to cover printed components and hybrid firearms?
2. How does your country treat digital firearm blueprints, and where does it draw the line between public safety and free expression?
3. What responsibility should online platforms and encrypted services have to detect and remove blueprints, and how could the international community enforce that?
4. Beyond criminal penalties, which long-term measures, such as forensic cooperation, shared databases, and oversight of printers and components, deserve priority?

Keep in mind that these questions are meant to guide your preparation, not limit it. A few important reminders:

1. You are representing your country's position, not your personal views (though I'd be glad to hear your own perspectives outside of session!).
2. Use reliable, credible sources to support your research.

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[4] Ministry of Foreign Affairs of Japan, "Ninth Biennial Meeting of States to Consider the Implementation of the Programme of Action on Small Arms and Light Weapons," June 17, 2026, https://www.mofa.go.jp/dns/ca/pagewe_000001_00388.html.

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3. When drafting your position papers, you must follow YUNMUN's updated AI policy: UG 1, Polish, with disclosure.

If you have any questions, comments, or concerns as we approach the conference, please don't hesitate to reach out. I would be so happy to help in any way, or even if you just want to introduce yourself, I would also love to hear from you! You may reach me at afried21@mail.yu.edu.

I am very much looking forward to hearing all of your creative ideas and meeting all of you in person at the conference! Let's make it the best one yet.

Warmest regards,
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