WHO Technical Advisory Group on the Responsible Use of the Life Sciences and Dual-Use Research (TAG-RULS DUR)

Report of the inaugural meeting, 24 January 2024
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Executive summary

Rapid advances in the life sciences and technologies, and their diffusion and convergence with other disciplines, hold great promises to improve our health, societies and environment. However, advances and developments in life sciences and technologies can pose risks, including safety and security risks that can cause accidental, unintended or deliberate harm to humans, animals, agriculture and our environment.

The Technical Advisory Group on the Responsible Use of the Life Sciences and Dual-Use Research (TAG-RULS DUR) was established in November 2023 to provide independent advice to WHO including on technical and strategic advice relevant to the monitoring and mitigation of biorisks, advances in the life sciences and related technologies, the governance of dual-use research and the responsible use of the life sciences.

On 24 January 2024, eighteen members of the TAG-RULS DUR virtually met to introduce TAG-RULS DUR members; to discuss current and future activities related to the responsible use of the life sciences and dual-use research; and to share the members’ perspectives and visions on the work ahead.

The group discussed the ways forward and agreed to create four working groups, which will each focus on specific priority topics, and which will closely follow the terms of reference of the TAG-RULS DUR (1). The next meeting of the TAG is scheduled for April 2024, in Geneva, Switzerland.
1. Background

Rapid advances in the life sciences and technologies, and their diffusion and convergence with other disciplines, hold great promises to improve our health, societies and environment. Emerging and existing technologies can bring transformational opportunities for improving global public health, supporting healthier populations worldwide and promoting health equity for all to achieve the health-related United Nations Sustainable Development Goals (SDGs). However, advances and developments in life sciences and associated technologies can pose risks, including safety and security risks that can cause accidental, unintended or deliberate harm to humans, animals, agriculture and our environment.

In September 2022, WHO issued the Global guidance framework for the responsible use of the life sciences: mitigating biorisks and governing dual-use research (2). The guidance calls on WHO Member States and other stakeholders to mitigate biorisks and safely govern dual-use research.

This global, technical and normative framework is intended as the starting point for the development and strengthening of biorisk management, which relies on three core pillars: laboratory biosafety, laboratory biosecurity and the oversight of dual-use research. The framework raises awareness about the importance of undertaking biorisk management within the context of the One Health approach to optimize the health of people, animals and ecosystems. Preventing and mitigating these risks is a shared responsibility and involves many stakeholders with different capacities.

The TAG-RULS DUR was established in November 2023 to provide independent advice to WHO including on technical and strategic advice relevant to the monitoring and mitigation of biorisks, advances in the life sciences and related technologies, the governance of dual-use research and the responsible use of the life sciences. The TAG-RULS DUR aims at supporting WHO in advising Member States and other stakeholders to develop and implement biorisk management in their different contexts.

The TAG-RULS DUR members have expertise in a range of areas including, but not limited to, the following:

- oversight of dual-use research and dual-use of concern (DURC), knowledge, information, methods, products or technologies;
- biorisk mitigation and management, biosafety and biosecurity;
- emerging areas of research and technologies in biology and the life sciences (for example, but not limited to, synthetic biology, genome editing, virology, infectious diseases, bioinformatics, neurosciences) and associated disciplines (for example, but not limited to, chemistry, artificial intelligence, nanotechnologies);
- governance of emerging technologies;
- risk communication and disinformation;
• ethics, international law, policy and governance and other relevant social science domains, related to the responsible use of the life sciences, dual-use research and pandemic prevention, preparedness and response;
• foresight;
• monitoring and evaluation related to global health security; and
• One Health approach to the responsible use of the life sciences and dual-use research.

The composition of the TAG-RULS DUR respects an adequate distribution of technical expertise, geographic and gender distribution. The members serve in their personal capacities, from a broad range of disciplines relevant to the TAG-RULS DUR areas of work.

2. Objective of the meeting

On 24 January 2024, eighteen members of the TAG-RULS DUR virtually met with the following objectives:

1) to introduce TAG-RULS DUR members;
2) to discuss current and future activities related to the responsible use of the life sciences and dual-use research; and
3) to share the members’ perspectives and visions on the work ahead.

3. Summary of discussions

The WHO Secretariat welcomed the members of the TAG-RULS DUR. John Reeder, the Director of the Research for Health Department, opened the meeting and thanked the members for their engagement in this TAG. The objectives and rules of the meeting were presented, and the members underwent a review of their declarations of interest before the meeting.

During the introduction of the TAG-RULS DUR members, each member was invited to briefly share their expertise, their motivations for serving on the TAG and to describe the priorities the TAG should address. After this round of introductions, Filippa Lentzos was appointed as the Chair of the TAG-RULS DUR, and Donald Ofili was appointed as its Vice-Chair.

The TAG-RULS DUR members were briefed by the WHO Secretariat on the current and upcoming activities of the project for the responsible use of the life sciences and dual-use research. The briefing included an update on the regional activities to operationalize the framework, the piloting of the framework by Uganda, the development of an online training and an online tool to support the operationalization of the framework by different stakeholders, and the publication of a WHO newsletter of the responsible sciences and emerging technologies (3).

The members of the TAG discussed these WHO activities and shared their views on the work ahead, based on their terms of reference. The discussion highlighted the importance of education and

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1 See Annex 2. List of participants.
2 See Annex 1. Agenda.
outreach activities on dual-use research and the need to support measures to increase the International Health Regulations (IHR) core capacities of countries by achieving the target set for the technical area of biosafety and biosecurity. The group also considered the convergence of artificial intelligence and biology and its implications for the international governance of dual-use research, the global reach of WHO in promulgating measures, including educational ones, and the need to identify the added value of the organization and this group on issues related to the governance of dual-use research. The conversation highlighted the need to leverage the work of relevant activities, groups and expertise in this area with the view of avoiding duplication and seeking synergies and opportunities to amplify the TAG’s initiatives. This included the importance of having open communication and collaboration among relevant WHO TAGs.

4. Next steps

The group discussed the ways forward and agreed to create four working groups, which will focus on specific priority topics, and which will closely follow the terms of reference of the TAG-RULS DUR. The webpage of the group was about to be published. The next meeting of the TAG is scheduled for April 2024, in Geneva, Switzerland.
References

Annex 1. Agenda

Technical Advisory Group on the Responsible Use of the Life Sciences and Dual-Use Research (TAG-RULS DUR): inaugural meeting

24 January 2024, 13:00–15:00 CET (Geneva time)

Meeting agenda

<table>
<thead>
<tr>
<th>13:00–13:50</th>
<th>Welcome</th>
<th>Anna Laura Ross, Unit Head, Emerging Technologies, Research Prioritisation and Support (EPS), Research for Health Department, Science Division</th>
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<tr>
<td>13:50–14:15</td>
<td>Session 2</td>
<td>Responsible Life Sciences Research and Dual-Use Research Project: objectives and activities</td>
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<td>- RULS DUR various projects, objectives and status</td>
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<td>Discussion</td>
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<td>13:00–13:50</td>
<td>Session 1</td>
<td>Opening remarks</td>
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<td>John Reeder, Director, Research for Health Department, Science Division</td>
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<td>Objectives of the meeting, expected outputs and rules of the meeting</td>
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<td>Summary of DOI review</td>
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<td>Presentation of all members</td>
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<td>Appointment of Chair and Vice Chair of the TAG-RULS DUR</td>
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<td>14:15–14:50</td>
<td>Session 3</td>
<td>TAG-RULS DUR: role and forthcoming activities</td>
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<td>- Mission and terms of reference of the TAG-RULS DUR</td>
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<td>- Considerations on the development of a draft TAG work plan with deliverables for 2024–2025 and working groups</td>
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<td>Discussion</td>
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<td>14:50–15:00</td>
<td>Session 4</td>
<td>Wrap-up and next steps</td>
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<td>Emmanuelle Tuerlings, Technical Officer, EPS</td>
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14:15–14:50 Discussion
Annex 2. List of participants

Technical Advisory Group on the Responsible Use of the Life Sciences and Dual-Use Research (TAG-RULS DUR): inaugural meeting

24 January 2024
13:00–15:00 CET

List of participants

TAG-RULS DUR Members

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Professor and Biosafety Advisor
Animal Health Research Institute
Cairo, Egypt

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Biosecurity Office
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CBRN Export Control on Dual-Use Materials and Intangible Technologies in Central Asia (ISTC) and in GUAM Countries (STCU)
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Diah ISKANDRIATI
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Biomedical Researcher and Distinguished Fellow Uganda National Academy of Sciences (FUNAS) Visiting professor, Busitema University Kampala, Uganda

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Syra MADAD
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System-wide Special Pathogens Program at NYC Health + Hospitals Fellow, Defense, Emerging Technology, and Strategy (DETS) Program, Harvard University’s Belfer Center for Science and International Affairs Boston, United States of America

Zabta Khan SHINWARI
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Quaid-i-Azam University Vice President Islamic World Academy of Sciences (IAS) Islamabad, Pakistan

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