

The InterAcademy Partnership (IAP)

BWC: Scientific and Technological Advisory Mechanism

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the Chair Webinar Series
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IAP is the Global Network of Academies of Science, Medicine, and Engineering

- 150 member academies; 4 regional networks
- >30,000 leading scientists, engineers and health professionals in over 100 countries
- Part of the network of international science organizations to advise the UN Secretary General



Mission

Convene and empower the world's academies of science, engineering and medicine to **work collaboratively to address issues of global, regional and national importance** including in a timely manner during crises.

- Climate health
- Food security
- Research integrity
- Biosecurity**
- Urban health
- Science education
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Proof-of-Concept for a BWC Science and Technology Advisory Mechanism

Implementing Team

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With special thanks to:

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Project Objective

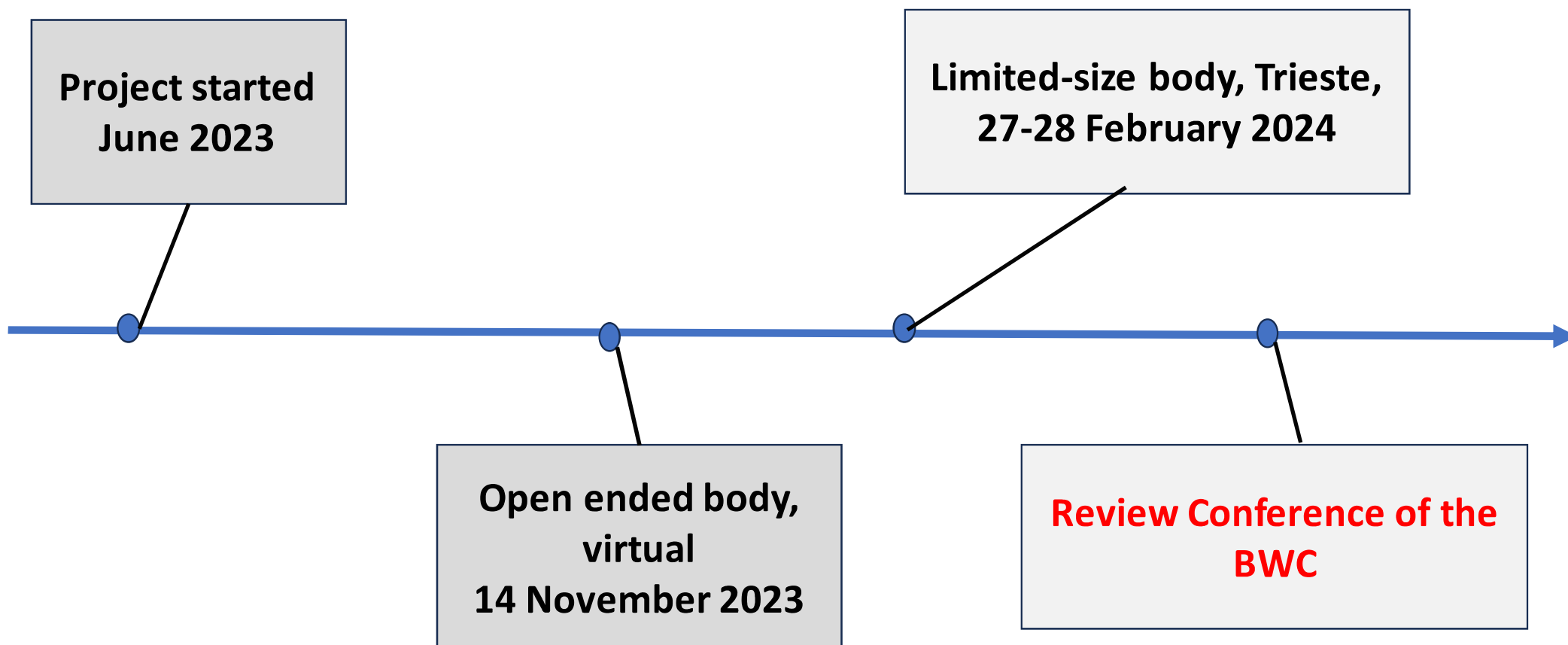
Demonstrate the value of the creation of a BWC Science and Technology Advisory Mechanism through a “Proof of Concept” exercise based on the hybrid model, and, in doing so, contribute to a consensus decision at the next Review Conference of the BWC.

- No S&T review and advisory mechanism for BWC
- Accelerating advances in science and technology
- Increasing access to technology by all, including by malevolent actors
- Such a body can provide vital scientific expertise, foster international collaboration, and ultimately strengthen the BWC's capacity to address the evolving challenges and opportunities of science and technology in the biosecurity domain.

Aspects Considered

- How to simulate the **two bodies** of the proposed mechanism:
the open-ended group and the limited-size group
- How to simulate **roles and responsibilities**?
- How are **topics** selected?
- How are **experts** identified?
- How is an **agenda** structured and agreed?
- How is a **report** drafted, reviewed, and adopted by
participants?
- How is **inclusiveness** ensured?
- How is **transparency** ensured?

Timeline



Topic Selection

Exploring Benefits and Risks of Artificial Intelligence on Biosecurity and International Cooperation in the Context of the Biological Weapons Convention

- Pressing and relevant
- Priority for many entities as judged by increasing number of meetings and reports on the topic
- Likely to get the attention of the BWC

Thematic Questions

1. How could AI contribute positively to advancing biotechnology and international cooperation in the BWC context?
2. How could AI negatively affect biotechnology and international cooperation in the BWC context?
3. How could AI contribute positively to strengthening security in the BWC context?
4. How could AI negatively affect security in the BWC context?



Selection of Experts

- Selected from national academies and research institutes
- Scientific/technological expertise and credentials
- Mostly life scientists; some AI experts
- Representation from 5 UN regions, 32 countries
- Gender balance
- Experts served in individual capacity; no country plates; **independence** is key
- Possible national and other conflicts/biases were balanced given broad regional and disciplinary representation



Roles and Responsibilities

“Chair”: IAP

“Vice-Chairs”: Uganda, Trinidad & Tobago, USA, Switzerland

“Rapporteurs”: Iran, Argentina

“Speakers”: Germany, UK, S. Africa

“Secretariat”: implementors

“Science Advisor”: USA



Report Writing and Adoption

- Condensed schedule
(a day versus likely months)
- Science Advisor
prepared first draft
- Discussions; language
revised; some tweaking
- Several opportunities
for deliberation





Some lessons learned

□ **Multidisciplinary Approach:**

- Ensures a comprehensive analysis of biosecurity challenges presented by emerging technologies, like AI
- Social scientists, data management experts, ethics and policy experts are also crucial.

□ **Balanced Representation and Geographical and Gender Distribution:**

- Ensure participation from both developed and developing countries to reflect the global nature of the BWC and address the specific needs of resource-constrained nations and different/competing priorities.

Some lessons learned (cont.)

□ Transparency and Communication

- Open meetings
- Press releases
- User-friendly website regularly updated with content for different audiences

Ricercatori per un organo consultivo Onu sulle armi biologiche



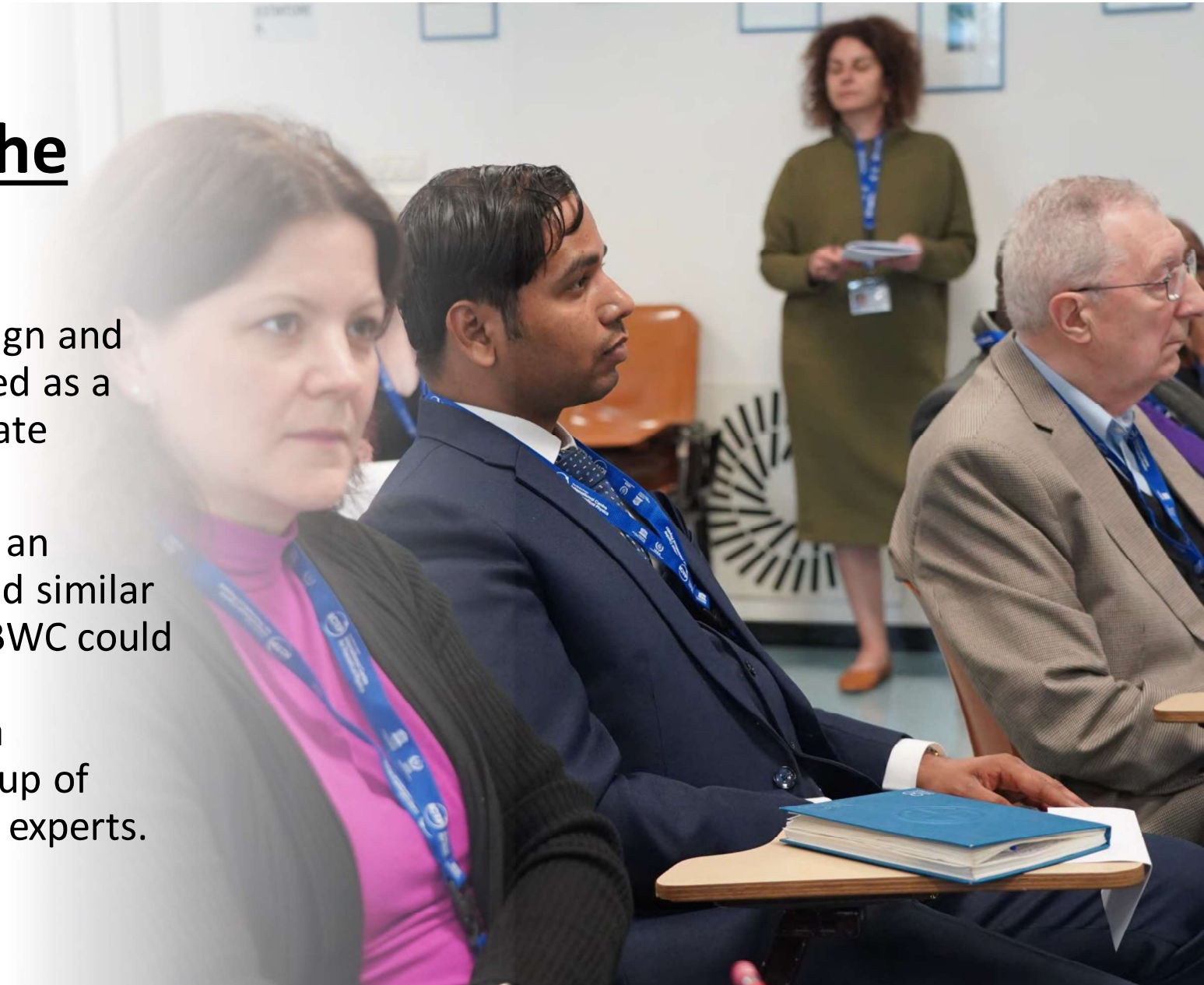
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Redazione ANSA

What about the science?

- AI-enabled protein design and synthesis was recognized as a capability with immediate relevance to the BWC.
- Participants noted that an assessment of these and similar developments for the BWC could benefit from further deliberations through a temporary working group of suitable subject matter experts.



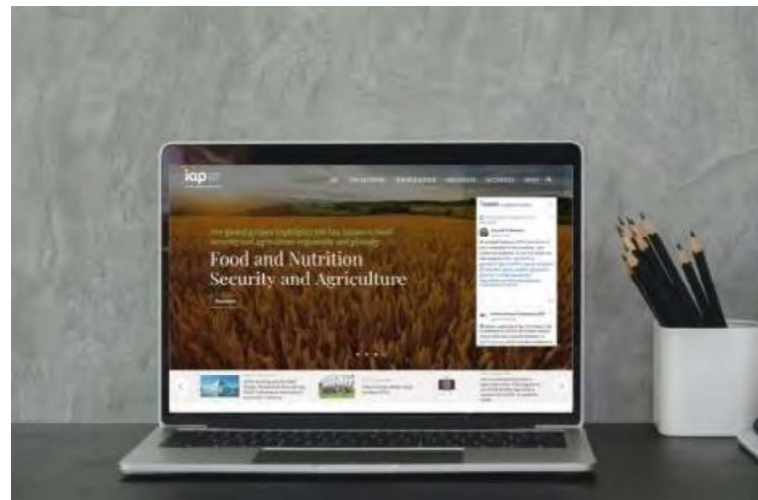
The Implementers' Conclusion

The two meetings succeeded in serving the purpose of the proof of concept of an advisory body for BWC, both in terms of simulating the process of convening such a scientific advisory body and of simulating the deliberations of such a body.



Thank you!

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