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Introduction and background

In 2016, the Global Action Plan (GAP) on antimicrobial resistance (AMR) was reaffirmed as the blueprint for tackling AMR during the 71st session of the United Nations General Assembly, where Heads of State issued a high-level political declaration (Resolution A/RES/71/3) committing to support and implement the GAP at national, regional and global levels.

Through the declaration, UN Member States called on the Secretary-General to establish an ad hoc Interagency Coordination Group of experts—in consultation with the World Health Organization (WHO), the Food and Agriculture Organization (FAO), and the World Organisation for Animal Health (OIE)—to offer advice and guidance on how to address AMR and improve coordination, taking into account the GAP.

This group, known as the IACG, was officially launched in March 2017. It is co-chaired by the UN Deputy Secretary-General Amina J Mohammed and the WHO Director-General Tedros Adhanom Ghebreyesus.

The IACG’s mandate is to provide practical guidance for approaches needed to ensure sustained effective global action to address antimicrobial resistance; and to report back to the UN Secretary-General in 2019. This includes making recommendations on how to better coordinate action across sectors and countries, as well as serving as a vehicle for building political momentum and future governance, and mobilising a broad base of stakeholders.

The IACG is made up of representatives from the major UN and multi-sectoral agencies and a similar number of individual experts.

For some work, members have organized into subgroups:

- public awareness, behaviour change, and communication
- National Action Plans
- optimize use of antimicrobials
- innovation, research and development, and improved access
- global governance post-IACG and alignment with the Sustainable Development Goals (SDGs)

Surveillance and monitoring for antimicrobial usage and resistance

This report is a record of the discussions at the seventh meeting of the IACG, held in Divonne les Bains, France, on 30 and 31 May 2018.

Meeting objectives

1. Map a route to the final report and recommendations, including a timeline
2. Update on the progress of work and agree plan for future work
3. Agree on the publication of documents (process and timelines)
4. Agree the process for engagement and communications
Opening remarks

The meeting was opened by United Nations Deputy Secretary General, Ms Amina J. Mohammed, through a video address. Ms Mohammed welcomed group members and thanked the tripartite leaders for their ongoing commitment to strengthen the IACG Secretariat.

Reminding participants of the May deadline for the IACG’s final report, Ms Mohammed urged the group to focus on practical recommendations that can deliver rapid results. She underscored the need for continued leadership from the tripartite organizations in supporting the IACG’s work and strengthening its engagement with civil society.

WHO Director-General, Dr Tedros Adhanom Ghebreyesus, echoed Ms Mohammed’s welcome to participants, and introduced a new co-convenor of the IACG, Dr Anthony So, that brings an important civil society perspective, as well as the new Head and Coordinator of the IACG Secretariat, Dr Haileyesus Getahun.

Dr Ghebreyesus outlined the steps taken since the IACG’s last meeting in Bangkok to elevate AMR within WHO, which include adding resources to the IACG Secretariat, raising AMR to the cluster level, securing internal and external funds, and establishing AMR as one of the five platforms in WHO’s latest five-year strategic plan, the General Programme of Work, which was approved by the World Health Assembly in May 2018.

Tripartite MOU

After delivering his opening remarks, Dr Ghebreyesus welcomed his colleagues OIE Director-General Dr Monique Eloit and FAO Director-General Dr José Graziano da Silva to the meeting. The tripartite leaders addressed the IACG in turn, each underscoring the importance of joint action in tackling AMR, and each highlighting their long-standing collaboration, which dates back to the 1940s.

The three leaders then signed a new MOU to reaffirm their commitment to work together to combat health threats associated with interactions between humans, animals and the environment.

Joint activities

Joint activities under the new MOU include:
- Supporting the IACG and ongoing implementation of the GAP
- Reinforcing national and regional health systems
- Improving inter-agency collaboration in foresight analysis, risk assessment, preparedness and joint response to infectious diseases at the animal-human-ecosystems interface
- Addressing food safety challenges
- Promoting coordinated research and development (R&D) on zoonotic diseases
- Developing a Voluntary Code of Conduct to reinforce implementation of international standards on responsible and prudent use of antimicrobials
First plenary session
Where we are now

Update from the tripartite organizations

**Chair by Dr Anthony So, Co-Convenor**

The tripartite organizations (WHO, FAO and OIE) presented a summary of their AMR work. All three organizations have an AMR strategy and work plan to support implementation of the Global Action Plan on AMR, or ‘GAP’. These encompass diverse activities, including:

- **Efforts at integrated surveillance**, such as the Global Antimicrobial Resistance Surveillance System (GLASS), the OIE Global database on antimicrobial agents intended for use in animals, the FAO Assessment Tool for Laboratory and Antimicrobial Resistance (ATLASS) and, more recently, the extended spectrum β-lactamases Escherichia coli (ESBL Ec) Tricycle AMR surveillance project and the Global sewage surveillance project.

- **Global standards and guidelines**, including OIE’s standards and guidelines in its terrestrial and aquatic animal health codes, FAO’s work on the prudent use of antimicrobials in food animals and agricultural production, WHO guidelines on sepsis and infection prevention and control, and the joint FAO/WHO Codex standards and guidelines to minimize the development and transmission of AMR through the food chain.

- **Priority lists**, including WHO’s Priority Pathogens List and the OIE list of antimicrobials of veterinary importance.

- **The collaborative GAP M&E framework**, under development to generate data to inform operational and strategic decision making on AMR for the next five to ten years.

All three also work at the country level to raise awareness, promote good practice, strengthen regulatory frameworks and gather evidence of what works to tackle AMR.

**Tripartite action: Key messages from discussion**

**Implementation is the biggest challenge.** National Action Plans vary in quality and relevance, which makes implementing them a major challenge.

“For many countries, AMR plans will remain a mere exercise in aspiration unless there is a significant step up in resources, support, technical advice, collaboration and bilateral engagement.”

**Tools need to be context-specific.** There is an urgent need to increase awareness of what is happening locally and to target interventions to individual countries and communities. Context matters.

**Countries need support to phase out antimicrobials for growth promotion.** When it comes to antimicrobials for growth promotion, it is easy to throw out words like ‘ban’ and ‘prohibit’ but harder at country level to implement them when alternatives and research are not forthcoming. The tripartite organizations are united in their messaging that antimicrobials for growth promotion should be phased out. Now countries need help making that happen.

**The UN cannot effect the necessary change alone.** UN agencies alone cannot provide a viable solution to AMR—they need to engage the private sector and secure global investment and support for joint action.

**IACG recommendations must be practical.** The IACG must consider how to leverage tripartite processes to give countries practical guidance and support, especially in low- and middle-income countries.
Country visits

Chaired by Dr Ranieri Guerra, WHO

To date, the IACG has completed one country visit, to Vietnam. Those IACG members that attended the visit shared their insights and experience before all meeting participants debated the overall value of country visits and discussed future plans and strategy.

Members that travelled to Vietnam agreed the visit was both interesting and useful, particularly in seeing the implementation of programmes supported by different donors and government, and in understanding how much planning and commitment is required by government to implement and sustain these programmes. One attendee highlighted that Vietnam offers a useful model of tripartite collaboration across country offices to support the development of the country’s AMR roadmap and stewardship programme.

Future strategy: Key messages from discussion

Interact with as many stakeholders as possible.

Several participants emphasized the need for more time to interact with different stakeholders across all sectors (not least environment), including civil society, industry, academia as well as professional associations and government.

“We need to hear as many voices as possible.”

Use country visits to inform recommendations. Most IACG members were clear that country visits should be used to better structure IACG recommendations so that they are both practical and feasible. That means talking to the final users, and looking at the structures and networks at the country level, to see if recommendations will be viable. Some participants argued that the IACG country visits should not be looking to deliver tailored recommendations but rather to gather as much information as possible that can be used for general purposes.

“With only a handful of countries visited, these can’t be country-specific recommendations.”

Do not replicate tripartite initiatives. IACG members were clear that country visits should not duplicate the existing work of the tripartite.

“The IACG has a unique position and distinct role from the tripartite and our intent in visiting countries is not to replicate JEE or OIE PVS missions.”

Prepare and prioritise. To ensure that country visits focus on the real issues of interest and are as useful as possible, the visiting team needs well researched and targeted information and support in advance of each visit. That means making appropriate use of tripartite country offices to prepare robust and informative background documents; and to prioritise issues. In selecting countries to visit, it is important to have geographical balance and to include both low-income and high-income contexts—but not at the sacrifice of the core work of IACG. That requires an additional level of preparation and prioritization.

Are country visits cost-effective? There was some debate as to the value and cost-effectiveness of country visits. Some participants suggested that they are beneficial to boost IACG members’ understanding as individuals but are not a good use of the group’s limited time and money. Others acknowledged the constraints but argued that even a short visit, if thoroughly prepared and well-structured, could be useful, particularly in getting a feel for where different stakeholders stand and whether there is real willingness to adopt potential recommendations.

Leverage existing country-specific experience and expertise within the IACG. Given the limited time available for country visits, and the wide breadth of in-country experience that resides within the IACG (including in LMICs), several IACG members suggested that rather than do more visits, the group should find a mechanism for learning more from each other and sharing its own experience and expertise. Country visits will still go ahead. But, at the same time, the IACG Secretariat agreed to explore and establish a knowledge-sharing mechanism.

“Collectively we know a lot…” “It might be best to have context specificity come through IACG membership rather than through country visits.”

Argentina | 18–19 June 2018

OIE will lead an IACG country visit to Buenos Aires, Argentina in June 2018. The visit will explore Argentina’s activities and future plans for tackling AMR in human, animal and environmental health, as well as areas of intersection and collaboration.

The agenda includes meetings with the National Coordination on AMR, as well as the health, agriculture and environment ministries.

Participants in the country visit will include representatives of as many different IACG subgroups as possible.
The new head of the IACG Secretariat, Dr Haileyesus Getahun, outlined a proposal for delivering the final report for the UN Secretary General. The process includes finalizing the subgroups work as soon as possible and then converging to agree and refine recommendations as the full IACG group and working together to shape a single, cohesive report.

In general, the process for finishing subgroup work as soon as possible over the next few months, as agreed by IACG members, is:

1. Finalise discussion paper (incorporate feedback from meeting and streamline questions).
2. Publish paper for public consultation.
   a. Target specific stakeholder groups.
3. Start developing recommendations,
   a. following the agreed guidance and common categorical framework; and
   b. considering feedback from the public consultation, as and where appropriate.
4. Submit draft recommendations to IACG to discuss in a cohesive manner

Details of how the public consultation on subgroup discussion papers will be handled were re-visited in the third plenary, and are summarised on page 15 below.

The broader timetable proposed for the IACG final report, and adopted by the IACG, is outlined in the Figure below.

### Timetable for the IACG final report

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- **Framework for developing recommendations**

- **Publish discussion papers following a staggered approach**

- **Subgroups submit recommendations to IACG**

- **IACG meeting to agree recommendations**

- **Call to Action in Accra, Ghana**

- **4 weeks public consultation**

- **Secretariat drafts final report, including recommendations**

- **Subgroups draft recommendations**

- **2 months public consultation**

- **Design and final production**

- **First draft final report**

- **IACG meeting to discuss and agree first draft**

- **Refined draft final report in response to consultation feedback**

- **IACG meeting to sign off final report**

- **Submit final report to UN for translation**
Second plenary session
Progress update: subgroup presentations

Subgroup on public awareness, behaviour change, and communication
Presented by Dr Anthony So, Co-Convener

Dr So presented a working framework for a discussion paper, which takes a system view of communications interventions and divides these into five types:

1. **Target priorities.** Making the value proposition for integrating and mainstreaming AMR into broader health, agricultural and environmental projects; and enabling the prioritization of some focused efforts on AMR.
2. **Raise awareness.** Communicating the investment case for addressing AMR and targeting efforts cost-effectively.
3. **Support behaviour change.** Leveraging opportunities to encourage individual change, including establishing peer-to-peer learning networks or ‘playbooks’ to document and share good practice and effective approaches.
4. **Enable collective action.** Making the most of different groups—from professional associations to civil society—to move from individual action to collective action.
5. **Monitor for accountability.** Using data more strategically to make it actionable and trigger policy change.

For each type, Dr So presented potential areas for IACG recommendations, suggested analyses to inform the final report, and highlighted opportunities for stakeholder engagement.

**Communications: Key messages from discussion**

**Support existing tripartite efforts.** Most of the interventions highlighted by this subgroup work best at country and regional level and are best stimulated by the tripartite organizations. The question is what the role of the IACG is in supporting that through its recommendations—one participant suggested it might lie in advocating for resources.

“There’s an immense ‘to do’ list in terms of smart ways to support tripartite in communications efforts.”

**Be clear about who we’re targeting.** One IACG member said there was a need to further consider who these recommendations are targeted at, and better articulate who should be implementing the proposed activities at the national and regional level.

“Who are we proposing the UN Secretary-General will write to saying ‘you need to do this?’”

**Don’t ignore access and stewardship.** Even if billions of dollars are thrown at research and development now, the world cannot avoid a rapid rise in AMR; and cannot afford to neglect access and stewardship. That is where efforts to support behaviour change come in to play and the IACG must look for opportunities to scale these up, for example by embedding initiatives in professional societies.

“We’re willing to spend a billion dollars on finding a drug—it goes much further on access or stewardship.”

**Bring context in.** Several IACG members suggested the need for greater context in considering communication interventions, for example, filtering approaches by sector or income level. One member argued that that is why it is important to consult and work with civil society, which is rooted in local context and understands local structures and realities.

“Civil society finds ways to bring context.”
Subgroup on National Action Plans (NAPs)

Presented by Dr Jaana Husu-Kallio

Dr Husu-Kallio provided a brief overview of the subgroup’s discussion paper, which articulates five key challenges in implementing NAPs (awareness and political will, finance, coordination, monitoring, and data and technical capacity); and suggests three main areas for developing recommendations:

1. **Mainstreaming.** AMR action is much more likely to be extended and sustained if it is mainstreamed into broader health, agricultural and environmental projects.

2. **Financing.** In the long term, mainstreaming AMR means governments will have to resource implementation of their NAPs, building it into national and local budgets and planning cycles to ensure sustainability. But putting resources into stopping AMR now is one of the highest-yield investments countries can make.

3. **Regional cooperation.** Increased regional cooperation can improve the efficiency and effectiveness of implementing NAPs and is essential to ensure that a lack of action in one area does not undermine progress in others.

She then discussed most recent deliberations of the subgroup, which include agreement to refine the paper to better include environment, and the emergence of five more areas for recommendations, which Dr Matthew Stone summarized as:

**Enable further investigation of AMR and environment,** including identifying the regulatory systems that exist for managing risk and, within those, exploring the scope for promoting a ‘polluter pays’ approach to responsibility.

**Establishing networks of AMR champions:** a network of funded, trained and supported people with a direct link and accountability to NAP planning committees.

**Reinforcing tripartite activities:** act quickly to reinforce Global Action Plan monitoring and evaluation activities. This includes development of the key indicators framework, in support of NAP monitoring frameworks, so the ongoing refinement and implementation of data collection for indicators can provide a real source of evidence and data for the IACG report.

**Developing strategic approaches to prioritised phasing** of activities at country and regional levels, rooted in local contexts (which requires a significant amount of analytical work).

**Encourage, design and broker long-term development arrangements** at bilateral and regional levels to ensure countries get sustained support.

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**NAPs: Key messages from discussion**

**Learning networks are valuable.** In supporting countries to implement their NAPs effectively, and improve their efforts as they go, some participants argued for learning networks as the most appropriate strategy. This includes South-South networks that enable the sharing of best practice and success stories. Such networks should also extend beyond the ‘usual disciplines’ to include fields such as implementation research and delivery science.

**Key challenges extend beyond implementing NAPs.** Several participants said the key implementation challenges identified by the subgroup are relevant to all IACG issues and could prove critical areas for linking the work of different subgroups.

“These [challenges] are also coming out strongly in our ongoing South Asia consultation.”

**AMR financing should be specific.** Several participants suggested that the IACG is well-placed to make recommendations on financing. Many emphasized the need for specific funds that are earmarked for capacity-building activities to tackle AMR across the full spectrum of interventions—legal, laboratory, measuring rational use, regulation, infection prevention etc.

“We can’t afford to hide AMR funding in health system strengthening or elsewhere... We need to give AMR visibility and specific funding for capacity building.”

**Coordination is critical.** There was some debate as to whether countries need individual AMR champions or multi-stakeholder national coordination councils. Some participants suggested a need for both. Either way, the key is enabling effective coordination across all the different relevant sectors and stakeholders and embedding local accountability.
Talking about the environment: A UNEP-facilitated discussion

The UN Environment Programme (UNEP) facilitated a dinner discussion aimed at stimulating thinking about key issues at the interface of environment and AMR. IACG members were split into groups and asked to consider three questions. A summary of their answers under each is summarised below.

1. What incentives could be offered to Active Pharmaceutical Ingredient manufacturers to encourage waste water treatment?
   - **Raise awareness** among consumers and buyers so that the incentive is reduced sales for those who do not treat waste water responsibly.
   - **Publish benchmark reports with rankings** (such as the one done by the Access to Medicines group) where self reporting is used to rank AMR friendliness including waste water treatment. It is, however important to note that a recent study by the Access to Medicines Benchmark to audit the compliance of companies with their own commitments is not encouraging.
   - **Establish a voluntary certification scheme** that is linked to a transparency mechanism like the benchmark report. To make the scheme fair for small companies, newly established manufacturers and low-income settings, it could be weighted by size and situation.
   - **Introduce regulation**, including on sewage. Legislation doesn’t need to be AMR specific, it could be linked to pharmaceutical waste more generally.
   - **Embed compulsory environmental impact assessments (EIAs) into procuring agencies**, following the example of Global Fund compulsory EIAs for manufacturers of malaria bed nets.

2. How can the tripartite organizations and UNEP strengthen their collaboration to enhance environmental surveillance, enforce existing regulations and create new ones where needed?
   - **UNEP could join the tripartite** and sign the MoU. Alternatively, an addendum could be added to the MoU to include a work plan on AMR and the environment.
   - **Showcase success stories and develop pilot studies** to demonstrate the quick and profound impact that resources spent on clean water and sanitation can have on morbidity and mortality.
   - **Recruit and push water experts** to identify the real barriers.

3. How can we help countries improve access to water and sanitation to reduce AMR spread?
   - **Support planning**—both urban and territorial.
   - **Embed initiatives** into existing climate change adaptation programmes.
   - **Support small NGOs and social entrepreneurs to scale up** the many, diverse small initiatives around community toilets, solar-powered water cleansing etc.
   - **Start talking to Member States at country level** to generate evidence, create environmental reporting capacity and interest. Advocate, educate and set up the regulations and monitoring framework necessary for adoption by Member States at the fifth session of the UN Environment Assembly in 2021.
   - **Establish links across all four organizations’ communications teams** to develop consistent and coherent campaign messages for World Antibiotic Awareness Week in November.
   - **Ensure surveillance platforms can integrate environmental data**, for example GLASS and ATLASS.
Dr Balkhy gave an overview of the subgroup’s work to date, which has seen the subgroup identify 33 preliminary recommendation areas, across seven themes:

1. Optimizing use in humans
2. Prevention and control of human infection
3. Clean water, sanitation and hygiene (WASH)
4. Optimizing use in animals and plants
5. Prevention and control of animal infection
6. Food safety and food production
7. Environmental contamination

In summarizing the subgroup’s deliberations across these themes, Dr Balkhy underscored five key messages, which were broadly endorsed by meeting participants:

**Focus on implementing existing guidelines**, rather than forming new expert groups and guidelines.

**Water and sanitation are key** and will have a major impact.

**Facilitate good practices** and commend them widely.

**Phrase recommendations to enable the pharmaceutical industry** to manufacture and market antimicrobials responsibly and not contribute to environmental pollution.

**Encourage a harmonized approach to regulation**, based on international standards adopted by consensus to avoid trade frictions.

**Optimal use: Key messages from discussion**

**Recommendations must support and amplify tripartite efforts.** IACG members agreed that the work of this subgroup covers many topics that fall under the tripartite organizations’ mandate; and that it is important to understand the challenges these organizations face and structure recommendations to help the tripartite overcome these. The IACG’s role is not to try and replace the normative guides issued by UN agencies, but to enable a policy environment for those guides to be implemented most effectively.

“What do you [WHO, OIE and FAO] want to see the IACG deliver to the UN General Assembly to help you do your work?”

**Highlighting best practices is a good approach.**

Several IACG members offered their support for the idea of focusing on the gaps and showcasing best practices to fill them. This includes building a repository of best practices across different settings and contexts, across low-, middle- and high-income settings as well as failed and fragile states.

**Acknowledge the tripartite’s ‘soft’ activities.** Some meeting participants called for stronger acknowledgement within the subgroup’s work on the ‘soft’ advocacy and influencing activity that the tripartite organizations do at a country level and with key stakeholder groups to promote good use practices in human and animal health. For example, supporting industry associations and others to pick up the priority list for vaccination development and address the market case for companies.
Subgroup on innovation, research and development, and access

Presented by Ms Sanne Fournier-Wendes on behalf of Mr Lelio Marmora

Ms Fournier-Wendes presented an overview of the subgroup’s work to date, which has included regular meetings and a series of external interviews and consultations with more than 20 organisations. These extensive interactions have been used to inform the subgroup’s discussion paper, which focuses on three potential areas for IACG recommendations:

1. **R&D.** R&D funding needs to be increased and optimized to better tackle AMR—to coordinate activities, prioritize and allocate funding effectively; and prevent duplication.

2. **Access.** With no overarching global initiative focused solely on AMR, there is a need for a concerted effort to strengthen the AMR components of existing initiatives (which are almost all in human health, related to HIV, TB and malaria) and improve coordination among them.

3. **Cross-cutting topics.** Investments in AMR could potentially be improved through a set of guiding principles (to help identify a ‘best buy’ in terms of return on investment as well as equity considerations). Operationalizing the One Health approach is important for both R&D and access.

R&D and access: Key messages from discussion

**Address access in HICs and shortages.** Access in HICs, and the broader issue of shortages that affects both LMICs and HICs, is important. IACG members agreed the subgroup should consider addressing why shortages occur and providing a value-added assessment of options to address them.

“The weak and fragile production system for old antibiotics is a crisis in itself.”

**Prescription-only access must be addressed.** Some IACG members suggested that the issue of prescription-only (or veterinarian-only) access needs to be tackled within this subgroup. This includes the consistency in access across sectors—for example, in some countries it is difficult to get Colistin for humans, but very easy to get it for animals.

**Establish a definition for ‘needs-driven’ R&D.** The UN high-level political declaration on AMR (Resolution A/RES/71/3) states that all R&D efforts should be “needs-driven” and there are expectations among external stakeholder groups that the IACG will provide an interpretation of what this means. So that needs to be specifically addressed in developing recommendations in this area. In this context, there is also a role for IACG in examining R&D in LMICs in the context of a global, needs-driven strategy on innovation.

**Innovation encompasses more than health products.** Several IACG members emphasized that it is important to look at innovation beyond antimicrobials, diagnostics, and vaccines—for example, considering alternatives for growth promotion and disease prevention and also innovation in stewardship practices such as animal husbandry.

“Offering potential technological innovation areas that can tackle substandard and falsified products could prove an effective starting point to engage governments in the AMR space.”

Incorporating stakeholder feedback

Before publishing its discussion paper, the subgroup agreed to incorporate feedback received during its consultations with civil society and industry. Particular areas to address as highlighted by IACG members include:

- **Areas of innovation** beyond drugs, diagnostics and vaccines.
- **Pooled procurement** as a key policy lever with the potential to ramp up stewardship programmes.
- **Market-shaping interventions**, including the work of Unitaid and the Medicines Patent Pool.
- **Substandard and falsified route to engage governments**, with a focus on potential areas of technology as a place to start engagement.
- **Cross-sectoral lessons on Product Development Partnerships (PDPs)** as a way to solve public good issues to share.

**Cross-cutting topi**

- **R&D**
  - Increase and optimize funding
  - Coordinate efforts

- **ACCESS**
  - More concerted effort
  - Coordinate activities among existing initiatives
  - Consider AMR in animal, plant and environmental health

- **OTHER**
  - Develop guidance for investment in AMR
  - Operationalize the One Health approach
This subgroup’s work centres on three commissioned studies, funded by the Wellcome Trust:

1. **UN roles, responsibilities and remit**
   Led by the UN Foundation, this study will map out all the AMR activities of UN agencies. The report, due at the end of August, will be based on a combination of desk research, questionnaires and interviews.

   Already, the project is stimulating links and building momentum among UN agencies.

2. **SDG indicators**
   This stream of work, carried out by McKinsey & Company, recognises that while AMR is very relevant to the SDGs (40% of SDG indicators are AMR-sensitive), AMR is not reflected well in them (0% of SDG indicators are AMR-specific).

   The research team looked at 300+ indicators and considered three options for better anchoring AMR in the SDG indicator framework:

   a. **Promote AMR through implementation**: keep SDG indicators as they are but support custodial agencies to anchor AMR in the metadata (for example, working with FAO to include AMR in the definition of sustainable agriculture).
   b. **Explicitly call out AMR in existing indicators**: for example, adding an AMR ‘flag’ to the TB incidence indicator to see if the strain is resistant or not.
   c. **Develop a new AMR-specific indicator**: for example, getting an indicator on resistance levels for key pathogens into the target on access to essential medicines.

   Other options that were not included in this study, but should arguably be pursued in parallel, include: leveraging communication opportunities; integrating AMR into other reporting frameworks; supporting NGOs to host dashboards for new AMR indicators; and building dashboards around country-driven data.

   Initial analysis identified three potential new AMR indicators but suggested that pursuing these (option c)—or trying to add AMR to existing indicators (option b)—is both politically and logistically difficult and arguably beyond the reach of the IACG (although the tripartite could decide to make a push for one or other of these options independent of the IACG).

Option a, to anchor AMR in the metadata, is much more feasible and the study identifies a diverse range of potential opportunities in this space.

**SDG indicators: Key messages from discussion**

**Country reviews offer another entry point for AMR.** Mechanisms such as voluntary country reviews and SDG submissions offer an annual platform for introducing AMR into the SDGs. According to one IACG member, all countries have the freedom to include any additional indicators they want, so recommendations could target countries to include AMR in their national indicator frameworks.

**Metadata options could prove a useful advocacy tool.** The full list of options and proposals for anchoring AMR in the metadata of SDG indicators could be used as an advocacy tool by networks such as ReAct that can circulate it widely and encourage its practical use.

**A united request from the tripartite would have a stronger chance of success.** The tripartite organizations are best placed to make the move for a new indicator if they adopt a united position and presented a common request for an AMR indicator. That includes working to build consensus on what a composite indicator that countries would have the infrastructure to collect data for looks like. It was also underlined that WHO could seize the opportunity of the SDG 3 action plan to introduce AMR indicators and targets.

> “The ultimate objective is stronger surveillance and responsibility, not necessarily getting into the SDGs themselves.”

**Policymakers lack the simple dashboards they need.** Mr Hartenstein argued that there is a reporting gap at the national level. For those policymakers wanting a quick perspective on AMR, there is no reporting summary available to serve them. From a government
perspective, there’s a need to find a way of cutting indicators together to create an easily digestible dashboard and reporting logic.

3. Governance models, forms and functions for AMR
The third strand of work under subgroup 5 focuses on identifying what type of governance mechanism is required for AMR beyond the IACG 2019 deadline, and the report from a meeting held in April 2018 at Leeds Castle, United Kingdom attended by some IACG members and external participants from the public, private and philanthropic sectors. The report explores various different governance models, including corporate voluntary codes of conduct, multi-stakeholder protocols (such as the Montreal Protocol), and intergovernmental treaties (such as the Framework Convention on Tobacco Control).

The discussion at Leeds Castle resulted in a ‘straw man’ model built on a multi-sector, multi-stakeholder global steering board, hosted in an existing organization, that is led by a time-limited high-level commission and works with a standing secretariat to support the tripartite organizations and UNEP deliver the GAP.

The global steering board is envisioned to actively advocate for AMR action and funding, sustain political momentum and provide regular syntheses of the science and partnership work with private sector and civil society.

Governance: Key messages from discussion
AMR needs IPCC-type analysis on regular basis. Every month, hundreds of scientific articles about AMR are published. To make sense of the burgeoning literature, the world needs a body akin to the Intergovernmental Panel on Climate Change (IPCC) to provide a regular analysis and synthesis of key issues.

“No one has the full picture and we need advice from the scientific community to find real gaps and move away from duplication.”

Global governance structures must work to support the tripartite organizations, not replace them. All IACG members agree that governance mechanisms for AMR must be anchored with the tripartite organizations and build on their long-standing collaboration to facilitate and elevate its work. The precise relationship between the proposed Global Steering Board and the tripartite organizations in terms of work, roles and functions needs clarifying.

The process must be driven by Member States. AMR is a shared responsibility, and Member States need to take the lead in tackling it to ensure their buy in. If the end goal is a substantive, binding treaty, then it is more important to secure strong engagement with Member States rather than adopt a multi-stakeholder model.

“Establishing how to facilitate ownership at prime ministerial level is key.”

We need a way to bring in multistakeholders effectively. That includes stakeholders that have so far been largely absent in the discussion, including regulators, whose collaboration is crucial in establishing the standards, norms and procedures needed to engage with the private sector. It also includes aligning with related processes such as the Global Framework for Development & Stewardship to Combat AMR that many Member States and stakeholders are already engaged in.

Beware a heavy structure. IACG members acknowledged that the proposed model looks to be a ‘heavy’ structure and that such structures require substantial resources to sustain. A key question for the IACG to consider then is: is there enough appetite to invest in this kind of structure or are we setting ourselves up for failure.
Dr Prater presented an overview of the subgroup’s discussion paper, which includes six potential areas for recommendations:

1. **Basic capacities.** Many LMICs need support to build the basic capacity to establish and maintain surveillance systems to collect and use data on AMR and antimicrobial use.

2. **Integration.** Integrated surveillance systems that connect and build on existing systems maximize the efficiency of resource use and provide more complete data.

3. **Prioritization.** The priorities for surveillance depend on national capacity, concerns and contexts, informed by global guidance.

4. **Comparability.** Surveillance data are most effectively used to study trends and inform policies when they are of high quality and easily comparable among systems.

5. **Availability.** Ensuring access to surveillance data includes making figures available but also securing the resources and capacity to collect data and interpret them for use in public policy.

6. **Investment.** Putting resources into AMR containment, including in surveillance, is one of the highest-yield investments a country can make.

**Key messages from discussion**

Surveillance systems need to be open to practical approaches. Some of the measures for surveying antimicrobial use (e.g. daily defined doses) are not meaningful in places without access. That means that in parallel to developing the capacity for integrated surveillance, LMICs need to be able to use rapid point prevalence surveys to guide empiric therapy.

Transparency requires balance. While recognising the benefits of transparency, several IACG members pointed to the potential risks—in particular, the risk of market reactions to non-scientific information that doesn’t reflect real risk to food supplies. There is the potential for misinformed stories to emerge and create distrust among consumers. There are also governance issues associated with promoting transparency and surveillance capacity. For example, moves by trading partners to build AMR into trade-based relationships could be a major concern for countries that lack basic capacities to establish and maintain surveillance systems that can collect and report quality data.

“If we want to encourage countries to use global surveillance systems then we cannot penalise them over data quality—countries need confidentiality until building data quality.”

New technologies have enormous potential for surveillance. For example, whole genome sequencing in surveillance could be a ‘game changer’ in terms of attribution and understanding where things came from through complex exposure pathways. And recent developments in paper-based analytic devices to detect chemicals could provide a leap forward in tackling substandard and falsified antibiotics.

Learn from innovative surveillance elsewhere. Some IACG members suggested there are lessons to be learnt from surveillance approaches used in other fields, for example, malaria mapping projects and various sampling approaches used in nutrition.

Explore opportunities to boost access to surveillance data from the private sector. That includes looking beyond pharmaceutical companies (and initiatives like the Open Data Institute) to consider other sectors that collect surveillance data, such as abattoirs, food regulators and supermarkets.

Leverage existing systems to improve AMR surveillance. Many LMICs are, for various reasons, looking to strengthen their health surveillance systems (for example, in pursuit of the global health agenda). Countries should be encouraged, wherever possible, to include AMR in those existing initiatives.
Stakeholder consultation plan

Chaired by Dr Anthony So, Co-Convener

The Head and Coordinator of the IACG Secretariat, Dr Haileyesus Getahun described three phases of stakeholder engagement in the lead up to publishing the IACG final report:

1. **Public consultation for subgroup discussion papers.** Discussion papers will be published online for public consultation. During a four-week consultation period, anyone can submit comments. All responses will be duly considered by the subgroups as they develop draft recommendations.

2. **Recommendation development.** Recommendations will be initially drafted in subgroups—a ccording to an agreed set of guiding principles and a common categorical framework—before being submitted to the full IACG to be refined and agreed. During this phase, subgroups can conduct targeted consultation with expert stakeholders as and where appropriate to fill gaps in expertise and inform the development of specific recommendations.

3. **Draft response.** Once the recommendations have been agreed, a full draft of the final report will be published for two months of public consultation before the report is finalised for submission to the UN Secretary-General. Full details of how stakeholder consultation during this phase will be conducted will be decided later.

In thinking about engaging stakeholders across all three phases, the need to be clear about IACG’s reasons for engagement was emphasized, which can include: gathering inputs or perspectives on potential solutions, securing buy-in, or raising visibility.

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**Considering options for engagement**

- Is it strategic or representative?
- Transparency: is it open or closed? Can stakeholders attend the consultation? Ask questions? Receive or approve the report?
- Is there a level playing field for participation?
- What type of policy venue is the consultation being held in?
- Are you engaging stakeholders or informants?

**Key messages from discussion**

*We need clear guidelines for responses.* IACG members agreed that it needs clear, tight guidelines to frame responses to the public consultation. Such guidelines should include a limit on length (to no more than 1000 words) and articulate guiding principles such as ensuring responses are clear, action-oriented and targeted at specific questions.

“**Responses should focus on the type of recommendations that IACG should be making.**”

*Manage expectations on how IACG will use responses.* The IACG should make it clear to stakeholders that while all comments will be considered by subgroups, they will only be incorporated into recommendations as and when the subgroups feel they are appropriate.

*More targeted outreach is required.* Some stakeholder groups, such as professional organizations and researchers, have been absent from IACG stakeholder engagement efforts to date. There are also many other interesting initiatives and strategies that the IACG should consult before developing recommendations. All relevant stakeholders and initiatives need to be identified as the first step to effective consultation.
Developing recommendations

Chaired by Dr Anthony So, Co-Convener

There was a discussion on how to support the IACG process for developing recommendations. To that end, IACG members broadly agreed to:

- **Target questions in the discussion papers.** The objective of the public consultation on discussion papers is to inform the development of recommendations and that all questions within the papers should be targeted to support that objective. As such, all subgroups agreed to review their discussion papers and streamline their questions to reduce redundancy and to ensure they are targeted to support recommendations.

- **Develop guidance for developing recommendations.** This guidance will be based on the IACG’s terms of reference and workplan, as well as various considerations proposed by IACG members during the meeting (see ‘Guidance for recommendations’ opposite).

- **Work to a common categorical framework, or ‘synthetic frame’.** The IACG Secretariat was tasked with developing a common framework of categories (‘buckets’), under which subgroups can begin to draft recommendations. This categorical framework will be based on an analysis of the subgroup discussion papers as they stand and the key criteria and gaps identified in those.

### Elements for guiding recommendations

**What we want to achieve:**
- Aim for large impact
- Link to existing AMR frameworks
- Build a plan for operationalize

**How we want to achieve it:**
- Respond to a wide audience
- Build recommendations from known challenges
- Use distinct and consistent description

The IACG has unique position and role distinct from other actors in AMR. Its recommendations should:
- follow its established terms of reference;
- provide practical guidance;
- describe how to improve coordination;
- describe how additional actors can contribute;
- describe gaps and suggest ways to fill them;
- consider the feasibility and potential for uptake;
- support the GAP, NAPs and other initiatives using the IACG Framework for Action; and
- not duplicate the work of UN agencies or other bodies such as Codex Alimentarius.

Other questions to consider in drafting a robust recommendation include:
- Where tripartite work could use a boost, what role is there for an IACG recommendation?
- What room is there for an IACG recommendation to create an enabling environment that allows for a policy trigger to create policy change?
- Without ascribing blame, what guidance might be given on making the root cause analysis in shaping the recommendation?
- Can recommendations be aspirational, yet suggesting operational steps? What does that look like?

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1 See [http://www.who.int/antimicrobial-resistance/interagency-coordination-group](http://www.who.int/antimicrobial-resistance/interagency-coordination-group).
Annex

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