Meeting Report: Fourth meeting of the Ad hoc Interagency Coordination Group on Antimicrobial Resistance (IACG)

16-17 October, 2017
OIE Headquarters, Paris, France
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# Abbreviations

<table>
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<th>Description</th>
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<tbody>
<tr>
<td>AMR</td>
<td>Antimicrobial resistance</td>
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<tr>
<td>ANMV</td>
<td>French Agency for Veterinary Medicinal Products</td>
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<td>ANVISA</td>
<td>Brazil National Health Surveillance Agency</td>
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<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
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<td>DNDi</td>
<td>Drugs for Neglected Diseases initiative</td>
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<td>EMA</td>
<td>European Medicines Agency</td>
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<td>FAO</td>
<td>Food and Agriculture Organization</td>
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<td>FEAP</td>
<td>Federation of European Aquaculture Producers</td>
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<td>GAP</td>
<td>Global Action Plan on AMR</td>
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<td>HTM</td>
<td>HIV, TB and Malaria</td>
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<td>IACG</td>
<td>Interagency Coordination Group on Antimicrobial Resistance</td>
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<td>IDF</td>
<td>International Dairy Federation</td>
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<td>IEC</td>
<td>International Egg Commission</td>
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<td>IMS</td>
<td>International Meat Secretariat</td>
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<td>JEE</td>
<td>Joint External Evaluation</td>
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<td>LMIC</td>
<td>Low- and middle-income country</td>
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<td>NAP</td>
<td>National Action Plan on AMR</td>
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<td>NGO</td>
<td>Nongovernment organization</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>OIE</td>
<td>World Organisation for Animal Health</td>
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<td>R&amp;D</td>
<td>Research and development</td>
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<td>SDGs</td>
<td>Sustainable Development Goals</td>
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<td>TB</td>
<td>Tuberculosis</td>
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<td>UHC</td>
<td>Universal health coverage</td>
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<td>UN</td>
<td>United Nations</td>
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<tr>
<td>UNAIDS</td>
<td>Joint United Nations Programme on HIV/AIDS</td>
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<td>UNEP</td>
<td>United Nations Environment Programme</td>
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<td>UNGA</td>
<td>United Nations General Assembly</td>
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<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<tr>
<td>WASH</td>
<td>Water Sanitation and Hygiene</td>
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<tr>
<td>WCO</td>
<td>World Customs Organization</td>
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<td>WHA</td>
<td>World Health Assembly</td>
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<td>WHO</td>
<td>World Health Organization</td>
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<td>WIPO</td>
<td>World Intellectual Property Organization</td>
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<td>WTO</td>
<td>World Trade Organization</td>
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Executive summary

During the 71st session of the UN General Assembly (UNGA), Heads of State issued a high-level political declaration backing a Global Action Plan on antimicrobial resistance (GAP) at national, regional and global levels. They called on the Secretary-General (SG) to establish an Ad hoc Interagency Coordination Group on Antimicrobial Resistance (IACG) to provide guidance on practical approaches to address AMR and improve coordination, taking the global plan into account.

This group, known as the IACG, is made up of 28 high-level experts and organizations in antimicrobial resistance (AMR) across human, animal and environment sectors. In October 2017, the group held its fourth meeting. Hosted by the World Organisation for Animal Health (OIE) in Paris, this meeting saw the IACG share updates on a range of ongoing activities, agree a plan for future work and ways of working, develop their work through breakout subgroup sessions, and engage stakeholders from the livestock and animal health sectors (see Annex 1).

AMR activity mapping

The AMR activity mapping exercise undertaken by the IACG Secretariat highlights significant gaps in activity, especially in the plant health and environment space and, to a lesser extent, in the animal health sector.

The IACG agreed that next steps for the mapping work should include:

- Possibly expanding the mapping to include other stakeholders, within the UN family and beyond.
- Re-mapping activities to the Framework for Action\(^2\) (including all UN agencies, not just IACG members).
- Integrating other relevant data, including, where feasible, commitments made at the Call to Action.
- Making the initial results public as work in progress, with links to further information.
- Using the results to identify gaps and inform report back on progress to the SG on next steps.

Finalising the work plan

The IACG’s final work plan includes several changes that reflect feedback from a web consultation\(^3\) of Member States and other stakeholders, as well as recommendations from IACG members. In particular, the work plan has been revised to:

- make recommendations more explicit;
- clarify the purpose of the Framework for Action and the AMR mapping exercise;
- strengthen language about the IACG’s role and added value;
- include a reference to HIV, TB and Malaria; and
- address stakeholder engagement.

In addition to finalising the work plan, IACG members finalised the details of three key mechanisms for delivering the work: subgroups, country visits and a drafting group (see Table 1).

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1 Three seats are currently vacant.
Subgroups offer a way of advancing the analysis of specific issues, and developing preliminary conclusions and recommendations that can feed into the IACG’s plenary sessions.

The IACG has established six subgroups, closely aligned with its Framework for Action:
1. Communication, public awareness, behaviour-change, professional education and training
2. National action plans, including monitoring and support
3. Reduce need for antimicrobials and unintentional exposure, and optimising use
4. Invest in innovation and research, and boost research and development (R&D) and access
5. SDG alignment, global governance past 2019 and UN role and responsibilities
6. Surveillance and monitoring for antimicrobial usage and resistance

Subgroups will engage a broad range of external stakeholders to help inform their work.

Country visits help ensure the participation and buy in of Member States. They can serve to raise political awareness, recruit AMR ‘champions’, road test IACG thinking and gather context.

All IACG country visits will be: short (1–2 days); prepared (supported by a strong country briefing beforehand); and high-level (focused on strengthening political will and advocacy; and on understanding country context to identify challenges and inform recommendations).

The drafting group is designed to help the IACG write its interim and final reports.

Made up of a small number of IACG members (subgroup chairs), the group will use inputs from both subgroups and the broader IACG membership to develop an initial set of written guidance and preliminary recommendations for the IACG to review and refine.

Table 1. Agreed mechanisms for delivering the IACG work plan

Engaging stakeholders

All IACG members agree on the need to engage the full spectrum of stakeholders in carrying out its work. The Paris meeting invited stakeholders from the animal health and food sector to offer their perspectives on AMR and to share their priorities for IACG guidance. Presentations were made by representatives from: International Dairy Federation, International Meat Secretariat, International Egg Commission, International Poultry Council, Federation of European Aquaculture Producers, Health for Animals, and USDA Agricultural Research Service. Their priorities for IACG action and guidance are summarised in Table 2 below.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Notes</th>
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<tbody>
<tr>
<td>Transparency</td>
<td>• A transparent mechanism for consulting with the IACG</td>
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<tr>
<td>Continued engagement</td>
<td>• Allowing stakeholders to stay involved in IACG work</td>
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<tr>
<td>More science and data</td>
<td>• Including the impact of antimicrobial residues on human health and a better understanding of AMR transmission pathways</td>
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<tr>
<td>Monitoring guidance</td>
<td>• A way to monitor antimicrobial use (including type of agent)</td>
</tr>
<tr>
<td>Education</td>
<td>• Raising awareness among both consumers and professionals</td>
</tr>
<tr>
<td>Public investment</td>
<td>• Overcoming regulatory, financial and technical hurdles</td>
</tr>
<tr>
<td>A paradigm shift in R&amp;D</td>
<td>• Incentivizing R&amp;D to prime the product development pipeline</td>
</tr>
<tr>
<td></td>
<td>• Not just focusing on new products</td>
</tr>
<tr>
<td>A portfolio of alternatives</td>
<td>• A focus on practical solutions across animal production systems, including good husbandry, and strong capacity, capability and training.</td>
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Table 2. Priorities for IACG action and guidance identified by stakeholders from the animal health and food sector
1. Introduction

1.1. About the IACG

In 2016, the Global Action Plan on antimicrobial resistance (GAP)\(^4\) was reaffirmed as the blueprint for tackling AMR during the 71\(^{st}\) session of the UNGA, where Heads of State issued a high-level political declaration\(^5\) committing to support and implement the plan 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 until September 2019, 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 and comprises 28 high-level representatives of UN agencies and other international organizations, and individual experts across different sectors.

The group’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 SG. This includes making recommendations on how to better coordinate action across sectors and countries, and serving as a vehicle for building political momentum and mobilising a broad base of stakeholders.

"AMR is a significant and growing threat—it needs this group’s expertise to help identify a collective and cohesive way forward."

Amina Mohammed, UN Deputy Secretary-General, addressing members of the IACG in October 2017.

The IACG has agreed a set of guiding principles for its work (see IACG guiding principles below) and has developed a Framework for Action\(^6\), which includes 14 ‘content areas’ for tackling AMR, six ‘levers’ for addressing these and three underlying ‘enablers’ (see Figure 1). It offers a common language for all sectors to use.


IACG guiding principles

- Ensuring that practical approaches are phased and stepwise.
- Ensuring that recommendations are based on utilization of existing tools across organizations and systems through collaboration and coordination, and avoiding redundancy.
- No apportioning of blame, but working to ensure that the AMR situation gets better, not worse.
- Working to support systems strengthening, promoting the dissemination of best practices and case studies, and access to services and health technologies.
- Committing to an inclusive and transparent process based on GAP objectives and aligned with SDGs.
- Not duplicating the work of others.

The framework adopted by the IACG:

- reflects the key priorities and focus of the UN’s high-level political declaration;
- is aligned with the GAP, builds on it and supports its implementation across key priorities;
- aligns with the Sustainable Development Goals (SDGs), many of which won’t be achieved without addressing AMR; and
- frames AMR measures as AMR-sensitive and AMR-specific.

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**Figure 1:** The IACG’s Framework for Action covers 14 content areas, six levers and three enablers.

1.2. Meeting aims and objectives

In October 2017, the IACG held its fourth meeting. Hosted by OIE in Paris, the meeting was largely a decision-making one intended to progress the group’s work. The meeting had four key objectives:

a. Update all members on ongoing activities.
b. Agree a plan for future work and ways of working.
c. Establish subgroups and decide their membership, scope, ways of working and deliverables.
d. Engage stakeholders from the livestock and animal health sector.

2. AMR activities

In closed sessions of the Paris meeting, IACG members were briefed on a selection of key AMR activities, including the IACG’s AMR activity mapping exercise, the Monitoring and Evaluation Framework, the Call to Action conference, the G20 Global Antimicrobial R&D Collaboration Hub, and the intergovernmental body Codex Alimentarius.

2.1. IACG activity mapping

Activity update

At its first meeting in May 2017, IACG members asked the group’s secretariat to map the AMR work already being done by the tripartite (FAO, OIE, WHO), IACG member organizations and other UN agencies. This mapping was intended as a first step towards understanding what activities are underway, what data are being collected, and where the gaps lie.

The Secretariat developed a categorical framework to map activities against the five GAP objectives (plus a cross-cutting ‘strategic leadership and coordination’ objective), while capturing additional information, such as the nature of activities (strategic planning, standards, operational implementation, advocacy), what sector they’re in (human, animal or plant health, or environment), their status and their relevance to the SDGs.

To date, ten agencies have participated in the mapping exercise.7 The most challenging aspect for most was identifying a single relevant SDG because many activities are relevant to multiple goals. The framework has now been revised to allow more than one SDG to be selected per activity.

Using the data collected, the Secretariat created a series of ‘maps’ that plot, for each GAP objective, the nature of activity against the sector it lies in. Each map works at a high level, seeking to understand what the AMR landscape looks like. The Secretariat’s findings were shared and discussed with IACG members at the Paris meeting (see Table 3 and Insights, lessons learned and next steps below).

<table>
<thead>
<tr>
<th>GAP objective</th>
<th>Observations</th>
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<tr>
<td>GAP 1 Awareness and understanding</td>
<td>• Plant health and environment sectors are behind on these issues compared with human and animal health</td>
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<tr>
<td>GAP 2 Evidence base</td>
<td>• Tripartite cooperative initiatives actively support national action plans on AMR and monitor and evaluate their outcomes</td>
</tr>
<tr>
<td>GAP 3 Reducing incidence</td>
<td>• There is a strong human health focus</td>
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<tr>
<td></td>
<td>• The exact relevance to plant health and environment is hard to see</td>
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7 FAO, OECD, OIE, UNAIDS, UNEP, UNICEF, Unitaid, the World Bank, WHO (plus the WHO HIV/TB/Malaria team), WIPO.
GAP 4
Optimising use
- There is lots of work across human and animal health, especially in the area of standards, guidelines and best practices

GAP 5
Economic case and innovation
- This area is top-heavy with work on strategic planning and coordination
- It needs a downwards push towards standards and operational work

Strategic leadership and coordination
- There are some cross-sector strategic leadership initiatives, but more comprehensive ones are needed, covering plant health and environment
- Ongoing economic studies may feed into future strategic leadership
- We expect lots more information from other organizations in this area

Table 3: Findings of AMR mapping exercise in brief.

Insights, lessons learned and next steps

Lessons
- Visual and info-rich
- Lots of gaps
- Reinforces a One Health approach

Next steps
- Re-map to framework for action
- Validate results
- Expand to other stakeholders
- Develop a public-facing tool
- Ensure no double-counting

I. The mapping exercise needs validating

- Across all objectives, there are gaps in activity, especially in the plant and environment space.
- But are these gaps ‘real’? Are areas sufficiently resourced? There’s much more activity out there and validating results (by adding activities of other stakeholders and looking critically at gaps) is important.
- The mapping does not include country-level activities, which may explain the relatively low number of activities in operational implementation and advocacy or promotion.
- To move forward with subgroups, the IACG needs to move beyond high-level information to examine the details of what is happening on the ground, including looking at what civil society is doing.

II. The mapping results are already useful; but they can be made more so

At the end of the day, we want a public-facing, online relational database.

- The IACG should expand the mapping exercise to include other stakeholders in the UN family and beyond.
- Expansion includes integrating the commitments made at the Call to Action in Berlin, and adding other mapping activities (particularly on R&D, where mapping has been done before).

- Activities need remapping to the IACG Framework for Action.
- To ensure they are ‘user-friendly’, maps need to be flexible, and should include links to more information.
- These data will inevitably be used to inform financial decisions—the natural next step is to look at how much money is being invested, where, and what resources are available.
2.2. Monitoring and Evaluation (M&E) Framework

Activity update

When the WHA agreed the GAP, it also called for the development of a monitoring framework. Over the past two years the tripartite have developed a joint approach to M&E for AMR at country and global levels. Many experts were involved in the process, which included a public online consultation in 2017. Overall the consultation endorsed the proposed approach and applauded its use of a multi-sectoral framework, although many respondents called for more work to be done on the animal, plant and environment indicators. Work is now underway to incorporate the comments, refine the approach and review and focus the list of indicators.

Because many countries are still only just beginning to develop an AMR response, M&E over the next few years will focus on progress as much as, or more, than on impact. To that end, the tripartite has already concluded a self-assessment survey to identify, among other things, the state of NAP development and national surveillance systems for AMR.

The tripartite is keen for the IACG to endorse the approach, assess GAP indicators and advise on both who should consolidate and review global reporting, and how evaluation should be commissioned and financed.

Discussion highlights

I. The IACG endorses the approach in the short-term

• The IACG agrees that the approach will work for the next two years. The group will devote a session at its next face-to-face meeting (Jan 2018) to get more information, discuss the IACG’s potential role in the framework, and explore the list of proposed indicators.

II. There is need for a common M&E framework

• The M&E framework must support an accountability mechanism that extends beyond the GAP.
• The question is how to integrate this into high-level political forum processes? These processes start at the country level, so that is the point at which AMR should be integrated.

III. The informal market is a big unknown

• The indicator with greatest traction so far is the ratio of drugs we want to have available against those we want to conserve, which is calculated based on what is coming into a country at customs level.
• But it also needs point surveys and data on the informal market, which is largely unknown.

IV. The M&E framework is an opportunity for more data

• Lack of access to drugs is a key driver of diseases such as HIV and, as such, is fundamental to what’s happening in AMR: if we don’t monitor access we may miss a big part of the AMR story.
• Tracking human and laboratory resources would be useful, albeit hard to do in practice.
• Understanding how much is being produced, where and for what purpose (whether that be distributed by doctors or vets, mixed in feed or used on crops, for example) would be a major achievement. But it requires the cooperation of pharmaceutical companies to share data.

Pharmaceutical companies...are part of the solution.
2.3. Call to Action conference

Held in Berlin, October 2017, the Call to Action conference was an innovative event aimed at accelerating momentum, alignment and cooperation on AMR. The event was hosted by the governments of the UK, Ghana and Thailand, with Wellcome Trust and the UN Foundation, in partnership with the IACG. It was designed to support the IACG’s work.  

Participants included representatives from industry, academia, NGOs, governments and funding bodies. All were called on to focus on the most critical gaps in tackling AMR, and to publicly commit to concerted and tangible actions to address these. More than 60 such commitments were made, covering a range of topics from tracking global burden of disease to developing AMR training curricula.

Participants also made recommendations to the IACG on what is required to tackle AMR—ranging from context-specific solutions to scientific standards, R&D incentives and public awareness campaigns—which will inform the IACG’s report back to the UN Secretary General.

Insights, lessons learned and next step

I. Calls to Action can help the IACG tap into expertise and keep momentum high

- There is no question that the political commitment to tackle AMR exists, but it is not matched by enough concrete action on the ground.
- The conference heard a new call for acceleration, with participants asking for more to happen, and faster.

II. The next conference needs broader engagement

- Despite many invitations, participation from the global South was low.
- To be inclusive and meaningful, the next event must include more participants from LMICs—the event’s success in Berlin should help secure future involvement.

III. These conferences, now and in the future, can drive the IACG’s work

The Call to Action conferences can be used to drive and support the IACG’s work by:

- publishing a list of commitments to hold pledgers to account and keep track of progress;
- using meetings to report back on tangible promises now and, from there, to generate more promises;
- integrating the commitments into the IACG mapping work to provide a fuller picture;
- tailoring meetings to specific gaps or audiences, and hosting consultation sessions for stakeholders; and
- reinforcing the role of the IACG to convene and coordinate, rather than implement.

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8 One of the conference’s stated objectives was to “ensure we identify all ongoing work at a national and international level to inform the IACG”. See https://wellcome.ac.uk/news/global-call-action-drug-resistant-infections for more information.

9 These are being analysed by the Call to Action organizing committee and will be shared, in full, with the IACG in due course.
3. IACG work plan

The Paris meeting included several agenda items aimed specifically at finalising the IACG work plan. Group members were asked to reflect on comments made by co-chairs, respondents to the web consultation and colleagues to decide the final wording of the work plan, define key activities such as stakeholder engagement and country visits, and agree ways of working.

3.1. Co-chairs’ priorities

Both IACG co-chairs addressed the Paris meeting to highlight their priorities for the group.

Amina Mohammed, UN Deputy Secretary-General

“Dr Tedros...and I are committed to giving you our full support as you survey the AMR landscape and formulate your recommendations.

Speaking through a video address, UN Deputy Secretary-General Amina Mohammed pointed to four areas of work that she sees as critical to the group fulfilling its mandate:

a. Stakeholder engagement: building on the success of the Call to Action conference, this includes considering how to leverage meetings to maintain broad engagement across all stakeholders.

b. Cross-sectoral communication: this involves communicating more effectively about AMR to the general public and professionals across the medical, agricultural, environment and food sectors.

c. Plan of action: this includes agreeing a clearly defined work plan to steer the future work of this group and finalising a way of working that can facilitate the effective implementation of this work plan.

d. Country visits: this includes visiting countries to find out what is being done at national and community levels, and ensuring IACG recommendations are grounded in evidence and country realities.

Dr Tedros Ghebreyesus, WHO Director-General

“AMR will be my top priority.

When WHO Director-General, Dr Tedros Ghebreyesus addressed the group, he made eight recommendations for action in the immediate and short term:

a. Fill IACG vacancies: there are three IACG member vacancies that need to be filled as soon as possible.

b. Proceed with subgroups: the six proposed subgroups make sense and should be adopted immediately.

c. Enable support: the WHO is committed to supporting the IACG but wants the group to define the support it needs—that means submitting a proposal for support, outlining personnel and resource requirements.

d. Fundraise: this begins by the Secretariat putting a cost to IACG activities in the work plan, preparing a budget and making a list of all potential donors and supporters (for the group as a whole and subgroups).

e. Include HIV, TB and Malaria: WHO considers that some reference to HIV, TB, and malaria (HTM) in the IACG work plan is advisable. Lessons learned from HTM could prove relevant to resistance elsewhere.

f. Undertake country visits: this is important to ensure country participation and ownership.

g. Identify institutional capacities: include these in the IACG AMR activity mapping exercise.

h. Involve the Director-General: Dr Ghebreyesus is keen to be involved in the IACG as much as possible, and asked IACG members what he could do to best support the group (see Figure 2 below).
3.2. Addressing HIV, TB and Malaria (HTM)

The 2017 web consultation on the IACG work plan resulted in several calls for specific reference to be made to HTM. During the Paris meeting, IACG members reviewed the pros and cons of doing so.

Pros

- **Opportunity knocks.** There are several meetings on HTM scheduled over the next year (including the UNGA high-level meeting on TB in 2018) that offer a good opportunity for cementing political commitment to, and raising the profile of, IACG work.

- **Lessons to learn.** HTM have a long history of tackling drug resistance, leading the field in terms of both programmes and funding, and the IACG could learn from their experience.

- **Agenda of the poor.** HTM are the three biggest infectious disease killers of poor people. Including them is critical to making the AMR agenda relevant to the global South.

- **Progress protection.** HTM has made lots of progress in the past 10–15 years and AMR is putting that at risk so we need to keep it high on the agenda.

There’s a wealth of experience and expertise waiting to be tapped.

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Cons

- **Risk of imbalance.** The IACG must maintain a balanced approach across human, animal, plant and environment—adding HTM to the work plan could give undue focus: why not others e.g. rabies or avian flu?
- **Holistic approach undermined.** The IACG’s work must support AMR systems and a One Health approach; not be disease-specific.
- **Aligning with the SDGs.** All the issues need to be strategically linked within the broader SDG framework, and HTM is already mentioned in the SDGs.

**HTM outcome**

**INCLUDE HTM, BUT DON’T MAKE IT THE FOCUS**

Following discussion, the IACG decided to include reference to HTM in its work plan, but not to make these diseases the focus of their work. The agreed reference is made in Objective 1.1 of the work plan:

“1.1 Advise on ways to mainstream AMR action into the SDGs, in a way that addresses antibacterial resistance as well as resistance to antimicrobials used to treat other infectious diseases, such as HIV, TB, and Malaria (HTM). Using a systems perspective, the IACG will take into account HTM experience, including lessons learned in awareness, advocacy, and community engagement, and will seek opportunities to collaborate with HTM initiatives where appropriate.”

3.3. Refining the work plan

In 2017, the IACG invited input on its work plan through a web consultation, which resulted in around 80 responses from a range of organizations. Taken together, these responses had three high-level recommendations to make to the IACG:

- Keep to the language of the resolution that established this group.
- Define the boundaries of what the IACG can and cannot achieve through its mandate.
- Develop a timeline with milestones for delivering the work plan.

Beyond these high-level recommendations, respondents also had several specific suggestions for improving the work plan. So too did several IACG members. Consideration of all these at the Paris meeting resulted in a ‘to do list’ of nine tasks aimed at refining the work plan in light of feedback. These range from using strong language to clarify the group’s role to defining stakeholder engagement (see Figure 3).

- Focus on mandate
- Reference de-linkage
- Clarify role of IACG
- Identify use of tools
- Add value
- Consider stakeholders
- Think long-term
- Draw up a budget
- Build a time line

Figure 3: A ‘to do’ list for refining the IACG work plan in response to feedback and discussion.

“We have patients in front of us, not diseases: we need to address their needs.”

“As a group, the IACG needs to be strategic about how to situate the issue of AMR in the broader political context.”
3.4. Country visits

The ‘why’: what are the objectives of these visits?

- To fulfil the mandate set down by the UN SG, and supported by IACG co-chairs.
- To engage Member States at all levels.
- To raise high-level political awareness.
- To recruit AMR ‘champions’ (at both country and regional levels) that can extend the reach and deepen the impact of local, national and regional AMR initiatives.
- To ‘road test’ IACG thinking and recommendations.
- To gather colour and context for the IACG final report.
- To learn about in-country challenges and opportunities.

“We’re trying to spark change but also to get country leaders to take their regions with them and build something bigger.”

The ‘what and how’: what will a visit entail and how will it work in practice?

- A country visit is an opportunity for IACG members to see how the theory of combating AMR works on the ground, in the local context.
- Visits offer an opportunity to reflect back information gathered through data-gathering initiatives such as the Joint External Evaluation (JEE) or the OIE database, in a way that is useful for countries in developing their NAPs.
- All visits must provide support and encouragement; they are not critical assessments.

“For countries that are struggling with the NAP process: how do we, as the tripartite or the IACG, support them?”

Country visits outcome

UNDERTAKE COUNTRY VISITS, WITH A FOCUS ON HIGH-LEVEL ENGAGEMENT

IACG members agreed such visits would be:
- short (1–2 days);
- prepared (supported by a strong country briefing beforehand); and
- high-level (focused on strengthening political will and advocacy).

Each visit should include a minimum of three IACG members and one or two members of the Secretariat.
4. Subgroups

Once IACG members had agreed upon a final work plan, they considered how they would work together to implement it. In particular, they agreed the need to split into smaller groups to advance analysis of specific issues and challenges and develop preliminary conclusions and recommendations that can feed into IACG’s plenary sessions. To that end, the IACG established six ‘subgroups’, closely linked to the Framework for Action (see Figure 6). At the Paris meeting, the group agreed the membership of these subgroups (see Annex 3) and defined their scope and added value, as well as ways of working, including how to engage external stakeholders.

![Figure 6. The IACG’s six subgroups](image)

4.1. Key features of subgroups

**Scope**

Subgroups are intended to drive the IACG’s work forward, and not to repeat work already being done by the tripartite or others. In many technical and political issues that the subgroups will grapple with, the ‘what’ has already been defined, so they will focus on determining ‘how’ solutions could be implemented.

Recommendations on scope to emerge from the IACG discussion include:

- **Don’t duplicate.** Subgroups should not duplicate work, both of other organizations or other subgroups.
- **Focus on the holes.** Subgroups should concentrate their efforts on the critical gaps. 

> *We must be informed by, but not re-do, the work of the tripartite.*
• **Ensure a balance.** Subgroups’ work should cut across human, animal, plant, and environment issues.

• **Align work.** Subgroups should link to the content areas, levers and enablers of the IACG Framework for Action.

• **Keep a clear remit.** Subgroups should be clear about both what they are and are not doing.

"Our added value lies at the political and strategic level."

**External advisor engagement**

As well as IACG members, other experts from IACG member organizations (referred to as IACG technical advisors) will contribute to subgroups. Subgroups may also consult external advisors on specific issues. However, inclusion of the input of those not affiliated with the IACG will be carefully considered: all members of the subgroup will need to agree on the inclusion of external advisors, these advisors will be required to provide a Declaration of Interest before engaging in IACG subgroup work, and their names and type of engagement will be made public on the IACG website.

Recommendations to emerge from the discussions on engagement with external advisors include:

• **Be transparent.** Subgroups should be clear and transparent about who they are engaging, when and how.

• **Balance expertise.** Subgroups should select external advisors for their expertise and experience, adopting a One Health approach and ensuring a strong balance across both gender and geography.

• **Avoid conflicts of interest.** Subgroups should favour representatives of associations rather than individual organizations, to avoid conflict of interests.

• **Limit roles.** Subgroups should limit the functions of external advisors to activities and advice within the subgroup (that is, no direct contributions to the broader IACG group) to avoid the risk of undue influence.

• **Consult widely.** Subgroups should consult with a broader set of stakeholders outside the role of advisors—through, for example, web consultations, interviews etc.

**Deliverables**

Each subgroup is tasked with submitting a 2–4 page analysis, including preliminary recommendations, to the broader IACG group at its next face-to-face meeting in Bangkok in January 2018.

To ensure a clear and consistent final set of recommendations, IACG members will need to agree a common language and philosophy for subgroups to use in drafting recommendations—either at the January 2018 meeting, or before.
5. Reporting

5.1. Drafting the IACG reports

The IACG is mandated to report to the UNSG during the 73rd session of the UN General Assembly, and plans to provide its final report to the Secretary-General for September 2019. The IACG has committed to providing an interim report with preliminary recommendations in September 2018; the group intends to consult with Member States on high-level aspects of this interim report ahead of submitting it to the Secretary-General.

A drafting group has been set up, comprising the chairs of IACG subgroups and some members of the Secretariat, working with inputs from the IACG as a whole to develop an initial set of guidance and preliminary recommendations that will be signed off by consensus of the IACG. The drafting group intends to meet in April 2018 to develop a first draft of the interim report for the IACG face-to-face meeting in June.

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**Drafting group**
- Dr Hanan Balkhy
- Professor Dame Sally Davies
- Ms Martha Gyansa-Lutterodt
- Ms Jaana Husu-Kallio
- Dr Lelio Marmora
- Dr Donald Prater
- IACG Secretariat members

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Figure 4: Drafting group membership and timeline for report development

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5.2. Final draft of the work plan

Before the Paris meeting closed, IACG members agreed upon a final version of the 2017–19 IACG work plan.

Key changes following the web consultation and IACG discussion include:
- A new guiding principle on not duplicating the work of others (see Section 1.1 above).
- More explicit language on ensuring a cohesive, integrated response (Objective 1).
- Reference to HTM (Objective 1.1).
- More explicit reference to engaging with stakeholders (Objective 1.3).
- Clearer statement of intended use of the Framework for Action (Objective 1.6).
- More detailed mapping activities set out (Objective 2).
- Inclusion of advocacy for innovative financing models (Objective 3.1).
• More explicit language on delivery of a vision and roadmap (Objective 4).
• Reference to tripartite reporting as source for assessing GAP progress (Objective 4.1).
• Deletion of Objective 5 (which was agreed to be a way of working rather than an objective).
• Minor edits throughout to improve clarity and sense.

The final work plan can be found in full on the IACG website at: www.who.int/antimicrobial-resistance/interagency-coordination-group/IACG-AMR_workplan.pdf.

See Figure 5 below for a top-level timeline of events and activities associated with the work plan.

Figure 5: Timeline of meetings, country visits, deliverables and broader set of activities.
6. Stakeholder spotlight

6.1. IACG and stakeholder engagement

All IACG members agree on the need to engage the full spectrum of stakeholders, and on the need for stakeholders to engage each other on key issues.

They are similarly agreed on the need to ensure a clear and transparent process for engaging stakeholders in IACG work, and on the importance of context and culture. The tools and tactics that work for engagement with one group or in one region may not work for others.

"AMR can be context-specific, so we must remember that the messages won’t always have the desired impact unless they are rooted in context and tailored to different audiences."

Taking stakeholder engagement as a given, the question remains: “who are we trying to engage, why and how?” The who-why-how puzzle summarises the scope of the high-level dialogue about stakeholder engagement at the Paris meeting (see Figure 7 below).

Figure 7: Three prongs to stakeholder engagement
6.2. Stakeholder contributions: Animal health

Across the world, individuals and organizations within the animal industry are making major efforts to combat AMR. The Paris meeting provided an opportunity for IACG members to learn about the challenges and issues faced by this sector and to hear representatives talk about their perspectives on AMR and share their priorities for IACG guidance (see Tables 4 and 5 below).

Watch the stakeholder engagement session in full at www.youtube.com/watch?v=lWd8tGB6DNg.

6.2.1. Livestock

Key stakeholders

Presentations were made by representatives from:
- International Dairy Federation (IDF): www.fil-idf.org
- International Meat Secretariat (IMS): www.meat-ims.org
- International Poultry Council (IPC): www.internationalpoultrycouncil.com
- Federation of European Aquaculture Producers (FEAP): www.feap.info

Discussion highlights

I. Tackling AMR in livestock requires communication, incentives and regulation

- Membership organizations, which have no enforcement authority, must rely on good communication tools to influence behaviour change.
- Success stories can be powerful tools of persuasion.
- The industry needs strong regulation.
- Incentives can also help promote responsible use and the private sector has a part to play here—large companies are a good vehicle for motivating good behaviour by implementing high standards through their supply chains.

The first step in tackling AMR is often trying to explain in simple terms what it is and why it’s so important.

II. Stakeholders in this sector are incredibly diverse

- Production systems vary in size, species and local environment.
- Addressing AMR within such diversity requires a careful balance of interests.

III. The sector needs a coordinated ‘One Health’ approach, rooted in science

- In many cases, the boundaries between human, animal, food and environment are very blurred—especially, for example, in aquaculture.
- Cooperation across all sectors is critical to success in tackling AMR.
- Any cooperative approach must be free of blame and bias, rooted in evidence, and built on comparable data.

We want [cooperation] that is based on science—this is the common language that we all speak.
IV. Concerted effort is required to “leave no one behind”

- For large country-based membership organizations, it can be difficult to reach out to the ‘back-yard’ village production systems that exist in large numbers across LMICs.
- Reducing antimicrobial use results in challenges and consequences that vary across different contexts.
- Whatever solution to AMR is proposed, it must consider the billion poor people that depend on livestock for their livelihoods as well as their nutritional and food security.
- Change will take time and so a phased approach may be best.

<table>
<thead>
<tr>
<th>Priority</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transparency</td>
<td>• A transparent mechanism for consulting with the IACG</td>
</tr>
<tr>
<td>A global view</td>
<td>• Keeping in mind that “what we do affects everyone else”</td>
</tr>
<tr>
<td>Continued involvement</td>
<td>• Allowing key stakeholders to comment on IACG technical content</td>
</tr>
<tr>
<td>More science</td>
<td>• Especially on the impact of antimicrobials released in the environment</td>
</tr>
<tr>
<td>Monitoring guidance</td>
<td>• A way to monitor antimicrobial use (including type of agent)</td>
</tr>
</tbody>
</table>

Table 4: Recommended priorities for IACG action and guidance from livestock stakeholders

6.2.2. Pharmaceutical and the wider R&D agenda

Key stakeholders

Presentations were made by representatives from:

- HealthforAnimals: [https://healthforanimals.org](https://healthforanimals.org)

Discussion highlights

I. Do not neglect the environment

- The fate of products in the environment is an important aspect of AMR that demands rigorous criteria for, and scrutiny of, manufacturing practices.

II. Focus on practical solutions

- A portfolio of alternatives to antibiotics may be needed to achieve optimum health and disease management for different animal production systems.
- There is scope for improvement with better feed and control, but biosecurity is not the only solution.

“*We excel at preventive medicine and biosecurity, but animals will get diseases... so we must have tools to treat them.*”
III. Adopt a multi-pronged approach

- There is a critical need to incentivize R&D for new antibiotics as well for alternatives to antibiotics, including vaccines, especially for use in agriculture and aquaculture.
- At the same time, better regulation is needed—to ensure strong veterinary services, legislation, counterfeit controls, and prescribing systems.

"We thrive under regulation because we are used to it."

<table>
<thead>
<tr>
<th>Priority</th>
<th>Notes</th>
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</thead>
<tbody>
<tr>
<td><strong>Science-based solutions</strong></td>
<td>- Invest in science-based information about transfer pathways</td>
</tr>
<tr>
<td></td>
<td>- Focus energy on actions to reduce overall AMR</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>- Increasing understanding among both consumers and health workers of how to use antimicrobials correctly and how to handle and cook meat products</td>
</tr>
<tr>
<td><strong>Public investment</strong></td>
<td>- Investment to overcome regulatory, financial, technical hurdles to animal vaccination; and reinforce public veterinary services.</td>
</tr>
<tr>
<td><strong>A paradigm shift in R&amp;D</strong></td>
<td>- Incentives to prime a product development pipeline that is currently dry</td>
</tr>
<tr>
<td><strong>A portfolio of alternatives</strong></td>
<td>- Managing health and diseases for different animal production systems.</td>
</tr>
</tbody>
</table>

Table 5: Recommended priorities for IACG action and guidance from pharmaceutical and R&D stakeholders.
**Annexes**

**Annex I. Meeting agenda**

Fourth meeting of the Interagency Coordination Group on Antimicrobial Resistance (IACG)
Venue: OIE Headquarters, Paris
Date: 16-17 October 2017

### DAY 1, 16 October

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.30 – 08.45</td>
<td>Welcome</td>
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<tr>
<td>08.45 – 09.15</td>
<td>Dialogue with Dr Monique Eloit, Director-General, OIE</td>
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<tr>
<td>09.30 – 10.45</td>
<td>Updates on: Call to Action conference; AMR mapping exercise; G20 R&amp;D collaboration hub and GARD-P; UNGA side event on AMR; Presentation on Codex</td>
</tr>
<tr>
<td>10.45–11.00</td>
<td>COFFEE</td>
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<tr>
<td>11.00 – 12.00</td>
<td>Presentations and decision points: (1) M&amp;E Framework (2) Work plan links with HTM</td>
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<tr>
<td>12.00 – 13.00</td>
<td>WORKING LUNCH: Meeting with French Government on update to National Action Plan</td>
</tr>
<tr>
<td>13.00 – 14.30</td>
<td>Subgroups: Plenary discussion, followed by breakout sessions for the six subgroups</td>
</tr>
<tr>
<td>14.30 – 15.00</td>
<td>COFFEE</td>
</tr>
<tr>
<td>15.00 – 15.30</td>
<td>Session with the Co-chair, WHO Director-General Dr Tedros Adhanom Ghebreyesus</td>
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<tr>
<td>15.30 – 16.30</td>
<td>Plenary discussion: Synthesizing key points from breakout session</td>
</tr>
<tr>
<td>16.30 - 18.00</td>
<td>High-level presentation of workplan comments</td>
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<tr>
<td>18.00</td>
<td>Wrap up and close of meeting</td>
</tr>
</tbody>
</table>

**18.30 – 20.30**  **Cocktail reception hosted by OIE**

### DAY 2, 17 October

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>08.30 – 09.00</td>
<td>Welcome and quick recap of day 1; run-through of agenda</td>
</tr>
<tr>
<td>09.00 – 11.00</td>
<td>Breakout session 2: Group to divide into sub-groups again</td>
</tr>
<tr>
<td>11.00 – 11.30</td>
<td>COFFEE</td>
</tr>
<tr>
<td>11.30 – 13.00</td>
<td>Plan future work and meetings, and follow-up discussions on Bangkok PMAC meeting</td>
</tr>
<tr>
<td>13.00 – 14.00</td>
<td>LUNCH</td>
</tr>
<tr>
<td>14.00 – 15.30</td>
<td>Presentations by livestock industry representatives, followed by Q&amp;A</td>
</tr>
<tr>
<td>15.30 – 16.00</td>
<td>COFFEE</td>
</tr>
<tr>
<td>16.00 – 17.00</td>
<td>Presentations by animal pharmaceutical and R&amp;D representatives, followed by Q&amp;A</td>
</tr>
<tr>
<td>17.00</td>
<td>Wrap up and close of meeting</td>
</tr>
</tbody>
</table>

**18.30 – 20.00**  **High-level stakeholder engagement event at UK Embassy in Paris, France.**
Annex II. List of participants

CO-CHAIRS

Ms Amina J Mohammed
Deputy Secretary-General
United Nations (could not attend)

Dr Tedros Adhanom Ghebreyesus
Director-General
World Health Organization

MEMBERS

Dr Hanan Balkhy
Executive Director
Ministry of National Guard Health Affairs
Kingdom of Saudi Arabia

Dr Enis Baris
World Bank
United States of America

Professor Otto Cars
Senior Professor, Infectious Diseases,
Senior Adviser – ReACT
Sweden

Professor Junshi Chen*
Senior Research Professor
China

Professor Dame Sally Davies*
Chief Medical Officer
United Kingdom of Great Britain and Northern Ireland

Dr Lyalya Gabbasova
Ministry of Health of Russian Federation
Russian Federation

Mr Minelik Alemu Getahun
World Intellectual Property Organization (WIPO)
Switzerland

Ms Martha Gyans-Lutterodt*
Ministry of Health
Ghana

Mr Elliot Harris
United Nations Environment Programme
United States of America
(Could not attend)

Ms Ana Hinojosa
World Customs Organization
Belgium
(Could not attend)

Ms Jaana Husu-Kallio
Ministry of Agriculture and Forestry
Finland

Dr Hajime Inoue
World Health Organization
Switzerland

Mr Martin Khor
South Centre
Switzerland
(Could not attend)

Dr Luiz Loures
Joint United Nations Programme on HIV/AIDS
Switzerland

Dr Juan Lubroth
Food and Agriculture Organization (FAO)
Italy

Dr Marco Marzano de Marinis
World Farmers Organization (WFO)
Italy

* Co-Convener

Dr Lelio Marmora
Executive Director UNITAID
Switzerland

Dr Gerard Moulin
National Agency for Veterinary Medical Products (ANSES)
France

Mr Mark Pearson
Organization for Economic Cooperation and Development (OECD)
France

Dr Stefan Peterson
United States of America

Dr Donald Prater
Food and Drug Administration
USA

Dr Jarbas Barbosa da Silva
National Health Surveillance Agency (ANVISA) Brazil

Dr Matthew Stone
World Organization for Animal Health (OIE) France

Dr Marijke Wijnroks
Global Fund to fight AIDS, Tuberculosis and Malaria
Switzerland
(Could not attend)

Ms Christiane Wolff
World Trade Organization
Switzerland
Annex III: Subgroups

For all subgroups: technical advisors and external stakeholders engaged in subgroup work will be confirmed in due course and listed on the IACG website.

**Subgroup 1: Communication, public awareness, behaviour-change, professional education and training**

Members include:
- Ms Martha Gyansa-Lutterodt, Ministry of Health, Ghana (Chair)
- Dr Hajime Inoue, WHO
- Ms Ana Hinojosa, WCO

**Subgroup 2: National Action Plans, including monitoring and support**

Members include:
- Ms Jaana Husu-Kallio, Ministry of Agriculture and Forestry, Finland (Chair)
- Dr Matthew Stone, OIE
- Dr Lyalya Gabbasova, Ministry of Health, Russian Federation
- Prof Otto Cars, ReAct
- Mr Elliot Harris, UNEP

**Subgroup 3: Reduce need for antimicrobials and unintentional exposure, and optimising use**

Members include:
- Dr Hanan Balkhy, Ministry of National Guard Health Affairs, Kingdom of Saudi Arabia (Chair)
- Dr Jarbas Barbosa da Silva, National Health Surveillance Agency (ANVISA), Brazil
- Dr Juan Lubroth (FAO)
- Dr Marco Marziano de Marinis, World Farmers Organization
- Professor Junshi Chen, China National Center for Food Safety Risk Assessment, China
- Dr Gerard Moulin, ANMV, ANSES, France
- Ms Christiane Wolff, WTO

**Subgroup 4: Invest in innovation and research, and boost R&D and access**

Members include:
- Dr Lelio Marmora, UNITAID (Chair)
- Mr Mark Pearson, OECD
- Mr Minelik Getahun, WIPO
- Professor Dame Sally Davies, Department of Health, UK
- Dr Marijke Wijnroks, Global Fund to fight AIDS, Tuberculosis and Malaria
- Mr Martin Khor, South Centre, Switzerland
Subgroup 5: SDG alignment, global governance past 2019 and UN role and responsibilities

Members include:
- Professor Dame Sally Davies, Chief Medical Officer, UK (Chair)
- Prof Otto Cars, ReAct
- Dr Enis Baris World Bank
- Ms Nana Taona Kuo, EOSG
- Dr Luiz Loures, UNAIDS
- Ms Martha Gyansa-Lutterodt, Ministry of Health, Ghana

Subgroup 6: Surveillance and monitoring for antimicrobial usage and resistance

Members include:
- Dr Donald Prater, US FDA (Chair)
- Dr Lyalya Gabbasova, Ministry of Health, Russian Federation
- Mr Elliott Harris, UNEP