ROLES, RESPONSIBILITIES AND REMIT OF UN ORGANISATIONS IN RELATION TO ANTIMICROBIAL RESISTANCE (AMR)
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The United Nations Foundation (UNF) wishes to acknowledge the members of the Inter-Agency Coordination Group for Antimicrobial Resistance (IACG), and particularly the co-convener, Dame Sally Davies, for entrusting UNF with leading this important assignment.

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The work was led by Natalie Africa of UNF and research consultant Gail Hansen, with support from Tosan Yembra and our intern, Jun Guo. Kate Dodson at UNF provided insights and direction throughout the process, as did Lori Sloate and Elizabeth Cousens.

Professors Didier Wernli and Keiji Fukuda of the University of Geneva’s Global Studies Institute and the University of Hong Kong provided additional desk research that was integrated into the background version of the report, while Delia Grace of CGIAR agreed to peer review the report. Daniel Laender and Eric Saboya assisted with the layout, and Betsy Rosenblatt Rosso with copyediting.

Most importantly, we extend our gratitude to all the individual respondents from the UN organisations and multilateral bodies who gave their time and knowledge to complete the questionnaires and hold telephone interviews with the UNF team. While space limitations render it impossible to reflect the breadth of data gathered, we trust that the content of the report provides a fair and faithful reflection of their important work being undertaken.
EXECUTIVE SUMMARY

Antimicrobial resistance (AMR) is the ability of microorganisms such as bacteria, viruses, and some parasites to stop an antimicrobial such as antibiotics, antivirals, and antimalarials from working against them. As a result, standard treatments become ineffective and infections persist and may spread to others.¹

AMR has been recognised as a challenge for every country and could endanger many health-related achievements of the 20th century, as well as the attainment of the 2030 Agenda for Sustainable Development. The political declaration adopted by heads of state and government during the High Level Meeting on AMR at the UN in September 2016 commits countries to support a multi-sectoral One Health approach to address AMR, and calls on the Tripartite organisations of the World Health Organisation (WHO), Food and Agricultural Organisation (FAO), and World Organisation for Animal Health (OIE) to work with relevant UN agencies and other intergovernmental organisations, as well as other stakeholders, to support development and implementation of national action plans and AMR-related activities at the national, regional, and global levels.²

The purpose of this summary report is to provide a mapping of the activities of UN and other multilateral organisations and assess their current or potential capacity to undertake AMR-specific or AMR-sensitive activities³. The aim is to support the IACG in formulating recommendations on the roles, responsibilities, and remit of UN organisations in tackling AMR. The report does not attempt to determine the effectiveness or impact of the activities cited.

Data for the report was generated by a combination of desk research, a written survey, and in-person and telephone interviews. Activities were cross-referenced to the 14 content areas and 5 levers of the 2017 IACG Framework for Action. Many of the organisations welcomed the opportunity to participate in the research, with one respondent noting that: “the survey was great, it helped us put things on paper that were bubbling under the surface.”

Based on our research and interviews, we grouped the organisations into five categories, according to our understanding of their level of mandate, remit, and sustained investment in AMR-related activities. This categorisation provides some direction for the IACG as to which organisations are currently the most active, starting with the Tripartite organisations (FAO, OIE, and WHO).

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¹ http://www.who.int/antimicrobial-resistance/en/
² http://www.who.int/antimicrobial-resistance/interagency-coordination-group/UNGA-AMR-RES-71-3-N1631065.pdf?ua=1
³ AMR-specific measures are specifically focused on reducing AMR and could include measures such as enacting and enforcing regulations on access of antibiotic medicines, innovating and funding new antimicrobial medicines, AMR surveillance, and AMR behavior change programmes. AMR-sensitive measures consist of primary prevention objectives that reduce the need for antibiotic medicines in the first place, such as improving access to clean water and sanitation, ensuring animal health and sustainable food production, or implementing vaccine programmes that reduce the likelihood of bacterial infections in humans and animals.
MAJOR FINDINGS

1. There was clear differentiation across the organisations researched in terms of mandate, remit and current responsibility for tackling AMR. We found it useful to categorise the organisations into five categories reflecting this wide difference in awareness and action in relation to AMR.

2. Human infection prevention and control and human use are highly emphasized, while a much lower volume of activity exists around the food animal and agricultural sector.

3. The lack of resources to undertake AMR-related work was the greatest challenge cited. As one respondent noted: “Without funding, AMR is not a priority.” This challenge was seen as hampering organisations’ ability to plan and optimise their actions beyond the short term.

4. Most organisations cite national governments as their primary target audience, which is in keeping with the nature of most UN organisations. However, there was a desire expressed for enhanced coordination and leadership to strengthen prioritisation, synergies, and accountability.

ISSUES FOR IACG CONSIDERATION

1. Potential for more deliberate targeting of organisations in categories 2 & 3 for strengthened action across the UN on AMR, working with the Tripartite organisations (FAO/OIE/WHO) and providing organisations with a clear roadmap, mandate, and responsibilities. Organisations in category 4 could be considered for further mainstreaming of AMR across the UN system.

2. The framing of AMR could be improved. The challenge of AMR could benefit from being brought into the mainstream of development language and better linked to the UN Sustainable Development Goals (SDGs).

3. High demand for strengthening the governance of AMR. Exploring global governance of AMR was not in the remit of this exercise, but was mentioned as a priority by respondents in nearly all the organisations that are already more active in addressing AMR.

4. Need to strengthen organisational leadership. AMR could be better managed across the UN organisations to prioritise AMR and address it in a decisive and logical fashion. Appointing senior staff solely dedicated to or involved with AMR activities would also allow for a more coordinated and deliberate response and create a broad network of senior champions.

5. Coordination across the UN could be enhanced. We recommend establishing a UN coordination mechanism—that goes beyond the Tripartite—for key UN organisations (and invited multilaterals) to assess progress, expand and disseminate evidence, and sharpen coordination and action on AMR.

6. Benefits of establishing or leveraging an existing multi-stakeholder partnership platform. Organisations indicated that collaboration and partnership with industry, civil society, research partners, and others are essential in tackling AMR. However, the system appears to lack a platform that enables clear assignment of roles and a systemic engagement of partners.

7. Need to elaborate a funding strategy. Few organisations outside the Tripartite have budgets clearly delineated to work on AMR. Elaborating a clear, collective, and coordinated funding strategy and identifying a potential pool of donors could benefit the broader UN strategy on AMR.

This report provides some rich detail of the enormous potential and willingness that exists across the UN system to take on the AMR challenge. There is significant capacity, expertise, and knowledge in the UN family and among its key partners. What appears to be needed is a significant sharpening of the tools being deployed, to enable a more coordinated, targeted, and effective response. Current discussions around UN Development System Reform could provide additional opportunity for UN organisations to work with member states to insert AMR-related targets into national Development Assistant Frameworks and enhance national-level coordination on AMR.
ACRONYMS USED

AMR: Antimicrobial resistance

IACG: Inter-Agency Coordination Group

NCDs: Non-communicable diseases

SDGs: Sustainable Development Goals

UNF: United Nations Foundation
INTRODUCTION
AND METHODOLOGY
Since its establishment in 1998, the UN Foundation has connected people, ideas, and resources with the United Nations and mobilised constituencies in support of UN causes and values. UNF has thus built relations with a broad realm of partners across the UN system and externally and has a keen understanding of both the opportunities and challenges that exist in working across the complex environment of the UN and in engaging effectively with outside partners. Since 2016, UNF has actively supported efforts of the UN and partners to raise awareness of and communicate the threat of AMR, and to bring diverse partners closer to the work of the UN.

UNF was commissioned by the IACG to undertake a mapping exercise on the *Roles, Responsibilities and Remit of UN organisations in relation to Antimicrobial Resistance*. Sixty-three organisations from across the UN and multilateral system were identified for the mapping exercise by the IACG. The scope of the exercise was to undertake a rapid analysis of the remit of UN organisations in terms of both AMR-sensitive and -specific objectives, to identify areas in which UN organisations could better mainstream AMR into their core activities, engage with AMR as a “stretch-target” beyond their current work, and identify the teams within the organisations that currently work on AMR or could bring AMR into their work.

A mixed methodology was used to execute the mapping exercise encompassing both desk research and primary research through use of a questionnaire and interviews. This allowed for capture of publicly available information as well as more textured and intimate information that may not be publicly available.

The first part of the questionnaire asked organisations to map their activities in terms of the five action levers and fourteen content areas identified in the 2017 IACG Framework for Action on AMR. The questionnaire also included more open-ended questions related to funding, staffing, implementation challenges, collaboration and partnerships, and new opportunities or areas where AMR could be better mainstreamed or enhanced within organisations. The survey instrument also included a section for organisations not currently undertaking any AMR-related activity to respond and indicate whether they planned to take up any relevant activities in the future. The questionnaire was shared with members of Sub-group 5 of the Inter-Agency Coordination Group (IACG) before being finalised and disseminated.

Each questionnaire was pre-populated according to publicly available information with some data provided from an earlier, more limited mapping exercise conducted by the IACG in 2017. The questionnaires were sent to the verified contacts in the organisations, and in some cases directly to the heads of the organisations and accompanied by a letter of introduction from Dame Sally Davies, co-convener of the IACG, as well as a copy of the IACG Framework for Action. Organisations were given two weeks to validate and complete the questionnaire. Once the questionnaires were completed, telephone or in-person conversations provided an opportunity to further clarify and supplement the survey content.

Following each interview, UNF made any necessary additions or adjustments to the questionnaire, and returned the questionnaire to the organisation in question for confirmation. On receipt of their final sign-off, the survey for that organisation was complete. Twenty-one questionnaires were not completed because of a lack of valid contacts or contacts not responding to repeated outreach. For these organisations, we relied on desk research to map their activities.

The report has attempted to stay close to the data obtained through the available desk research, self-reported activity, and interviews. The analysis does not provide additional evaluation of the quality, effectiveness, or scale of activities, which was not within the remit of this exercise.

*(4) The number of 63 organisations counts WHO and its six regional offices as one organisation; if they were counted separately this would total 69 organisations.*

*(5) http://www.who.int/antimicrobial-resistance/interagency-coordination-group/20170818_AMR_FIA_v01.pdf*
2.1 Categorisation of organisations by current AMR activity

We recognised a great variation in terms of mandate, remit, and scope of the 63 organisations mapped. At completion of the exercise, UNF succeeded in interviewing 42 out of 63 organisations, or 67%. In delving into the research and conversations with organisations, we found it useful to classify the level of activity and mandate in relation to AMR across five engagement categories.

Visually, the differentiation is presented in Figure 1 below. The first three columns, circled in red, are the organisations that could currently be considered to have AMR in their programmatic remit, although not all of them have clear mandates to drive AMR-related activity from their governing boards or leadership.

This categorisation is expanded in Table 1 below, indicating organisations by name in each category.

### Table 1 – Categorisation of organisations by level of engagement in AMR-related activity

<table>
<thead>
<tr>
<th>Organisations &amp; level of engagement</th>
<th>Mandate and remit for AMR</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Core organisations (Tripartite):</strong> FAO, OIE, WHO (3)</td>
<td>These three organisations all have a clear mandate and remit for AMR; their governing bodies have endorsed the 2015 Global Action Plan and they form the Tripartite leaders on AMR. FAO and OIE have both created their own global action plans based on the WHO Global Action Plan. In addition, the heads of the three organisations signed an MOU in May 2018 to reaffirm their commitment to work together to combat health threats associated with interactions between humans, animals, and the environment, underscoring their commitment to tackle AMR.</td>
</tr>
<tr>
<td>Organisations &amp; level of engagement</td>
<td>Mandate and remit for AMR</td>
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</table>
| **2. Organisations with clear AMR-related activities:** Gavi, the Vaccine Alliance (Gavi), the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), International Fund for Agricultural Development (IFAD), the Joint United Nations Programme on HIV/AIDS (UNAIDS), UN Development Program, the UN Environment Programme (UNEP), UN General Assembly, UN Children’s Fund (UNICEF), Unitaid, UN Secretariat, World Intellectual Property Organisation (WIPO), World Bank (11) | • Gavi - No AMR-specific mandate but has integrated AMR in its 2018 Vaccine Investment Strategy and in certain vaccine research areas.  
• Global Fund – AMR officially integrated into work plan especially with regard to TB and ARV resistance.  
• IFAD – AMR not in official mandate, but IFAD does undertake both AMR sensitive and specific activities and is willing to expand.  
• UNAIDS – No official mandate for AMR, but undertakes AMR-related advocacy and country engagement within HIV and TB activities.  
• UNDP – No official mandate, but AMR concerns are integrated into work on HIV/AIDS, MDR-TB, and in ADP/GHIT and Global Fund delivery.  
• UNEP – Signed an MoU with WHO in Jan 2018 that includes AMR-related activity and included AMR as a major challenge in its 2017 Frontiers report  
• UN General Assembly – Convened high-level meeting on AMR in 2016 and adopted Political Declaration that triggered creation of IACG.  
• UNICEF – No official mandate, funding, or capacity for AMR. Is nonetheless raising awareness of AMR within the context of newborn and child survival, Integrated Community Case Management framework, and undertaking WASH activities.  
• Unitaid - AMR is inscribed in Unitaid’s strategy 2017-2021, and some 50% of Unitaid’s investments are AMR-related.  
• UN Secretariat (EOSG) – Has a mandate for AMR as co-chair of IACG  
• WIPO – No official mandate for AMR, but WIPO collaborates with WHO and WTO on public health, trade and intellectual property issues, including in relation to AMR.  
• World Bank – No official mandate for AMR, but plans to develop an investment framework to cost and deliver the objectives of the AMR Global Action Plan at country, regional, and global levels. |
### Organisations & level of engagement

#### 3. Organisations playing an initial role in tackling AMR through specific activities within the context of their broader social or economic remit:
- **UN Conference on Trade and Development (UNCTAD)**, UN High Commissioner for Refugees, UN Industrial Development Organization (UNIDO), UN Relief and Works Agency for Palestinian Refugees (UNRWA), World Food Program (WFP), World Trade Organisation (WTO) (6)

#### Mandate and remit for AMR
- **UNCTAD** – No official mandate for AMR but has been actively organising specific events to match investors with innovators of new antibiotics and plans to organise an additional session in October 2018
- **UNHCR** – No official mandate for AMR, has an extensive remit on health for refugees with includes both sensitive (e.g., WASH) and specific (e.g., quality procurement) activities on AMR
- **UNIDO** – No official mandate for AMR, undertakes AMR-sensitive activities through promotion of local, quality production of drugs especially in Africa
- **UNRWA** – No official mandate, conducts a wide range of AMR-sensitive and specific activities through ensuring quality health services to Palestinian refugees in the Middle East
- **WFP** – No official mandate, but planning to strengthen work with FAO on AMR in food and nutrition
- **WTO** – No official mandate from members on AMR, but has included AMR in recent deliberations on trade and health

### 4. “In-stretch” organisations not currently active but willing to explore a role in the future:
- UN Economic and Social Council (ECOSOC), UN Economic and Social Commission for Western Asia (ESCWA), UN Economic and Social Council for Asia Pacific (ESCAP), International Maritime Organisation (IMO), International Organisation for Migration (IOM), Medicines Patent Pool (MPP), UN Economic Commission for Africa (UNECA), UN Educational, Scientific and Cultural Organisation (UNESCO), UN Framework Convention on Climate Change (UNFCCC), UN Population Fund (UNFPA), UN System Staff College (UNSSC), United Nations University (UNU), UN-Water, UN Women (14)

These organisations do not currently have any official mandate for AMR.

They nevertheless expressed their willingness to stretch their programmatic remits to include AMR-sensitive or -specific concerns. However, including this range of organisations will require careful consideration of how they can be held accountable for taking on stretched mandates, whether there is sufficient capacity from the IACG or Tripartite to coordinate a broader network of organisations, and how they would be resourced to undertake any stretch activity to tackle AMR. For these organisations, AMR will also need to be better framed within the context of the SDGs and broader development concerns for it to be relevant and justifiable to their mandates and strategic priorities.
### Organisations & level of engagement

<table>
<thead>
<tr>
<th>5. “Out of remit” organisations: the UN System Chief Executives Board for Coordination (CEB), International Court of Justice (ICJ), International Monetary Fund (IMF), International Trade Centre (ITC), Organisation for the Prohibition of Chemical Weapons (OPCW), UN Institute for Disarmament Research (UNIDIR), World Tourism Organisation (UN-WTO) (7)</th>
</tr>
</thead>
</table>

#### Mandate and remit for AMR

Based on our communications, these organisations do not have AMR in their mandates or in their programmatic remit and indicated that they are not likely to undertake any AMR-related activities in the near future.

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Based on the above categorisation, the most active organisations that could be considered natural allies to the Tripartite are those in Category 2. While they may not always have clear mandates from their governing bodies to undertake AMR-related activities, they are all already actively sustaining actions within the purview of their programmatic remits. Many, however, indicated that they are challenged in terms of funding AMR-related activities, and expressed the need for enhanced leadership and coordination around AMR.

Organisations in Category 3 have begun undertaking AMR sensitive and specific activities, although not necessarily on a sustained or explicit basis. All nevertheless expressed a willingness to champion AMR. UNHCR and WFP would be critical in helping to mainstream AMR concerns in fragile situations, while UNCTAD and WTO are essential partners in dealing with trade and investment related issues around AMR.

If the IACG wishes to further broaden the net of organisations active on AMR, the fourth category of “in-stretch” organisations that are not currently active, but indicated their willingness to be, would be the next level of organisations to target. This group includes influential UN bodies such as ECOSOC, which plays a coordinating role across more than 50 UN bodies and programmes, and is responsible for review of the Agenda 2030 through the High-Level Political Forum. However, including Category 4 organisations will require careful consideration of how they could be held accountable for taking on stretched mandates, whether there is sufficient capacity to coordinate a broader network of organisations, and how they would be resourced to undertake any stretch activity to tackle AMR. AMR will also need to be better framed within the context of the SDGs and broader development concerns for it to be relevant and justifiable to such organisations.

Organisations that fall in the “out of remit” section, or Category 5, are least likely to undertake any AMR-related in the near future based on our communications with them. Unless there is a strong reason to approach any of them, it is not anticipated that they would require additional investment in terms of IACG outreach or new mandates at this stage.

There were another 21 organisations that either did not respond to requests for interviews and to complete the survey, or for which we were unable to obtain valid contact details. As such, their potential to undertake AMR-related activity was not fully validated. This does not necessarily mean that they would not be ready to undertake targeted activities to combat AMR if appropriately engaged. Information on their potential remit for AMR-related activities is provided in the longer, background version of this report.\(^6\)
2.2 Mapping organisational activity to the IACG framework levers and content areas

The activities being conducted by the organisations that were researched and interviewed were mapped to the IACG Framework of Action\(^7\). The Framework, adopted in August 2017, outlines 14 content areas and 5 levers regarded as essential in driving success in tackling AMR.

The 14 content areas are grouped according to three main approaches, as shown below:

- Reduce need and unintentional exposure
- Optimize use of medicines
- Invest in innovation, supply, and access

\[\text{FIGURE 2} \]

\textbf{ORGANISATIONAL ACTIVITY ACROSS THE 14 CONTENT AREAS}

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\(^{(6)}\) These organisations are: The Convention on the Rights of Persons with Disabilities, UN Economic Commission for Latin America (ECLAC), International Criminal Court (ICC), International Labour Organisation (ILO), International Civil Service Commission, Joint Inspection Unit (JIU), Office of the United Nations High Commissioner for Human Rights (OHCHR), UN Convention on the Law of the Sea (UNCLOS), UN Economic Commission for Europe (UNECE), UN Human Settlements Programme (UN-Habitat), UN Inter-Agency Standing Committee (UN-IASC), UN Interagency Task Force on NCDs (UNIATF), UN Interregional Crime and Justice Research Institute (UNICRI), UN Office for Disaster Reduction (UNISDR), UN Institute for Training and Research (UNITAR), UN Office on Drugs and Crime (UNODC), UN Office of Internal Oversight Services (UNOIOS), UN Office of Project Services (UNOPS), UN Security Council, World Meteorological Organisation (WMO).

\(^{(7)}\) \url{http://www.who.int/antimicrobial-resistance/interagency-coordination-group/20170818_AMR_FIA_v01.pdf?ua=1}
Figure 2 clearly reveals the higher and lower activities across the fourteen content areas, with the highest level of activities reflected under the content areas of human infection prevention and control and optimise human use of antibiotics, followed by vaccine development and access, and access to all therapeutics. The lowest levels of activity reflected - highlighted in the red rectangles - were under animal prevention and control and animal and agricultural use. These trends show that most of the organisations mapped are more focused on human health, rather than animal or environmental health. This finding may also reflect the need for greater outreach to be conducted across UN organisations, including those that have a broader economic and social mandate, to bring them into the AMR and One Health discussions and encourage them to use their influence in the agricultural space.

A closer analysis of the activities that were mapped reveals that most are conducted at global level, followed by national, and then regional levels. Most activities could be categorized as capacity building followed by standard setting, fostering of innovation and research, policy support, and awareness raising. Collaboration and partnerships cut across all areas of activity.

The Tripartite organisations are leading the way in terms of setting global standards and developing templates and guidelines that can be adapted and executed on a national level. For example, FAO sets standards for foodborne AMR, OIE created the International Standards to Control Antimicrobial Resistance, and WHO is responsible for the Global Antimicrobial Resistance Surveillance System (GLASS), which was developed to support national AMR surveillance.

Organisations in Category 2 reported a diverse mix of sustained activities which span global, national, and multi-country levels ranging from programme development to capacity building and innovation. For instance, Gavi implements activities to strengthen health systems and immunisation delivery within partner countries, while UNDP promotes innovation, delivery, and access to health technologies for TB (including MDR-TB) and other neglected diseases in developing countries through the Access and Delivery Partnership.

Organisations in Category 3 which do not have health as their main programmatic priority are nevertheless conducting regular capacity building, innovation, and awareness-raising activities on a regional and global scale. For example, in 2016, WHO, WIPO and WTO held a joint technical symposium on how to foster innovation, access, and appropriate use of antibiotics. WTO has continued to include sessions on AMR in recent workshops. UNCTAD has convened and participated in several gatherings, bringing together policy makers, investors, and innovators in order to foster investment in existing generic drugs as well as investing in research for new antibiotics. It has further plans for an AMR session during the World Investment Forum in October 2018. UNRWA, through its work in ensuring health and wellbeing for Palestinian refugees in the Middle East, is responsible for ensuring laboratory quality control and ongoing capacity building of its staff in its areas of operation.

Note that this exercise was limited to mapping activities and picking up any discernible gaps; it did not extend to providing any assessment of how effectively organisations are executing activities or to evaluate the effectiveness, breadth, or scale of such activities.

The 5 levers below are seen as necessary to implement the 14 content areas and describe how the content areas can be addressed. It is recognized in the IACG Framework that all the five levers are potentially relevant for all content areas, and that the levers are often mutually reinforcing.
The graph in Figure 3 reveals that the highest level of activity is through employing the lever of awareness and capability building, with just under 200^3 activities indicated that fall into this category. It should be noted that despite this lever appearing to be high, many respondents still felt that there was a large gap in terms of levels of awareness of AMR both within some of their own organisations, in the health sector, among policy makers, and in the general public.

The lever reflecting the least activity is funding and financial incentives, with measurement and surveillance being the second-lowest represented lever. The latter is also a highly specialized activity that not all organisations would have the mandate or capacity to undertake. Nevertheless, many respondents did note that there was a lack of capacity with regard to measurement and surveillance, particularly in developing countries, and that while efforts were being made to boost capacity in this regard, resources and expertise were still inadequate.

2.3 Challenges and Organisational Management

All survey respondents were asked an open-ended question about what they perceived to be their main challenges in tackling AMR.

As shown in Figure 4 below, the top challenge expressed by interviewed organisations is lack of funding (17), followed by a need for more leadership or coordination (12). Lack of funding, which correlates with the finding in the previous section that reveals funding and financial incentives is the least employed lever, includes other lack of resources (including reagents, therapies, or other materials), scarcity of proficient staff, and inadequate infrastructure. The challenge around leadership and coordination referred to leadership and coordination both within organisations as well as overall coordination of efforts, and political will.

(8) Note that while we are presenting the level of activities numerically for purposes of the graph, the mapping exercise did not attempt to gather an exhaustive description of all the activities that are being undertaken. Such a task would have required more time and resources than were available. Organisations were encouraged to describe their principal or most illustrative activities, rather than attempt to provide a fully comprehensive and exhaustive account of everything they are doing to tackle AMR.
Competing priorities, especially in the food and agriculture sector, present a challenge for resource mobilization for the sector. A dearth of data and lack of evaluation was noted by seven organisations, which underlined that a lack of science to inform policy is especially true for environmental, crop, and plant health. Organisations also referred to a lack of awareness of AMR, both internally within organisations, as well as from outside partners.

Additional challenges noted by organisations in the “other” category included:

- Fragile or unstable governments
- Access versus excess concerns, as well as regulatory oversight needs for diagnostic tests, vaccines, and other therapies
- Counterfeit and substandard drugs or lack of enforcement policies

Suggestions made by respondents to mitigate some of these challenges included:

- Active resource mobilization and redistribution for those with no AMR specific funding
- Additional work within the UN to discuss funding of innovation
- Tripartite and other organisations, such as UNICEF, UNEP, and WB could work with countries to help them create investment plans
- Partners could explore a specific funding pool (similar to the Global Fund and Gavi)
- Diversify donors
- Open markets to access better products and source higher quality products at competitive prices (it was noted that EURO is exploring joint procurement mechanisms for some countries)
- Use expert input when evidence-based information is lacking
- Improve partner coordination with others outside the UN on efforts against AMR
Only 12 organisations interviewed indicated that they have clearly demarcated budget allocations for AMR and these varied widely, with some organisations only having a small annual budget for staff travel, or a portion of staff time, and others being able to allocate larger amounts of funding for investment in innovation (such as Unitaid) and country support (WHO). Only for a few organisations outside of the WHO and its regional offices were budgets for AMR-related programmes delineated as a stand-alone item. Many who did have AMR-specific funding were largely dependent on extra-budgetary or voluntary contributions.

For several of the organisations, this hinders their ability to plan long-term for future activities or to anticipate substantive increases in AMR-related activity.

In terms of management structures within organisations, most organisations surveyed have not taken explicit efforts to mainstream AMR across their organisations, although a few have begun to create inter-sectoral or departmental task teams or working groups. Where there is a person responsible for AMR-related activities (usually in the Tripartite or Category 2 organisations), they are often at senior levels such as director, executive director, or assistant director. However, most organisations surveyed (17) indicated that there are no senior staff responsible for AMR at all, which implies a lack of senior champions and accountability within many organisations who may be interested in taking on AMR.

Additionally, only 10 out of the 42 organisations which responded to the survey indicated that there was oversight from their governing body for AMR activities, which could signify a lack of constituency ownership and accountability for AMR activities. This means that there is ample opportunity for member states and others on the governing bodies of these organisations, to be seized with the issue of AMR and to take responsibility for guiding the work of organisations to tackle AMR.
2.4 Target audience & partners

Besides mapping the activities organisations are conducting to tackle AMR and how they are executing these, it was also deemed important to understand who they are targeting and with whom they are collaborating. They were therefore asked to indicate the key constituencies they were targeting through their AMR-related work, as well as who their main partners were.

Table 3 shows that while national governments and the pharmaceutical industry appear to be well-targeted by the organisations that were mapped in this exercise, other sectors do not appear to be as heavily targeted. These include the agricultural sector, the funding sector (such as impact investors and research funders) and the public at large. This may simply reflect the bias of the study in terms of the type of organisations that were proposed for the mapping exercise, which are largely member-state driven organisations with a high focus on human health. The lesser-targeted constituencies demonstrate opportunity for increased engagement by UN organisations - unless there are already others in the broader landscape that are adequately targeting these audiences. It would also be useful to understand whether there is room for greater coordination and synergy across targeted organisations.

For example, while national governments appear to be most highly targeted by the organisations that responded to the survey, are efforts that target national governments being adequately coordinated? Are there potential inefficiencies or duplication, or un-leveraged opportunities for complementarity and synergy across UN organisations? Current discussions around UN Development System Reform could provide opportunity over the next two years for UN organisations to insert AMR-related targets into national Development Assistant Frameworks and enhance coordination on national level.

Table 3: Target audiences for organisations mapped

<table>
<thead>
<tr>
<th>Target audience breakdown</th>
<th>Who is engaging these audiences</th>
<th>Numbers</th>
</tr>
</thead>
<tbody>
<tr>
<td>National governments</td>
<td>AFRO, ECOSOC, EMRO, EURO, FAO, Gavi, Global Fund, IFAD, IMO, OIE, PAHO, SEARO, UNAIDS, UNCTAD, UNDP, UNEP, UNGA, UNHCR, UNICEF, UNIDO, UNITAID, UNJ, WHO, WIPO, World Bank, WPRO, WTO</td>
<td>27</td>
</tr>
<tr>
<td>Industry – pharma manufacturers</td>
<td>AFRO, Gavi, Global Fund, IFAD, MPP, OIE, UNAIDS, UNDP, UNICEF, UNIDO, UNITAID, WIPO</td>
<td>12</td>
</tr>
<tr>
<td>Research institutions</td>
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<td>10</td>
</tr>
<tr>
<td>Other UN organisations</td>
<td>IFAD, OIE, PAHO, SEARO, UNCTAD, UNEP, UNRWA, UNU, WIPO, WPRO</td>
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<td>Public at large</td>
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<td>NGOs/CSOs</td>
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<td>6</td>
</tr>
<tr>
<td>Health workers</td>
<td>EURO, UNHCR, WHOM, WPRO</td>
<td>4</td>
</tr>
<tr>
<td>Regional organisations</td>
<td>AFRO, IFAD, WIPO, World Bank</td>
<td>4</td>
</tr>
<tr>
<td>International organisations</td>
<td>OIE, UNCTAD, UNDP, WIPO</td>
<td>4</td>
</tr>
<tr>
<td>SMEs and small agri producers</td>
<td>FAO, IFAD, UNCTAD, WIPO</td>
<td>4</td>
</tr>
<tr>
<td>Donors</td>
<td>OIE, UNITAID</td>
<td>2</td>
</tr>
</tbody>
</table>
The importance of partnership in achieving sustainable development was recognized by all respondents as essential, especially given the complex, multi-dimensional nature of AMR. The data in Table 4 demonstrates that the organisations most frequently cited as partners are other UN organisations, followed by national governments, donors and international organisations. Partners that were referenced least often are innovators, investors, philanthropic organisations and technical partners. Given the structure and mandate of most UN and multilateral organisations, which is focused on member states and multilateral actors, this breakdown is understandable. The survey did not attempt to quantify or qualify the impact or cost of this collaboration, although several organisations mentioned a desire for better collaboration with UN partners and private sector. The chart also reveals opportunity for collaboration with fresh players, including industry, regional partners and the research and investor community.

Table 4: Partners and collaborators of respondents

<table>
<thead>
<tr>
<th>Partner category</th>
<th>Respondents</th>
<th>Numbers</th>
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</thead>
<tbody>
<tr>
<td>Other UN organisations</td>
<td>AFRO, EMRO, Gavi, IFAD, IOM, MPP, OIE, PAHO, UNAIDS, UNCTAD, UNDP, UNHCR, UNICEF, UNIDO, UNITAID, UN SEC/EOSG, WHO, WIPO, WPRO</td>
<td>20</td>
</tr>
<tr>
<td>National governments</td>
<td>EMRO, IFAD, IOM, SEARO, UNAIDS, UNECA, UNEP, UNIDO, UNITAID, UNU, WHO, WIPO, WPRO</td>
<td>13</td>
</tr>
<tr>
<td>Donors</td>
<td>AFRO, EMRO, Gavi, IFAD, OIE, UNICEF, UNIDO, UNITAID, WORLD BANK, WPRO</td>
<td>10</td>
</tr>
<tr>
<td>International organisations</td>
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<td>10</td>
</tr>
<tr>
<td>NGOs/CSOs</td>
<td>IOM, MPP, UNCTAD, UNDP, UNHCR, UNITAID, WIPO, WTO</td>
<td>8</td>
</tr>
<tr>
<td>Research institutions</td>
<td>EMRO, Gavi, IFAD, IOM, PAHO, UNECA, WIPO, WPRO</td>
<td>8</td>
</tr>
<tr>
<td>Industry - pharma manufacturers &amp; associations</td>
<td>IFAD, UNAIDS, UNDP, UNEP, UNIDO, UNITAID, WIPO</td>
<td>7</td>
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<tr>
<td>Regional organisations</td>
<td>AFRO, PAHO, UNIDO, WIPO</td>
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<tr>
<td>Philanthropic organisations</td>
<td>OIE, PAHO, UNICEF</td>
<td>3</td>
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</table>
Although this mapping exercise concerned itself primarily with UN organisations, the breadth and complexity of AMR has attracted a growing number of organisations outside of the UN family that are driving meaningful actions to combat AMR or have the capacity to do so.

Given the diversity of actors playing significant roles in tackling AMR, there could be opportunity for the UN to create or leverage a multi-stakeholder platform that would enable ongoing collaboration and coordination with such partners and enable the UN to significantly enhance its impact in tackling AMR. Such a platform could also enable the UN to more deliberately differentiate its role from other partners so that it concentrates on areas in which it can add most value.

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9 A large number of non-UN organisations were cited during the interviews and surveys as being important partners in the fight against AMR. It was not within the mandate of this exercise to map the roles or activities of these external partners. However, previous work that may be relevant is contained in the 2016 AMR Stakeholder Mapping undertaken by ReACT: https://www.reactgroup.org/wp-content/uploads/2016/10/stakeholder-analysis-reactforwho.pdf

10 During an exercise conducted at the 2017 Call to Action, for example, participants proposed that civil society could play a leading role in raising awareness & capability building, the private sector in innovation, supply and access and governments in policy and regulation. International organisations such as the UN were seen more as coordinators and enablers. https://wellcome.ac.uk/sites/default/files/call-to-action-on-antimicrobial-resistance.pdf
CONCLUSIONS AND ISSUES FOR IACG CONSIDERATION
The mapping exercise revealed the broad range of activity being undertaken by organisations across the UN family and the other multilateral organisations surveyed. These activities include essential AMR-sensitive actions such as human and animal hygiene and immunisations, to quality production, procurement and use of therapeutic drugs. In terms of AMR-specific activities there are organisations that have in recent years established complex global and regional systems for AMR surveillance and monitoring of country consumption of antibiotics. There are also organisations that are actively raising funding and negotiating intellectual property mechanisms that can help drive innovation into new antibiotics, diagnostics, and therapies while ensuring access of quality treatments to those who need them most.

Individuals within the organisations interviewed are doing their best to demonstrate results, many under what they regard as difficult circumstances. Internal barriers include scarcity of resources, lack of a strong organisational or leadership mandate and low internal awareness. External challenges include lack of political awareness among member states, prevalence in local markets of counterfeit and substandard drugs, restrictive trade and market environments and operating in fragile, conflict-affected environments with the attendant risks of uncontrolled migration and unmonitored spread of disease and pathogens.

Although many organisations reported that adequate resources are lacking, there is willingness across the system and a clear sense of urgency to take on the threat of AMR. By working with the appropriate partners, the UN can leverage its considerable convening, technical assistance, and standard-setting powers to significantly advance the charge against AMR.

Listed below are specific issues for consideration in terms of how the IACG can leverage the strengths of the UN organisations and help to meet some of these challenges.

1. **Consider targeting organisations in Category 2 & 3** for strengthened action across the UN on AMR, working as allies with the Tripartite organisations (FAO/OIE/WHO). Organisations in Category 4 that are not yet active on AMR can play a significant role in corralling other external partners, if they are provided with a clear roadmap, tasks, and mandates. Leveraging these extra layers of partners in the UN could help to mainstream AMR amongst a broader swathe of organisations with diverse constituencies.

2. **The framing of AMR could be improved.** Even though a high level of awareness and capability-building activities were indicated in the exercise, respondents overall did not feel that there was a sufficient level of awareness of AMR either within their organisations or in the external arena. As the Global Action Plan on AMR notes, there is a need for an effective “One Health” approach involving coordination among numerous international sectors, including human and veterinary medicine, agriculture, finance and well-informed consumers. Given the potential impact and challenges of AMR, there is a need for a re-writing of the message, linking it to the SDGs. The awareness-raising activities currently being undertaken also deserve to be sustained and mainstreamed in a broader manner, through school curricula, through leveraging mixed media, celebrity champions and other tools referenced by some of the organisations interviewed.

3. **High demand for strengthening the governance of AMR.** While exploring global governance of AMR was not in the remit of this exercise, it was mentioned spontaneously by interviewed organisations that are already active in AMR. Coordination and leadership were two of the challenges most frequently cited, next to funding. While there are efforts underway in this respect, this exercise clearly validates the need for additional action from the perspective of many of the organisations researched.

4. **Need to strengthen organisational leadership.** Many organisations in Category 2 and 3 are currently active on AMR but are not necessarily operating with a clear mandate from their governing bodies. This hampers their ability to raise the profile of their activities or get broader external and internal buy-in. Additionally, many organisations across Categories 3 and 4 do not currently have senior staff that are responsible for AMR-related activity. Senior staff solely dedicated to or clearly involved with AMR activities would allow for a more coor-
ordinated and robust response. A champions network or task force to mainstream AMR across the organisations would also enable some of the issues raised to be dealt with in a logical and orderly fashion.

5. Coordination across the U. While many organisations cited collaboration with other UN organisations as among the most important considerations, they also reference the lack of coordination, the need for a common road map amongst UN organisations, and for clearer accountability. There is opportunity for the IACG to recommend the establishment of a UN coordination mechanism for key UN organisations and invited multilaterals to assess progress, explore synergies, expand and share evidence and sharpen coordination on AMR. Such a mechanism could leverage the IACG Framework for Action as a monitoring and evaluation framework and be replicated at regional and even country levels. A specific, ongoing UN AMR inter-agency task force is one model to consider; other existing examples are UN-AIDS, the Every Woman Every Child H6 Partnership, and UN Women’s Gender Checklist.

6. Consider establishing or leveraging an existing multi-stakeholder partnership platform. As one respondent put it: “Make sure the attention stays broad, even if the UN doesn’t accomplish everything.” Or in the words of another: “We (the UN) don’t need to do everything.” Currently, neither the Tripartite nor the IACG have such a multi-stakeholder platform, the creation of which could assist the UN in deciding in which areas it is best positioned lead, and where others are better positioned to do so. Industry, civil society, research partners, and others could have a sustained interaction with the UN’s work on AMR to help the UN more clearly differentiate its own roles. Such a platform can engage other partners who can lead in areas such as innovation, investment, industry mobilisation, or communications outreach. This will allow the UN to do what it does best such as global convening, normative policy-making and regulation, national capacity building and coordination.

7. Need to elaborate a funding strategy. The mapping exercise revealed that funding and financial incentives was the least utilised lever, and that outside traditional bilateral donors, research funders and investors were one of the least targeted audiences. This implies that there is scope for the UN to invest some time and effort in exploring the funding issue and its related constituencies. Funding was identified as the top challenge faced by organisations, yet few organisations outside the Tripartite have budgets that are clearly delineated to work on AMR or to assess the impact of their AMR-sensitive activities. Often staff are cumulating AMR-related tasks within other positions they undertake, and because their AMR work is not always clearly mandated within the organisation, they cannot undertake explicit fundraising actions that may compete with organisations who have clear mandates for AMR. This challenge needs to be discussed so that a clear, collective, and coordinated funding strategy can be implemented.

It is our belief that many of these recommendations can be accomplished by using existing resources within organisations and working alongside partners and allies to achieve others. If carefully implemented, they could make a substantial impact in combating AMR by uniting partners within and outside of the UN, aligning efforts, and enabling greater coherence. This enhanced coordination will create more cost efficiencies and enable the UN to affirm its leadership role, and enable it to better mobilise diverse partners, not necessarily from within the UN, to assist with execution around this complex and multi-dimensional challenge.
ANNEXES

ANNEX 1: ORGANISATIONS RESEARCHED

CEB - The United Nations System Chief Executives Board for Coordination

Convention on the Rights of Persons with Disabilities

ECLAC - United Nations Economic Commission for Latin America and the Caribbean

ECOSOC - United Nations Economic and Social Council

ESCAP - United Nations Economic and Social Commission for Asia and the Pacific

ESCWA - United Nations Economic and Social Commission for Western Asia

FAO – The Food and Agriculture Organization

Gavi, the Vaccine Alliance

The Global Fund to Fight AIDS, Tuberculosis and Malaria

ICC - International Criminal Court

ICJ - International Court of Justice

IFAD - The International Fund for Agricultural Development

ILO - The International Labour Organization

IMF - The International Monetary Fund

IMO - The International Maritime Organization

International Civil Service Commission

IOM - The International Organization for Migration

ITC - The International Trade Centre

JIU - The Joint Inspection Unit

Medicines Patent Pool

OHCHR – The Office of the United Nations High Commissioner for Human Rights

OIE - The World Organisation for Animal Health

OPCW - The Organisation for the Prohibition of Chemical Weapons

UN General Assembly

UN IASC – The UN Inter-Agency Standing Committee

UN Secretariat

UN Security Council

UN Women

UNAIDS - The Joint United Nations Programme on HIV/AIDS


UNCTAD - The United Nations Conference on Trade and Development

UNDP - The United Nations Development Programme

UNEC - United Nations Economic Commission for Africa

UNECE - United Nations Economic Commission for Europe

UNEP - The United Nations Environment Programme

UNESCO - The United Nations Educational, Scientific and Cultural Organization

UNFCCC - United Nations Framework Convention on Climate Change
UNFPA - The United Nations Population Fund
UN-Habitat - The United Nations Human Settlements Programme
UNHCR - The United Nations High Commissioner for Refugees
UNIATF - The UN Interagency Task Force on NCDs
UNICEF - The United Nations Children’s Fund
UNICRI - United Nations Interregional Crime and Justice Research Institute
UNIDIR - United Nations Institute for Disarmament Research
UNIDO - The United Nations Industrial Development Organization
UNISDR - The United Nations Office for Disaster Reduction
Unitaid
UNITAR - United Nations Institute for Training and Research
UNODC - The United Nations Office on Drugs and Crime
UN-OIOS - United Nations Office of Internal Oversight Services
UNOPS - The United Nations Office for Project Services
UNRISD - United Nations Research Institute for Social Development
UNRWA - The United Nations Relief and Works Agency for Palestine Refugees
UNSSC - United Nations System Staff College
UNU - United Nations University
UN-Water
UNWTO - The World Tourism Organization
WFP - The World Food Programme
WHO - The World Health Organization
WIPO - The World Intellectual Property Organization
WMO - The World Meteorological Organization
World Bank - The World Bank
WTO - The World Trade Organization
# ANNEX 2: MAPPING OF ORGANISATIONS TO IACG CONTENT AREAS AND LEVERS

<table>
<thead>
<tr>
<th>14 content areas</th>
<th>5 Levers</th>
</tr>
</thead>
</table>
| **Human infection prevention and control**                                        | **Awareness & capability building**  
 1: FAO, WHO (AFRO, EMRO, EURO, SEARO, WPRO); 2: Gavi, IFAD, UNDP, UNICEF, WB; 3: UNHCR, UNRWA; 4: IOM, UNU  
 1: WHO (AFRO, EMRO, EURO, SEARO, WPRO); 2: Gavi, UNAIDS, UNICEF, UNRWA; 4: IOM  
 1: WPRO; 2: IFAD, UNEP, WB; 3: UNHCR, UNRWA; 4: UNU  
 1: FAO, WHO (AFRO, EMRO, EURO, SEARO, WPRO); 2: IOM, UNECA, UNRISO  
 1: WHO (AFRO, EMRO, EURO, PAHO, SEARO, WPRO); 2: Gavi, GF, UNAIDS, UNITAID, WB; 3: UNHCR, UNRWA; 4: UNU  |
| **Clean water and sanitation**                                                    | **Measurement & surveillance**  
 1: FAO, WHO (AFRO, PAHO, SEARO, WPRO); 2: Gavi, IFAD, UNDP, UNICEF, WB; 3: UNHCR, UNRWA; 4: UNU  
 1: WHO (PAHO, SEARO, WPRO); 2: UNEP, UNICEF; 3: UNHCR, UNRWA  
 1: WPRO; 2: IFAD, UNEP, WB; 3: UNHCR, UNRWA; 4: UNU  
 1: FAO, WHO (AFRO, PAHO, SEARO, WPRO); 2: UNDP, UNEP, UNHCR; 3: UNRWA; 4: UNU  
 1: WHO (EMRO, SEARO, WPRO); 2: UNDP, UNEP, UNHCR; 3: UNRWA; 4: UNU  |
| **Reduce need and unintentional exposure**                                        | **Funding & financial incentives**  
 1: FAO, OIE, WHO (AFRO, EMRO, EURO, PAHO, SEARO, WPRO); 2: IFAD, WB  
 1: OIE, WHO (EURO, SEARO)  
 1: FAO, OIE, WHO (WPRO); 2: IFAD  
 1: FAO, OIE, WHO (EURO, PAHO, WPRO); 2: IFAD  
 1: FAO, OIE, WHO (EMRO, SEARO, WPRO); 2: IFAD, UN SEC  |
| **Animal infection prevention and control**                                       | **Policy & regulation**  
 1: FAO, WHO (AFRO, EMRO, EURO, PAHO, SEARO, WPRO); 2: IFAD, UNEP, WB; 3: UNHCR, UNRWA, WFP; 4: UNU  
 1: FAO, WHO (AFRO, EMRO, EURO, PAHO, WPRO); 2: IFAD, WB; 3: UNRWA, WFP  
 1: FAO, SEARO, WPRO; 2: IFAD, WB; 3: UNRWA  
 1: FAO, OIE, WHO (EMRO, SEARO, WPRO); 2: UNEP  
 1: FAO, OIE, WHO (EURO, PAHO, WPRO); 2: UN SEC; 3: WFP; 4: UNU  |
| **Food safety**                                                                  | **Championing & piloting**  
 1: FAO, WHO (AFRO, EMRO, EURO, PAHO, SEARO, WPRO); 2: IFAD, UNEP, WB; 3: UNHCR, UNRWA, WFP; 4: UNU  
 1: FAO, WHO (AFRO, EMRO, EURO, PAHO, WPRO); 2: IFAD, WB; 3: UNRWA  
 1: FAO, SEARO, WPRO; 2: IFAD, WB; 3: UNRWA  
 1: FAO, OIE, WHO (EMRO, SEARO, WPRO); 2: UNEP  
 1: FAO, WHO (AFRO, EMRO, EURO, PAHO, WPRO); 2: UNDP, UNEP, UNHCR; 3: UNRWA; 4: UNU  |
| **Environmental contamination**                                                   | **1: FAO, WHO (AFRO, EMRO, EURO, PAHO, SEARO, WPRO); 2: IFAD, UNDP, UNEP; 3: UNHCR, UNIDO, UNRWA; 4: IMO, UNU  
 1: EURO, WPRO; 2: UNEP; 3: UNHCR, UNRWA  
 1: FAO, WPRO; 2: IFAD, UNDP, UNEP; 3: UNHCR, UNIDO; 4: UNU  
 1: FAO, WPRO; 2: UNDP, UNEP; 3: UNHCR, UNIDO; 4: IMO, UNECA  
 1: FAO, WHO (AFRO, EMRO, EURO, PAHO, WPRO); 2: UNDP, UNEP, UNHCR; 3: UNRWA; 4: UNU  |
| **1: FAO, WHO (AFRO, EMRO, EURO, PAHO, SEARO, WPRO); 2: Gavi, IFAD, UNDP, UNICEF, WB; 3: UNHCR, UNRWA; 4: IOM, UNU  
 1: WHO (AFRO, EMRO, EURO, SEARO, WPRO); 2: Gavi, GF, UNAIDS, UNICEF, UNRWA; 4: IOM  
 1: WPRO; 2: IFAD, UNEP, WB; 3: UNHCR, UNRWA; 4: UNU  
 1: FAO, WHO (AFRO, EMRO, SEARO, WPRO); 2: UNDP, UNEP, UNHCR; 3: UNRWA; 4: UNU  
 1: WHO (AFRO, EMRO, EURO, PAHO, SEARO, WPRO); 2: Gavi, GF, UNAIDS, UNITAID, WB; 3: UNHCR, UNRWA; 4: UNU  |
| **Human infection prevention and control**                                        | **1: FAO, WHO (AFRO, EMRO, EURO, SEARO, WPRO); 2: Gavi, IFAD, UNDP, UNICEF, WB; 3: UNHCR, UNRWA; 4: IOM, UNU  
 1: WHO (AFRO, EMRO, EURO, SEARO, WPRO); 2: Gavi, GF, UNAIDS, UNICEF, UNRWA; 4: IOM  
 1: WPRO; 2: IFAD, UNEP, WB; 3: UNHCR, UNRWA; 4: UNU  
 1: FAO, WHO (AFRO, EMRO, SEARO, WPRO); 2: UNDP, UNEP, UNHCR; 3: UNRWA; 4: UNU  
 1: WHO (AFRO, EMRO, EURO, PAHO, SEARO, WPRO); 2: Gavi, GF, UNAIDS, UNITAID, WB; 3: UNHCR, UNRWA; 4: UNU  |
| **Clean water and sanitation**                                                    | **1: FAO, WHO (AFRO, PAHO, SEARO, WPRO); 2: Gavi, IFAD, UNDP, UNICEF, WB; 3: UNHCR, UNRWA; 4: UNU  
 1: WHO (PAHO, SEARO, WPRO); 2: UNEP, UNICEF; 3: UNHCR, UNRWA  
 1: WPRO; 2: IFAD, UNEP, WB; 3: UNHCR, UNRWA; 4: UNU  
 1: FAO, WHO (AFRO, PAHO, SEARO, WPRO); 2: UNDP, UNEP, UNHCR; 3: UNRWA; 4: UNU  
 1: WHO (EMRO, SEARO, WPRO); 2: UNDP, UNEP, UNHCR; 3: UNRWA; 4: UNU  |
| **Reduce need and unintentional exposure**                                        | **1: FAO, OIE, WHO (AFRO, EMRO, EURO, PAHO, SEARO, WPRO); 2: IFAD, WB  
 1: OIE, WHO (EURO, SEARO)  
 1: FAO, OIE, WHO (WPRO); 2: IFAD  
 1: FAO, OIE, WHO (EURO, PAHO, WPRO); 2: IFAD  
 1: FAO, OIE, WHO (EMRO, SEARO, WPRO); 2: IFAD, UN SEC  |
| **Animal infection prevention and control**                                       | **1: FAO, WHO (AFRO, EMRO, EURO, PAHO, SEARO, WPRO); 2: IFAD, UNEP, WB; 3: UNHCR, UNRWA, WFP; 4: UNU  
 1: FAO, WHO (AFRO, EMRO, EURO, PAHO, WPRO); 2: IFAD, WB; 3: UNRWA  
 1: FAO, SEARO, WPRO; 2: IFAD, WB; 3: UNRWA  
 1: FAO, OIE, WHO (EMRO, SEARO, WPRO); 2: UNEP  
 1: FAO, WHO (AFRO, EMRO, EURO, PAHO, SEARO, WPRO); 2: IFAD, WB; 3: UNRWA, WFP; 4: UNU  |
| **Food safety**                                                                  | **1: FAO, WHO (AFRO, EMRO, EURO, PAHO, SEARO, WPRO); 2: IFAD, UNEP, WB; 3: UNHCR, UNRWA, WFP; 4: UNU  
 1: FAO, WHO (AFRO, EMRO, EURO, PAHO, WPRO); 2: IFAD, WB; 3: UNRWA  
 1: FAO, SEARO, WPRO; 2: IFAD, WB; 3: UNRWA  
 1: FAO, OIE, WHO (EMRO, SEARO, WPRO); 2: UNEP  
 1: FAO, WHO (AFRO, EMRO, EURO, PAHO, SEARO, WPRO); 2: IFAD, WB; 3: UNRWA, WFP; 4: UNU  |
| **Environmental contamination**                                                   | **1: FAO, WHO (AFRO, EMRO, EURO, PAHO, SEARO, WPRO); 2: IFAD, UNDP, UNEP; 3: UNHCR, UNIDO, UNRWA; 4: IMO, UNU  
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 1: FAO, WPRO; 2: IFAD, UNDP, UNEP; 3: UNHCR, UNIDO; 4: UNU  
 1: FAO, WPRO; 2: UNDP, UNEP; 3: UNHCR, UNIDO; 4: IMO, UNECA  
 1: FAO, WHO (AFRO, EMRO, EURO, PAHO, SEARO, WPRO); 2: IFAD, WB; 3: UNRWA, WFP; 4: UNU  |

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26
<table>
<thead>
<tr>
<th>14 content areas</th>
<th>5 Levers</th>
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<tbody>
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<td>Awareness &amp; capability building</td>
<td>Measurement &amp; surveillance</td>
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<tr>
<td>Optimise use of medicines</td>
<td>1: FAO, OIE, WHO (EMRO, EURO, PAHO, SEARO, WPRO); 2: IFAD, UNDP, UNEP, WB</td>
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<tr>
<td>Animal &amp; agricultural use</td>
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<tr>
<td>Laboratory capacity &amp; surveillance</td>
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<td>Basic research</td>
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## 14 content areas

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<tr>
<th>5 Levers</th>
<th>Awareness &amp; capability building</th>
<th>Measurement &amp; surveillance</th>
<th>Funding &amp; financial incentives</th>
<th>Policy &amp; regulation</th>
<th>Championing &amp; piloting</th>
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</table>
ANNEX 3: SURVEY INSTRUMENT/QUESTIONNAIRE

Roles, Responsibilities, and Remit of UN Organisations in relation to Antimicrobial Resistance

This questionnaire aims to capture data and information required to inform a report that will assess the remit of UN organisations in relation to Antimicrobial Resistance objectives and activities. The report has been commissioned by Sub-Group 5 of the Inter-Agency Coordination Group (IACG) for AMR and aims to map AMR specific and sensitive activities across the UN system, with a view to promoting synergies and collaboration across the system, as well as exploring how to strengthen and expand existing activity. The work of the IACG builds on and seeks to strengthen implementation of the Global Action Plan for AMR adopted by the WHO, FAO and OIE in 2015 and which reflects a “One Health” approach that encompasses human, animal and environmental health. The questionnaire is aligned with the key objectives and priorities contained in the Global Action Plan as well as the IACG Framework for Action.

The questionnaire will, in the first instance, aim to cross-check relevant information and data available through desk top research. This information will subsequently be verified and supplemented through direct interviews and email communication with relevant personnel within UN organisations.

The report will be submitted to the IACG Sub-Group 5 in July. You have received this questionnaire because of your organisation’s role/potential role in the fight against AMR and because your organisation was subsequently suggested the IACG for the mapping exercise. Your cooperation in assisting us to complete this survey is greatly appreciated.

The questionnaire aims to align with the objectives and key content areas reflected in the Global Action Plan and the IACG’s AMR Framework for Action and covers the following key sections:

Section A – Descriptive activities
- Name of organisation and primary contact/s responsible for any AMR activities
- Reference and description to formal remit of AMR in organisation’s role and responsibilities
- Overview of current and planned objectives and activities that are AMR specific or sensitive
- Main target audience for activities
- Key implementation partners

Section B – Analytic assessment
- Challenges in the implementation of AMR-related activities
- Decision-making/leadership processes within organisation as relating to AMR
- Extent to which AMR concerns are mainstreamed within organisation’s activities
- Assessment of whether organisation has ability to grow AMR activities or integrate AMR as a stretch target

Note: If your organisation is already implementing AMR specific and sensitive objectives and activities, please complete the entirety of Sections A and B.

If your organisation is NOT currently implementing any have any AMR-related activities underway, please go directly to Section C.

Thank you very much in advance for your contribution. We appreciate that your participation requires your precious time and effort. Your input will be greatly valued.
Section A – Descriptive activities

A.1 Primary Point of Contact for AMR-related activities: This form contains the details of the primary point of contact on file for your organisation’s AMR-related activity. Please update the information if the existing information is inaccurate and please add any additional names and contacts if there are additional persons responsible for AMR in your organisation.

Name: 

Position: 

Organisation: 

Telephone: 

Email: 

A.2 Description and reference to all formal instruments giving your organisation a remit for AMR specific or sensitive activities: Please describe the formal remit of your organisation in relation to AMR. Please include hyperlinks or attachments referencing any formal board, member state or management resolutions or decisions outlining your remit and responsibility.
A.3.1 Levers for implementation of content areas based on the IACG AMR framework. Please indicate with an X which of the following levers you are employing to enable activity in any of the 14 content areas?

<table>
<thead>
<tr>
<th>Framework’s 14 content areas</th>
<th>Awareness &amp; capability building</th>
<th>Measurement &amp; surveillance</th>
<th>Funding &amp; financial incentives</th>
<th>Policy &amp; regulation</th>
<th>Championing &amp; piloting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce need and unintentional exposure</td>
<td>Human infection prevention and control</td>
<td></td>
<td></td>
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<tr>
<td>Clean water and sanitation</td>
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<td>Animal infection prevention and control</td>
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<tr>
<td>Food safety</td>
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<tr>
<td>Environmental contamination</td>
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<tr>
<td>Optimize use of medicines</td>
<td>Human use</td>
<td></td>
<td></td>
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<tr>
<td>Animal &amp; agricultural use</td>
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<tr>
<td>Laboratory capacity &amp; surveillance</td>
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<tr>
<td>Invest in innovation, supply and access</td>
<td>Basic research</td>
<td></td>
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<tr>
<td>Development of new therapeutics</td>
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<tr>
<td>Access to all therapeutics</td>
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<tr>
<td>Diagnostics development and access</td>
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<tr>
<td>Vaccine development and access</td>
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<tr>
<td>Quality</td>
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</table>
A.3.2 Overview of current activities related to 14 key content areas of the AMR Framework for Action: Please describe your organisation’s AMR activities according to the AMR Framework for Action’s 14 key content areas. Please attach any relevant documents or publications that illustrate implementation and outcomes of activities.

<table>
<thead>
<tr>
<th>Framework’s 14 content areas</th>
<th>Place an X if applicable.</th>
<th>Activities implemented</th>
<th>Date activities commenced</th>
<th>Key outcomes</th>
<th>Activities planned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce need and unintentional exposure</td>
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<td>Quality</td>
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</tbody>
</table>
A.4 Budgetary commitment to implementing AMR objectives and activities. Please indicate whether your organisation has made formal budget allocations to implementing AMR activities. If so, please indicate the amount below and specify over what time period (per annum, multi-year) this allocation is valid for.

<table>
<thead>
<tr>
<th>Estimated Financial Commitment (USD)</th>
<th>Amount</th>
<th>Time period</th>
</tr>
</thead>
</table>

A.5 Target Audience. Please indicate who your principal target audience/s is for your activities. i.e., who are you most seeking to influence or work with? (e.g. national governments, regional organisations, research institutions, the public, agricultural sector, pharmaceutical companies etc.)

A.6 Main partners & collaborative activities. with other international organisations within and outside the UN system. Please indicate who the principal partners are with whom you interact to implement your key objectives and activities (ego. Other organisations within or outside the UN system, national governments, regional organisations, research institutions, the public, agricultural sector, pharmaceutical companies etc.) Please indicate the goal (e.g. achieve common goal, align activities, reduce surprise and uncertainty...) the nature of the collaboration (shared information, resources, task, responsibility, decision-making) and the level of formalism (from informal exchange to formal governance structure).
Section B – Analytic Assessment

B.1 Challenges. Please indicate any major challenges that your organisation has encountered in implementing any of your objectives and activities as defined above. Please also indicate any steps that are being taken to mitigate these challenges?

B.2 Decision-making/leadership processes. Please indicate the following information as it relates to the governance of AMR in your organisation.

| Level of seniority of most senior person in your organisation responsible for AMR activities. |
| # of people in your organisation with clear, formal responsibility for AMR-related activities. |
| Is there clear oversight of AMR activities by your organisation’s Board/governing body? If so, please describe. |

B.3 To what extent are AMR objectives or activities mainstreamed within your organisation? Please provide concrete references such as integration of AMR-related activities in business workplans, key performance indicators for staff, cross-cutting working groups, management processes, reporting standards, M&E etc.
B.4 Future activities: Do you have any intention to further grow your AMR-related activities in the future? How do you expect to do this and how do you think you can stretch your targets to take on additional, value add activities that will create more impact on AMR? What will these additional activities consist of?

B.5 Additional comments on organisation’s role. Do you have any comments or suggestions on how your organisation could enhance or strengthen its AMR-related objectives and activities?

B.6 Additional comments on the UN’s role: Do you have any comments or suggestions on how the UN as a system could enhance its AMR-related objectives and activities and overall governance of AMR?

Thank you very much for taking the time to help us complete this survey.
Section C - For organisations NOT currently implementing any AMR-related objectives and activities

C.1 Future activity. Do you have any intention to take on any AMR-related activities in the future? If YES, please indicate what these could be by completing each section below.

<table>
<thead>
<tr>
<th>Describe the planned objectives and activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographic focus</td>
</tr>
<tr>
<td>Expected time period for implementation of future activity</td>
</tr>
<tr>
<td>Projected human capacity in terms of responsible staff or consultants</td>
</tr>
<tr>
<td>Projected funding for activity over specified time period</td>
</tr>
<tr>
<td>Target audience</td>
</tr>
<tr>
<td>Expected partners</td>
</tr>
<tr>
<td>Name and email address of key contact in your organisation for these activities</td>
</tr>
</tbody>
</table>

If NO, please explain below why your organisation does NOT plan to implement any AMR-related objectives and activities in the future,
C.2 Additional comments on your organisation’s role. Do you have any comments or suggestions on how your organisation could enhance or strengthen its AMR-related objectives and activities?

C.3 Additional comments on UN’s role: Do you have any comments or suggestions on how the UN as a system could enhance its AMR-related objectives and activities and overall governance of AMR?

Thank you very much for taking the time to help us complete this survey.