

Terms of Reference for Request for Proposals

Ghana First Country Grant

1. Overview of this grant

This is a Request for Proposals (RFP) for a grant to address critical gaps in the surveillance of antibiotic resistant bacteria and antibiotic use in Ghana. The grant will be funded by the UK Department of Health under its Fleming Fund Grants Programme. The aim of the Fleming Fund is to address critical gaps in the surveillance of antibiotic resistant bacteria and antibiotic use in low and middle-income countries (LMICs) in South and South-East Asia and Sub-Saharan Africa. Countries in these regions are set to bear the highest burden of antibiotic resistant infections. A Global Action Plan on Antimicrobial Resistance (AMR) has been developed by the World Health Organization¹, which acts as the blueprint for a multi-stakeholder global response to averting a global health crisis caused by AMR.

Mott MacDonald has been appointed as the Fleming Fund Management Agent (MA) and is responsible for management of the Fleming Fund Grants Programme.

Fleming Fund Country Grants are aligned with the objectives of the Global Action Plan on AMR and will support the Global Antibiotic Resistance Surveillance System (GLASS). The objectives of the Fleming Fund Country Grants are:

- Laboratory infrastructure enhancement
- Human resource strengthening and workforce reforms
- Surveillance systems strengthening
- Building foundations for AMR surveillance data use
- Promoting rational use of antimicrobial medicines

This RFP is in response to a request for support from the Government of Ghana, submitted in March 2017, for funding to support implementation of national plans for AMR surveillance. This will be the first Fleming Fund Country Grant that Ghana will receive and will focus on the development of AMR and AMU surveillance systems national reference laboratories for animal and human health and selected AMR surveillance sites. The successful applicant for the Country Grant, the Lead Grantee, will be responsible to the Management Agent for all aspects of the grant in its entirety, as well as responsible for the management of any sub-grantees it may wish to engage, including their performance, technical delivery, financial accountability and value for money (VfM). The Lead Grantee will sign the grant agreement with Mott MacDonald Ltd. Should the Lead Grantee wish to engage with sub-grantees to deliver the terms of reference of the RFP, the Lead Grantee may enter into the same sub-granting arrangements with the same back-to-back terms. A Lead Grantee is likely to partner with sub-grantees because the Lead Grantee may not have all the required competence and capacity in-house to deliver all objectives and outputs of the term of reference of this RFP.

The Lead Grantee must work in close collaboration with the national Ghana Antimicrobial Resistance Platform (AMR Platform) as well as with the Management Agent. The Lead Grantee for the Country Grant will be required to align objectives and outputs of this Country Grant to other types of grants under the Fleming Fund Grants Programme (Regional Grants), the Fleming Fellowship Scheme, and to the work of other national stakeholders.

¹ <http://www.who.int/antimicrobial-resistance/global-action-plan/en/>

The initial Country Grant is expected to fund 18 months of activities/inputs. Subsequent grants may be made available and applied for in later years totalling a four-year period up to October 2021.

2. Overview of the Fleming Fund

2.1. Introduction

The UK Government has established the Fleming Fund to respond to the global threat of drug-resistant infections, also known as antimicrobial resistance (AMR). The Fleming Fund is a critical tool in achieving the resolution of the 68th World Health Assembly, 2015 (WHA A68/20), and in realising the 'Political Declaration of the High-Level Meeting of the United Nations General Assembly (UNGA) on Antimicrobial Resistance, 2016'. These milestone declarations recognise that urgent cross sectoral rationalisation of antibiotic use, and prevention and control of infections in the human, animal, food, agriculture and aquaculture sectors are key to tackling AMR, and call for innovative research and development, affordable and accessible antimicrobial medicines and vaccines, improved surveillance and monitoring, improved governance on antimicrobial use as well as increased international cooperation to control and prevent AMR.

The aim of the Fleming Fund Grants Programme is to improve the ability of recipient countries to diagnose drug resistant infections, with an emphasis on antibiotics, and improve data and surveillance to inform policy and practice at national and international levels. The overall goal is to avert the human and economic burden of AMR.

The Fleming Fund Grants Programme is one component of financial support provided by the wider Fleming Fund, which also provides support to the Tripartite Alliance, comprising the Food and Agriculture Organization (FAO), the World Organisation for Animal Health (OIE), and the World Health Organization (WHO) - as part of the Fleming Fund's One Health approach. The Fleming Fund also funds initiatives in academic institutions to develop guidance on the development of AMR surveillance systems. Through funding to the Tripartite Alliance, the Fleming Fund has contributed to the development of National Action Plans in Sub-Saharan Africa, South and South-East Asia, and to the building of the evidence base and guidance for AMR surveillance. This work will be critical for the overall success of the Fleming Fund Grant Programme and underpins the delivery of the portfolio of Country and Regional Grants, as these will target capacity gaps identified in National Action Plans.

The geographic focus of the Fleming Fund Grants Programme is 20-24 LMICs from Sub-Saharan Africa, and South and South-East Asia. It will provide financial support to participating countries via three funding channels, over a five-year period from 2017 to 2021:

- Country Grants
- Fleming Fellowship Scheme Grants that provide continual professional development and leadership training opportunities for relevant fellows
- Regional Grants

Resources may also be available to conduct Operational Research on selected topics within these funding channels. These studies will provide an opportunity to better define implementation options or undertake more detailed case study analysis in themes of interest (e.g. VfM) for programme learning and adaptation purposes.

The UK Department of Health has appointed Mott MacDonald as the Fleming Fund Management Agent for the Fleming Fund Grants and Fleming Fellowships Programmes. Mott MacDonald is a global company with expertise in multi-sectoral international development and fund management. On behalf of the UK Government, Mott MacDonald is responsible for funding allocation and oversight of all investments across the

portfolio of grants for different activities in different countries. The Fleming Fund will be independently evaluated and Itad, a specialist evaluation firm, which has been appointed by the UK Department of Health for this purpose.

2.2. Problem statement to be addressed by Fleming Fund Country Grants

The main issues to be addressed by Fleming Fund Country Grants are as follows:

- There are too few trained microbiologists to undertake the volume of testing required for representative surveillance on AMR
- There are few health facilities that routinely undertake bacterial culture; still fewer facilities that meet the requirements for accreditation, or which do routine antimicrobial drug sensitivity tests
- Routine AMR in healthcare delivery is not practiced or there is no culture of surveillance for AMR in healthcare delivery and there are barriers to developing it
- There is little perceived use of surveillance data on any level including low demand for the data from policy makers
- There is a lack of knowledge on the use and consumption of antimicrobial agents across One Health sectors
- Lack of antimicrobial stewardship
- Logistical challenges are significant – transporting samples in a safe and secure manner under challenging transport conditions; ensuring a quality assured and sustained supply chain for reagents and consumables; and ensuring appropriate servicing of equipment are a few examples
- Surveillance systems (national, regional and global) that do exist are often vertical in nature, are not linked, and are often unwilling to integrate
- There are weak One Health structures and poor inter-sectoral collaboration
- There is a heterogeneous picture across countries and regions in terms of starting points, political will, capability and donor interest and engagement
- There are poorly defined and applied quality assurance standards in laboratory testing
- There is lack of understanding from basic surveillance of pathogens on transmission patterns and drivers such as inappropriate use of antimicrobial drugs across all sectors

2.3. Fleming Fund investment areas and outputs

To address the problems above, the Fleming Fund Grants Programme invests in:

- Laboratory infrastructure enhancement
- Human resource strengthening and workforce reforms
- AMR and AMU surveillance systems strengthening
- Building foundations for AMR surveillance data use
- Promoting rational use of antimicrobial medicines

Investment in these areas is expected to achieve the following outputs:

- Improved laboratory skills and conditions for bacterial identification and Antimicrobial Susceptibility Testing; and therefore, improved data quality
- Strengthened One Health workforce with a range of relevant skills for AMR surveillance
- Stronger AMR and AMU surveillance systems and processes at country and regional levels
- Stronger demand for AMR data at regional, country, sub-national and facility levels
- Better knowledge of country level patterns of practice and use of antimicrobials (particularly antibiotics) across sectors

Fleming Fund outputs are expected to contribute to the following country outputs:

- Increase in quality and quantity of AMR and AMU data collected
- AMR and AMU data shared in country to support evidence based policy and practice
- AMR and AMU data shared internationally to improve and inform the global response

Country Grants are designed to ensure that investments and activities contribute directly to outputs. Lead Grantees are expected to adhere to and demonstrate this alignment and contribution to outputs in their grant application.

2.4. Core principles within the Fleming Fund Grants Programme

The Fleming Fund is built on four core principles. Lead Grantees are expected to demonstrate how they will align with these principles while implementing the grant (See Country Grant Application Form and Guidance Note).

- 1) **Country Ownership:** The Fleming Fund Grants Programme will work closely with national governments to ensure that country plans and aspirations, as laid out in their National Action Plans, are implemented; Lead Grantees and the MA will consult and work hand-in-hand with national Governments to agree the approach and ensure sustainability. RFPs and country grants will conform to national priorities outlined in the National Action Plan. Unless there are good reasons to do so, Fleming Fund grants will chiefly invest in public sector laboratories and surveillance systems, thereby supporting national public health, animal and environmental health systems.
- 2) **One Health:** The Fleming Fund recognises that the problem of AMR is a growing danger to human health that cannot be controlled without a One Health approach. A specific set of One Health investment parameters has also been developed and is summarised below. This approach is aligned with key documents and guidelines from OIE² and FAO³ as well as the Global Action Plan.
 - a. **Collaborative multi-sectoral governance of AMR:** Leadership and resourcing of AMR surveillance and mitigation measures in all sectors that contribute to the emergence of AMR
 - b. **Integrated AMR and antimicrobial use and consumption (AMU/C) surveillance in all sectors:** Surveillance in humans, livestock, aquaculture, crops, food and the environment to produce information that is interpreted by multi-sectoral teams to help understand factors associated with AMR emergence within and between sectors
 - c. **AMR mitigation policies and programmes prioritised across multiple sectors:** Evidence-based policies and programmes for AMR mitigation measures that are prioritised across the relevant sectors, based on information generated through AMR and AMU/C surveillance in all sectors
- 3) **Alignment of Approach:** The Fleming Fund Grants Programme seeks to invest in areas, which complement and build on work done to date, rather than create new systems. Grant applicants will need to demonstrate that they understand other stakeholders' work in the field of improved laboratory capacity (both within and outside the sphere of AMR surveillance), improved disease surveillance, and the One Health approach. The Fleming Fund Grants Programme will assess grants for duplication of effort and/or the proposed development of parallel systems. To the extent possible, potential grantees will need to demonstrate how their proposals add value to existing investments and systems
- 4) **Sustainability:** The Fleming Fund Grants Programme will focus assistance on national systems with a view to long-term sustainability. Investment size and scope should, as far as possible, be aligned with national government spending so that systems supported with Fleming Fund grants are sustainable

² OIE Standards, Guideline and Resolution on Antimicrobial resistance and the use of antimicrobial agents; ³ The FAO Action Plan on Antimicrobial Resistance, 2016-2020.

within the public health system. We also recognise that the public good of conducting AMR surveillance means medium to long term support, and it is expected that countries that demonstrate good performance will have access to additional funds to provide ongoing support

3. Addressing AMR in Ghana – current situation

3.1. National AMR landscape

Ghana's national AMR landscape is relatively mature. In 2011, the Ministry of Health constituted the national AMR Platform comprising membership from ministries and departments from Health, Agriculture, Fisheries and Environment, UN agencies (WHO, OIE and FAO), civil society organisations, academic and research institutions, and the private sector (farmer groups and the Pharmaceutical Society of Ghana). This Platform, with representation from all relevant sectors, drives a One Health approach in responding to the growing AMR crisis.

A Situation Analysis of AMR was conducted in 2014 with support from the ReACT Project. The Ghana Cabinet approved the national AMR policy and the National Action Plan (NAP) on 7 December 2017, and these are expected to be officially launched simultaneously in early 2018.

3.2. AMR surveillance

Antibiotics for human and animal consumption are widely available to the Ghanaian public. For human health, they are available from hospitals, pharmacies, over-the-counter Drug Sellers, roadside stalls and drug peddlers. In 2013, 40% of outpatient encounters in formal health facilities included an antibiotic prescription. It is commonly believed that antibiotics speed up recovery from malaria and help to manage the common cold. Self-medication is common – for example 30% of a sample of students self-medicated with antibiotics monthly.

A 2015 ReACT study found “commonly used antimicrobials such as ampicillin, tetracycline, chloramphenicol and trimethoprim-sulfamethoxazole were ineffective (>70%) against gram-negative and gram-positive isolates. These older antimicrobials are cheap and their continued use (whether appropriate/inappropriate) in both humans and animals contributes to the high resistance levels. High prevalence levels (>50%) of resistance were also observed in third-generation cephalosporins and fluoroquinolones. Syndromic infections are often treated with third-generation cephalosporins, and high levels of resistance to these antimicrobials are worrisome” (Opintan et al, 2015)

“Fluoroquinolones, largely ciprofloxacin, were introduced very recently to Ghana with high expectations; resistance to these drugs is already common and occurs through multiple mechanisms, suggesting that heavy use of these valuable drugs may rapidly obliterate their usefulness”. Resistance to multiple antimicrobials is high, leading the authors of a 2011 study to conclude: “there may be few low-cost alternatives for managing infections”. (Namboodiri et al, 2011)

“A problem of misuse of antibiotics in cattle for meat production and the percentage of positive samples was relatively high in comparison with other countries. The presence of residues of antibiotics in beef as observed in the present study is a great public health concern.” (Addo et al, 2015)

Antibiotics are in widespread use in livestock, poultry and aquaculture. 98% of 387 livestock keepers interviewed in 2015 used antibiotics on their animals, mostly for preventive or treatment purposes; antibiotic use to stimulate growth was rare.

Antibiotics for human consumption available to the Ghanaian public are easily bought without a prescription, despite prohibitive (but unenforced) regulation (Lerbec et al, 2014). Pills are often priced individually and sold as incomplete courses. The picture is similar for antimicrobials for veterinary use. Veterinary services in Ghana are generally considered as expensive and difficult to access by livestock farmers. Animals either go untreated or are treated without the benefit of professional advice (Adzitey, 2013).

At the same time as the lab-based work was underway, ReAct (Opintan et al. 2015) also funded a study of the knowledge, perceptions and practices of 379 prescribers (59% nurses) about AMR (Asante et al, 2015). This study found that:

- Awareness of the existence of AMR was high
- 19% of prescribers thought that antibiotics could be added to malaria prescriptions to speed recovery
- Prescribing practices varied among different cadres of health professional: there was a particular problem with misprescribing of antibiotics amongst Community Health Officers (a more “junior” cadre)
- 50% of the health facilities involved in the study had stock-outs of at least one essential antibiotic.

This study of prescribers complemented an earlier study (2013) of knowledge amongst Civil Society Organisations (CSOs). This study found that whilst many CSO staff had a fair level of knowledge about AMR, there were almost universal misconceptions about some issues. Widespread misconceptions included the belief that antibiotics hasten recovery from a common cold and the notion that there is no connection between the use of antibiotics in animals and the effectiveness of antibiotics in humans. (ReAct Ghana Technical Working Group, 2013).

The Opintan et al paper from 2015 is part of a steady trickle of academic papers about AMR, which have appeared in the last 15 or so years in Ghana. Many of these papers end with a call for improved surveillance of AMR, but activity has traditionally been largely confined to academia. More recently however, under the Ministry of Health, a multi-sectoral AMR Platform was established.

The AMR Platform is a well-managed committee, which has over 40 regularly attending members representing diverse human and animal health-related government departments, research institutions, collaborating institutions and international partners, including FAO, OIE and WHO.

In 2016, the Platform oversaw the development of a National Policy on Antimicrobial Use and Resistance which has a clear One Health approach and multi-sectoral support is provided by the Ministry of Food and Agriculture, the Ministry of Fisheries and Aquaculture, and the Ministry of Environment, Science, Technology, and Innovation, as well as the Ministry of Health, which are all signatories on the policy submission. The Platform has also developed a detailed National Action Plan (NAP) to address issues identified in the situation analysis of the AMR Policy. The Ghana Cabinet approved both documents on 7 December 2017.

There is no routine AMR surveillance in animal and human health in Ghana. In the case of certain isolates and suspected multi-drug resistant TB, these cases are further investigated in specialised public health reference laboratories. For example, in a recent outbreak of swine flu in a school in the Ashanti region of Ghana, the pathogen was confirmed at the Noguchi Memorial Institute for Medical Research. However, there is no national surveillance system to monitor and inform a national and international evidence based response to AMR. The Fleming Fund Country Grants are designed to catalyse support for strengthening the AMR surveillance system under the leadership and guidance of the AMR Platform.

3.4. Fleming Fund activities in Ghana to date

The MA fielded a scoping mission to Ghana in February 2017, and this was followed by a more detailed Political Economy Assessment in April/May 2017 to identify the key stakeholders and partners who were already supporting the AMR agenda, and to begin understanding gaps in the AMR surveillance system.

Recognising the need for a continuous country presence to gain and sustain traction for Fleming Fund supported activities, the MA appointed a Country Technical Coordinator and a Country Administrator/Logistics Coordinator in July 2017 who are members of the AMR Platform, and have been instrumental in supporting a number of country positioning activities that have facilitated the development of this RFP.

In October and November 2017, the Fleming Fund’s MA Laboratory Specialist and One Health and Animal Health Specialist visited some of the public health and veterinary laboratories in Ghana. The team also interacted with

key stakeholders in the animal and human health sectors as part of the positioning activities for a country grant. Subsequently, national Laboratory Assessors conducted thorough assessments of 11 laboratories, which comprised 8 human health and 3 animal health laboratories in 6 of Ghana's 10 regions. These activities culminated in identification of the major gaps and needs for strengthening AMR and AMU surveillance in humans and animals and the assessments have informed this RFP development.

4. Scope of this country grant

This first country grant will support the development of an AMR and AMU surveillance system in Human and Animal health. This support will include: strengthening the work of Technical Working Groups to guide the development of the surveillance system, renovations of Reference and Surveillance laboratories listed in table 1 below, the provision and maintenance of essential equipment, and a continuous supply of appropriate reagents and consumables. An illustrative list of procurement items will be provided in the Grant Application Pack as a guide to the items and quantities required. This list will be negotiated and finalised in collaboration with the reference and surveillance laboratories, together with the MA once the preferred Lead Grantee has been identified. As agreed with the AMR Platform, the grant will also support the AMU surveillance in animals and humans through the Ghana Food and Drugs Authority, which is the statutory regulatory body mandated to ensure the quality of imported drugs for human, animal, and food safety purposes, and to carry out post-market surveillance of food and drugs down to community level across all ten regions of Ghana.

	Laboratory	Type
Human Health		
1.	University of Ghana Department of Medical Microbiology, Accra	National Reference Laboratory for Human Health
2.	Korle Bu Teaching Hospital Central Laboratory, Accra	Human Health AMR surveillance site
3.	Komfo Anokye Teaching Hospital, Kumasi	Human Health AMR surveillance site
4.	Tamale Teaching Hospital, Tamale	Human Health AMR surveillance site
5.	Volta Regional Hospital, Ho	Human Health AMR surveillance site
6.	Eastern Regional Hospital, Koforidua	Human Health AMR surveillance site
7.	Public Health Reference Laboratory, Sekondi	Human Health AMR surveillance site
8.	St. Martin de Porres Hospital, Eikwe	Human Health AMR surveillance site
Animal Health		
9.	Food Safety Laboratory, Veterinary Services department, Accra	Animal Health AMR Reference Laboratory and surveillance site

10.	Ashanti Regional Veterinary Services Department	Animal Health AMR surveillance site
11.	Pong Tamale Veterinary School	Animal Health AMR surveillance site

5. Objectives and Specific Outputs of the Country Grant

The Three Objectives and Nineteen specific Outputs proposed for the initial Fleming Fund Country Grant to Ghana are listed below under One Health, Human Health, and Animal Health.

ONE HEALTH

Objective 1: Establish a well-functioning One Health governance structure for AMR and AMU surveillance

Output 1.1: Terms of Reference of a One Health, Human and Animal AMR/AMU Surveillance Technical Working Groups approved by the AMR platform

Output 1.2: Strengthen the statutory mandated custodian of health data in Ghana (Ghana Health Service) to collect, collate, analyse, report and disseminate AMR data

Output 1.3: Strengthen the Ghana Food and Drugs Authority to collect, collate and analyse AMU surveillance data in humans and animals

HUMAN HEALTH

Objective 2: Establish a government led system of collecting, collating, analysing, reporting and disseminating AMR/AMU data on national and international platforms in alignment with the requirements of GLASS

Output 2.1: A framework for the stepwise implementation of an AMR surveillance system for humans

Output 2.2: Criteria for selection of relevant isolates for long-term storage in a biorepository and procedures for access to the repository

Output 2.3: National guidelines for AMR surveillance in humans (both passive and active)

Output 2.4: Standardized national protocols for the diagnostics of AMR including internal Quality Controls across all Surveillance Site laboratories

Output 2.5: Support workshops, conferences, expert consultations, printing of handbooks and flowcharts

Output 2.6: Strengthen the Human Health AMR Reference Laboratory as follows:

- Define its roles and responsibilities in the AMR surveillance system in collaboration with the TWG for human health
- Enhance AMR diagnostic capabilities for phenotypic characterisation of the mechanisms of AMR.
- Upgrade the Phoenix platform to perform automated MIC analysis
- Procure and deliver a full collection of reference strains to reference and surveillance laboratories
- Establish an inventoried biorepository of relevant isolates from surveillance sites (together with appropriate IT and systems support)
- Establish and Lead an External Quality Assessment (EQA) system for the surveillance laboratories, and analysis and dissemination of results

- Participate in an international EQA programme
- Provide any other support to the reference laboratory as determined and requested by the AMR Platform and/or MA.

Output 2.7: As guided by the HH AMR/AMU Surveillance TWG, strengthen AMR diagnostic capabilities and capacity, with a strong emphasis on quality assurance, at the surveillance laboratories focussing on country priority specimens and pathogens, and ensure international biosafety and biosecurity standards are established and maintained

Output 2.8: Review existing options for the safe and secure transportation of samples and isolates between the reference laboratory and the surveillance laboratories for confirmatory testing, and an EQA programme and other technical support organised by the Reference Laboratories

Output 2.9: As agreed with the AMR Platform and the MA, select, establish and sustain a reliable, cost effective transportation system across the surveillance system of biological material for confirmatory testing, long term storage of isolates and an EQA programme that includes an audit and accountability component

Output 2.10: Improve computer assisted data management at surveillance laboratories using national standards for AMR data collection, including data storage, sharing of data with clinicians and health care facilities, and linking site level data with WHONET

ANIMAL HEALTH

Objective 3. Strengthen AMR /AMU surveillance in animals

Output 3.1: In collaboration with the AMR National Reference Laboratory for animal health (National Food and Safety Laboratory) and regional veterinary laboratories in surveillance sites, implement a population-based surveillance system in poultry to generate data on resistance in 3 of the 7 priority bacteria/bacterial groups: *E. coli*, *Salmonella* species, *Enterococcus faecium* and *Enterococcus faecalis*

and antibiotics as identified by WHO

Output 3.2: As agreed with the AMR Platform and the MA, select, establish and sustain a reliable cost-effective transportation system across the surveillance system of biological material for confirmatory testing, long term storage of isolates and EQA programme that includes an audit and accountability component

Output 3.3: Strengthen the national AMR reference laboratory for animal health as follows:

- Produce a ToR to define the roles and responsibilities of the national AMR reference laboratory in the surveillance system
- Provide TA and training to enhance its capacity to perform AMR resistance testing on poultry, efficient data management and data quality assurance
- Procure and maintain an ATCC strain collection
- Establish an inventoried Biorepository of relevant isolates from surveillance laboratories (together with appropriate IT and systems support)
- Establish the national External Quality Assessment (EQA) system for the reference and surveillance laboratories, and analyse and disseminate results
- Provide any other support as determined and requested by the AMR Platform and MA.

Output 3.4 Biosafety and biosecurity measures are being applied within food safety and veterinary laboratories and to the safe transport of samples.

Output 3.5: In collaboration with Veterinary Services and the Animal Health AMR/AMU Surveillance TWG, develop and implement a sample selection framework, and a procurement and transportation system for a sample of live birds to be collected from farms and live bird markets and transported to the laboratories, where biological samples will be collected for culture and AST

Output 3.6: In collaboration with Veterinary Services and the Animal Health AMR/AMU Surveillance TWG, collect antibiotic use (AMU) information in the veterinary sector including; sample data on antibiotic usage by layer and broiler farmers; mapping the value chain and distribution pathways for antibiotics from importation to farm use; and collation of data at a national level on the importation of veterinary drugs

Output 3.7 Quarterly and annual reports of AMR patterns for the zoonotic bacteria/antibiotic combinations in broiler and layer populations are shared with the veterinary services and One Health AMR/AMU surveillance TWG.

6. Lead Grantee Roles and Responsibilities

The main role of the Lead Grantee will be to plan and execute the nineteen outputs to deliver the three objectives listed in Section 5 above. The Grant is designed as an AMR laboratory capacity building and systems strengthening intervention. The Lead Grantee is responsible for providing, either through in-house resources, and/or through a partnership or consortium, the expert technical assistance and high-quality support needed to strengthen the selected reference and surveillance sites' capability and capacity to generate and share AMR surveillance data on both a national, and international basis.

7. Key measures of success

This is an initial Fleming Fund Country Grant for Ghana to support AMR related surveillance strengthening in the country with a focus on AMR/AMU data collection and use. The success of this first grant will position the country to apply for an additional and potentially larger grant covering a longer period (potentially to October 2021). In order to track results in this initial grant, the Lead Grantee is expected to select and propose the most useful indicators from a standard set of indicators to monitor progress and achievements, which will be negotiated and agreed with the MA. A copy of the full list of indicators will be shared in the Application Pack.

Itad, a specialist evaluation firm, appointed by the UK Department of Health for this purpose, will independently evaluate the Fleming Fund Grants programme. All grants are subject to review and evaluation by these evaluators, and full co-operation with the evaluators by all Lead Grantees is expected.

In addition to measuring grant performance against the objectives and outputs stated above in Section 5, the grant will also be monitored on the implementation of and adherence to the Fleming Fund grant principles described in Section 2.4.

8. Key partnerships

Successful partnerships and close collaboration with a wide range of stakeholders at different levels, especially the AMR Platform and Ministries of Health, Food and Agriculture, Fisheries and Environment, is central to the success of this grant. Grantees will also need to build and leverage partnerships with several AMR stakeholders including WHO, FAO, OIE, civil society, academic and research institutions, and other development partner supported programmes.

9. Complementary grants

The initial country grant is expected to work effectively and synergistically with other grants under the Fleming Fund Grants Programme in Ghana and at the regional level, especially the Fleming Fellowship Scheme (which are not funded under the country grants).

Fleming Fellows will receive specialised training in data management analysis and advanced laboratory technical skills, and are expected to play a role as mentors and active trainers in various capacity building activities that will be implemented through this grant. Therefore, the Lead Grantee is expected to work in collaboration with the Fleming Fellowship Scheme beneficiaries, once they are established.

Additionally, Regional Grants will focus on strengthening networking and data sharing on AMR at the regional level. The Lead Grantee is expected to liaise, through the MA, with such grants for maximising sharing of AMR data and learning at the regional and global level.

10. Application requirements

10.1. Initial Country Grant Duration and Start Date

Initial Country Grant duration should be planned for 12 months. Subsequent grants may be applied in later years and country support is expected to be for up to four years in total (to October 2021).

The expected start date will be no later than three months following submission of the proposal.

10.2. Delivering Value for Money (VfM)

Mott MacDonald is responsible for driving VfM on behalf of the UK Department of Health throughout the Grant programme and will carefully consider how the proposal addresses “efficiency”, “effectiveness”, “economy” and “equity” in delivering the RFP/TOR outputs in relation to the proposed costs. The Guidance Notes for the Grant Application Form provide additional information on how the MA will assess applications.

10.3. Lead Grantee Eligibility Criteria

Lead Grantee applicants must satisfy the following eligibility criteria before applications can be assessed:

- Eligible Lead Grantee organisations are: National institutes (such as universities or research institutes); Non-Governmental Organisations; UN Agencies; Private companies
- Can be a single organisation or consortium; if a consortium, Lead Grantee applicant must evidence it has the appropriate governance, coordination mechanisms, and documented track record to manage sub-grantees
- Must demonstrate that they are registered to work within the country, including the submission of essential documents such as; current business registration certificate or equivalent, articles of incorporation, current tax clearance certificate, social security certificate, annual audited statements for the past three years
- Lead Grantee applicant must demonstrate they are competent and sufficiently experienced in successfully supporting laboratory capacity development, disease surveillance, capacity building, and One Health in LMICS
- Lead Grantee Applicant must be able to provide all information required to demonstrate that adequate and tested financial management controls and levels of authority are in place and are adhered to
- References from clients for previous work undertaken within the last five years are welcome

10.4. How to apply

Prospective Grantees must register their interest to apply by emailing flemingfund@mottmac.com in order to receive an invitation to **the Applicant Information Session**.

The Applicant Information Session will be organised in **Accra on 16 January 2018**. The details of the venue will be shared with applicants registering their interest.

Following the Applicant Information Session, prospective Grantees must register interest by **18 January 2018** to receive the **Application Pack** by emailing flemingfund@mottmac.com. The Application Pack will be sent out on 19 January and will include the application form, budget and milestones template and Guidance Notes. Please complete the application form provided, in line with the Guidance Notes.

Note the key requirements set out at the beginning of the Country Grant Application Form:

- Full proposals comprising the documents set out below must be submitted **by responding to the automated e-mail** that will be sent out on 19 January to applicants who have registered their interest; the Application Pack will be enclosed with the automated email.
- The submission deadline is: **13 February 2018, 17:00 GMT**.
- Applicants should observe the word limit. Additional words outside the limit will be disregarded.
- All documents included as part of the proposal must be submitted by separate e-mail in PDF format (body font: Calibri 11pt).
- This application is conditional upon your acceptance of the grant agreement (format will be shared in the application pack).

Proposals that do not satisfy these criteria may not be accepted.

10.5. Evaluation criteria

The Application Pack will include the Country Grant Application Form indicating the scoring and weighting for each section of the application. The Application Pack will also contain Guidance Notes explaining what we are looking for in terms of a high-quality response to each question.

10.6. Restrictions/limitations

Any potential conflict of interest known at the time of registration should be flagged to the Management Agent at that time. If a potential conflict of interest arises after that point in time, the prospective Lead Grantee must clearly disclose this in the proposal.

10.7. Key dates

Publication of RFP: 3 and 8 January 2018

Applicant Information Session: 16 January 2018

Registration to receive Application Pack deadline: 18 January 2018

Application deadline: 13 February 2018

Anticipated start date of grant: 16 April 2018

10.8. Contact details and support information

Any questions on the Request for Proposals should be sent to flemingfund@mottmac.com. The Management Agent will endeavour to respond to queries within 72 hours.