Australian Government

AusAID

PROGRAM DESIGN DOCUMENT

Australia Indonesia Partnership

for

Emerging Infectious Diseases

Human Health Program
2011-2014

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Glossary of Terms and Abbreviations

AIPD	Australia Indonesia Partnership for Decentralisation
AusAID	Australian Agency for International Development
Bappenas	National Development Planning Agency
EID	Emerging Infectious Diseases
FAO	UN Food and Agriculture Organization
GOA	Government of Australia
GOI	Government of Indonesia
H5N1; H1N1	Sub-types of Influenza A virus
JICA	Japanese International Cooperation Agency
KOMNAS FPBI	Pandemic influenza response coordinating agency Indonesia
MOA	Ministry of Agriculture
MOH	Ministry of Health
PSC	Program Steering Committee
QAE	Quality at Entry
QAI	Quality at Implementation
SARS	Severe Acute Respiratory Syndrome
SOPs	Standard Operating Procedures
TOR	Terms of Reference
USAID	United States Assistance for International Development
USCDC	United States Centers for Disease Control
WHO	World Health Organization

Executive Summary

Indonesia has been affected by several emerging infectious diseases (EIDs) in the last few years. Zoonotic EIDs such as avian influenza H5N1 have increased Indonesia and the global community's attention to the animal-human ecosystems and cross-cutting capacities needed for EID detection and response. This has become a priority in Indonesia, where the Ministry of Health (MOH) has been enhancing the disease control legislation, national coordination and communication, early warning alert and response system (EWARS), and laboratory and human resource support structures. Strengthening cross-cutting capabilities is in line with both the International Health Regulations (IHR) and the One World, One Health framework.

Australia has played a leading role in strengthening the regional EID capacity for preparedness and response, and was one of the first donor countries to fund EID programs in Indonesia in March 2004. Early support provided emergency funding for the avian influenza H5N1 response. With time, however, the response has evolved to strengthen the underlying systems that enable general EID disease detection and response. These programs have been successful in developing a five-year surveillance and outbreak response roadmap, establishing a national Outbreak Command Post, strengthening the field epidemiology training program (FETP), and piloting an enhanced early warning alert and response system (EWARS) for EIDs.

The existing programs from Australia and other donor and multilateral initiatives have been well coordinated through the Indonesian MOH and the World Health Organization (WHO). Lessons learned include the need for high quality technical input, flexible support, and coordination between the various funding agencies. Australian support has been well received by the Government of Indonesia, and has been instrumental in advancing Indonesia's capabilities under the IHR. Further strategic involvement by Australia will enable sustainability of the various initiatives by the Government of Indonesia

Program Content

Goal and Outcomes

The goal of the Program is to enhance the surveillance system for EID detection and response through strengthening of key underlying systems.

By the end of the Program, the short term intended development outcomes are:

- MOH and an increased number of provinces/districts have strengthened systems for the detection, control & prevention of EIDs
- MOH has a strengthened system for the response to EIDs
- Indonesia has strengthened human resources for the detection, control & prevention of EIDs

Three main outcomes will be achieved from the nine activities in the four components of the Program. These are:

- Improved timeliness and completeness of detection and reporting of outbreak-prone diseases
- The outbreak command post conducts routine surveillance for EID detection, data analysis, response and coordinates & disseminates information during outbreaks.

- Improved quality of FETP teaching/supervision and geographic distribution of students/graduates

The four components are;

Component 1: Expanding and Strengthening the Early Warning Alert and Response System (EWARS)

While the MOH has an existing outbreak detection and response system, the MOH, WHO and USCDC have been working to enhance this system (referred to as EWARS enhancements). The enhancements address system attributes such as timeliness, data quality and completeness by providing simplified guidelines for disease detection and outbreak response, training to provincial, district and primary healthcare workers, newer technology for data management and analysis, and streamlined mechanisms for data collation and reporting. The enhanced program was successfully rolled out in 2 provinces (Lampung and Bali) in early 2009.

Component 2: Strengthening and Ensuring Sustainability of the Outbreak Command Post.

The Outbreak Command Post at the Directorate-General of Disease Control and Environmental Health was initially established to collate information on, and coordinate the response to, outbreaks of human cases of avian influenza H5N1. In 2008, supported by international recommendations, the Directorate-General of Disease Control and Environmental Health identified the need for the Avian Influenza Command Post to expand its mandate to an Operations Centre servicing all Disease Control Directorates with responsibility for all emerging and outbreak prone diseases. This was successfully achieved in 2009. The next priority is to optimise the quality of Command Post operations and ensure its sustainability by shifting funding sources from donor funds (currently AusAID) to government funding. It is envisaged that this can be achieved within one year after commencement of the new Program.

Component 3: Enhancing the quality and Sustainability of the Field Epidemiology Training Program.

FETP is an internationally recognised mechanism to build human resource capacity in public health where the graduates provide for quality management of disease surveillance systems, outbreak response and disease program development and implementation. Indonesia's FETP was first established in 1982 and has operated out of two universities (University of Indonesia and University of Gadjah Mada) with some oversight from the MOH since then. Over time, however, the field aspects of the program had been diluted. In 2007, a revitalization of the FETP was commenced by the MOH, the universities and the WHO Epidemiologist. Activities under the revitalisation workplan are continuing using donor support that is available until mid-2011. A request for continued assistance after 2011 has been clearly expressed by the MOH.

Component 4: Timely Australian support for response to outbreaks of national or international importance

In addition to building capacity at national, provincial, district and community health workers levels to detect, report and respond to outbreaks, there is an ongoing need for the MOH to support outbreaks of national and international importance. In the last five years, MOH has provided immediate support to local level authorities through provision of investigation teams, technical and laboratory assistance, outbreak response supplies of drugs such as antivirals and vaccines such as for rabies. In many cases, the rapid response was enabled through international funding including through previous phases of AusAID support. The flexibility to provide timely assistance is needed to minimize spread of outbreaks, disease burden and to ensure outbreaks of national importance are characterized and fully resolved. In the past, delays in dispatch of teams or procurement of outbreak response aids were experienced due to funding

mechanisms that required long approval processes. There is a need to speed up these timelines so that outbreak control is achieved earlier and to limit the magnitude of disease spread.

A total of nine activities will be implemented during the course of the Program in the four components. All activities will be supported and enabled by three technical positions funded for the duration of the Program at WHO Indonesia: an International Technical Officer (epidemiologist), a National Program Officer and a National Data Information Officer. This model ensures good program management, donor coordination and information systems design, and has been highly successful over the last five years.

1. Background

1.1 Introduction

Australia was one of the first countries to support Indonesia combat the threat from avian influenza (H5N1) and other emerging infectious diseases (EID) and, through the Australian Agency for International Development (AusAID), has committed over $30 million[1] to Indonesia in three phases since 2004.

The current $19 million program commenced in July 2007 and is due to be completed in June 2010. Australia would like to continue this support after the current program expires and has been exploring options for future engagement with the Government of Indonesia (GOI).

The Health component of the Program, worth $1.5 million, was reviewed in November 2008[2]. This review was very positive and recommended continuation of activities after the current program is completed. In preliminary discussions, key Ministry of Health (MOH) counterparts also strongly supported continued AusAID engagement in support of EID activities in the health sector.

A design mission, comprising Dr Lynleigh Evans, Gina Samaan, Dr Vernon Lee and Fiona MacIver was therefore mobilised in October, 2009. This Program Design Document (PDD) is the outcome of the design mission.

1.2 History and Rationale

1.2.1 Situation Analysis

Emerging infectious diseases (EIDs) have large public health, economic and social impacts. The recent emergence of new diseases such as Severe Acute Respiratory Syndrome (SARS), Ebola-Reston virus and avian influenza H5N1 have demonstrated the need for rapid in-country capacity for outbreak detection and response to minimise the risk of disease entrenchment and spread. Similarly, the re-emergence of known diseases that threaten to increase in incidence or in geographic distribution, such as rabies and dengue hemorrhagic fever, also necessitate more robust public health systems to minimize the burden and impact of such diseases.

EID preparedness and response has become established as a major global public health issue. The revision of the World Health Organisation (WHO) International Health Regulations (IHR) in 2005 has provided a clear framework for countries to strengthen their EID detection and response capacities. In general, countries are mandated to strengthen capacities for EIDs through a health systems approach; enhancing disease control legislation, strengthening national coordination and communication (both within and between sectors), improving early warning surveillance and response to outbreaks, and addressing support structures such as human resource development and laboratory capacity.

Indonesia has been heavily affected by a number of EIDs in the last few years. The entrenchment of avian influenza H5N1 after its introduction in 2003, the spread of rabies to an increasing number of provinces, and the emergence of novel zoonoses such as Nipah virus in neighbouring countries have challenged the public health system. Rapid detection and response to EIDs in Indonesia is further constrained by the recent decentralisation of disease control

[1] All amounts are in Australian Dollars unless otherwise specified
[2] Review of Health Program, Nov 2008

mandates down to the district and municipal level, hampering standardisation, coordination and financing.

A number of recent assessments, including the *Joint Comprehensive Assessment of the National Disease Surveillance System* commissioned by WHO in 2004 and the *Review of Core Capacities for the Implementation of the IHR* conducted by WHO in 2005, found that nationwide capacity for EID detection and response exists but confirmed that the capacity to perform these functions, especially at the provincial and district levels, needed strengthening.

The Governments of Indonesia and Australia have recognised the importance of strengthening health systems in the face of this threat from EIDs and have given the highest priority to the strengthening of Indonesian systems so they can effectively detect threats early and respond quickly to outbreaks of disease.

Previous phases of the Program aligned strongly with the Australian guidelines for assistance documented in the *Pandemics and Emerging Diseases Strategy*, released in November 2006. The objectives of this strategy cover four main areas: (a) planning and preparation for emerging infectious diseases and potential pandemics; (b) recognition, control and prevention of emerging infectious diseases; (c) strengthening national systems for animal and human health; and (d) rapid response to outbreaks of disease in animals and humans. In 2010, a new *Pandemic and Emerging Disease Strategy was released for 2010-2015. Under this new framework, Australia will continue to assist partner countries to consolidate achievements made under the last few years and translate gains in prevention, detection and control of emerging diseases into stronger systems for EIDs generally.*

1.2.2 Australian Support

Australia was one of the first countries to support Indonesia when avian influenza was first reported in poultry in 2004 and has provided almost $10 million to the MOH through WHO in three phases since then. Early assistance specifically targeted avian influenza and was heavily focussed on the emergency response. This included support for development of disease control guidelines, provision of essential supplies including 50,000 doses of Oseltamivir and personal protective equipment, and training of provincial and district level health officers as rapid response teams for verification and control of disease outbreaks and public health emergencies. Over time, support was increasingly directed towards strengthening underlying systems to enable general EID and outbreak prone disease detection and response.

Through the support provided by AusAID, significant achievements were made in:

- Developing of a five-year Surveillance and Outbreak Response Roadmap to strengthen national public health capacity for EIDs.
- Establishing a Command Post for the response to avian influenza and other epidemic-prone outbreaks, including the collection, analysis and dissemination of information.
- Revitalising Indonesia's field epidemiology training program (FETP) to strengthen human resource capacity in the public health systems that enable EID detection and response.
- Piloting an enhanced Early Warning Alert and Response System (EWARS) for priority emerging and outbreak-prone diseases.
- Supporting outbreak investigations for diseases of national and international importance, including avian influenza A H5N1, cholera, clusters of fever with unknown origin and rabies.

All of the above achievements through the previous phases of Australian aid strongly link back to strengthening the core capacities under the revised IHR 2005. The development of the Surveillance and Outbreak Response Roadmap helped crystallize the MOH priority areas for system-strengthening. The Roadmap emphasized the need to enhance the core functions of the surveillance system especially the capacity to detect outbreaks in its EWARS. The Roadmap also emphasized the cross-cutting need for workforce development to improve quality of work. Thus, major emphasis was placed by the AusAID-funded support to strengthen EWARS by piloting enhancements and supporting the revitalization of the FETP.

The Indonesian EWARS aims to rapidly detect outbreaks based on reports from primary healthcare centres about disease activity. Data are collected and sent to the district health offices for collation, analysis and action. Districts are legally mandated for disease control and, thus, are first responders to potential outbreaks or public health emergencies. Data are also forwarded to provincial and national level health authorities for analysis, action and feedback.

Based on various evaluations and on the experience arising from Australia's previous aid, the major challenges to the national surveillance system including EWARS are the timeliness, quality and completeness of reporting. Timeliness and completeness are hindered at all levels of the system especially at local level. Staff at primary healthcare centres are burdened with numerous activities and reports which limits their capacity to submit surveillance data weekly. At district level, there are usually only two staff responsible for surveillance and they are also tasked with many programs and are frequently outside the office attending trainings and meetings. In terms of data quality, limitations exist in use of case definitions for reporting, completion of forms and appropriateness of diagnosis especially utilization of laboratory-based diagnosis.

Through the previous phases of the AusAID support, enhancements to Indonesia's EWARS sought to address these issues by reviewing reporting protocols, case definitions and computer programs used to streamline timeliness, increase completeness and to enhance quality. District, provincial and national authorities were provided with automated indicators to monitor completeness and timeliness and were mandated to feedback findings to lower levels of the healthcare system to maximize commitment to the system. These changes were trialled in two provinces, Bali and Lampung, and were found to successfully increase timeliness and completeness of EWARS to 80% compared to 30% pre-intervention.

For FETP, the AusAID support through WHO enabled MOH to re-establish its role in steering and coordinating the Program for maximal benefit to the government's public health and surveillance system. Through the support of previous AusAID grants, an international assessment of FETP Indonesia was conducted in November 2007. The assessment was conducted against the international standards for FETP known as TEPHINET Continuous Quality Improvement (CQI) tool. The tool provided the basis for the revitalization emphasis. Thus, in coordination with the universities offering the FETP coursework, the provinces/districts providing field placements for student traineeships and the MOH Health Workforce Bureau, a workplan was devised to enhance student field learning, promote the benefits of the program and embed the program into the national health workforce strategy to maximize its sustainability. Lessons learnt from the previous phases of AusAID's support are the need to strengthen field and academic supervision and to continually promote the Program to other divisions of the MOH responsible for budgeting and programming.

An *External Review of the AusAID Pandemic Influenza and Emerging Infectious Diseases Prevention and Preparedness Program* was conducted in November 2008. This report identified general and specific lessons that have been learnt with respect to Australia's support to Indonesia in strengthening EID detection and response systems. These include the need for high quality technical input, flexible support over a number of years to enable appropriate timeframes

for activity development and continuity of initiatives, and the benefit of coordination through WHO. These lessons have been incorporated into the new design process.

1.3 Sector Analysis

1.3.1 Government of Indonesia Policy Context

In 2008, the Ministry of Health established a Surveillance Roadmap to enhance the capacity for detection and response to outbreak of infectious diseases, including EIDs. The Roadmap is based on a number of system evaluations conducted between 2004 and 2008, which identified gaps in human resource capacity, system management, budgeting and support functions such as laboratories and infrastructure. This Roadmap outlines the key strategies needed to achieve the goal of strengthening national capacity to define, detect and respond to diseases and other public health priorities. The Roadmap emphasizes components of the public health system requiring alignment with international standards in EID surveillance and response. These include the formation of outbreak rapid response teams, strengthening the laboratory support role in outbreak detection and response, and building human resource capacity in public health surveillance at local level. The Roadmap also considers alignment with other Government of Indonesia policy regarding routine yet priority diseases, including tuberculosis, vaccine preventable diseases and malaria. For these vertical programs, the outputs of the Roadmap are seen to benefit human resource availability and enhanced coordination and pooling of resources.

1.3.2 Country Donor Harmonisation

The coordination of Australian and other donor support with respect to EIDs has been successfully streamlined through the MOH and WHO. Several other donor countries including Canada, Japan, USA and the European Commission have also provided funding through WHO. This funding was utilised to support the MOH to strengthen core systems under the IHR and the implementation through WHO has resulted in good harmonisation and synchronization of activities. The coordination between WHO and other agencies directly funding the MOH, such as US Centers for Disease Control and Prevention (US CDC) and the Japanese International Cooperation Agency (JICA), has also been excellent. An example is the support for piloting an enhanced EWARS, where the current Australian funding through WHO was used for technical support to the overall initiative and roll out of the enhancements in Bali province, whilst the roll out in Lampung province was funded by US CDC and the planned roll out in South Sulawesi province is to be funded by JICA.

US CDC, JICA and AusAID are the only major funding agencies planning to fund the MOH for strengthening EID capacity beyond 2011. The US CDC is planning to continue its operations in Indonesia including laboratory support for surveillance and response, epidemic and pandemic preparedness, and the roll out of EWARS enhancements in a number of provinces. The US CDC will also likely undertake an expanded research agenda on influenza and pneumonia as a continuation of its investment in the influenza and respiratory disease control program. JICA has expressed interest in future EID funding but is awaiting the review of its existing program in South Sulawesi province that is strengthening health systems for the detection of and response to avian influenza H5N1 specifically.

In this context, the activities in this Program are likely not only to benefit Indonesia's EID capacity directly but also to support the broader program of donor support. To avoid duplication or major gaps in activities, it will be important to continue engagement with US CDC and JICA on the status of their funding and program plans.

1.3.3 Regional and Global Activity

As attention to EIDs and their health, social, economic impact increases, there has been a lot of regional and global activity to enhance country preparedness to detect and respond to such events. A major global activity under the purview of WHO was the revision of the International Health Regulations (IHR), which are the global rules to enhance national, regional and global public health security. Signatories to the IHR are expected to build surveillance and response capacity that minimizes the risk of disease spread, especially across borders. The IHR implementation schedule aims for countries to have such capacities functional by 2012.

In addition to this key global initiative, there are a number of regional activities to strengthen capacity to respond to EIDs and especially zoonotic diseases. The regional activities include the WHO bi-regional strategy on Asia-Pacific Strategy for Emerging Diseases (APSED) and the framework for Combating EIDs in the South East Asia Region of WHO. These regional policies emphasize the importance of epidemic preparedness and rapid response, public health infrastructure, risk communication, research and its utilization, as well as advocacy for political commitment and partnership building. Further, there is increasing emphasis on EIDs through the Association of Southeast Asian Nations (ASEAN), where coordination by member countries has led to increased sharing of disease information and the establishment of minimum standards for outbreak investigation and response.

Importantly, the Team Leader of the Communicable Disease Surveillance and Response Team in WHO Indonesia is an epidemiologist previously funded to work for WHO through the AusAID funded Australian Epidemiology Regional Assistance Program (AERAP).

1.3.4 Consistency with Existing AusAID and other donor/multilateral Programs

AusAID has a large Health Program in Indonesia which, in addition to its EID activities, supports partnerships in HIV, Health System Strengthening and Maternal and Neonatal Health. All these partnerships have a strong health system focus and the activities within this Program should complement those other partnerships.

In addition, the Australian Department of Health and Aging (DOHA) has a Memorandum of Understanding with the MOH of Indonesia. Key components under this MOU include the exchange of information, the exchange of experts and expertise, cooperation between institutions and training and education activities. Continued dialogue and communication with DOHA will be important to ensure that activities between the two organisations are synchronised.

1.4 Australian Government Policy context

1.4.1 Australia Indonesia Partnership Country Strategy

The *Australia Indonesia Partnership (AIP) Country Strategy 2008-13*, which is aligned with GOI's development priorities, articulates key priorities for the bilateral development cooperation relationship. The second of its four pillars is a commitment to "Investing in People"[3], which in turn includes amongst its objectives that Australia will work with Indonesia to achieve better health access and systems. This program will directly and indirectly assist in achieving this through strengthening human health services and providing Indonesia with a sustainable system for detecting and addressing emerging infectious diseases.

[3] The other three pillars are Sustainable Growth and Economic Management, Democracy, Justice and Good Governance, and Safety and Peace.

The Country Strategy states that the Australia Indonesia Partnership will:

- Provide support where there are opportunities for assistance that aligns with GOI programs and have a feedback link to improving national, regional and district policy and practice.
- Work through Indonesian systems and ensure GoI determines assistance priorities.
- Address problems that impact on Indonesia and Australia's mutual interests.
- Ensure that a solid understanding of Indonesian policies and systems will form the basis of analysis and program development.

The geographic focus of health activities aligns with this focus of the Country Strategy targeting provinces with the lowest health indicators.

1.4.2 Overarching policy issues

The implementation of the human health component will be informed by a number of overarching principles that the Government of Australia has put in place to ensure the quality and effectiveness of the aid program. In all cases, these principles are consistent with Government of Indonesia policy. These overarching principles are outlined below.

Accra Agenda and Paris Declaration on Aid Effectiveness

Consistent with Australia's commitments under the Paris Declaration on Aid Effectiveness, the program incorporates the key themes of: increased policy engagement and alignment with government strategies; working through government systems; donor harmonisation; mutual accountability and innovative forms of aid and funding.

Gender

Gender equality is an overarching principle of Australia's aid program. Consideration and incorporation of gender aspects into implementation of this activity is implicit in the design of the project. The important role that women play at all levels of the health system will ensure that women are active participants in this Program. The design team noted that women occupy several key positions consulted, including Head of the Provincial Health Office in Lampung.

The Terms of Reference for positions to be funded under this program and recruitment methods encourage gender equality and follow equal employment opportunity policy. Officers will be familiar with gender issues, and methodologies to amplify women's voices in decision-making.

Gender equality principles have been incorporated into the graduate selection process of the FETP, and it is intended that this will continue. Indonesian officials have indicated they will give equal priority to males and females in accepting students. Of the second batch of 28 students currently enrolled in the FETP at the two participating universities, 12 are women and 16 are men. Staff for EWARS operating at all levels of the health system (MOH, province, district, health centre) are all government employees who are under the purview of the government's own gender equality principles. Similar principles are adopted for POSKO staff recruitment.

In disease detection and response, the distribution of cases according to characteristics of the population (disaggregated by age, gender, economic status, education) will point out population groups that need greater attention and outbreak intervention/support.

Disability-inclusive Development

The EID program was developed in line with the principles espoused in *Development for All: Towards a Disability-inclusive Australian Aid Program 2009-2014*, and will be guided by the guiding principles in this document, particularly around promoting active participation of people

with disability, acknowledging the interaction of gender and disability, and strengthening people-to-people links and partnerships involving people with disability.

Anti-Corruption

The risk of corruption in this Program has been reduced by the direction of funds through WHO, including the procurement component for which WHO has strict tendering processes. Further, the close management of the Program by the AusAID Health Team and WHO Project Leader ensures the regular close monitoring of activity and spending.

Environment

As a Commonwealth agency, all AusAID activity must comply with the *Environment Protection and Biodiversity Conservation Act 1999*. There is no need for a comprehensive environmental impact assessment to be undertaken in relation to this Program as it will not involve any environmentally sensitive locations, sectors or interventions.

Child Protection

AusAID has zero tolerance for child abuse, as stated in the *Child Protection Policy*. In the event that any activities are developed in future that involve working with children, AusAID and all relevant contractors or partners will undertake to ensure the personnel positions involved put in place risk management measures in accordance with the *Child Protection Policy*.

2. Program Description

There are four components in the Health Program Design: three of which are aimed at strengthening the underlying health systems for robust early detection and response to EIDs and the fourth is to provide flexible and rapid response support to outbreak emergencies. These are aligned with Australia's strategy to assist partner countries on pandemics and emerging infectious diseases in the next five years. They are (1) Expanding and Strengthening the Early Warning Alert and Response System (EWARS); (2) Strengthening, and Ensuring Sustainability of, the Outbreak Command Post; (3) Enhancing Sustainability and Quality of the Field Epidemiology Training Program (FETP), and (4) Timely Australian support for response to outbreaks of national or international importance. These components were prioritized in the Health Program Design for the next phase of AusAID support as they reflect the priorities of MOH system-strengthening as documented in the Surveillance and Outbreak Response Roadmap, they continue and build upon AusAID's support in the previous phases, they specifically respond to the needs identified by MOH during the Design Mission and they are aligned with the AusAID Framework for Pandemics and EID 2010-2015.

Even though WHO will be contracted for the implementation of the Program, it is important to recognise that the ownership of and performance against the indicators the program rests at the MOH Surveillance and Outbreak Response Sub-directorate. Specifically, the three development components will impact the process and activities conducted by this Sub-directorate at the Directorate-General of Disease Control and Environmental Health. This is inline with the AIP emphasis to work in close partnership with Indonesian systems and to maintain a program-based approach to achieving development outcomes. The fourth component will allow Australia to provide emergency response upon request from the MOH Surveillance and Outbreak Response Sub-directorate.

The program focuses on broad health system initiatives rather than targeting specific diseases. Although disease-specific control programs are important in managing EIDs, they are outside the scope of this Program. The direct beneficiaries of the Program are the surveillance and communicable disease response workforce. Staff at national, provincial, district and primary healthcare centre level will receive training to enhance and streamline current work activities in disease detection, reporting, action and feedback. This will be achieved through the enhancements to EWARS, strengthening of the Outbreak Command Post and through direct training of some staff as field epidemiologists. The indirect beneficiaries of the Program are the Indonesian public since disease outbreaks will be detected in a timelier and complete manner that will minimize human morbidity and potential mortality.

Information about the activities and expected outcomes for each component are presented below.

2.1 Goal and Outcomes

Goal: To enhance the surveillance system for EID detection and response through strengthening of key underlying systems.

By the end of the Program, the short term intended development outcomes are:

- MOH (Surveillance and Outbreak Response Sub-directorate) and an increased number of provinces/districts have strengthened systems for the detection, control & prevention of EIDs

- MOH (Surveillance and Outbreak Response Sub-directorate) has a strengthened system for the response to EIDs
- Indonesia has strengthened human resources for the detection, control & prevention of EIDs

Three main outcomes will be achieved from the nine activities in the four components of the Program. These are:

- Improved timeliness and completeness of detection and reporting of outbreak-prone diseases
- The outbreak command post conducts routine surveillance for EID detection, data analysis, response and coordinates & disseminates information during outbreaks.
- Improved quality of FETP teaching/supervision and geographic distribution of students/graduates

The fourth component - timely Australian support for response to outbreaks of national or international importance - does not have a development outcome but enables Australia to provide flexible and rapid support to Indonesia during health emergencies (outbreaks). In the South-East Asian region, such flexible support was found to be very useful, and thus, became an Objective in the AusAID Pandemics and EID Framework 2010-2015. Based on this Framework Objective, funding is available for rapid outbreak response through this program.

2.2 Description of Components

1. Expanding and Strengthening the Early Warning Alert and Response System (EWARS)

The MOH aims to strengthen the capacity for detection and response to EIDs by enhancing the early warning alert and response system (EWARS). While the MOH has an existing outbreak detection and response system, the MOH, WHO and USCDC have been working to enhance this system. The enhancements address system attributes such as timeliness, sensitivity, acceptability and flexibility by providing simplified guidelines for disease detection and outbreak response, training to provincial, district and primary healthcare workers, newer technology for data management and analysis, and streamlined mechanisms for data collation and reporting. The enhanced program was successfully rolled out in 2 provinces (Lampung and Bali) in early 2009.

EWARS utilises existing surveillance officers at the District and Provincial levels to enable active case finding and alert verification, and it will utilise the rapid response teams previously established to enable immediate response. These staff is also existing officers at District and Provincial levels.

Overall, strengthening EWARS will help Indonesia meet the minimum core capacity requirements under the International Health Regulations. There is high commitment at the MOH to develop this area of work and to expand the EWARS enhancements nationally.

Outcome: *EWARS leading to improvements in the timeliness and completeness of detection, response and reporting of outbreak prone disease incidents*

Activities:

1.1 Establishment Phase: The Program will support the MOH in establishing EWARS enhancements in six new provinces over three years. AusAID's development assistance through the Australia-Indonesia Partnership for Decentralization (AIPD) focuses on five provinces: NTB, NTT, East Java, West Papua and Papua. NTB has already been earmarked

to receive EWARS enhancements through other sources of funding. Thus, establishment of EWARS in the remaining four AusAID-priority provinces will be considered and they will be prioritized if the provinces are ready for the enhancements. However, ultimate decision of the provinces to receive the enhancements will need to be based on the provincial and district preparedness including: local funding availability, pre-requisite human resources for surveillance and clear commitment to sustaining activities. The initial activities in each province will be an advocacy meeting with provincial and district health managers, a one-week training workshop for disease surveillance staff, training for primary healthcare workers, a lab assessment and some provision of supplies and equipment. To enable this, funds will be provided to MOH to hire additional project staff as the activity expands into more provinces.

Output: The enhanced EWARS established in 6 new provinces in Indonesia.

1.2 Province Implementation Phase: Once EWARS is enhanced in a province, the Program funds will be used to support technical implementation in the first year of operation. This will include funding monthly meetings at district level to monitor quality and system uptake, provision of operational resources for reporting and feedback and some laboratory supplies (if needed).

Output: Districts and provinces with the enhanced system will generate weekly bulletins for outbreak detection and response with high participation, completeness and timeliness from health centers, district and provincial health offices.

1.3 Monitoring and Technical Support: Support for monitoring and evaluation of the provincial system enhancement will be provided during the first and second years after implementation in each province. The monitoring missions will enable MOH staff to ensure quality roll out of activities and to trouble-shoot any problems with the computerisation of the overall system. Five MOH missions to each province are expected to be needed and undertaken annually. This activity will also enable MOH to obtain the technical support, such as IT expertise, needed to upgrade EWARS software or guidance. This need is expected to be more apparent once more provinces enhance their systems and the tools used need to adjust for greater data flow.

Output: Active feedback about surveillance system performance including quality, timeliness and completeness from Ministry of Health to provincial and district health offices on progress with EWARS implementation through weekly bulletins.

2. Strengthening and Ensuring Sustainability of the Outbreak Command Post

The Outbreak Command Post at the Directorate-General of Disease Control and Environmental Health was initially established to collate information on, and coordinate the response to, outbreaks of human cases of avian influenza H5N1. It has played a pivotal role in collating information from the national surveillance system and other independent national and international sources, in providing policy makers with key information for decision making, and in working with the public communications officials to provide information to the public during EID outbreaks.

In 2008, the Directorate-General of Disease Control and Environmental Health, supported by international recommendations, identified the need for the Avian Influenza Command Post to expand its mandate to become an Operations Centre servicing all Disease Control Directorates with responsibility for all emerging and outbreak prone diseases. This was successfully achieved in 2009, when a Regulation was issued allowing the Directorate of Surveillance, Immunization

and Matra Health to have oversight of the Command Post thus enabling the Command Post to support all disease control programs (e.g. Vaccine Preventable Diseases, Vector borne Diseases and Directly Transmissible Diseases). The next priority is to optimise the quality of Command Post operations and to ensure its sustainability by shifting funding from donors (currently AusAID) to government funding. It is envisaged that this can be achieved within one year since the Command Post has largely been integrated into the functions of the Surveillance and Outbreak Response Sub-directorate.

Outcome: *The Outbreak Command Post independently conducts routine rumour surveillance for EID detection, data analysis from various information sources, and coordinates and disseminates information during an outbreak response.*

Activities:

2.1 Strengthening Command Post Functions: The Program will support the MOH to enhance the outbreak detection, data analysis, information-sharing and coordination role of Command Post. The quality of Command Post outputs will be improved by revising existing protocols and surveillance databases, systematising monthly coordination meetings between MOH, WHO and other technical experts (where relevant) and ensuring Command Post access to bulletins and other outputs arising from provinces with enhanced EWARS. The Program will initially provide operational costs to enable investigation of public health emergencies if needed, including one staff position, but these aspects of the Command Post operation will be incorporated into regular GoI funding within one year.

Output: Revised protocols and surveillance databases.

2.2 Handover of Funding Responsibility: In 2012, AusAID will hand over funding responsibility for the Command Post to the MOH. The transition, including implementation of any recommendations from the review, will be supported by the WHO Epidemiologist.

Output: Funding responsibility of Command Post transferred to GOI by 2012.

3. Enhancing the Field Epidemiology Training Program (FETP)

Field epidemiology expertise is an essential component for a successful EID program. In Indonesia, this expertise is developed through a number of different in-training short courses and more formal qualifications such as the Field Epidemiology Training Program (FETP). FETP is an internationally recognised mechanism to build human resource capacity in public health where graduates provide quality management of disease surveillance systems, outbreak response and disease program development and implementation. FETP emphasizes both infectious and non-communicable disease programs, where the skills acquired during training apply to different diseases and programs. Indonesia's FETP was first established in 1982 and has operated out of two universities (University of Indonesia and University of Gadjah Mada) with some oversight from the MOH since then. Over time, however, the field aspects of the program had been diluted.

In 2007, a revitalization of the FETP was commenced by the MOH, the universities and the WHO Epidemiologist funded through previous phases of AusAID support. An assessment was conducted in November 2007 against the international recognized standards for FETP, namely, the TEPHINET Continuous Quality Improvement (CQI) tool. The international assessment found that FETP Indonesia needed to be embedded into MOH structures for sustainability, have a larger field study component with quality field supervisors, updated university-based curricula and increased relevance of the program to the Indonesian context by inclusion of learning material relevant to Indonesia's needs, such as disaster epidemiology. Based on this assessment, the revitalisation workplan focused on the following key aspects:

- Strengthening MOH oversight of the program through a technical Secretariat at the Directorate-General of Disease Control and Environmental Health;
- Embedding FETP into the MOH training policy and structures so that the epidemiologist function is recognised as a priority technical function in health (along with doctors and midwives). This would in turn secure funding and sustainability of the program;
- Aligning the FETP curricula with international standards, between the various universities, and with MOH needs for skills in epidemiology;
- Increasing the opportunity for learning and quality of teaching in both classroom and field placements; and
- Linking FETP Indonesia with other public health workforce capacity-building programs, epidemiologist associations, FETPs in other countries and the accrediting network of FETPs known as TEPHINET.

Activities under the revitalisation workplan are continuing using donor support available until 2011. A request for continued assistance after 2011 has been clearly expressed by the MOH.

Outcome: *FETP Indonesia is ensuring the quality of teaching and supervision and is guiding the geographic distribution of graduates.*

Activities:

3.1 FETP Secretariat: Funds will be provided to MOH to recruit staff for the Secretariat and for yearly operational costs, including field supervision costs, monitoring and coordination missions. The Secretariat will work on the sustainability of FETP Indonesia by coordinating with the MOH Planning Bureau and Health Workforce Development Centre and the universities to integrate FETP into the routine workforce development budgets and plans. This sustainability planning will be critical to ensure that the FETP does not get diluted as experienced in previous decades after external funding dissipated. Similarly, the Secretariat will guide the recruitment and geographic distribution of students/graduates to areas of need and projects of importance. Geographic distribution will be ensured qualitatively by taking into consideration the home provinces of student applicants and the presence of FETP graduates at those locations. The secretariat will also continue to evaluate progress against the CQI standards, whereby an evaluation in 2011 (using alternate sources of funding) will be compared to a 2014 evaluation (using this Program's funding). This will ensure regular evaluation of FETP so that there is ongoing review of gaps and consideration of remedial actions.

Output: Secretariat functions and staffing incorporated into routine MOH operations.

3.2 Training: To enhance the learning-teaching in FETP, a yearly field supervisor refresher workshop will be conducted to strengthen field supervisor capacity in field epidemiology, to exchange experiences and to improve communication between the MOH, FETP Secretariat, universities and the field supervisors. Further, the Program will provide funds for two visits per year for two weeks, either for Indonesian staff to travel to another country for specific courses or for an international consultant to visit Indonesia for activities such as to enhance curricula design, and review teaching/learning methods and student coaching skills. This will focus on young lecturers or university trainers who will become future leaders in FETP Indonesia[4]. The selection of these staff will be done through consultation between the MOH, universities and WHO. However, criteria for selection of staff to receive this training include:

[4] The Design team recommends that other existing AusAID mechanisms be explored to support FETP, including the scholarships available for students from Indonesia interested in undertaking Masters and PhD programs in Australia.

- University lecturer or field supervisor,
- Minimum 3 years commitment to FETP Indonesia after receipt of training,
- Training should focus on acquisition of new skills (e.g. biostatistics relevant to FETP student needs) or tools for enhancing student learning (e.g. curricula design or new teaching methods).

Output: Cadre of technically competent field supervisors and university trainers established.

3.3 International Participation: The Program will fund FETP Indonesia's director participation at the yearly TEPHINET meeting which provides a forum for exchange on curricula, training strategy and for the accreditation of individual country programs. The Program will also provide technical and financial support to students applying for oral (or if nil oral, poster) presentation at the international TEPHINET conference, where at least one student in the Indonesian program should be accepted for presentation each year. Students presenting an oral presentation will be prioritized for funding. Final selection will be done through consultation between the MOH, universities and WHO.

Output: Indonesia participating in, and students presenting at, TEPHINET meetings/conferences.

4 Timely Australian support for response to outbreaks of national or international importance

In addition to building capacity at national, provincial, district and community health workers levels to detect, report and respond to outbreaks, there is an ongoing need for the MOH to support outbreaks of national and international importance. MOH has and continues to provide immediate support to local level authorities through provision of investigation teams, technical and laboratory assistance, outbreak response supplies of drugs such as antiviral and vaccines such as for rabies. However, there have been a number of challenges to this responsibility including budgetary constraints at MOH, budgetary cycles that limit ability to support outbreak response during fiscal year endings, capacity to procure laboratory kits, vaccines and treatments quickly through government channels. Thus, in many cases where these challenges were faced, the rapid response was enabled through international funding including through previous phases of AusAID support.

The flexibility to provide timely assistance is needed to minimize spread of outbreaks, disease burden and to ensure outbreaks of national importance are characterized and fully resolved. In some rare cases, there is also an Australian national interest in the outbreak since it has the potential to affect Australian citizens. One example is rabies outbreaks in Bali where many Australian tourists may be at risk of dog bite and infection. Thus, there is the prerogative to support the Indonesian authorities under the spirit of collaboration and One World, One Health to respond to such threats. The role of Australia in providing immediate and financial support (or surge capacity) required for disease events that threaten global health is explicitly acknowledged as an objective under the AusAID Pandemics and EID Framework 2010-2015. Thus, even though this component of the Program does not have an explicit development outcome, it is relevant as a mechanism to enable rapid support to Indonesia on EIDs.

To ensure that funding under Component 4 is utilized in accordance to its intended purpose, the scope and fund utilization criteria are outlined below:

Scope: To support the MOH in responding to outbreaks with the following criteria:

- Outbreaks of International Health Regulations relevance (e.g. cholera, avian influenza A H5N1)

- Outbreaks of direct impact on Australians (e.g. rabies, legionella in Bali)
- Outbreaks occurring during fiscal year ends when MOH money is not accessible
- Outbreaks necessitating shipment of samples to international reference laboratories or where international expertise is required (e.g. suspect polio cases)

Fund utilization: The funds can be utilized to:

- Send outbreak response teams (e.g. MOH staff, FETP students) to the field
- Procure vaccine, treatment & laboratory tests relevant to immediate outbreak needs
- Ship outbreak-related specimens overseas to reference laboratories
- Expert consultants recruitment to support outbreak response

These funds will be channelled through WHO so that the funding mechanisms, procurement of supplies and technical assistance are consistent for the entire Program. However, since the funds need to be utilized in accordance with the scope of this Program, the MOH will inform AusAID Indonesia directly whenever access to these funds is required. This will be done informally by the Chief of Sub-directorate of Surveillance and Outbreak Response to the EID Program Manager at AusAID Indonesia either via phone or email. This is to ensure AusAID knowledge about the Australian support on outbreak response.

Output: Timely Australian support for response to outbreaks of national or international importance

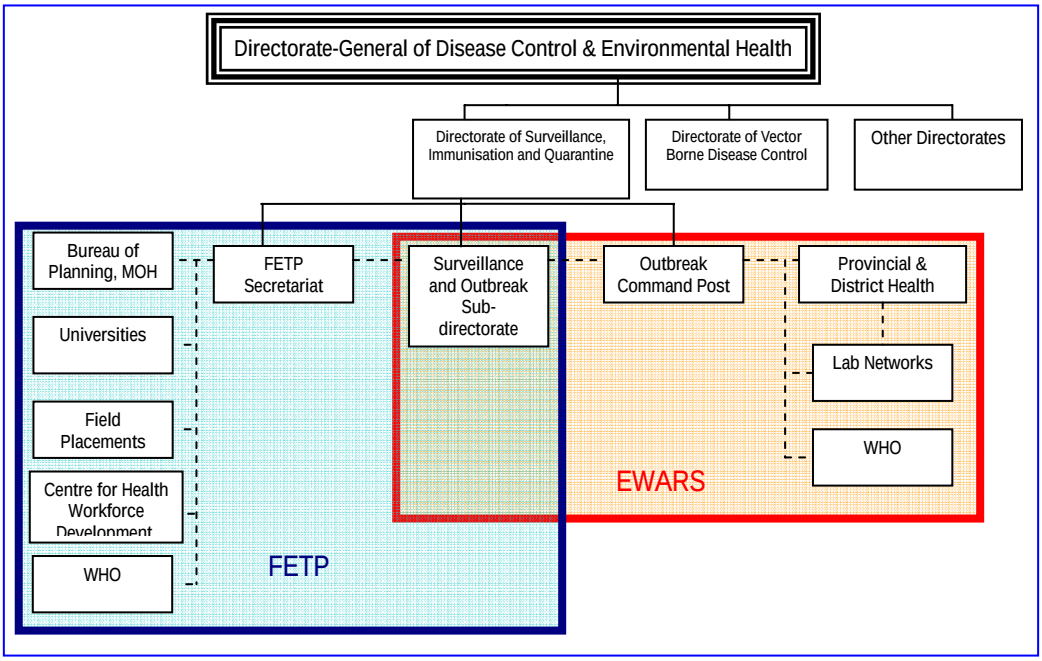
3. Implementation Arrangements

3.1 Management Arrangements

3.1.1 Management

The Program will be implemented through WHO Indonesia, with WHO being the contractual partner to AusAID. WHO will work directly with the MOH Sub-directorate of Surveillance and Outbreak Response and the provincial and district health authorities to ensure that Program activities are embedded into government structures as quickly as possible and to ensure quality outputs. Program management will focus on achieving the outcomes, integrating activities into the existing MOH structures (especially at the provincial and district level) and streamlining the reporting and feedback to AusAID. The ownership, day-to-day management and implementation of the Program belong to the Sub-directorate of Surveillance and Outbreak Response as the outcomes focus on this unit's processes, outputs and partnerships. The WHO technical support will be responsive to the needs of this Sub-directorate and support the MOH accountability for the Program.

An Organizational Chart of the program is shown below.



Based on the existing MOH structures, a Program Management Team will be led by the Director of Surveillance, Immunization, Quarantine and Matra Health and will comprise the Chief of Sub-directorate of Surveillance and Outbreak Response, the Director of FETP in the Secretariat and the WHO Epidemiologist. The Program Management Team will have regular interaction through meetings, field activities and visits to implement activities, ensure continued alignment of the Program with government priorities, integrate work into routine structures, ensure donor fund harmonization and troubleshoot where needed. Open and routine communication between the members of the Program Management Team will ensure common understanding about Program goals, activities and progress against outputs. It will also allow for smooth transition of funding to

GOI funds. Through this team, WHO will work with MOH to formulate funding plans and shift in funding responsibilities.

3.1.2 Responsibilities

In continuation of the highly successful current arrangements, the Program will fund three key positions within WHO. The WHO positions will have clear accountabilities for achieving the outcomes expected from the Program. Detailed Terms of Reference (TOR) for these positions can be founding Annex 2.

The WHO international technical officer (epidemiologist), working within the WHO Communicable Diseases Surveillance and Response (CSR), has been instrumental in working with the MOH to develop the surveillance framework, EWARS, human-animal interface systems, and EID detection and response protocols. In addition to providing technical advice on surveillance, EID detection and control, as well as human resource strengthening for these functions, the epidemiologist's role has included building relationships between WHO and other UN agencies and across different sectors and levels of the Indonesian government.

The WHO data information officer has been critical in working with the MOH on the design of the information systems required for EID detection and response, including EWARS and the specific databases utilised during outbreaks. The data information officer position is therefore complementary to the role of the technical officer position. The position is for a national (Indonesia) officer, and ensures that local needs especially from non-English speaking counterparts are fed back to WHO technical officers.

The WHO national professional officer provides project management to enable activities to be implemented, operationalized and appropriately monitored. The national professional officer also provides support to the international technical officer in technical advice on surveillance, EID detection and control. This officer plays an important liaison role since the position is for a national (Indonesian), and thus, can ensure that activities and their implementation are appropriately delivered within the Indonesian context and in accordance with the WHO systems.

The recruitment of these WHO staff will be done in accordance with WHO procedures but will also include MOH concurrence. This is an existing pre-requisite for the international technical officer position since WHO sends formal request for concurrence to the MOH. For the other two positions, MOH will be consulted during the selection process. This may include participation as observers on the selection panel if new recruitment is initiated by WHO.

The program will also support the recruitment of some local staff by the MOH, as outlined previously.

3.1.3 Procurement

Procurement is expected under component 1 and component 3 (EWARS and FETP), where computers, modems, minor lab supplies and printed guidelines may need to be provided. WHO will administer the funds for these procurement activities. For Component 4 where outbreak supplies such as laboratory test kits, reagents, treatments or vaccines may need to be procured rapidly, WHO will seek to expedite and fast-track the procurement process in accordance with its standard procedures. In the past, this has been feasible by using the WHO procurement catalogue whereby items such as rabies vaccine were delivered within two weeks of the request.

3.1.4 Donor Engagement

The Program Management Team will coordinate activities funded by various donor agencies. The Program Management Team For the activities under this Program, it is expected that

coordination will be most required with US CDC and JICA for EWARS and FETP. Based on previous phases of the AusAID support, this was successfully achieved through regular meetings between MOH Sub-directorate of Surveillance and Outbreak Response staff, WHO and the technical officers from JICA and US CDC. A similar structure will be maintained and encouraged for this phase of support.

3.2 Governance

Governance arrangements will be aimed at ensuring that there are appropriate forums for both the GOI and the GOA to review and respond to progress of the program and to ensure accountability for the Team. AusAID will have overall oversight of the program.

Program Steering Committee (PSC) meetings will be held every six months and will be the main high-level monitoring and decision making mechanism for the program. The Chair of this meeting will be the Director General of Disease Control and Environmental Health. Members of the PSC include:

- Director of Surveillance , Immunization, Quarantine and Matra Health
- Chief of Sub-directorate of Surveillance and Outbreak Response
- World Health Organization
- AusAID Indonesia

Representation from other senior GOI, & GOA officials and other donors will be considered. At each meeting, a review of progress from the previous six months will be presented by the program management team. Any major decisions concerning future directions for the project will be presented and discussed at these meetings, and no significant changes will be made without endorsement from this committee.

External Reviews AusAID will conduct external reviews during the program implementation. Reviews will assess technical progress and implementation arrangements. Other AusAID visits may be considered if specific adjustments are required. These activities will incorporate specific reviews on progress and provide recommendation for the direction and future of the program.

3.3 Reporting

Key reports will be required for AusAID in January (six-monthly report) and July (Annual Report) each year. These reports should be concise but comprehensive and include: a general review of the previous six months; progress against targets; key issues and constraints; and requests for alterations to the planned activity schedule. The report should be the key background document for each PSC meeting. A summary of expenditure against the budget should be forwarded independently to AusAID at the same time.

The Annual Report should also include an annual review against the monitoring and evaluation framework, a workplan for the next year's activities and a reconciliation of the yearly expenditure.

In addition, WHO will send dot points to AusAID by email on major activities undertaken or completed each month and provide verbal or email briefing for AusAID as requested.

3.4 Critical Risks and Risk Management Strategies (including sustainability)

The activities proposed in this Program have been ongoing for the past few years, and previously identified obstacles and risks have largely been addressed already. Nevertheless, risks to the

new Program still exist. For further details about the risks identified, as well as the risk treatment methods, see Annex 3.

Systems strengthening and capacity development must provide a basis for ongoing effectiveness. The approach of this design maximises sustainability through adoption of a strategic and multi-faceted approach through WHO and by ensuring that all activities are based on sound analysis and are appropriate to each institutional context.

This design contains a number of specific activities that aim to increase the likelihood of sustainability. For example, the Program will phase out funding to the Outbreak Command Post and transfer this to the Government of Indonesia's budget, and it will support activities to embed FETP into the MOH's training policy and structures that will then secure the long term funding for the program.

3.5 Monitoring and Evaluation

The overall purpose of monitoring and evaluation is to ensure that program inputs flow through to achieving the planned goal, purpose and outcomes. The responsibility for monitoring and evaluating the program's implementation should be shared between the MOH, WHO Indonesia, and AusAID. Indicators and targets have been built into the program design and details of these including baselines, targets and methods of verification can be found in Annex 4. Annex 4 provides the Program Logic and Model Logic for each of the three Program components. Lastly, Annex 4 provides the framework for monitoring and evaluating progress against each of the eight activities in the Program. The PSC will form a key mechanism for reviewing progress against the monitoring and evaluation framework.

Quality at Entry (QAE) and Quality at Implementation (QAI) will be developed separately by AusAID, in accordance with AusAID's oversight role with respect to monitoring and evaluation.

3.6 Implementation Schedule

A three-year implementation plan, including milestones, can be found in Annex 5. Most activities are envisaged to begin in the first year of the Program and will continue for three years. The exception to this is the Program support for the Command Post, where the implementation and outcomes are expected to be fully achieved within one year.

A detailed first year workplan with activities expected in each quarter is also provided. The first year workplan will rapidly enable the WHO technical team to commence the activities designed in this Program. The activities listed in the implementation plan and first year workplan will guide the start of the Program but may need to be adjusted if there are GOI/WHO delays or unplanned changes in policy or structure. Most of these changes will be managed by the Program Management Team and will be reported in the 6-monthly reports to AusAID. However, major alterations to the Program will be brought to the attention of AusAID as well as the PSC as aforementioned.

3.7 Estimated Program Budget

The distributions of these costs by component, and by year, are given in the tables below. Costs per activity are based on WHO rates for travel, operational funds, meeting packages and consultants. Details can be seen in the costing schedule below. The total cost of the Program is AUD 2,8 million.

Annexes

Annex 1: Stakeholders Consulted

Name	Institution	Position/Title	Date
Dr Chusak Prasittisuk	WHO Indonesia	A/g WHO Representative	12 Oct 09
Dr Graham Tallis	WHO Indonesia	Team Leader for Communicable Disease Surveillance and Response	12 Oct 09 & 22 Feb 11
Dr Ratna Juwita	University of Indonesia (UI)	Director of FETP at UI	12 Oct 09
Dr Lukman Tarigan	University of Indonesia	FETP lecturer at UI	12 Oct 09
Dr Frank Mahoney	CDC Atlanta	Team Leader	12 Oct 09
Dr Wiwiek	Provincial Health Office, Lampung	Head of Provincial Health Office	13 Oct 09
Mr Anzial	District Health Office, Lampung	Surveillance staff	13 Oct 09
Mr Prasetio Wicaksono	WHO Indonesia	Data manager	13 Oct 09 & 22 Feb 11
Mr Yasukawa	Japanese Embassy	1st Secretary, Health & Welfare	14 Oct 09
Dr Hari Santoso	Ministry of Health	Chief of Subdirectorate of Surveillance and Outbreak Response	14 Oct 09 & 22 Feb 11
Dr Nyoman Kandun	Ministry of Health	FETP Secretariat Director	14 Oct 09
Dr Runizar Roesin	Ministry of Health	Outbreak Command Post	14 Oct 09
Mr Edhie Rahmat	European Commission	Health Unit	
Mr Larry Bennett	CIDA	First secretary	15 Oct 09
Prof Tjandra Aditama	Ministry of Health	Director-General of Disease Control & Environmental Health	16 Oct 09
Dr Anas Maruf	Ministry of Health	Zoonosis Subdirectorate	16 Oct 09
Dr Arie Bratesena	Ministry of Health	Chief of Subdirectorate of Acute Respiratory Infections	16 Oct 09

Annex 2: TORs for Key Positions

Terms of Reference – WHO Technical Officer

Position Name: WHO Technical Officer (TO)

Reporting to: WHO Representative or Communicable Disease Surveillance and Response Team Leader

Location: WHO Indonesia, Communicable Disease Surveillance and Response (CSR) unit Jakarta

Duration: 1/7/2010 – 30/6/2013

Key Accountabilities:

1. Expansion of the enhancements of the Early Warning Alert and Response System to up to 6 provinces.
2. Enhancing quality of FETP and ensuring its sustainability;
3. Transfer of Outbreak Command Post to Indonesian MOH internal operations and funding.

Key Responsibilities:

- Take direct responsibility for achieving the outputs and outcomes of the Program, including objectives, milestones and the monitoring and evaluation schedule; especially
    - Provide technical support to the MOH in expanding EWARS to up to 6 new provinces and reviewing its progress;
    - Provide technical support and training activities to the Field Epidemiology Training Program to strengthen the quality of technical outputs and ensure sustainability.
    - Support the MOH in strengthening the coordination and response capacity of the Outbreak Command Post at the Directorate-General of Disease Control & Environmental Health.
- Support Ministry of Health to implement, monitor and evaluate activities that strengthen EID detection and response;
- Engage effectively with Indonesian MOA personnel related to the Program;
- Monitor Program progress and liaise closely with Indonesian counterparts and the AusAID Program Manager in Jakarta to identify and rectify implementation constraints or negotiate changes to work plans as required;
- Undertake technical and reporting activities related to WHO's response to EID outbreaks, including those mandated under the International Health Regulations.
- Liaise with donors and other implementing partners engaged in related projects to ensure complementarily and coordination of activities;
- Supervise the activities of the Data Manager;
- Ensure all work is carried out in a gender sensitive manner and with regard to women in decision making and training processes.
- Brief Australian Embassy and Australian Government personnel on Program activities as required;
- Prepare and provide reports on Program progress as required within the Program Document;

- Prepare monthly dot points on key activities for previous month (<1/2 page) for AusAID;
- Other duties as requested by WHO team Leader.

Required Qualifications/Experience:

The WHO TO will have the following essential qualifications/capabilities:

- Recognized university degree in health related field and post graduate degree in public health or epidemiology.
- Demonstrated skills in program management, capacity building, program planning, implementation and monitoring/evaluation and reporting.
- An ability to work harmoniously and productively with partners in project implementation in developing countries.
- Excellent oral and written communication skills.

Desirable Qualifications and skills:

- Several years of experience in epidemiological surveillance of communicable diseases;
- Tertiary qualifications in Field Epidemiology;
- Demonstrated in previous experience in working harmoniously and productively in developing countries, preferably in Southeast Asia;
- Field experience in major outbreak investigations, including coordination and reporting;
- Experience in strengthening surveillance and response of communicable disease systems;
- Previous experience of working in Indonesia;
- Skills in Indonesian language.

Terms of Reference – WHO Data Information Officer

Position Name: WHO Data Information Officer (DIO)

Reporting to: WHO Technical Expert

Location: WHO Indonesia, Communicable Disease Surveillance and Response (CSR) unit Jakarta

Duration: 1/7/2010 – 30/6/2013

Key Accountabilities:

1. Training of staff from up to six provinces (and their districts) in the IT enhancements to the Early Warning Alert and Response System
2. Updating of Early Warning Alert and Response System manuals and guidelines based on changes implemented from evaluations or routine system enhancements
3. Updating WHO CSR website with information about any EID of international public health concern.

Key Responsibilities:

- Assist in the timely preparation, maintenance and provision of geographic information, maps, presentations, situation updates and websites in support of EID outbreak response;
- Assist in sharing updated information with the Indonesian Ministry of Health, other UN agencies, Non-Governmental Organizations (NGOs) and donor agencies about outbreaks of EIDs;
- Assist in preparation and implementation of field investigations of EIDs;
- Provide training, management and user support for Ministry of Health staff trained in newly implemented systems, including the enhancements to the Early Warning Alert and Response System;
- Participate in development and implementation of guidelines, SOPs, training materials and user manuals for newly implemented systems;
- Assist Ministry of Health in establishing and maintaining the information management system, including the Early Warning Alert and Response System;
- The Data Information Officer will ensure all work is carried out in a gender sensitive manner and with regard to women in decision making and training processes.

Essential Qualifications and Experience:

- Complete high school education;
- Supplemental post-secondary courses/training in data information system and/or ARC GIS applications.
- Very good knowledge of spoken and written English and Indonesian.

Desirable Qualifications and skills:

- Bachelor degree in related field.
- Knowledge of data base system, image processing, mapping, web technology, geographic information and related matters;
- Knowledge and practical experience of the following GIS software is required: ArcGIS
- Computer data management systems; knowledge of the latest technological developments in related field and in web applications

Terms of Reference – WHO National Professional Officer

Position Name: WHO National Professional Officer (NPO)

Reporting to: WHO Technical Officer

Location: WHO Indonesia, Communicable Disease Surveillance and Response (CSR) unit Jakarta

Duration: 1/01/2012 – 30/6/2014

Key Accountabilities:

1. Assist technical officer on expansion and establishment of the Early Warning Alert and Response Systems to additional provinces.
2. Assist on enhancing quality of FETP and outbreak investigation and response.

Key Responsibilities:

1. Provide technical assistance to the MOH on strengthening surveillance and in particular EWARS. This may include reviewing EWARS data quality, bulletins and providing MOH with feedback, ensuring technical materials are operational and up-to-date, and advising on mechanisms to enhance surveillance timeliness and completeness. ,
2. Assist MOH in preparation of proposals for the AusAID Program activities including preparation of budgets, monitoring expenditure, and supporting the operational aspects of the project by providing expert knowledge and trouble shooting to address practical and logistic issues in EWARS and outbreak responses.
3. Assist MOH in identifying training needs for strengthening surveillance and outbreak response capacity for district and provincial health offices, and assist in the organization and delivery of the training.
4. Assist and coordinate with the Surveillance sub-directorate and FETP Secretariat in the mobilization of FETP students on event detection and investigation.
5. Support the EWARS and FETP monitoring missions to ensure appropriate feedback and improve the quality of implementation, and assist the MOH in ensuring indicators under the monitoring and evaluation of the Emerging Infectious Diseases project are collected and reported.
6. Assist and participate in outbreak response when required.
7. Perform other duties assigned by the WHO Representative

Required Qualifications/Experience:

The WHO NPO will have the following essential qualifications/capabilities:

- Recognized university degree in health related field (preferably medicine) and post graduate degree in public health or epidemiology.
- Demonstrated skills in disease surveillance especially on EWARS.
- An ability to work harmoniously and productively with counterparts in project implementation in districts and provinces.
- Excellent oral and written communication skills.

Desirable Qualifications and skills:

- Several years of experience in communicable diseases surveillance;
- Demonstrated in previous experience in working harmoniously and productively in provinces and districts;
- Experience in strengthening surveillance and response of communicable disease systems in the provinces and districts;
- Previous experience of working in WHO –Indonesia.

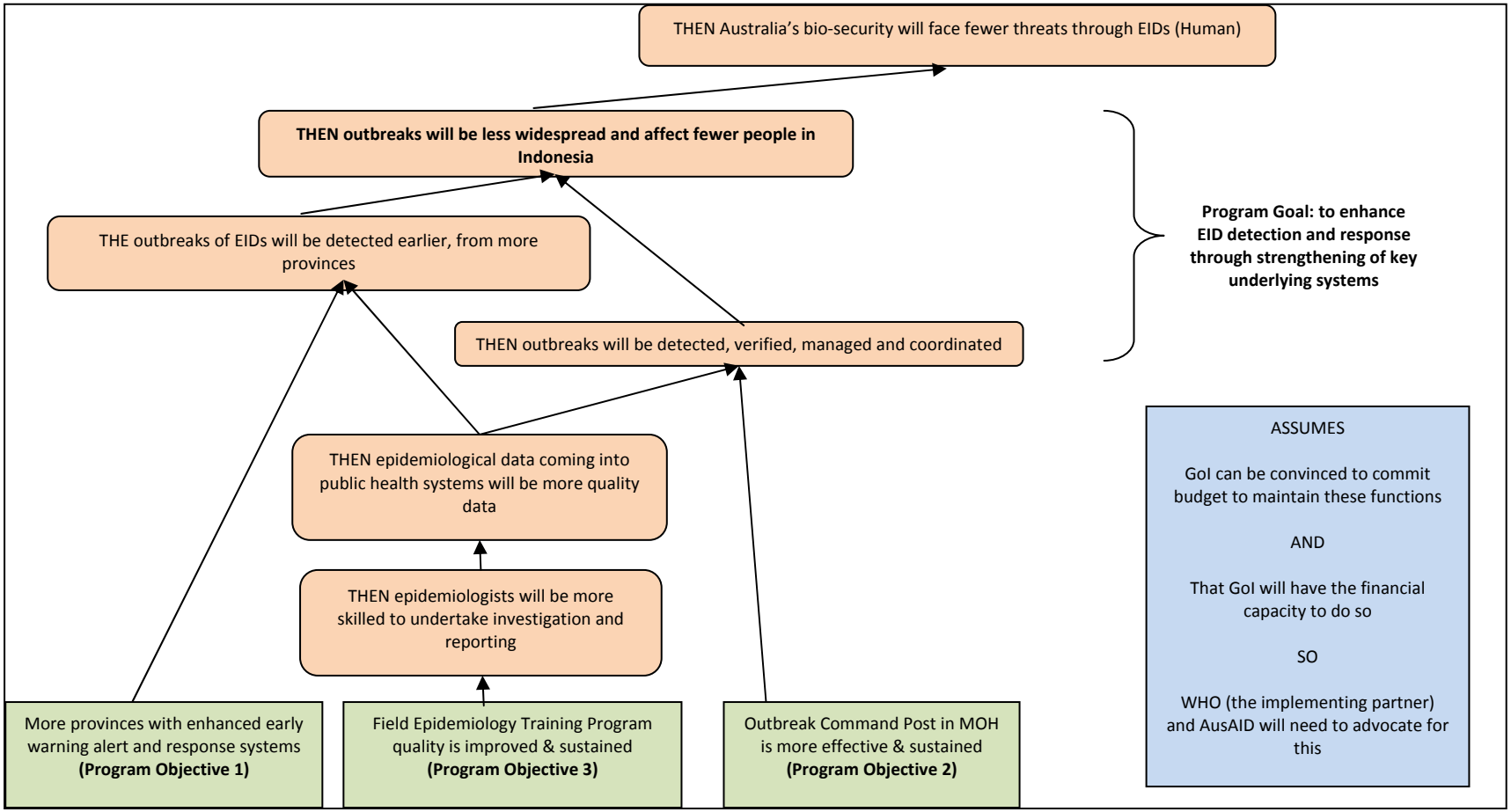
Annex 3: Risk Matrix

Risk	Source of Risk	Likelihood	Imp[act	Risk Treatment
1. Donors coordination not optimal	Possible lack of co-ordination across different donors on the funding of various activities or duplication of same activities.	Low	High	• Ensure 6-monthly co-ordination meetings through MOH Program Steering Committee and Program Management Team members
2. Delay in funding and WHO recruitment of staff	Lengthy time needed for transfer of funds and recruitment of staff members due to several levels of approvals in WHO system and clearance in GoI.	Moderate	Moderate	• WHO initiates early planning for programs at least 1 year in advance, and project specific activities across the 3 years. • WHO to ensure position Terms of Reference are clear to stakeholders at MOH. • If delays in staff recruitment are expected, WHO will seek short term consultants to ensure continuity & support.
3. MOH does not accept funding responsibility for Command Post	Establishment of Command Post donor driven without ownership by MOH. MOH does not see benefit from activities.	Low	High	• Discussions with MOH indicate agreement to take over funding responsibility. • MOH has indicated a high level of ownership for Command Post
4. Donor withdraw from EID system strengthening	Donors may pull out funding as some are already considering ended their funding by 2011	Moderate	Low	• Maintain flexibility to cover critical gaps if necessary, especially after initial two years of implementation and review of activities and needs.
5. Slow procurement of supplies for implementation of EWARS activities	WHO procurement processes for supplies & equipment are lengthy and may delay ability to roll out training and implementation in new provinces using AusAID funding	Moderate	Moderate	• WHO to design a detailed EWARS workplan based on MOH requirements to enable timely procurement and delivery of the required supplies
6. Natural disasters	Indonesia experiences frequent natural disasters such as earthquakes, tsunamis, and volcanic eruptions	High	Low	• Good program design and redundancies for continuity even during disruptions
7. Surveillance strengthening decreases in priority	Indonesia is focused on achieving MDG targets relevant to Health Sector	Low	High	• MOH committed to IHR implementation for which this Program's activities contribute strongly. • WHO maintain awareness amongst MOH decision makers.

Annex 4: Program Logic Model

Program Logic

The program logic provides a simple visual model of the cause and effect relationships in the Program and the Theory of Change for the Program's development goals. This program logic applies to the three short term intended development outcomes which are achieved through the first three components of the Program. Component 4 does not have a developmental outcome – it only provides a mechanism to support rapid response to outbreaks of national or international interest.



Logic Model - Component 1

End Of Program Outcome (EOPO)		1. MOH and an increased number of provinces/districts have strengthened systems for the detection, control & prevention of EIDs 2. MOH has a strengthened system for the response to EIDs 3. Indonesia has strengthened human resources for the detection, control & prevention of EIDs
Main outcome		Improved timeliness and completeness of detection and reporting of outbreak-prone diseases
Immediate Change (outputs)		1. Enhanced EWARS established in 6 new provinces in Indonesia 2. Provinces with the enhanced system will generate weekly bulletins for outbreak detection and response 3. Active feedback from MOH to provincial and district health offices on progress with EWARS implementation
Influence Activities of the Program		1. Provide new protocols, computer applications & tools 2. Train surveillance officers in province, district & primary healthcare centres 3. Reaffirm case definition used in provinces 4. Technical assistance for province implementing enhancements 5. Monthly meetings for 1 year at district level to monitor quality & surveillance indicators 6. Hold monitoring missions for each province for 2 years post-implementation
Foundations		Existing system for early warning alert and response for outbreak

Logic Model – Component 2

End Of Program Outcome (EOPO)		1. MOH and an increased number of provinces/districts have strengthened systems for the detection, control & prevention of EIDs 2. MOH has a strengthened system for the response to EIDs 3. Indonesia has strengthened human resources for the detection, control & prevention of EIDs
Main outcome		The outbreak command post conducts routine surveillance for EID detection, data analysis, response and coordinates & disseminates information during outbreaks.
Immediate Change (outputs)		1. Revised protocols and surveillance databases. 2. Funding responsibility of Command Post transferred to GOI.
Influence Activities of the Program		1. Technical assistance to improve data collation, analysis & feedback 2. Monthly outbreak meeting with Director and technical staff in MOH 3. Budget request for GOI to fund outbreak command post 4. Coordination with provinces, hospitals and other sectors during outbreaks to enhance response 5. Investigate outbreaks of national significance
Foundations		Outbreak Sub Directorate in MOH

Logic Model – Component 3

End Of Program Outcome (EOPO)		1. MOH and an increased number of provinces/districts have strengthened systems for the detection, control & prevention of EIDs 2. MOH has a strengthened system for the response to EIDs 3. Indonesia has strengthened human resources for the detection, control & prevention of EIDs
Main outcome		Improved quality of teaching/supervision and geographic distribution of students/graduates
Immediate Change (outputs)		1. Secretariat functions and staffing incorporated into routine MOH operations. 2. Cadre of technically competent field supervisors and university trainers established. 3. Indonesia participating in, and students presenting at, TEPHINET meetings/conferences
Influence Activities of the Program		1. Secretariat holds meeting to embed FETP into government public health workforce strategy 2. Training workshops held for academic and field supervisors to refresh skills 3. Technical assistance for students to attend international conferences 4. FETP participates in international meetings and program coordination activities 5. Secretariat supports student to access field projects
Foundations		Field Epidemiology Training Program Secretariat at MOH and existing University courses

Annex 5: Monitoring and Evaluation Framework & Monitoring and Evaluation Plan

Monitoring and Evaluation Framework

In the Monitoring and Evaluation Framework, indicators and methods of verification are detailed further for the Program's components as well as outcomes for each of the nine activities.

Program Goal: To enhance the surveillance system for EID detection and response through strengthening of key underlying systems.

By the end of the Program, the short term intended development outcomes are:

- MOH (Surveillance and Outbreak Response Subdirectorate) and an increased number of provinces/districts have strengthened systems for the detection, control & prevention of EIDs
- MOH (Surveillance and Outbreak Response Subdirectorate) has a strengthened system for the response to EIDs
- Indonesia has strengthened human resources for the detection, control & prevention of EIDs

Three main outcomes will be achieved from the nine activities in the four components of the Program. These are:

- EWARS leads to improved timeliness and completeness of detection and reporting of outbreak-prone diseases
- The outbreak command post conducts routine surveillance for EID detection, data analysis, response and coordinates & disseminates information during outbreaks.
- Improved quality of FETP teaching/supervision and geographic distribution of students/graduates

Output	Indicator	Methods/Verification	Baseline (2011)	2012	2013	2014	Target
Component 1 Outcome :EWARS leading to improvements in the timeless and completeness of detection and reporting of outbreak prone disease incidents							
1.1 Enhanced EWARS established in 6 new provinces in Indonesia	Provinces receiving enhanced system	• Number of *selected* provinces receiving training, protocols & computer tools each year according to six-monthly progress reports	Bali, Lampung, Sumatara Utara, West Kalimantan & South Kalimantan				By mid-2014, six additional provinces received enhancements

1.2 Provinces/districts with the enhanced system will generate weekly bulletins for outbreak detection and response	New provinces/districts with enhanced EWARS generate bulletins that document alerts, verifications & monitor timeliness & completeness	• Weekly bulletins generated by provinces/districts available for review	No routine weekly report from provinces/districts that do not have enhanced EWARS				80% of provinces/districts with enhanced EWARS producing weekly reports
1.3 Active feedback from MOH to provincial and district health offices on progress with EWARS implementation	MOH producing weekly national surveillance bulletin that includes provinces with EWARS, timeliness, & completeness of reporting	• Weekly MOH surveillance bulletin generated by MOH Surveillance and Outbreak Response Subdirectorate available for review	Ad hoc bulletins generated by MOH Surveillance and Outbreak Response Subdirectorate				100% weekly bulletins distributed by email/website from MOH that report about alerts & verifications concerning IHR-related events, and that feedback on system performance (timeliness & completeness)
Component 2 Outcome : The outbreak command post conducts routine surveillance for EID detection, data analysis, response and coordinates & disseminates information during outbreaks							
2.1 Revised protocols and surveillance databases.	Outbreak command post has written protocols describing surveillance mechanisms and updated database for monitoring and responding to outbreaks. Outputs are reported at monthly outbreak meetings	• Documentation on protocols available for review. • Surveillance database available for review. • Documentation on monthly meetings at MOH to review outbreak data available for review	Ad hoc monthly meetings with no documentation				Monthly meetings routine and documented each time
2.2 Funding responsibility of Command Post transferred to GOI.	GOI funds secured for 2012	• Request for budget in APBN mechanism available for review	No GOI funds for Command Post				Handover of funding responsibility for Command Post to GOI by 2012

Component 3 Outcome : Improved quality of FETP teaching/supervision and geographic distribution of students/graduates							
3.1 Secretariat functions and staffing incorporated into routine MOH operations.	• Secretariat involved in student selection, recruitment & project determination. • Secretariat coordinates with other MOH structures to ensure student scholarships from GOI	• Documentation on student applications, recruitment stages and student projects available for review. • Meeting records available for review outlining progress on embedding FETP into GOI funding	• Ad hoc data available about applications, recruitment & student projects • Meeting records not available				• Geographic distribution of students increases in outer parts of Indonesia • Meetings documented & output summaries provided in six-monthly reports to AusAID
3.2 Cadre of technically competent field supervisors and university trainers established.	A workshop to refresh/train field and university supervisors conducted yearly	• Report and workshop materials available for review	No yearly workshop				Yearly workshop undertaken
3.3 Indonesia participating in, and students presenting at, TEPHINET meetings/conferences.	• FETP Directors attending TEPHINET coordination meetings. • Students participating in & presenting at international TEPHINET conferences	• Report from TEPHINET meetings available for review • Student/s abstract accepted to international TEPHINET conference available for review	• Ad hoc director participation in TEPHINET • Ad hoc student participation in TEPHINET				• Yearly participation documented at TEPHINET • At least 1 student participates per year in TEPHINET

Component 4 Outcome: Rapid support for response to outbreaks of national or international importance							
4.1 Timely Australian support for response to outbreaks of national or international importance	• Field investigation teams dispatched to outbreaks when required • Items procured & provided to support investigation & outbreak response when required	• Outbreak reports documenting time period from time outbreak reported until team arrives in field • Review WHO records on time from MOH procurement request till time items delivered to MOH	• Current MOH requests for WHO funding of teams takes 2 weeks to process until funds available. • Items procured take more than two weeks to purchase & deliver				• Field investigation teams dispatched within two days of request/ need. • Items procured & provided within 2 weeks of request

Monitoring and Evaluation Plan

This Plan provides narrative details about how to monitor and evaluate each of the nine activities in the EID Human Health Program Design Document. Using this Plan will enable the assessment of the quality of implementation as the Plan describes the qualitative and quantitative aspects of each indicator and its method of verification.

Importantly, the definitions of monitoring and evaluation need to be clarified from the outset so that there is a common understanding:

- Monitoring: A continuing function that uses systematic collection and analysis of data on specified indicators to provide management and the main stakeholders of an ongoing development intervention with indications of the extent of progress and achievement of objectives and an understanding of progress in the use of allocated funds.

- Evaluation: The systematic and objective assessment of an on-going or completed activity, program or policy, its design, implementation and results. The aim is to determine the relevance and fulfilment of objectives, development efficiency, effectiveness, impact and sustainability.

Component 1: EWARS leading to improvements in the timeless and completeness of detection and reporting of outbreak prone disease incidents

Output 1.1 Enhanced EWARS established in 6 new provinces in Indonesia

Monitoring: A province would have achieved enhanced EWARS if it meets the following criteria:

- MOH Surveillance and Outbreak Response Sub-directorate held an advocacy meeting with provincial and district level stakeholders to agree to EWARS enhancement.
- Provincial and district level surveillance officers were trained for 1 week in EWARS enhancements.
- District surveillance officers held training sessions for reporting units including Healthcare Centers and their outreach units.
- Computers and other relevant materials (e.g. forms, phone vouchers, and guidelines) have been sent to recipients at province, district and sub-district level.
- Province and lower level health units have started utilizing the software and forms for EWARS.

Evaluation: In addition to the above, sustainability and fulfilment of the development goal will be assessed by determining if the EWARS software remains functional with up-to-date mapping shape files and population data at the end of the Program in the districts and provinces that received the enhancements. Further, the timeliness and completeness of surveillance reporting over time will clarify whether provinces and districts have enhanced their detection capacity in a sustainable fashion. Both these surveillance system attributes should be over 80%.

Output 1.2 Provinces/districts with the enhanced system will generate weekly bulletins for outbreak detection and response

Monitoring: A province and its districts would meet this output if they conduct the following:

- Each unit (province and district health offices) generate a computerized bulletin on a weekly basis – either on Tuesdays or Wednesdays - based on data received into the system from the Healthcare Centers.
- The bulletin should contain surveillance information:
    - The alerts generated for potential disease outbreaks based on the computerized system
    - Epidemiological information about the alerts: numbers of cases, reporting unit names and any data collected based on clarifications with reporting units such as Healthcare Centers
    - Recommendations about how to proceed with alert verification.
    - Information about response to previous week alerts – resolved, outbreak confirmed, outbreak response measures

- The bulletin should contain data that monitor timeliness and completeness of reporting. Successful implementation of enhanced EWARS should achieve the following targets:
    - Timeliness: At least 80% of Healthcare Centers report to District Health Office every Monday (usually by sms)
    - Timeliness: At least 80% of District Heath Offices report to Provincial Health Office every Tuesday (by exporting data file using EWARS software)
    - Timeliness: At least 80% of provinces report to MOH every Tuesday (by exporting data file using EWARS software)
    - Completeness: At least 80% of Healthcare Centers report to District Health Office every week.
    - Completeness: At least 80% of District Health Offices report to Provincial Health Office every week.
    - Completeness: At least 80% of Provincial Health Offices report to MOH every week.

Evaluation: In addition to the above, sustainability and fulfilment of the development goal will be assessed by determining if provinces and districts with EWARS enhancements produce weekly bulletins. The target is for each of heath unit to sustain bulletin production where at least 80% of weeks in the year have bulletins created and fed back to lower level heath units.

Output 1.3 Active feedback from MOH to provincial and district health offices on progress with EWARS implementation

Monitoring:

- MOH Subdirectorate of Surveillance and Outbreak Response produces a weekly bulletin (100% weeks) with the following:
    - Alerts and verifications from EWARS enhanced provinces based on data reported through the software. At minimum, the alerts and verifications should be for diseases of national and international health concerns (e.g. IHR-relevant).
    - Timeliness and completeness of reporting should be charted in the bulletin per province to indicate performance, whereby 80% performance is the target for each province.
    - Bulletins should be fed back to provinces and districts by email, and if possible, placed on a website.
- Subdirectorate should conduct monitoring and trouble-shooting missions to provinces and districts that need to update sottware or need to improve timeliness/completeness performance. Further, MOH should review province and district bulletins and provide feedback on content.
    - Missions should be documented and maintained at MOH. Mission documentation should describe purpose of mission, dates of visits, staff visiting, locations visited, summary of activities, conclusions and recommendations for follow up.

Evaluation: The MOH bulletin should evolve to become an all-inclusive tool that also includes data on rumor surveillance, outcomes of outbreaks investigated and changes or updates in surveillance policy. Eventually, the bulletin should include FETP updates and immunization data (both as per currently produced).

Component 2: The outbreak command post conducts routine surveillance for EID detection, data analysis, response and coordinates & disseminates information during outbreaks.

Output 2.1 Revised protocols and surveillance databases.

Monitoring:

- The protocols for the Command Post will be revised so that:
    - Rumor surveillance data sources are documented (media list, hospital list etc)
    - Rumor surveillance database updated
    - Standard format for minutes of monthly outbreak meeting prepared and utilized. The minutes of meeting should include:
        - List of discussion topics,
        - Recent EWARS alerts of national concern,
        - Recent rumor-sourced alerts,
        - Outbreak response actions take during month
        - Resolution of outbreaks investigated – outcomes
        - Action items per meeting member
    - Feedback on Post's activities incorporated into weekly bulletin for EWARS

Evaluation: The Command Post functions are fully documented and the monthly meetings are occurring 100% with full documentation for each meeting.

Output 2.2 Funding responsibility of Command Post transferred to GOI.

Monitoring: During the first year of the Program, MOH Subdirectorate for Surveillance and Outbreak Response will assess and determine funding needs for the Command Post. By end of the first year, the Subdirectorate will request the funding through the routine government budget.

- If funding is needed, Subdirectorate has APBN paperwork indicating that funding request has been made from GOI sources.

Evaluation: By the end of the Program, Command Post funding is from GOI sources.

Component 3: Improved quality of FETP teaching/supervision and geographic distribution of students/graduates

Output 3.1 Secretariat functions and staffing incorporated into routine MOH operations

Monitoring: Each year, the FETP Secretariat will

- Participate in student selection as indicated by
    - Copies of student applications at FETP Secretariat
    - List of selected students for each cohort and their provincial origin
    - Consideration for increased geographic distribution of students: at least one student per yearly cohort from outer regions (e.g. East Indonesia)
- Ensure alignment of student projects with needs:
    - List of student projects available for review to ensure that the disease focus is aligned with national priorities (these priorities include MDGs and diseases for which programs exist at national MOH level)
- Student scholarships funded from MOH Health Workforce Bureau
    - Copy of documentation for scholarship funding available at FETP Secretariat

Evaluation: In addition to the monitoring indicators, the FETP Secretariat conducts periodic evaluations (using the international standard CQI tool) to enhance quality of the Program. The evaluations were last conducted in 2007 and 2011. By the 2014 CQI evaluation, FETP Indonesia should be performing at enhanced capacity compared to the 2011 and 2007 evaluations. Performance can be compared for each CQI standard across each evaluation.

Output 3.2 Cadre of technically competent field supervisors and university trainers established.

Monitoring:

- Each year, a workshop with field and university supervisors will be held:
    - Workshop materials available for review at FETP Secretariat
    - Workshop evaluations and feedback from participants summarized and available at FETP Secretariat

Evaluation: To determine if the training workshops impacted field and academic supervisor capacity for teaching, review student projects to see changes in quality of student outputs over time. Projects should have greater use of epidemiology concepts, statistics and analytical methods.

Output 3.3 Indonesia participating in, and students presenting at, TEPHINET meetings & conferences.

Monitoring:

- At least one director of FETP attends the TEPHINET meeting each year. This can potentially include university program conveners (not just FETP Secretariat Director).
    - Indonesia's participant report from TEPHINET meeting and action items for FETP Indonesia available for review.
- At least one student submits an abstract for TEPHINET conferences yearly and at least one student is accepted for either oral or poster presentation
    - Abstracts submitted to TEHPINET available for review
    - Abstracts accepted for oral/poster presentation available for review
    - Student report on participation at TEPHINET (e.g. in bulletin or separately) available for review

Evaluation: FETP Indonesia has yearly participation in global TEPHINET network based on above monitoring indicators.

Component 4: Rapid support for response to outbreaks of national or international importance

Output 4.1 Timely Australian support for response to outbreaks of national or international importance

Monitoring:

- Review outbreak reports supported by the Program to see the time taken from request for field investigation till the time the team is in the field. The target is 2 days.
- Review WHO procurement records for outbreaks supported by the Program to see the time taken from procurement request by MOH until items delivered. The target is two weeks.

Evaluation:

- Since this activity is to enable rapid Australian support to outbreaks of national and international concern, review each outbreak to ensure that it meets the scope as per the PDD.
- Review funding expenditure over the three year Program to determine if the AusAID support was useful in filling gaps. Higher percentage utilization suggests that MOH gaps remain large and that Australian support was useful.

Annex 6 Implementation Schedule

Code	Narrative summary	Year 1				Year 2				Yea 3			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
COMPONENT 1: Expanding and Strengthening the Early Warning Alert and Response System (EWARS)													
Indicative activities													
1.1	Establishment Phase												
1.2	Province Implementation Phase												
1.3	Monitoring and Technical Support												
Milestones													
M 1.1	*Enhanced EWARS established in 6 new provinces in Indonesia.*			2				4				6	
M 1.2	*Provinces with the enhanced system generating weekly bulletins for outbreak detection and response.*					2				4			6
M 1.3	*Active feedback from MOH to provincial and district health offices on progress with EWARS implementation (bulletins).*												
COMPONENT 2: Strengthening and Ensuring Sustainability of the Outbreak Command Post													
Indicative activities													
2.1	Strengthen Command Post Functions												
2.2	Handover of Funding Responsibility (end 1st year of Program)												
Milestones													
M 2.1	*Revised protocols and surveillance databases.*			X									
M 2.2	*Funding of Command Post transferred to GOI.*				X								
COMPONENT 3: Enhancing the Field Epidemiology Training Program (FETP)													
Indicative activities													
3.1	FETP Secretariat												
3.2	Training and Curriculum Enhancement												
3.3	International Participation												
Milestones													
M 3.1	*Secretariat functions and staffing incorporated into routine MoH operations.*												X
M 3.2	*Academic and field supervisor skills updated through training course*				1				2				3
M 3.3	*Indonesian students presenting at TEPHINET meetings/conferences.*				1				2				3
COMPONENT 4: Supporting Rapid Response to Outbreaks of Infectious Diseases													
Indicative activities													
4.1	Funding investigation teams and procurement of outbreak control items												
Milestones													
M 4.1	*Funding for response timely*												X

Code	Narrative summary	Year 1				Year 2				Year 3			
COMPONENT 5: Project management													
5.1	Steering Committees												
	Indicative Activities												
5.1.2	Organise Program Steering Committee .	x		x		x		x		x		x	
5.2	Reporting												
	Indicative Activities												
5.1.2	Reports (S=six monthly, Y=yearly)	S		Y		S		Y		S			
5.1.3	Annual Plans (to be submitted with Yearly Report)			x				x					
5.1.4	Completion Report											X	
5.3	External Reviews/Designs												
	Indicative Activities												
5.3.2	Mid Term Reviews						X						
5.3.3	Design Process (if indicated)									X			

SUMMARY OF MILESTONES BY COMPONENT													
Component 1													
M 1.1	*Enhanced EWARS established in 6 new provinces in Indonesia.*			2				4				6	
M 1.2	*Provinces with the enhanced system generating weekly bulletins for outbreak detection and response.*					2				4			6
M 1.3	*Active feedback from MOH to provincial and district health offices on progress with EWARS implementation (bulletins).*												X
Component 2													
M 2.1	*Revised protocols and surveillance databases.*				X								
M 2.2	*Funding of Command Post transferred to GOI.*				X								
Component 3													
M 3.1	*Secretariat functions and staffing incorporated into routine MoH operations.*												X
M 3.2	*Curriculum and/or teaching methods updated following overseas exchanges .*				1				2				3
M 3.3	*Indonesian students presenting at TEPHINET meetings/conferences.*				1				2				3
Component 4													
M 4.1	*Funding for outbreak response timely*												X

Annex 7: First Year Workplan

Outcome 1: EWARS leading to improvements in the timeless and completeness of detection and reporting of outbreak prone disease incidents					
Activity	**Q1**	**Q2**	**Q3**	**Q4**	**Output**
Recruit support staff at Ministry of Health for EWARS	**Start** recruitment process at MOH	**Train** new staff in EWARS enhancement process	Nil	Nil	Staff recruited and trained
Establish enhanced EWARS in two provinces a. Advocacy meeting (1 day) b. Training workshop for province and district level staff (1 week) c. Train primary healthcare workers (1 day) d. Lab assessment Provision of supplies and equipment	**Select** two provinces to enhance in first year **Hold** advocacy meetings with provincial and district managers in the two provinces	**Conduct** two lab assessment using standard questionnaire **Commence** procurement process of supplies for both provinces	**Conduct** training workshop for province and district level staff in two provinces (1 week each) **Commence** training for primary healthcare workers in each district of province **Supplies** and equipment provided to province/districts	Nil	EWARS enhanced in two provinces in Indonesia
Implementation of enhancements in two provinces	Nil	Nil	Nil	**Start** enhanced EWARS in two provinces **Confirm** monthly district level meetings with primary healthcare workers to streamline system	Two provinces operational and trouble-shooting (if needed)
Monitoring and evaluation of two provinces	Nil	Nil	Nil	**Provide Command Post and MOH** with access to bulletins and other outputs arising from provinces/districts with enhanced EWARS **Conduct** monitoring mission in each province (at least once) **Conduct** trouble-shooting missions in each province (at least twice)	Monitoring to ensure smooth roll out of EWARS enhancements in two provinces.

Outcome 2: The outbreak command post conducts routine surveillance for EID detection, data analysis, response and coordinates & disseminates information during outbreaks					
Activity	Q1	Q2	Q3	Q4	Output
Recruit staff into Command Post (1 person) and provide operational costs for outbreak investigation & other verification	Start recruitment process at MOH	Train new staff in Command Post duties and Provide Command Post with operational budget	-	-	Staff recruited, equipped and trained
Revise and utilize rumor surveillance database	Review rumor surveillance system and documentation			Apply and utilize rumor surveillance database for documentation	Rumor surveillance established formally
Hold monthly coordination meetings (MOH, WHO & other technical experts)			Commence monthly coordination meetings with standard agenda ((MOH, WHO & other technical experts)	Continue coordination meetings	Meetings become routine and documented
Provide access to bulletins arising from provinces with enhanced EWARS			Draft mechanism for EWARS information flow to Command Post and expected actions	Implement agreed mechanism and build into monthly meeting discussions	EWARS information utilized by national level authorities through Command Post
Build costs of Command Post into government budget cycle			Draft funds required for Command Post function into APBN (GOI Budget Cycle) system	Submit request for funds to sustain Command Post without external donor resources	Command Post funded by GOI

Outcome 3: Improved quality of FETP teaching/supervision and geographic distribution of students/graduates					
Activity	Q1	Q2	Q3	Q4	GOALS
Recruit staff for Secretariat (2 persons) & provide operational costs	Select staff for FETP Secretariat and provide operational resources	Nil	Nil	Nil	Staff recruited, equipped and trained
Secretariat and universities conduct field visits to students/staff for quality assurance	Nil	Conduct two field visits to field placements	Conduct two field visits to field placements	Conduct two field visits to field placements	Ongoing quality assurance of field projects and student activities
Conduct field supervisor refresher workshop	Nil	Prepare course outline and logistics	Hold workshop to refresh supervisor skills	Review feedback from workshop and help incorporate into next year's workshop	Enhance and refresh field supervisor skills
Two visits per year for two weeks either from Indonesian staff to other country or international consultant visiting Indonesia to strengthen academic or field supervisor capacity	Decide on beneficiaries of visits or training courses and the outputs expected	Fund visit/training course attendance		Fund visit/training course attendance	Enhance epi or teaching methods skills for young staff at universities or for field supervisors
FETP Indonesia Director attends yearly global FETP Directors' meeting	Nil	Nil	Nil	Attend TEPHINET Directors' meeting	International FETP participation
Students apply & present at international TEPHINET conference	Support student abstracts Commence paperwork for successful students to attend conference	Attend conference		Support student in abstracts	International participation of students in FETP
Support rapid response to outbreaks	Prepare mechanism (e.g. DFC) to enable rapid support to Subdirectorate in case of outbreaks			Review timeliness of the outbreak response supported through funds	Response was timely (teams dispatched within 48 hours & procurement achieved in 2 weeks)
Provide AusAID with mid-year reports	Nil	Provide first report on progress & funds spent	Nil	Provide Annual report on progress & funds spent along with annual plan for next year	Ensure Program management