Direct Funding Agreement

between the

Government of Australia as represented by the Australian Agency for International Development and Geoscience Australia and

Government of the Philippines as represented by the National Disaster Risk Reduction and Management Council – Collective Strengthening of Community Awareness to Natural Disasters

In relation to

Enhancing Risk Analysis Capacities for Flood, Tropical Cyclone Severe Wind and Earthquake for Greater Metro Manila Area

General

1. This Agreement expresses understanding between the Government of of the Philippines (GOP) as represented by the National Disaster Risk Reduction and Management Council (NDRRMC) - Collective Strengthening of Community Awareness to Natural Disasters (CSCAND) hereafter referred to as the "GOP" and the Government of Australia (GOA) as represented by the Australian Agency for International Development (AusAID) and Geoscience of Australia (GA) hereafter referred to as "GOA", hereafter referred to collectively as "the Parties."
2. This Agreement is made pursuant to the terms of the General Agreement on Development Cooperation (GADC) between GOP and GOA signed on 28 October 1994 governing implementation of activities under the Philippines-Australia Development Cooperation Program; and the Subsidiary Arrangement (SA) between GOP and GOA signed on 09 February 2009 governing support on disaster risk management to the National Disaster Coordinating Council – CSCAND.
3. The terms of the GADC and SA between GOA and the GOP apply to this Agreement.
4. This Agreement represents the understanding of the respective responsibilities and contributions of all Parties with regard to the provison of "Enhancing Risk Analysis Capacities for Flood, Tropical Cyclone Severe Wind and Earthquake for Greater Metro Manila Area (GMMA)" ("the Activity").
5. The Activity is Component 5 of the proposed post-Ketsana Metro Manila recovery and reconstruction program of AusAID. Other components include: (1) socialized housing and livelihood; (2) community-based disaster risk management; (3) comprehensive land use planning; and (4) classroom reconstruction. Components 1, 2 and 3 will be implemented in Taguig City while component 4 and this Activity will be implemented in Greater Metro Manila Area.

Definitions

6. Under this Agreement:
   6.1. The NDRRMC is empowered with policy making, coordination, integration and supervision functions on disaster risk reduction and management in the

Philippines as mandated under Republic Act 10121 or the Philippines Disaster Risk Reduction and Management Act of 2010. The NDRRMC is chaired by the Department of National Defense with its Office of Civil Defense serving as the implementing arm of the National Council.

6.2. The Collective Strengthening of Community Awareness to Natural Disasters (CSCAND) is a sub-committee of the NDCC now NDRRMC that coordinates the efforts of scientific agencies in promoting disaster risk management. The CSCAND contributes to building disaster resilient communities, recognizing strong government and humanitarian organization partnership in disaster risk management as key towards this end. It is composed of the following technical agencies of the Philippine Government:

6.2.1. Mines and Geosciences Bureau (MGB);

6.2.2. National Mapping and Resource Information Authority (NAMRIA);

6.2.3. Office of Civil Defence (OCD);

6.2.4. Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA);

6.2.5. Philippine Institute of Volcanology and Seismology (PHIVOLCS);

6.3. Greater Metro Manila Area (GMMA) refers to the contiguous areas surrounding Metro Manila which spills into the neighbouring provinces of Batangas, Bulacan, Rizal, Laguna, Cavite, Pampanga, and Bataan surrounding Manila Bay

6.4. .

Partnership Arrangements and Responsibilities

7. This Agreement serves as the tripartite agreement among AusAID, GA and NDRRMC-CSCAND for the implementation of this Activity (Annex 1).

8. The executing partners for this Activity are the Office of Civil Defense (OCD) for GOP, and Geoscience Australia for GOA.

9. The implementing partners are the member agencies of NDRRMC-CSCAND and the Risk and Impact Analysis Group of GA.

10. **Partnership Principles**. The Parties agree that the implementation of the Activity under this Agreement will be guided by the following principles:

10.1. Australian Government support is aligned to the needs and priorities of the GOP as detailed in the Philippines Strategic National Action Plan on Strengthening Disaster Risk Reduction, and Options Paper on Enhancing Natural Hazard Risk Assessment Capacity in the CSCAND Agencies agreed by all Parties.

10.2. The relationship of the Parties will be based on equal partnership recognizing that each Party has different skills, attributes and strenghts; and valuing the contribution of each Party to the achievement of Activity objectives,

10.3. The partnership will be underpinned by mutual respect, professionalism, honesty, cooperation, sharing of ideas, and open-two-way communication at all levels.

10.4. Each Party recognizes its roles and responsibilities in relation to the Activity and is guided by its respective mandates and responsibilities.

10.5. The leadership of the GOP and ownership of the Activity will be maximized, and ensuring the pace of implementation is appropriate and responsive to the absorptive capacity of the GOP, and appropriate capacity building measures are implemented.

11. **Joint Responsibilities**

11.1. The Parties will implement the Activity ensuring they provide the necessary inputs to perform their respective obligations under this Agreement.

11.2. CSCAND and GA will jointly prepare a detailed Work Plan based on the Implementation Plan (Annex 2) in the Activity Design Document.

11.3. The Parties will closely collaborate on policy and direction setting through the Component Executive Board, and on the implementation of activities through the Component Steering Committee.

11.4. The Parties will ensure effective and efficient use of resources.

11.5. The Parties will monitor and evaluate the performance and impact of the Activity in accordance with the Logical Framework (Annex 3) set out and the monitoring and evaluation arrangements that will be prepared based on this.

11.6. The Parties will be responsible for managing risks in accordance with the Risk Management Plan (Annex 4).

12. **AusAID will have the following general responsibilities:**

12.1. Provide appropriately qualified and experienced AusAID personnel and/or contractors to perform its obligations under this Agreement;

12.2. Facilitate the partnership between CSCAND and GA;

12.3. Provide advice and assistance to CSCAND and GA in relation to the implementation of AusAID Philippines development assistance strategy, the development context underpinning the Activity and its linkage to other components of the proposed post-Ketsana Metro Manila recovery and reconstruction program;

12.4. Participate in strategic and direction setting with GA and NDRRMC-CSCAND through the Component Executive Board; and discussions on operational concerns through the Component Steering Committee;

12.5. Manage the recruitment of a Project Coordinator for this Activity; and

12.6. Provide financial assistance for the implementation of this Activity.

15. **GA will have the following general responsibilities:**

13.1. Implement this Activity with CSCAND agencies;

13.2. Provide appropriately qualified and experienced GA personnel to perform its obligations under this Agreement;

13.3. Work with CSCAND in developing a detailed Work Plan based on the Implementation Plan;

13.4. Provide technical assistance in the form of training, workshops and mentoring among others to CSCAND in the course of Activity implementation;

13.5. Facilitate access of CSCAND to appropriate and available scientific methodologies and tools;

13.6. Manage a competitive procurement process for the selection of a firm for LIDAR survey and data processing, and engage NAMRIA and other CSCAND agencies in the procurement , as appropriate;

13.7. Collaborate with CSCAND and AusAID on policy and direction setting through the Component Executive Board, and on the implementation of activities through the Component Steering Committee.

14. **CSCAND agencies will have the following general responsibilities:**

14.1. Implement this Activity with GA.

14.2. Provide technical assistance in the form of mutual mentoring, information sharing and practical on-the-job collaboration, among others, to GA in the course of Activity implementation;

14.3. Work with GA in generating datasets and developing risk analysis methodologies and tools such that appropriate capability is built and enhanced within the Philippines. In particular, the following agencies will serve as lead agency for CSCAND, engaging other member-agencies as appropriate, for implementing the corresponding sub-activities and ensuring delivery of outputs with GA:

14.3.1. NAMRIA on generation of a seamless digital elevation model for GMMA and acquisition of high-resolution elevation model for key areas;

14.3.2. MGB and PAGASA on development of flood hazard and risk information for the Marikina-Pasig river system and GMMA, if applicable;

14.3.3. PAGASA on development of severe wind hazard and risk information for GMMA;

14.3.4. PHIVOLCS on development of earthquake hazard and risk information for GMMA;

14.3.5. PHIVOLCS as the lead agency on the development of an exposure database for GMMA;

14.3.6. OCD on development of capacity building and information, education and communication activities on hazard and risk information from earthquakes, flood and tropical cyclone severe wind for LGUs and communities in GMMA.

14.3.7. OCD on overall project management including management of financial contributions from AusAID and its requirements on monitoring and reporting.

14.4. Work with GA in developing a detailed Work Plan based on the Implementation Plan;

14.5. Provide appropriately qualified and experienced CSCAND personnel to perform its obligations under this Agreement;

14.6. Provide counterpart office space, exemptions from taxes and duties, where applicable, and logistical support for the implementation of this Activity;

14.7. Collaborate with GA and AusAID on policy and direction setting through the Component Executive Board, and on the implementation of activities through the Component Steering Committee.

15. As executing partner with overall responsibility on project management for GOP, OCD through the Component Executive Board or Component Steering Committee, whichever is appropriate, will:

15.1. Provide guidance and supervision over the project-funded Project Coordinator and other contracted staff for this Activity, as determined by the Component Executive Board, in performing its roles and responsibilities for the implementation of this Activity.

15.2. Draw on the resources and support of the Project Coordinator who will undertake the following support tasks:

15.2.1 Open a foreign exchange account for the GOA contributions and manage its utilization, disbursement and reporting to AusAID;

15.2.2 Submit to AusAID an annual accomplishment report covering both financial statements and physical outputs. The financial statements will show sources of funding, with sufficient breakdowns of data to permit identification of individual sources of funds and disbursements on major activities or types of expenditure;

15.2.3 Regular coordination/communication with CSCAND, Geoscience Australia and AusAID on Activity implementation, including provision of regular financial reports summarising project receipts, expenditures and planned future procurements;

15.2.4 Prepare the monitoring and evaluation arrangement based on the logical framework;

15.2.5 Prepare the communications and advocacy strategy for this Activity;

15.2.6 Submit to AusAID an annual Work Plan;

15.2.7 Submit to AusAID a semi-annual report using the Quality-at-Implementation template of AusAID;

15.2.8 In consultation with AusAID, initiate the Activity mid-term review of the Activity and submit the corresponding report to the Component Executive Board;

15.2.9 Undertake the Activity completion review and submit the corresponding report to AusAID;

15.2.10 Immediately inform AusAID in writing of any circumstance which may interfere or threaten to interfere with the successful implementation of the Activity and, with a view to resolving the issue, consult with AusAID on remedial action to be taken; and

16 The following GOP agencies will also be engaged, as needed, as partners or contributors:

16.1. Metro Manila Development Authority; Laguna Lake Development Authority; and League of Cities and Municipalities.

Goals and Objectives

17. The overall goal of the Activity is to support the GOP in making the Philippine population better prepared for and protected from natural disasters by informing the reduction of flood, tropical cyclone severe wind and earthquake risks in vulnerable communities within the Greater Metro Manila Area through long-term partnerships among AusAID, NDRRMC-CSCAND and GA.

18. The objective of the Activity is to analyse the risk from flood, tropical cyclone severe wind and earthquake in GMMA through the development of fundamental datasets and information on hazard, exposure and vulnerability towards strengthening the resilience of communities to the impacts of natural disasters.

19 The outcomes of this Activity include:

19.1. Base datasets fundamental to natural hazard risk analysis, such as high-resolution digital elevation models, are available in GMMA for the analysis of natural hazard risk and climate change impacts;

19.2. Technical specialists have an improved understanding and capability to produce exposure databases, and exposure information is available in the GMMA for the analysis of natural hazard risk and climate change impacts;

19.3. Scientists within PAGASA and MGB are able to better assess the risk and impacts from flood in the Pasig-Marikina River Basin and have an improved understanding of these risks;

19.4. Scientists within PAGASA are able to better assess the risk and impacts of tropical cyclone severe wind and have an improved understanding of these risks in the GMMA;

19.5. Scientists within PHIVOLCS have an improved understanding of earthquake risk in the GMMA;

19.6. The local government units (LGUs) in GMMA are better informed about its risk from earthquakes, flood and tropical cyclone severe wind; and

19.7. Relationships of AusAID, GA and NDRRMC-CSCAND and other technical agencies are enhanced so that the GOP technical agencies have an increased capacity to access and use risk assessment knowledge and skills.

20. The Activity Design Document is attached as Annex 6.

Duration of Program

21. The duration of the Activity is three years commencing in July 2010 and ending June 2013.

22. This Agreement will take effect from the date of its signature by the Parties and will conclude when all responsibilities and obligations of the Parties have been fulfilled unless the Agreement is terminated earlier.

23. Any changes to the the Activity including changes to the funding as shown in Table 1 or duration will be subject to the mutual agreement of the Parties and a formal amendment of this Agreement.

GOA Funding

24. Subject to annual parliamentary appropriations, AusAID will contribute up to a maximum of AUD1,010,320 through direct funding support to the GOP for the implementation of the Activity. This contribution shall form a pool of funds that will be managed by the OCD on behalf of the GOP.

25. Australia's total contribution to GOP through the direct funding support will be revisited annually during submission of the Annual Plan. Any changes to the budget shall be made through an amendment of this Agreement by Exchange of Letters between AusAID and GOP.

26. In addition to the direct funding support, AusAID will provide up to an estimated AUD1,000,000 for the procurement of Light Detection Ranging (LiDAR) survey for GMMA with a contracted service provider and related technical assistance for the implementation of the Activity through a separate agreement between AusAID and Geoscience Australia.

27. AusAID will also provide up to an estimated AUD120,000 for the services of a Project Coordinator to be engaged for the duration of the Activity.

28. The GOP agrees to use the GOA direct funding solely for the implementation of the Activity and in accordance with expenditures to be detailed in the Work Plan unless AusAID provides written advice to the contrary.

29. In the event that GOA funding is not used in accordance with Clause 30 (Table 1, item 1) and/or there is a finding of fraudulent or corrupt practice in respect of the Activity, AusAID may reduce or suspend its funding until such time as Parties agree to a mutual resolution.

30. The GOP agrees that GOA funds will not to be used for recurrent administrative costs including salaries of permanent staff, housing allowances or office costs;

GOP Contribution

31. The GOP will provide an estimated AUD5,000,000 as its contribution for the implementation of this Activity.

32. The indicative funding fo the Activity is shown in Table 1.

Table 1: Indicative Funding

	Year/Funding	2010-11	2011-12	2012-13	Total
1	**Direct Funding to GOP**	**364,880**	**332,880**	**312,560**	**1,010,320**
	Operational Cost[1]	*200,000*	*150,000*	*150,000*	*500,000*
	Travel Costs of CSCAND Agencies (Manila to Canberra)[2]	*164,880*	*182,880*	*162,560*	*510,320*
2	**Funding for LIDAR Procurement (Geoscience Australia)**[3]	**1,000,000**	-	-	**1,000,000**
3	**Funding for Project Coordinator (AusAID)**[4]	**40,000**	**40,000**	**40,000**	**120,000**
4	**NDRRMC-CSCAND Counterpart Funding**[5]	**1,700,000**	**1,650,000**	**1,650,000**	**5,000,000**

[1] Costs directly related to responsibilities of CSCAND for the implementation of this Activity, including transportation and travel allowances of CSCAND personnel within GMMA for Activity implementation.
[2] In FY10/11 and FY11/12 this includes six trips for each component, other than exposure which has 10 trips to Canberra, plus one trip per year for the Manila-based Project Coordinator. In FY12/13 this includes six trips for exposure and 8 trips for the other components as well as two trips for the Project Coordinator.
[3] Through a separate agreement between AusAID and Geoscience Australia.
[4] Cost to be covered by AusAID.

	Grand Total	**3,104,880**	**2,022,880**	**2,002,560**	**7,130,320**

Deposit and Disbursement of GOA funds

33. AusAID will transfer to the nominated foreign account of the GOP, on receipt of a valid invoice, the sums in accordance with the tranches below. Transfer of the 2nd or 3rd tranches will be subject to AusAID confirming that satisfactory progress has been made against the work plan.

Table 2. Schedule of transfer of GOA funds

Tranches	Date	Amount (AUD)
1st Tranche	November 2010	364,880
2nd Tranche	July 2011	332,880
3rd Tranche	July 2012	312,560
		1,010,320

34. OCD will send an invoice, using the template in Annex 5, to AusAID for the transfer of funds on the date indicated in Table 2. The invoice will be sent by email to accountsprocessing@ausaid.gov.au.

35. GOA contributions will be deposited in Australian Dollars to a single foreign exchange account nominated by the GOP and held in the name of "NDRRMC-CSCAND Risk Analysis for GMMA Project."

36. OCD will immediately acknowledge receipt of the funds, in writing, to GOA.

37. Any interest income attributable to the GOA contribution may be utilised by the GOP solely for the implementation of the Activity.

38. Any interest income attributable to the GOA contribution will be reported to the Component Executive Board on an annual basis.

Management Arrangements

39. The Parties acknowledge that regular consultation between the Parties is critical to the effective implementation of the Activity.

40. **The Component Executive Board.** Coordination between the Parties will be achieved through the establishment of a Component Executive Board. It will have overall accountability for project outputs, set policy and financial directions, and ensure ongoing consultation, planning, coordination and implementation of the Activity. The Board will report to the Steering Committee to be organized for the post-Ketsana Metro Manila recovery and reconstruction program.

41. The Component Executive Board will meet annually unless an alternative time interval between meetings is subsequently agreed by the Board members.

[5] Includes financial contribution, personnel, office space, utilities, administrative and logistical support, among others.

42. The Component Executive Board will comprise of head of agencies or senior representatives from:

    42.1. AusAID;

    42.2. GA;

    42.3. MGB;

    42.4. NAMRIA;

    42.5. OCD;

    42.6. PAGASA; and

    42.7. PHIVOLCS

43. Representatives from relevant organisations or agencies may be invited to attend the Component Executive Board meetings with the agreement of all Parties.

44. In accordance with the implementing principles, the Component Executive Board will be chaired by OCD as executing partner and with primary responsibility for project management.

45. OCD, supported by the Project Coordinator, will provide secretariat support to the Component Executive Board, including setting the agenda and preparing materials and reports and sending these to Board members five working days before the meeting.

46. Key subjects to be discussed by the Component Executive Board include, among others:

    46.1 Approval of monitoring and evaluation arrangements, and communication and advocacy strategy;

    46.2 Assessment/review of performance/budget execution and expenditure priorities on the basis of the indicators described in the logical framework (Annex 4);

    46.3 Annual review of Work Plan/budget for the forthcoming calendar year/revenue and expenditure priorities;

    46.4 Implementation of the Agreement;

    46.5 Consideration of audit report(s) and follow up required on audits;

    46.6 Regular Financial/expenditure reports;

    46.7 Review/update of Activity risk management plan/strategy

    46.8 Monitoring, evaluation and review plans (mid-term and completion reviews) and reports

    46.9 Requirements for additional technical assistance for implementation

    46.10 Procurement plan/report

    46.11 Progress on other program related support initiatives or objectives.

47. The results of the meeting will be recorded in Minutes to be drafted by OCD through the Project Coordinator and sent within 10 working days after the meeting, to Component Executive Board members for their comments/approval. If no comments are received from Board members within 10 working days after

receipt of the draft Minutes, it will be assumed that Board members has endorsed the Minutes.

48. Additional consultation meetings may be requested by Parties on any subject relevant to the implementation of the Activity.

Annual Program Review and Planning

49. In May each year, the Component Executive Board will convene an Annual Program Review and Planning meeting.

50. Prior to the meeting, the GOP will develop and circulate the following documents in advance of the meeting:

    50.1. An Annual Accomplishment Report including:

        50.1.1. Summary of overall progress and achievements over the previous 12 months compared against the Program of Work for the period.

        50.1.2. A detailed program performance report assessing progress against the agreed performance assessment framework (Annex 4) based on the Activity logical framework contained in the Activity Design Document.

    50.2. A draft Annual Work Plan for the next 12 months which identifies priorities and provides detail of proposed funding levels compared against funding levels for the previous year.

51. At this meeting the Component Executive Board will:

    51.1. Assess the performance of the Activity against the Performance Assessment Framework indicators based on the most recent available data and/or monitoring and evaluation reports.

    51.2. Identify issues and where possible causes of concern arising from the performance assessment and, where necessary, seek to identify measures to be implemented to address these.

    51.3. Review the proposed Annual Work Plan for the following year in relation to Activity priorities and funding availability.

    51.4. Agree a final Annual Work Plan for implementation.

Program Coordination and Support

52. **The Component Steering Committee.** The GOP will establish a Component Steering Committee. The Component Steering Committee will serve as the technical working group for the implementation of the Activity, and will report to the Component Executive Board.

53. The Component Steering Committee will meet quarterly unless an alternative time interval between meetings is subsequently agreed by the Component Steering Committee.

54. The Component Steering Committee will comprise of designated technical representatives from:

54.1 AusAID;
54.2 GA;
54.3 MGB;
54.4 NAMRIA;
54.5 OCD;
54.6 PAGASA; and
54.7 PHIVOLCS.

55. The Component Steering Committee will be responsible for:

55.1. Developing detailed and work plans (based on the Implementation Plan in the Activity Design Document), budget, monitoring and evaluation arrangements, and communication and advocacy strategy;

55.2. Supervising the quality of scientific inputs and outputs;

55.3. Undertaking activities and delivery of key outputs;

55.4. Development of accomplishment, financial and progress reports; and

55.5. Ensuring linkage of the Activity with other components of the proposed post-Ketsana Metro Manila recovery and reconstruction program.

56. **The Project Coordinator.** A Project Coordinator, locally engaged and Manila-based, will be recruited and physically located in OCD or in an office identified by the GOP. The Project Coordinator will be reporting to OCD and will have the following general responsibilities:

56.1. Regular coordination / communication with CSCAND, Geoscience Australia and AusAID on Activity implementation;

56.2 Supporting the collaborative development of natural hazard risk information

56.3 Supporting the acquisition and development of fundamental natural hazard datasets (eg. acquisition and analysis of exposure information etc.);

56.4 Supporting the development of IEC materials on risk information for LGUs and local communities;

56.5. Liaising with local government units in GMMA covered by the Activity, relevant government agencies, academic institutions, professional organizations and other stakeholders on the implementation of activities, particularly facilitating stakeholder participation and inputs, data generation, and compliance to GOP requirements, among others;

56.6 Coordinating the procurement of services or engagement institutional partners for the implementation of activities, including preparation of terms of reference, contracts, and agreements;

56.7 Coordinating monitoring visits including collating, analysing and reporting of performance indicators based on performance assessment framework;

56.8 Organizing and coordinating meetings, workshops, trainings and forums among others including the preparation of materials;

56.9 Coordinating missions and visits relevant to Activity implementation;

56.10 Support OCD in performing the following tasks:

56.10.1 Open a foreign exchange account for the GOA contributions and manage its utilization, disbursement and reporting to AusAID;

56.10.2 Submit to AusAID an annual accomplishment report covering both financial statements and physical outputs. The financial statements will show sources of funding, with sufficient breakdowns of data to permit identification of individual sources of funds and disbursements on major activities or types of expenditure;

56.10.3 Submit to AusAID an annual Work Plan;

56.10.4 Prepare and submit to AusAID a semi-annual report using the Quality-at-Implementation template of AusAID;

56.10.5 In consultation with AusAID, initiate the Activity mid-term review of the Activity and submit the corresponding report to the Component Executive Board;

56.10.6 Undertake the Activity completion review and submit the corresponding report to AusAID

56.11 Support OCD in in organizing the Component Executive Board and Component Steering Committee and regular meetings, and providing secretariat support including;

56.11.1 Setting the agenda, drafting and distributing materials and reports to members;

56.11.2 Preparing meeting Minutes, circulating these to members and finalizing these;

56.11.3 Coordinating the preparation and finalization of the detailed Work Plan based on the Implementation Plan;

56.11.4 Coordinating the preparation of monitoring and evaluation arrangements based on the logical framework;

56.11.5 Coordinating the preparation of communications and advocacy strategy;

56.11.6 Updating the Risk Management Plan as requested by the Component Executive Board;

56.11.7 Coordinating the preparation of Accomplishment Report and Annual Workplan including financial reports;

56.11.8 Coordinating the Annual Review meeting and preparation of necessary materials; and

56.11.9 Ensuring relevant reports and documents are submitted to AusAID on time.

56.12 Immediately inform OCD and AusAID in writing of any circumstance which may interfere or threaten to interfere with the successful implementation of the Activity and, with a view to resolving the issue, consult with OCD and AusAID on remedial action to be taken

56.13 Performing other tasks related to the Activity as maybe identified by OCD.

Review and Evaluation

57. The Parties agree that it is essential to ensure the performance and impact of the Activity is adequately and effectively monitored and assessed. The Parties agree that the Activity will be monitored and evaluated in accordance with the framework set out in Annex 4.

Program Risk Management

58. Parties are jointly responsible for managing risks in accordance with the Activity Risk Management Plan attached as Annex 5.

Procurement

59. The procurement of the LiDAR survey will be a responsibility of Geoscience Australia in coordination with AusAID and NDRRMC-CSCAND.

60. Except for the procurement of LIDAR survey, the GOP will be responsible for all procurement in accordance with its established rules, procedures and legislation as may be amended by the GOP from time to time.

61. All Parties agree that a sample of major procurements may be audited periodically either independently or by GOP Commission on Audit.

62. The GOP may request the GOA to undertake specific major procurement action on behalf of the Activity.

Audit

63. The GOP is responsible for ensuring that the Activity and its associated funding are audited on an annual basis.

64. The annual audit will, if requested by the Committee Executive Board, also examine procurement decisions and /or related contracts where GOA funds are utilised by the GOP for the procurement of goods and/or services.

65. The Annual audit of the Program will, wherever possible, be undertaken by GOP Commission on Audit.

66. Where circumstances arise that the Commission on Audit advises that it will be unable to undertake the annual audit the Parties agree that an independent auditor will be engaged to undertake the annual audit.

67. The arrangements, including the terms of reference, selection method and costs, for the engagement of an independent auditor will be agreed by the Component Executive Board.

68. The annual audit report will include formal advice detailing any weaknesses in the Activity's internal controls and recommendations for strenghtening identified weaknesses.

69. The annual audit report will be provided to all members of the Component Executive Board and be included as an agenda item for the Component Executive Board meeting at the earliest opportunity.

70. The GOP agrees that AusAID may commission independent audits of the Program and acknowledges that it will cooperate fully with any such audits.

71. AusAID agrees to provide the GOP with a copies of any independent audit reports.

Fraud

72. Fraudulent activity' or 'fraud' means: Dishonestly obtaining a benefit by deception or other means.

73. The Parties are committed to preventing and detecting fraud.

74. The GOP is responsible for preventing and detecting fraud involving or relating to the Program.

75. The GOP must immediately report in writing to GOA any detected, suspected, or attempted fraudulent activity involving or relating to the Activity.

76. The GOP is required to investigate any alleged fraud and must undertake an investigation in accordance with its own procedures and standards or, where requested by the Component Executive Board, in accordance with procedures and standards as directed by the Steering Committee.

77. Following the conclusion of an investigation, where the investigation finds identifies acts of a fraudulent nature GOP will:

    77.1 Initiate recovery action in accordance with recovery procedures, including if appropriate civil litigation, available in the Partner Country; and

    77.2 Referring the matter to the relevant Partner Country police or other authorities responsible for prosecution of fraudulent activity; or

    77.3 where a GOP r Government employee is involved in fraudulent activity, take the relevant disciplinary procedures in accordance with relevant Code of Conduct or similar GOP provisions where these exist.

Anti-Corruption

78. The Parties are committed to preventing and detecting corruption and bribery. The Parties through their employees, agents or representatives will not make or cause to be made, nor will they receive or seek to receive, any offer, gift or payment, consideration or benefit of any kind, which would or could be construed as an illegal or corrupt practice, either directly or indirectly to any party, as an

inducement or reward in relation to the execution of this Agreement or any arrangement or provision of funds in relation to the Activity. The Parties will use their best endeavours to ensure that their respective employees, agents, representatives or other entitities involved in the Activity will also adhere to this provision.

79. For the purposes of this paragraph (Anti-Corruption), the term "corrupt" includes (but is not limited to) any action or practice which would warrant disciplinary procedures being taken against an individual under applicable laws.

80. In the event of alleged misuse of Activity funds involving fraudulent or corrupt behaviour as defined above, AusAID may reduce or suspend its funding until such time as the matter is mutually resolved by the Parties.

Status of Agreement

81. This Agreement serves only as a record of the Parties' intentions and does not constitute or create (and is not intended to create) rights or obligations under domestic or international law and will not give rise to any legal process and will not be deemed to constitute or create any legally binding or enforceable rights or obligations (expressed or implied).

Settlement of Disputes

82. Any dispute, controversy, or claim, which arises out of the interpretation or application of this Agreement will not be subject to adjudication or arbitration, but will instead be dealt with through amicable consultations and negotiations as the only method of achieving the peaceful settlement of that dispute, controversy, or claim.

Extraordinary Events

83. Neither the GOP or the GOA will be responsible for any failure to perform or any delay in performing thier obligations under this Agreement where the cause of such failure of delay is beyond that Party's reasonable control (Force majeure). The Party claiming suspension of its obligations due to an extraordinary event will immediately notify the other Parties in writing of its intent and the reason(s) for suspension.

Indemnity and Insurance

84. The GOP will indemnify AusAID at all times against any actions, claims, liabilities, damages or expenses suffered or incurred by GOA as a result of, or arising from, the implementation of the Activity.

85. The GOP will be responsible for insurance cover against loss of life, personal accident and illness, loss, theft and damage to personal effects and Activity supplies and assets and all personnel engaged directly by the GOP. The GOA will have no responsibility for any insurance cover for the GOP personnel, property , assets and supplies or actions.

Use of Agreement Information

86. The Parties will respect the confidentiality of information provided by the other as "Confidential" or "In-Confidence". Neither Party will disclose such information to a third party without obtaining the written agreement of the other Party unless and except where the disclosure of such information is required by law or government convention.

87. GOA may disclose matters relating to the Agreement, including the Agreement to governmental departments and agencies, Ministers and Parliamentary Secretaries of the Commonwealth of Australia, and to the Parliament of the Commonwealth of Australia, including responding to requests for information from Parliamentary committees or inquiries. This clause will survive termination or expiration of the Agreement.

88. The GOP may disclose matters relating to the Agreement, including the Agreement to its governmental departments and agencies, including responding to requests for information from Congressional committees or inquiries. This clause wil survive termination or expiration of the Agreement

Amendment

89. All changes to this Agreement must be mutually agreed in writing by all Parties in the form of a formal amendment to the Agreement.

90. This Agreement may be amended at any time by an Exchange of Letters between the Parties.

Termination

91. Termination of this Agreement may be effected by one Party on giving 90 days written notice and reasons for the termination to the other Party.

92. In the event of any termination the GOP will provide an independently audited financial statement of the Activity funding for the financial year during which termination occurred.

Provisions to Prevent Financing of Terrorism

93. The GOP will use its best endeavours to ensure that funds provided by GOA under the Agreement, do not provide direct or indirect support or resources to organisations and individuals associated with terrorism or listed on a 'Relevant List'

94. If, during the course of this Agreement, the GOP discovers that an organisation or individual involved in the Agreement is listed on a 'Relevant List' or has any link whatsoever with any organisation or individual associated with terrorism it will inform GOA immediately.

95. GOA may terminate this Agreement immediately by notice in writing to the GOP if the GOP breaches any of its obligations to prevent the financing of terrorism.

96. Notwithstanding GOA's right to terminate this Agreement under **Clause 94** in the event of a breach of this **clause**, the GOP will use its best endeavours to recover an amount equivalent to the relevant funds which are found to have been paid to organisations and individuals associated with terrorism and refund that amount to GOA.

97. 'Relevant List' means the lists of terrorist organisations made under Division 102 of the *Criminal Code Act 1995* (Cth) and the *Charter of the UN Act 1945* (Cth) posted at:
http://www.nationalsecurity.gov.au/agd/www/nationalsecurity.nsf/AllDocs/95FB057CA3DECF30CA256FAB001F7FBD?OpenDocument and
http://www.dfat.gov.au/icat/UNSC_financial_sanctions.html#3

Exemption from Taxation

98. The GOP agrees that all the provisions of the GADC apply to this Program including taxation exemptions.

Correspondence

99. All official correspondence related to the implementation of this Agreement should be addressed to:

GOA:	AusAID
	Level 24 Tower II RCBC Plaza 6819 Ayala Avenue Makati City 1200 Philippines
	Telephone +63 2 7578294
	Facsimile +63 2 7578265
	Attention: Counsellor
GOP	Office of Civil Defense
	National Disaster Risk Reduction and Management Center, Camp General Emilio Aguinaldo
	1101 Quezon City Philippines
	+63 2 9120441
	Attention: Administrator, Office of Civil Defence and Executive Officer, NDRRMC

ANNEXURES to this Agreement form an integral part of it.

IN WITNESS THEREOF, the undersigned have signed this Agreement.

Signed in duplicateon the 19th day of November in the year of 2010 in two (2) originals in the English language, both of the texts being equally authentic.

FOR THE GOVERNMENT OF AUSTRALIA

H.E ROD SMITH
Ambassador

DR JOHN SCHNEIDER
Assistant Director General
Geoscience Australia

FOR THE GOVERNMENT OF THE PHILIPPINES

Usec BENITO T. RAMOS Administrator,
Office of Civil Defense and
Executive Director, NDRRMC

Sec. MARIO MONTEJO
Department of Science and Technology
(DOST)

Recommending approval for DOST:

DR RENATO U. SOLIDUM, JR.
Director, PHIVOLCS

DR GRACIANO P. YUMUL
Undersecretary, DOST
Acting Administrator, PAGASA

ENGR LEO JASARENO
Director, MGB

DR. PETER N. TIANGCO
Administrator, NAMRIA

Annex 1: Summary outline of the Activity

1. GENERAL ACTIVITY INFORMATION

Activity Name	Enhancing Risk Analysis Capacities for Flood, Tropical Cyclone Severe Wind and Earthquake for Greater Metro Manila Area– Component 5 of the Metro Manila Post-Ketsana Recovery and Reconstruction Program	
Location	Greater Metro Manila Area, Philippines	
Activity Timing: **Expected Start Date** **Expected Finish Date** **Activity Duration**	 July 2010 June 2013 3 years	
Executive Agencies: **Agency Name** **Contact Officer** **Telephone Number** **Fax Number** **Email Address**	 Geoscience Australia Dr John Schneider +61 2 6249 9667 +61 2 6249 9986 john.schneider@ga.gov.au	 Office of Civil Defense Usec Benito T. Ramos +63 2 9127822 +63 2 9120441 administrator@ndcc.gov.ph
Implementing Partner Agencies	Mines and Geosciences Bureau National Mapping and Resource Information Authority Office of Civil Defense Philippine Atmospheric, Geophysical and Astronomical Services Administration Philippine Institute of Volcanology and Seismology	
Responsible / Contributing Partner Agencies	Laguna Lake Development Authority Metro Manila Development Authority League of Cities and Municipalities	

2. BACKGROUND

The context to this Activity is fourfold. First, the Philippines experiences some of the world's worst natural hazards being exposed to frequent earthquakes, volcanic eruptions, tsunamis, cyclones, flooding, extreme winds and landslides. Disasters in the Philippines are increasing in number and size each year due to climate change, rapid population growth and urbanisation. Second, there is an international, national and AusAID policy context that is increasingly focused on reducing the risks from natural disasters. The international and national policies focused on disaster risk reduction, such as the Hyogo Framework for Action (HFA) adopted by Australia and the Philippines, place considerable importance on identifying and understanding the risk from natural hazards. One of the five priorities for action in the HFA outlines a requirement to invest in scientific and institutional capabilities to "identify, assess and monitor disaster risks and enhance early warning" including multi-risk assessment and mapping; which is the type of investment proposed in this Activity. The Philippine

Government has undertaken affirmative actions to implement the HFA. Third, a scoping mission to the Philippines after Tropical Storm Ketsana (Ondoy) in September 2009, undertaken by AusAID and Geoscience Australia revealed a huge need on multi-hazard risks analysis, particularly for flood and earthquake, in GMMA, with this Activity building upon significant progress already made in natural hazard mapping and assessment. Lastly, these ongoing engagements also provide the building blocks in furthering the partnership among AusAID, Geoscience Australia and NDCC-CSCAND now NDRRMC-CSCANDas enunciated in the Memorandum of Subsidiary Arrangement between GOA (AusAID) and GOP (NDCC-CSCAND) signed in December 2008 on providing support to NDCC-CSCAND on natural hazard risk work. This partnership would play a key role in the proposed Metro Manila Post-Ketsana Recovery and Reconstruction Program, particularly the component on Enhancing Risk Analysis Capacities for Flood, Tropical Cyclone Severe Wind and Earthquake in GMMA.

The mode of aid delivery and implementation arrangements are conceptually similar to a twinning program via an equal partnership arrangement among AusAID, Geoscience Australia and NDRRMC-CSCAND with a focus placed on developing new, and strengthening existing partnerships that ultimately support the development of new natural hazard risk information.

3. ACTIVITY DESCRIPTION

Goal: The overarching goal of this Activity is to contribute to making the Philippines population better prepared for and protected from natural disasters by informing the reduction of flood, severe wind and earthquake risks in vulnerable communities within the Greater Metro Manila Area (GMMA), Philippines through long-term partnerships among the Philippines' National Disaster Risk Reduction and Management Council – Collective Strengthening of Community Awareness to Natural Disasters (NDRRMC-CSCAND) technical agencies, AusAID and Geoscience Australia.
The objective, purpose and outcomes for this Activity are:

Objective: To analyse the risk from flood, severe wind and earthquake in the Greater Metro Manila Area through the development of fundamental datasets and information on hazard, exposure and vulnerability.

Purpose: To achieve progress towards the above goal by enhancing relationships among AusAID, Geoscience Australia and NDRRMC-CSCAND and other technical agencies responsible for assessing, analysing and mapping flood, severe wind and earthquake hazard in the Philippines.

Outcomes: The anticipated outcomes of this activity are:

Outcome 1. Base datasets fundamental to natural hazard risk analysis, such as high-resolution digital elevation models, are available in GMMA for the analysis of natural hazard risk and climate change impacts.

Outcome 2. Technical specialists have an improved understanding and capability to produce exposure databases, and exposure information is available in the GMMA for the analysis of natural hazard risk and climate change impacts.

Outcome 3. Scientists within PAGASA and MGB are able to better assess the risk and impacts from flood in the Pasig-Marikina River Basin and have an improved understanding of these risks.

Outcome 4. Scientists within PAGASA are able to better assess the risk and impacts of tropical cyclone severe wind and have an improved understanding of these risks in the Greater Metro Manila Area.

Outcome 5. Scientists within PHIVOLCS have an improved understanding of earthquake risk in the Greater Metro Manila Area.

Outcome 6. The local government units (LGUs) in GMMA are better informed about its risk from earthquakes, flood and tropical cyclone severe wind.

Outcome 7. Relationships of AusAID, Geoscience Australia and NDCC-CSCAND and other technical agencies are enhanced so that the GOP technical agencies have an increased capacity to access and use risk assessment knowledge and skills.

Activity Partners, Stakeholders and Beneficiaries. The GOP Executing Partner is the NDRRMC-CSCAND through the Office of Civil Defence (OCD) under the Department of National Defence. The NDCC utilizes the facilities and services of the Office of Civil Defence as its operating arm. The OCD has oversight of the implementation of policies, activities and programs on disaster risk reduction and management, and the responsibility to cascade disaster preparedness, contingency planning and early warning are transferred to LGUs including communities. Other members of the NDRRMC-CSCAND which are implementing partners in this Activity are:

- *Philippine Institute of Volcanology and Seismology (PHIVOLCS)*: responsible for volcanic eruption, earthquake and related processes (tsunami, landslides etc).
- *Philippine Atmospheric, Geophysical and Astronomical Services Administration (PAGASA)*: responsible for tropical cyclone, flood, storm surge, severe wind and drought.
- *Mines and Geosciences Bureau (MGB)*: responsible for landslide and flood.
- *Philippine National Mapping and Resource Information Authority (NAMRIA)*: responsible for providing up-to-date geographic and resource information.

Other responsible partners or contributors include, but are not limited to:

- Laguna Lake Development Authority (LLDA)
- Metro Manila Development Authority (MMDA); and
- League of Cities and Municipalities.

Implementation Arrangement: The mode of aid delivery is conceptually similar to a twinning program via an equal partnership arrangement among AusAID, Geoscience Australia and NDRRMC-CSCAND with a focus placed on developing new, and strengthening existing partnerships that ultimately support the development of hazard risk information. A Component Executive Board will be established and will compose senior representatives from AusAID, NDRRMC-OCD and GA. As highest policy making body for Component 5, the Board has overall accountability for project deliverables. A Component Steering Committee (CSC) composed of representatives from Geoscience Australia, AusAID and the CSCAND agencies and other *ad hoc* participants as deemed appropriate shall also be created. The CSC shall be technical

working group that provides formal channels for joint assessments on the progress of the component activities.

Annex 2: Activity Implementation Plan

A more detailed will be developed by CSCAND and Geoscience Australia based on this Activity Implementation Plan. Annex 5 presents a more detailed implementation plan.

	Narrative Summary	Year 1 (July 1, 2010 – June 30, 2011)				Year 1 (July 1, 2011 – June 30, 2012)				Year 1 (July 1, 2012 – June 30, 2013)			
		Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
	COMPONENT 1: ***Digital Elevation for Greater Metro Manila Area (GMMA)***												
	INDICATIVE ACTIVITIES												
1.1	Modification of Memorandum of Understanding with NAMRIA to include new Schedule of Work												
1.2	Tender process for the acquisition of high resolution digital elevation (LiDAR) data for the GMMA												
1.3	The acquisition of high resolution digital elevation data for the GMMA												
1.4	Geoscience Australia supports NAMRIA to develop a seamless elevation dataset												
	MILESTONES												
M1.1	MOU with NDCC-CSCAND signed on roles and responsibilities												
M1.2	Tender process for LiDAR is complete and supplier identified												
M1.3	A seamless elevation dataset is available for the GMMA												
	COMPONENT 2: ***Development of an Exposure Database for Greater Metro Manila Area (GMMA)***												
	INDICATIVE ACTIVITIES												
2.1	Engagement with LGU's and Cities in GMMA on exposure information												
2.2	Development of a strategy for the collection and development of exposure information												
2.3	Training in exposure database development												
2.4	Development of a pilot exposure database for Taguig City												
2.5	Development of a preliminary exposure database for GMMA												
2.6	Workshop with GoP partners to demonstrate preliminary exposure database and to determine custodian of exposure database												
2.7	Development of final exposure database												
2.8	Training provided to custodian of exposure database to ensure sustainable upgrades, storage and delivery occurs												

	Narrative Summary	Year 1 (July 1, 2010 – June 30, 2011)				Year 1 (July 1, 2011 – June 30, 2012)				Year 1 (July 1, 2012 – June 30, 2013)			
		Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
	MILESTONES												
M2.1	Workshop on risk analysis and exposure												
M2.2	Pilot exposure database for Taguig City												
M2.3	Workshop on draft exposure database												
M2.4	Final exposure database is produced.												
	COMPONENT 3: ***Flood Risk Modelling in Metro Manila***												
	INDICATIVE ACTIVITIES												
3.2	Collection of fundamental flood data to support flood modelling in the Pasig-Marikina basin												
3.3	Development of preliminary flood *hazard* information for Taguig City to support broader MMRR program												
3.4	Available flood hazard models are compared to select the most appropriate model for use in Manila												
3.5	PAGASA undertakes hydraulic modelling in Pasig-Marikina basin												
3.6	Training is provided to PAGASA staff on flood inundation modelling for GMMA												
3.7	Vulnerability models for flood are developed through workshops and collaborative analysis[6]												
3.8	Flood risk assessment for the Pasig-Marikina basin is undertaken by integrating exposure and flood vulnerability models into flood model												
3.9	Flood risk information generated for GMMA is synthesised and maps and educational materials are produced.												
	MILESTONES												
M3.2	Preliminary flood *hazard* information is provided to Taguig City												
M3.3	Workshop is held on the available flood models and the most appropriate selected												
M3.4	Flood vulnerability models are finalised for use in risk assessment												
M3.5	Flood hazard inundation maps are available for GMMA												
M3.6	Flood risk information is available for GMMA												
	COMPONENT 4: ***Tropical Cyclone Severe Wind Risk Modelling in Metro Manila***												

[6] Vulnerability models (or fragility curves) will be developed in collaboration with Philippine engineers, PAGASA and Geoscience Australia. The process for developing these curves will be discussed as part of the detailed project planning which will occur in the Qtr 1 of the 2010/2011 financial year.

	Narrative Summary	Year 1 (July 1, 2010 – June 30, 2011)				Year 1 (July 1, 2011 – June 30, 2012)				Year 1 (July 1, 2012 – June 30, 2013)			
		Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
	INDICATIVE ACTIVITIES												
4.1	Compile necessary tropical cyclone datasets for project, including datasets on tropical cyclone severe wind impacts from previous cyclones												
4.2	Undertake modelling to determine the frequency and severity of tropical cyclones affecting Manila area												
4.3	Develop severe wind multipliers for the GMMA												
4.4	Refinement, if necessary, of the severe wind vulnerability models developed under existing AusAID Activity in the Philippines												
4.5	Undertake tropical cyclone severe wind impact modelling in the pilot area of Taguig City												
4.6	Undertake severe wind impact modelling for GMMA												
4.7	Tropical cyclone severe wind risk information generated for GMMA is synthesised and maps and educational materials are produced and presented in a web-based information system.												
	MILESTONES												
M4.1	The frequency and severity of tropical cyclones affecting the GMMA is quantified												
M4.2	Severe wind vulnerability models are finalised for use in risk assessment												
M4.3	Severe wind impact modelling is complete for Taguig City												
M4.4	Severe wind impact modelling is complete for GMMA												
M4.5	Tropical cyclone severe wind risk information is available for GMMA												
	COMPONENT 5: Earthquake Risk Modelling in Metro Manila												
	INDICATIVE ACTIVITIES												
5.1	Modification of MOU with PHIVOLCS to include new Schedule of Work												
5.2	Plans are developed for studies on active faults in the GMMA												
5.3	PHIVOLCS to undertake studies on active faults in the GMMA to determine frequency of earthquakes on the Marikina fault.												
5.4	Refinement, if necessary, of the earthquake vulnerability models developed under existing AusAID Activity in the Philippines												
5.5	Earthquake impact and risk modelling undertaken for GMMA and compared to results from MMEIRS study												
5.6	Earthquake risk information generated for GMMA is synthesised and maps and educational materials are produced.												

	Narrative Summary	Year 1 (July 1, 2010 – June 30, 2011)				Year 1 (July 1, 2011 – June 30, 2012)				Year 1 (July 1, 2012 – June 30, 2013)			
		Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4
	MILESTONES												
M5.2	New information is available on how frequently earthquakes occur on the Marikina fault.												
M5.3	Earthquake risk information is available for GMMA												
	COMPONENT 5: Establishment of governance arrangements and other activities, including those related to the broader Metro Manila Rehabilitation and Recovery (MMRR) Program												
	INDICATIVE ACTIVITIES												
6.1	GA provides engineering advice to the Socialised Housing Component of the MMRR program, as required												
6.2	Establish of a PSC for this Activity												
6.3	Recruit a Manila-based Project Coordinator for this Activity												
6.4	The PSC will develop a work plan for the scientific aspects of this Activity[7]. Progress will be measured against work plan.												
6.5	Information materials produced in this Activity are discussed with and distributed to stakeholders by the CSCAND agencies.												
6.6	A succession plan is developed which includes development of new program to include other hazards and climate change												
6.7	Development o final project report and AusAID Activity review												
	MILESTONES												
M6.1	Agreement on scientific work plan – with a copy provided to AusAID												
M6.2	Manila-based Project Coordinator is recruited												
M6.3	Information materials and maps are produced on earthquake and flood risk in the GMMA												
M6.4	An activity succession plan is provided to AusAID												
M6.5	Final project report is provided to AusAID												

[7] This workplan will be developed within the framework provided by this Activity Design Document

Annex 3: Activity Logical Framework – Approach to Monitoring and Evaluation

ctivity Objective: To analyse the risk from flood, severe wind and earthquake in the Greater Metro Manila Area through the development of fundamental datasets and information on hazard, exposure and ulnerability.			
Outputs	**Inputs**	**Objective Level Indicators**	**Means of Verification**
utcome 1: Base datasets fundamental to natural hazard risk analysis, such as high-resolution digital elevation models, are available in the Greater Metro Manila Area for the analysis of natural hazard risk and imate change impacts			
utput 1: High-resolution digital elevation data and nagery (LiDAR) for Metro Manila	An AusAID-led tender process undertaken with GA and NAMRIA, will be undertaken to determine the most cost-effective and efficient provider of high-resolution data (LiDAR) for Manila.	The high-resolution elevation data and imagery is available to CSCAND agencies to undertake flood, earthquake and severe wind risk modelling in the GMMA.	• A provider for LiDAR will be identified, and contracts in place, by December 2010. • LiDAR acquisition will occur between January and March 2011 • Final LiDAR products to be available by June 2011
utput 2: A seamless digital elevation dataset is vailable for the Greater Metro Manila Area	Training on dataset integration provided to NAMRIA staff by GA staff and staff resources provided by NAMRIA.	A seamless elevation dataset is available to CSCAND agencies to undertake flood, earthquake and severe wind risk modelling in the GMMA.	• Training will be provided to NAMRIA staff through staff exchanges between September 2010 and December 2011. • Seamless elevation dataset is available by December 2011.
utput 3: Increased knowledge and skills within AMRIA to acquire, process and store high solution digital elevation data and combine with athymetry to create a seamless elevation dataset.	Training, skills development and mentoring to NAMRIA technicians to run a tender process, process high-resolution data, develop a seamless digital elevation dataset using data from different sources and at different scales	NAMRIA staff are able to use skills acquired to develop high-resolution digital elevation datasets required for natural hazard risk.	• High resolution LiDAR data available for use by Philippine technical agencies by June 2011. • Seamless elevation dataset is available by December 2011. • Data storage in place at NAMRIA by June 2011.
utcome 2: Technical specialists have an improved understanding and capability to produce exposure databases, and exposure information is available in the Greater Metro Manila Area for the analysis of natural azard risk and climate change impacts.			
utput 4: Exposure database is available for the reater Metro Manila Area	Existing datasets collected from Local Government Units, Development Authorities, Cities and the National Statistics Office. Staff resources provided by the CSCAND agencies and training and technical support provided by GA	Exposure database is available to assess flood, severe wind and earthquake impacts and in the future other hazards and climate change impacts.	• Engagement with data providers between July 2010 and December 2011. • Pilot database is available for Taguig City by September 2011. Full database finalised by September 2012. • Training is provided to exposure database custodian October 2012 to March 2013 to ensure that long-term sustainability
utput 5: Increased knowledge and skills within the hilippines technical agencies to contribute to the evelopment of exposure data and use for natural azard risk assessments.	Training and skills development for CSCAND by GA staff. Significant staff resources provided by CSCAND and GA. Leverage off current AusAID funded program where an exposure database has been developed for a pilot location.	The Philippines technical agencies can use exposure data within the flood, severe wind and earthquake risk modelling environments.	• Training provided to GoP agencies between Sep 2010 and September 2012. • Workshop is held develop a strategy for exposure database development in the GMMA by Dec 2011.
utcome 3. Scientists within PAGASA and MGB are able to better assess the risk and impacts from flood in the Pasig-Marikina basin and have an improved understanding of these risks.			
utput 6: Flood hazard and risk information is vailable for the Pasig-Marikina watershed and the ity of Taguig.	A high-resolution Digital Elevation Model for flood catchments, including bathymetry. Existing river flow and rain data from Local Government Units and Authorities and PAGASA. Building vulnerability information for flood. Exposure Database. Staff resources provided by PAGASA and MGB. agencies and training and technical support provided by GA.	Flood hazard and risk information is available for the Pasig-Marikina basin and the City of Taguig	• Collection of existing flood data – July 2010 to June 2011 • Preliminary flood hazard information is available for Taguig City in June 2011. • Vulnerability models for flood developed by March 2012 • Flood inundation modelling completed by Dec 2012 • Flood risk information is available for the Pasig-Marikina basin by March 2013.

Outputs	Inputs	Objective Level Indicators	Means of Verification
)utput 7: Increased knowledge and skills within AGASA and MGB to assess flood hazard and risk, nd information developed for the Pasig-Marikina asin and the City of Taguig.	Training and skills development by GA staff with significant staff resources provided by PAGASA and MGB.	PAGASA and MGB are using a hydrodynamic model to determine flood inundation extents for different scenarios and are able to integrate this information with exposure and vulnerability to assess risk.	• Training provided to PAGASA and MGB staff on flood inundation and risk modelling between Sept 2010 and March 2012. • A succession plan is developed by March 2013 to reproduce the flood risk assessment in another watershed. •
)utcome 4. Scientists within PAGASA are able to better assess the risk and impacts from tropical cyclone severe wind and have an improved understanding of these risks in the Greater Metro Manila Area			
)utput 8: Severe wind risk information is available)r the GMMA.	A seamless moderate to high-resolution Digital Elevation Model for the GMMA. Existing PAGASA data on historic typhoon events. Building vulnerability information for severe wind. Exposure Database. Staff resources provided by PAGASA and training and technical support provided by GA.	Severe wind hazard and risk information is available for the Greater Metro Manila Area	• Collection of existing data – July 2010 to March 2011 • Modelling is used to determine the frequency and severity of typhoons affecting Manila – Jan to June 2011. • Vulnerability models for severe wind modified by March 2011 • Severe wind impact modelling completed by December 2012
)utput 9: Increased knowledge and skills within AGASA to assess tropical cyclone severe wind azard and risk, and information developed for the MMA.	Training and skills development by GA staff with significant staff resources provided by PAGASA.	PAGASA is using severe wind modelling to determine the impacts from different tropical cyclone events and are able to integrate this information with exposure and vulnerability to assess risk.	• Training provided to PAGASA staff on tropical cyclone severe wind and risk modelling between Sept 2010 and Dec 2012. • A succession plan is developed by March 2013 to reproduce the severe wind impact analysis for another community.
)utcome 5. Scientists within PHIVOLCS have an improved understanding of earthquake risk in the Greater Metro Manila Area			
)utput 10: Earthquake frequency and magnitude ıformation is better understood and earthquake risk ıformation is available for the GMMA	Earthquake catalogues, existing studies on earthquake, resources to undertake palaeoseismological investigations, vulnerability information and exposure database. Staff resources provided by PHIVOLCS and training and technical support provided by GA.	Technical specialists within PHIVOLCS have increased data to better constrain earthquake frequency and magnitude for the dominant Manila fault system. Earthquake risk information is available for the GMMA.	• Studies on active Manila faults are undertaken between Jan and December 2011. • Vulnerability information is finalised by June 2012. • Earthquake impact modelling is complete by December 2012.
)utput 11: Increased knowledge and skills within HIVOLCS to determine the frequency and impact f earthquakes	Significant staff resources provided by PHIVOLCS with training and mentoring provided by GA.	PHIVOLCS has an increased range of techniques that it can apply to understanding earthquakes in the Philippines.	• Training provided to PHIVOLCS staff on different earthquake assessment techniques.
)utcome 6. Relationships among AusAID, Geoscience Australia and NDCC-CSCAND is enhanced so that the latter have an increased capacity to access and use risk assessment knowledge and skills			
)utput 7: Tripartite MOU among AusAID, ieoscience Australia and NDCC-CSCAND cover ıe arrangements and outputs for this Activity.	Funding Agreement between AusAID and NDCC-CSCAND based on the GOA-GOP Memorandum of Subsidiary Arrangement on support to NDCC-CSCAND on natural hazard risk analysis. Activity Schedule between AusAID and Geoscience Australia based on Head Record of Understanding between AusAID and Geoscience Australia.	Relationship among AusAID, Geoscience Australia and NDCC-CSCAND expanded and deepened through agreement to work together through an equal partnership arrangement.	• MOU among AusAID, Geoscience Australia and NDCC-CSCAND is signed by September 2010. • Funding Agreement between AusAID and NDCC-CSCAND is signed by September 2010. • Activity Schedule between AusAID and Geoscience Australia is signed by September 2010.
)utcome 7. The Greater Metro Manila Area is better informed about its risk from earthquakes, flood and tropical cyclone severe wind			
)utput 8: Stakeholders in the GMMA receive, and re educated about, flood, severe wind and arthquake risk information that can be used to ıformation DRR activities, particularly land use lanning, contingency planning, and early warning ystem.	Flood, severe wind and earthquake risk products that are developed in Outputs 6, 8, and 10. Staff time from the CSCAND agencies to engage with communities, government and media on the results.	The results for earthquake, severe wind and flood are available for GMMA. The CSCAND agencies are trained in the methodologies to develop this for other locations.	• Technical notes on all outputs prepared as the Activity progresses. • Final risk and impact information is available by March 2013. • Training of local DCCs and emergency managers on use of risk information undertaken on 2012 onwards.Local DCCs and emergency managers undertake IEC activities for local communities from 2012 onwards.

ınnex 4: Activity Risk Management Plan

Source/s of Risk (how)	Risk Event (what)	Impact/s on Activity (why)	L	C	R	Risk Treatment/s	Responsibility	Timing
mited human sources in the ilippines chnical agencies.	Technical agencies have limited capacity, in terms of human resources, to engage with Geoscience Australia.	Activity does not achieve milestones and ultimately objectives within agreed timeframes.	P (3)	M (3)	High (3)	Milestones and objectives have been developed according to according to available human resources. The science plan for this Activity will also be developed in accordance with available staff resources.	Philippine technical agencies/ Geoscience Australia	Activity Planing, regular review and bi-annual PSC meetings
atural Hazard	A natural disaster occurs in the Philippines. The scale of the natural disaster will influence the consequence and thus risk to the Activity.	Technical agencies in the Philippines need to divert resources (human and financial) to responding to the natural disaster. As a result, Activity milestones may be delayed.	P (3)	N (1) to M (3)	Low (1) to High (3)	Risk treatments will depend on the scale of the natural disaster. For a smaller natural disaster that diverts resources for several months, milestones may need to be adjusted. For a large natural disaster (eg. 2004 Indian Ocean tsunami) the Activity goals and objectives may need to be adjusted.	Philippine technical agencies / Geoscience Australia / AusAID	Activity will be reviewed in the event of a natural disaster.
omplex emergency	A complex emergency (insurgency, rebellion, etc) that threatens security occurs in the Philippines.	Technical assistance of GA to the Philippines may be aborted if the Australian Government declares the Philippines, particularly Manila, as insecure and thereby declare a travel ban to the country for Australian citizens.	Rare (1)	N (1) to M (3)	Low (1) to High (3)	Risk treatments will depend on the scale of complex emergency. For complex emergency that delays Activity implementation and deliverables for several months, milestones may need to be adjusted.	Philippine technical agencies / Geoscience Australia / AusAID	Activity will be reviewed in the event of a complex emergency.
inancial strictions of the hilippines chnical agencies	Financial restrictions in the Philippines technical agencies limit their ability to engage with Geoscience Australia.	Restrictions in finances result in reduced human resources and therefore milestones are delayed.	U (2)	M (3)	Mediu m (2)	Activity planning takes into account available finances and human resources currently available and if these change over the course of the Activity then milestones and possibly objectives are modified accordingly.	Philippine technical agencies / Geoscience Australia	Ongoing
ack of appreciation f Geoscience ustralia personnel ı development ɔjectives	Geoscience Australia personnel do not understand and therefore do not support the development environment	Activity planning is overly ambitious and therefore milestones and objectives may not be met within agreed timeframes.	U (2)	M (3)	Mediu m (2)	Geoscience Australia personnel without prior experience working in a developing country are mentored by Geoscience Australia personnel who have considerable experience working in developing countries. Mentoring could also be provided by AusAID to GA personnel working in the Philippines.	Geoscience Australia / AusAID	Ongoing

Source/s of Risk (how)	Risk Event (what)	Impact/s on Activity (why)	L	C	R	Risk Treatment/s	Responsibility	Timing
ctivity exacerbates iff turnover in the ilippines chnical agencies	The training and staff development provided to the Philippines technical agencies exacerbates staff turnover as better trained staff move into higher paid jobs in private industry.	Achievement of Activity milestones and objectives may be delayed. Moreover, other activities within the technical agencies may be delayed due to staff loss.	U (2)	M (3)	Mediu m (2)	The treatment for this risk will be determined by individual Philippines technical agencies as this has been an on-going concern for many of these agencies. However, it is envisaged that training will be given to as many staff as possible so the there will be an institutional rather than just personal gain.	Philippine technical agencies	Ongoing and Bi-annual Planning Meetings
o complementarity tween Geoscience ustralia and the ilippines chnical agencies.	A lack of understanding between Geoscience Australia and the Philippines technical agencies.	Activity work plan is not followed, and milestone and Activity objectives are not met within agreed timeframes.	R (1)	M (3)	Mediu m (2)	Ensure that relationship building is a strong focus of the Activity approach through collaborative work plan development, training courses, staff exchange and frequent email and phone correspondence. Much of these relationships have already been developed through an existing Activity.	Philippine technical agencies / Geoscience Australia / AusAID	Scoping Missions, Activity Planing, regular communication, and bi-annual planning meetings
uccession Plan	Succession Plan for the Activity is not developed.	Risk analysis skills developed during this Activity do not have the resources for them to reach completion. Relationships established during this Activity lapse.	R (1)	M (3)	Mediu m (2)	Sufficient time is set aside in the Activity plan for the establishment of a Succession Plan.	Philippine technical agencies / Geoscience Australia / AusAID	Ongoing, Bi-annual Planning Meetings and particularly Year 3 of Activity.
usAID Manila ost	AusAID Manila Post is unable to contribute time to supporting this Activity.	Activity planning is compromised. Possible impact of Activity sustainability beyond the planned 3 years.	U (2)	M (2)	Low (1)	Support from the relevant AusAID Posts will be a key requirement of the Activity initiation.	AusAID Canberra and AusAID Manila Post	Activity Planning and bi-annual planning Meetings
lack of suitable uipment (e.g., mputers with rtain operating pacities)	Philippines technical agencies do not have equipment, such as computers with minimal operating capacities (RAM, memory etc), and therefore can not utilise training or specialised software provided by Geoscience Australia.	Activity milestones may be delayed or not be achievable. Knowledge and skill transfer is restricted.	U (2)	M (2)	Low (1)	Where deemed necessary, will be purchased using operational funds provided by AusAID to the Office of Civil Defence. Explore opportunities to utilise the high-performance computing capacity with the Australia-Indonesia Facility for Disaster Reduction.	AusAID / Office of Civil Defence	Ongoing

Project Name: Enhancing Risk Analysis Capacities for Flood, Tropical Cyclone Severe Wind and Earthquake for GMMA

mentation Plan

GA support: 4 FTE in FY10/11 and FY11/12 and 2.7 FTE in FY12/13

Components/Activities	Roles / Lead Agency		Remarks / Requirements		Milestones
	GA	CSCAND			
NT 1: Digital Elevation for Greater Metro al (GMMA)					
Activities					
ctivities for the tender process/acquisition of high ital elevation (LiDAR) data for the GMMA	Prepare draft terms of reference and tender documents - 90% complete	NAMRIA as lead (?) All agencies identify priority needs and geographic coverage. OCD and NAMRIA work together on secure GOP-CAB approval for conduct of LIDAR survey.		M1.1	Tender process for LiDAR is complete and supplier identified
f high resolution digital elevation data for the GMMA	Manage tender process	Assign a representatve to participate to tthe Tender Assessment Panel.			
amless elevation dataset	Support CSCAND (GA to provide hands on training, mentoring, coaching as requested / required within the time frame)	NAMRIA to proess data with other agencies.	NAMRIA Requirements: Hardware & software for processing raw LiDAR data. Cost will be based on GA computation	M1.2	A seamless elevation dataset is available for the GMMA
ocol for sharing of LIDAR data	Provide information on Australian and international practice, input from Geoff Lawford	NAMRIA with all CSCAND agencies		M1.3	LIDAR data ownership transferred to GOP
nership of LIDAR data to GOP	Help facilitate transfer to GOP	NAMRIA to host the LIDAR data.		M1.4	Protocol for data sharing developed
T 2: Development of an Exposure Database for ro Manila Area (GMMA)					
Activities					
t of a strategy for the collection and development of ormation	GA to provide inputs and experience based on the Iloilo pilot project and GA's experience with NEXIS - 1.5 FTEs	PHIVOLCS as lead in collaborative effort by CSCAND agencies – 2 years, initial period 1year using NSO data - 1.5 FTEs at initial phase of the project. More FTE % as data needs processing. This includes data collection and data harvesting from existing national and local sources (eg population and census data).	Methodology under QUIVER Project for application to GMMA with enhancements – 2 quarters, using NSO data		
t with LGUS in GMMA on exposure information		OCD to coordinate with CSCAND			
etings/forum to build awareness of LGUs on importance nents of building an exposure information	GA to participate as resource speakers if requested and timings allow. Jan/Feb 2011 mission will fit in well.	OCD to organize with PHIVOLCS, PAGASA, MGB			
rkshop on exposure database development	GA to run ~2 day workshop on database development in Manila after requirements are agreed to.	Participants from CSCAND and LGUs. OCD and Project Manager to organize.		M2.1	Workshop on risk analysis and exposure
nt of a pilot exposure database for Taguig City	Build on the Iloilo pilot. Anticipate that this is the first phase of the GMMA work.	Use this as the pilot framwork for 2.3	- 18 brgys. critical facilities-bldg level. - Survey- 18 mos, NSO data-1 yr. - Requirements: RICS set-up (6) - Research Assistants (5 pax)	M2.2	Pilot exposure database for Taguig City
guig City in data collection and provision		OCD to organize with PHIVOLCS, PAGASA, MGB			
nt of a preliminary exposure database for GMMA (brgy - 2yrs.)	On-the-job training offered by GA for CSCAND. Alongside activity 2.3.		Only for brgy level NSO data	M2.3	Pilot exposure database for GMMA
MA LGUs in data collection and provision		OCD to organize with PHIVOLCS, PAGASA, MGB			

th GoP partners to demonstrate preliminary exposure d to determine custodian of exposure database	GA to participate as supporting workshop presenters.	- PHIVOLCS as resource speakers - PHIVOLCS as temporary custodian	- Plans and initial and preliminary exposure database is in near NEXIS-like form - Consider linkage with CRISP (Climate and Disaster Risk Information Support System for Planning) being developed under Integrating DRR-CCA Project	M2.4	Workshop on draft exposure database
it of exposure database framework and initial exposure ne along side 2.1	Provide information on Australian and international practice. Delivery by GA along side CSCAND (as part of 2.1)	OCD to house the system	- Original activity is not achievable within the project period. ??? - Assistance needed for sustainability: Development of an infrastructure (inmcluding a server, suggested to be housed at OCD as NDRRMC operating arm)	M2.5	Exposure database framework and initial database produced
ided to custodian of exposure database to ensure pgrades, storage and delivery occurs	GA support as required by CSCAND.	CSCAND agencies, specifically OCD and PHIVOLCS.			
3: Flood Risk Modelling in Metro Manila					
Activities					
fundamental flood data to support flood modelling in the na basin	Support PAGASA upon request using previous experience.	- PAGASA to lead - Conduct of workshop for data inventory must be done to include academe (UP-NIGS, ICE, MO, NHRC, CSCAND)			
vant academic, research and professional organizations		Identify relevant institutions (UP-NICS, ICE, MO, NHRC) that could contribute to the work		M3.1	MOU/s with relevant institutions forged
vorkshop for data inventory	GA to contribute presenter to the workshop and present examples	- OCD to organize with PAGASA. - CSCAND with academe (UP-NIGS, ICE, MO, NHRC)			
it of preliminary flood *hazard* information for Taguig City oader MMRR program		To be undertaken by PAGASA and MGB, c/o CSCAND-UNDP GMMA Project	Recommend to be deleted under this Project, as this will be done under the GMMA CSCAND-UNDP	M3.2	Preliminary flood *hazard* information is provided to Taguig City
od hazard models are compared to select the most model for use in Manila	Support PAGASA as requested to identify possible flood hazard models. Workshop outcomes, PAGASA lead and GA support.	PAGASA to lead, share existing models (HECRAS + ANUGA+ academe models?)			Workshop is held on the available flood models and the most appropriate selected
d MGB undertakes hydraulic modelling in Pasig-Marikina	On-the-job training by GA for CSCAND in Manila. Based on the models selected in 3.3	PAGASA and MGB	Based on selected model in 3.4??? Why no training for hydraulic modelling? PAGASA & MGB has currently low capacity.		
rovided to PAGASA and other CSCAND agencies staff dation modelling for GMMA	On-the-job training by GA for CSCAND as per 3.4	PAGASA and other CSCAND agencies			
ability models for flood are developed through and collaborative analysis (fragility curves)	GA support Philippines engineers and PAGASA in developing these models.	PAGASA and local engineering community	Vulnerability models (or fragility curves) will be developed in collaboration with Philippine engineers, PAGASA and Geoscience Australia. The process for developing these curves will be discussed as part of the detailed project planning which will occur in the Qtr 1 of the 2010/2011 financial year.	M3.3	Flood vulnerability models are finalised for use in risk assessment
ssessment for the Pasig-Marikina basin is undertaken by exposure and flood vulnerability models into flood model	On-the-job training by GA in Manila for CSCAND. Support as requested from CSCAND.			M3.4	Flood hazard inundation maps are available for GMMA
NT 4: Tropical Cyclone Severe Wind Risk Modelling anila					
Activities					

ssary tropical cyclone datasets for project, including opical cyclone severe wind impacts from previous	Advice on existing methods deployed at GA	PAGASA as lead			
ant academic, research and professional organizations		Identify relevant academic and research institutions that could contribute to the work (i.e., ICE)		M4.1	MOU/s with relevant institutions forged
odelling to determine the frequency and severity of nes affecting Manila area	On-the-job training offered by GA for CSCAND in Manila	PAGASA with ICE?		M4.2	The frequency and severity of tropical cyclones affecting the GMMA is quantified
re wind multipliers for the GMMA	On-the-job training offered by GA for CSCAND in Manila	PAGASA with ICE?	Dependent on the availability of LiDAR processed data, to be done with GA		
f necessary, of the severe wind vulnerability models nder existing PAGASA-GA activity in Legazpi	GA support Philippines engineers and PAGASA in developing these models.	PAGASA with ICE	- No existing result from current GA-PAGASA acitivity in Legazpi	M4.3	Severe wind vulnerability models are finalised for use in risk assessment
opical cyclone severe wind impact modelling in the pilot ig City	As the first phase of the GMMA. On-the-job training by GA	PAGASA with ICE?	Dependent on the availability of exposure datasets	M4.4	Severe wind impact modelling is complete for Taguig City
evere wind impact modelling for GMMA	Support for the remainder of the GMMA upon request	PAGASA with ICE?	- Will be using NSO data. - Subject to further discussion, if it is possible in the given project period	M4.5	Severe wind impact modelling is complete for GMMA
one severe wind risk information generated for GMMA d and maps and educational materials are produced d in a web-based information system.		OCD with PAGASA	To be deleted in this component, moved to Component 6: Consolidation & production of risk information (e.g. risk maps) and IEC	M4.6	Tropical cyclone severe wind risk information is available for GMMA
T6's Earthquake Risk Modelling in Metro Manila					
Activities					
veloped for studies on active faults in the GMMA	GA support as requested by PHIVOLCS	PHIVOLCS as lead			
o undertake studies on active faults in the GMMA to equency of earthquakes on the Marikina fault	Provide input and support upon request				
if necessary, of the earthquake vulnerability models nder existing PHIVOLCS-GA activity in Iloilo City	GA support using the Iloilo experience as a starting point.				
impact and risk modelling undertaken for GMMA and results from MMEIRS study	GA to support the GMMA project				New information is available on how frequently earthquakes occur on the Marikina fault.
0: Consolidation and production of risk (e.g. risk maps, IEC materials) and Conduct of IEC					
Activities					
orum to increase awareness of GMMA LGUs and s on objectives of the Activity	GA can assist if required	OCD as lead, in coordination with other CSCAND agencies			
institutionalize collaboration with LGUs in GMMA and olders as needed (i.e., MMDA, LC/MP, LLDA) on activity tion		CSCAND		M6.1	Forged MOUs with LGUs and relevant stakeholders on activity implementation
institutionalize partmership with relevant academic, d training institutions for capacity building and IEC LGUs and communities		CSCAND	Link to other activity components	M6.2	Forged MOUs with academic, research and training institutions on provision of capacity building for LGUs and communities
d conduct capacity building activities for LGUs and s	GA can assist if required	CSCAND		M6.3	Capacity building for LGUs and communities on use of risk information developed and conducted
earthquake, flood, and tropical cyclone severe wind risk for GMMA, produce maps and educational materials, sent in a web-based information system.	Reviews as requested / required		From items 3.8, 4.7, and 5.5	M6.4	IEC Materials developed

T 7: Project management: Establishment of arrangements and other activities					
Activities					
partite agreement among AusAID, CSCAND and GA	AusAID as lead				Signed agreement/MOU among AusAID, CSCAND and GA
mponent Executive Board and organize regular enda, kit, minutes)		OCD as lead			Established CEB and conducted regular semi-annual meetings
mponent Steering Committee and organize regular enda, kit, minutes)		OCD as lead			Estanlished CSC and conducted regular quarterly meetings
nila-based Project Manager (confirm TORs, advertise, rview, recommend, decision, contract)	AusAID as lead. GA representative as part of selection panel.	CSACND representative as part of selection panel.			Project Manager recruited
ork plan for the scientific aspects of this Activity. be measured against work plan.	GA and CSCAND to work collaboratively	GA and CSCAND to work collaboratively			Agreed detailed/scientific work plan
finalize Annual Work Plans and Accomplishment Report ncial statement	GA to provide inputs	OCD as lead with CSCAND providing inputs			Developed Annual Work Plans and Accomplishment Report including financial statement
finalize M&E plan based on the logical framework	GA to provide inputs	OCD as lead			Finalized M&E plan
finalize a Comminications and Public Advocacy		OCD as lead	If possible, link with other AusAID-supported activities (i.e., CSCAND-UNDP GMMA Project, READY Project, Integarting DRR-CCA Project)		Finalized a Comminications and Public Advocacy Strategy
Mid-Term Review	GA to participate	OCD as lead			Conducted Mid-Term Review and and submitted report to AusAID
itutional linkages and capacity through technical study hanges	AusAID and GA	CSCAND	Additional activity, to be participated in by CSCAND, thrice in the project period		Linkages built through conduct of technical study tour and exchanges
uccession plan (e.g., utilization of project outputs, activity ards and climate change)	GA to provide inputs	OCD as lead			Developed Activity succession plan and submitted report to AusAID
t of Activity Completion Report and AusAID Activity	GA to provide inputs	OCD as lead			Submitted to AusAID the Activity Completion Report

orkplan will be developed within the framework provided by this Activity Design Document. Progress will be measured against work plan