CTCN
CLIMATE TECHNOLOGY CENTRE & NETWORK

Instructions to lead Implementers for drafting the Technical Assistance Closure and Data Collection Report

Objective of the technical assistance (TA) Closure Report and Data Collection Report:

- To communicate publicly in one synthesis document a summary of progress made and lessons learned under the technical assistance (TA) towards the anticipated impact (main template).
- Compile TA-specific information required for internal use in donor and UN reporting (annex 1).

Steps for completing the TA Closure report:

1. The lead TA implementer drafts the report at the end of the assignment as a final deliverable /product. The TA Closure report will capture all activities conducted under the TA hence it is expected that duplication of information will occur from earlier documents. Please copy and summarise relevant material from previous TA outputs/deliverables and the Response Plan, as relevant.
2. A CTCN Manager will review and revise the report before final approval by the CTCN Director.

Important note on public and internal use of the closure report:
Once approved by the CTCN Director, the TA Closure and Data Collection Report will be a public document available on the CTCN website. Annex 1 is for internal use only and will not be publicly available.

Closure and Data Collection Report for CTCN Technical Assistance

1. Basic information

Title of response plan	**Hydrodynamic modelling for flood reduction and climate resilient infrastructure development pathways in Jakarta**
Country / countries	**Indonesia**
NDE focal point and organisation	Ardina Purbo, ardinapurbo@gmail.com Indonesia's Ministry of Environment and Forestry
Proponent focal point and organisation	Tusy A. Adibroto, tusy.adibroto@bppt.go.id Jakarta Research Council (JRC)
Sector(s) addressed	Water Resource and Disaster Management
Technologies supported	Hydrodynamic modelling and Socio economic analysis
Implementation period and total duration	18 months (15 July 2016 – 31 December 2017)
Total budget for implementation	239.798 USD
Designer of the response plan	UNEP DHI Partnership
Implementer of response plan	UNEP DHI Partnership Supporting: Jakarta Research Council (JRC) and Agency for Assessment and Application of Technology (BPPT)

2. Summary of all activities, outputs and products that contribute to the expected impact of the technical assistance.

Description of delivered outputs and products as well as the activities undertaken to achieve them. In doing so, review the log frame of the original response plan and refer to it as appropriate	4 main activities were conducted during this technical assistance: • Activity 1A: Develop a high resolution hydrodynamic model for a study area in Jakarta that is capable of producing flood levels under differing climate and/or engineering scenarios. • Activity 1B: Carry out a socio-cultural survey to capture the views of the local residents within the study area to the risks of flooding along with adaptation and mitigation options to alleviate these risks. • Activity 1C: Enable local agencies to further develop the model to explore a wider range of scenarios. • Activity 2: Allow local authorities to take the findings from the technical assistance into account when formulating plans to provide a sustainable future for the area. • Activity 3: Initialise future funding opportunities to further expand the utilisation of the hydrodynamic model. • Activity 4: Produce a report dealing with the lessons learned in the implementation of the hydrodynamic flood model and socio-cultural risk assessment in Jakarta. **Deliverables:** - Interim report - Hydrodynamic model report - Socio economic study report - Policy recommendation report - Lesson learned report - Substantive report
Partners organisations	• The implementers worked closely with the Ministry of Environment and Forestry (NDE and project beneficiary) and the Government of Jakarta Province. • The implementation was supported by Jakarta Research Council (JRC) and Agency for Assessment and Application of Technology (BPPT) • Key local stakeholders engaged include: National Bureau for Meteorology and Geophysics , Agency for Ciliwung Cisadane Watershed, Jakarta Agency for Water Resource, BPPT, Agency for Geospatial and Informatics , Jakarta Agency for Spatial Planning
Beneficiaries	The main project beneficiary and project proponent was the government of DKI Jakarta Province
Methodologies applied to produce outputs and products	The methodology to produce output and products is described as follow: **Focus group discussion** Focus group discussion applied in every activity of this technical assistance. In activity 1 FGD was used to obtained information about data availability for hydrodynamic modelling, and also to collect data related to social, economic and living culture of the of the people in the study area. FGD was also use to socialize this technical assistance activity to the people who live in the study area. Besides that, FGD was used to socialise the modelling result and to formulating the policy recommendation which includes the local stakeholder.

	High resolution hydrodynamic modelling • The river modelling covered all area in Ciliwung Cisadane catchment including DKI Jakarta province and its surrounding cities: Bogor, Depok, Tangerang, and Bekasi. Detail river network and cross sections obtained from Lidar DEM with 1.3 m resolution • The flood plain was model in 10 resolution • And several scenario has been modeled • Several scenarios have been simulated such as: extreme event with 50 year return period, climate change and land subsidence, etc. **Three level analysis to obtain social economic condition of the study area** The first level, called as a macro study, aimed to show an overview of economic and demographic characteristics of the study area as well as consequences of flooding in recent years. The second level, called as a meso study, aimed to obtain information on social, economic, and cultural based on perspectives of community representatives. The third level, called as a micro study, aimed to obtain more detailed information related to the characteristics of the economic, social, and cultural of communities in the pilot area. In detail, micro study collected various information i.e., perceptions on flood risk, vulnerability assessment, resilience social, potential damage (flood exposure), the level of acceptable risk, mitigation and adaptation choices, and the willingness to be relocated to support both mitigation and adaptation publics.
Deviations	• The data required was substantial and was hosted in several institution. The process required a lot of direct contact and lobbying with government's institution so that the process took longer time than the time allocation. Data processing and model calibration data also took longer time because the data available was not all in 'ready to use' state condition. • The Constraints that occur in the hydrodynamic model development process had a significant impact on the next activity of socio economic impact assessment. Previously, socio-economic surveys were planned to be executed after hydrodynamic modelling activities were completed, but eventually it was done in parallel with model development. The basis of sample survey sampling is finally taken based on information from Focus Group Discussion (FGD) activities. The timing of survey activities coincided with governor election (PILKADA) which turned out to be also a constraint in the implementation of surveys and FGDs. • Transfer technology activities which ran in parallel with model development has been completed, a series of training and workshops have been implemented as a form of knowledge transfer from DHI as the technology holder to the BPPT / JRC as recipient. The technology transfer activity has increased the recipient capabilities to be able to duplicate and to build their own model. Unfortunately, this transfer technology activity is constrained by the license of software that expires when this technical assistance activity is completed.
Achieved or anticipated gender benefits from the TA	While this TA did not focus specifically on gender issues, it is expected that this TA will deliver a range of benefits, including open access to flood risk assessment result especially the hydrodynamic model configuration so that local stakeholder can improvise for further research and different scenario.
Achieved or anticipated co-benefits from the TA	Strengthen local capacity to enable local stake holder to conduct hydrodynamic modelling, and tried various scenarios to the model, the TA also enhance the local stakeholder capacity to replicate the hydrodynamic modeling in other location.

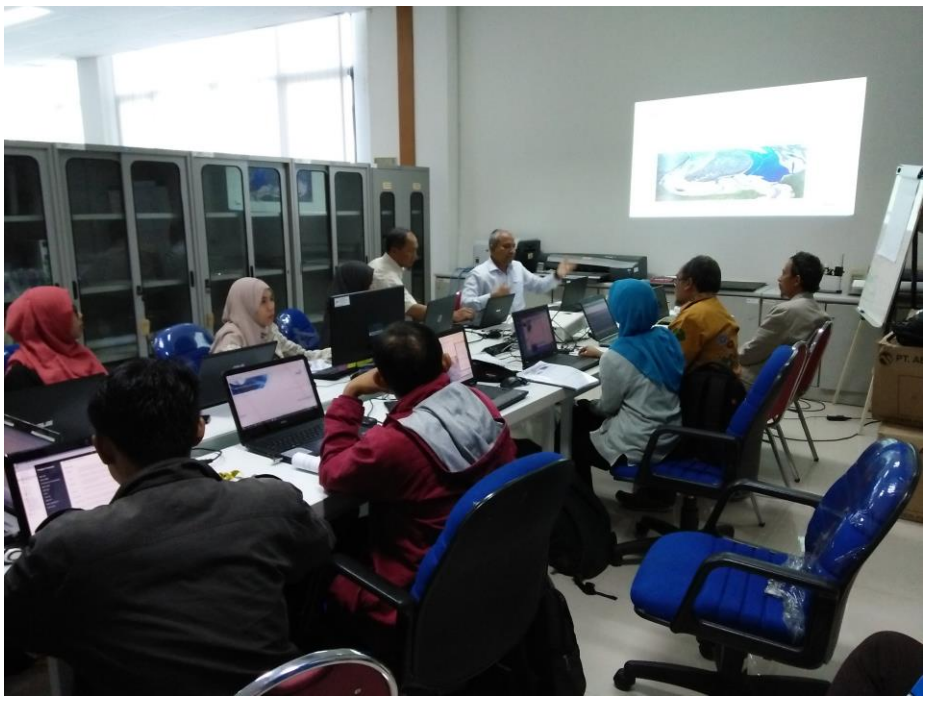
Anticipated follow up activities and next steps	A series of report was produced as output from this technical activites to support local stake holder This activities is only an initial activity toward creating Jakarta as a flood resilient city. This pilot project is allow to demonstrate the how various factors contributing to the flood pattern in Jakarta area. the output of the activity can be used as starting point to decide best solution for flood problem in Jakarta. The initial result has been obtained from this TA activity, the next step would be trying various scenarios to find the best solution to overcome flood problem in Jakarta. In the Activity 3, the idea for the next activity has been formulating in the form of future funding stream proposal. Several funding donor has been contacted (such as World Bank and KOICA). KOICA has given good response about the proposal.

3. Lessons learnt

	Lessons learnt	**Recommendations**
Lessons learnt for this TA. Describe essential factors contributing to successful implementation, as well as specific challenges. Recommendations include considerations on what would need to be in place for increasing success of similar efforts (i.e. regulatory, legal, stakeholders, communication, etc.)	• One of the key complexities of the TA is that there are many different stakeholders that do not necessarily communicate well with each other • Lack of comprehensive data availability and delays in obtaining data • Having a local consultant who could engage directly with the NDE and local stakeholders was very useful	Continuous engagement from the NDE, project beneficiaries and relevant stakeholders is important to ensure the recommendations and outputs of the TA are relevant.
Lessons learnt related to climate technology transfer Describe opportunities, challenges and barriers for the use and deployment of the technology or technologies supported by the TA. The objective is to identify specific success factors for technology transfer	Related to the participant of the technology transfer activity, the current training participant only came from two agency, i.e. Agency for the Assessment and Application of Technology (BPPT) and Meteorological, Climatological, and Geophysical Agency (BMKG). These agency did not represent all the agencies that related to Jakarta flood risk management	The training participant should include all the representative from all Regional Jakarta Work Unit (SKPD), related institute/agency in Jakarta. So that all these work unit have the same knowledge and perception related to flood problem in DKI Jakarta. The training participant of this technology transfer is also expected to following all the training as a whole package, so that the material of the training can be transferred and well received by the participant.

	The availability of the software license or the training is limited, the number of the software licenses was adjusted based on the list before the first training. The new participant that was not listed as a training participant, cannot use the software license, since the number of software license available is limited based on the list that given before the first training	The training participant list should be fixed before the first training, and should not change up to the last training
Lessons learnt related the CTCN process for TA	CTCN has been very cooperative when it comes to responding the problem which encountered during the TA execution and giving opportunity to make innovation and improvisation according to the local condition as long as a good communication between CTCN and us is maintained.	

4. Illustration of the TA and photos



Session 2 of Hydrodynamic model trainning, Serpong 5-9 December 2016

FGD with industry representative of the study area, Jakarta January 2017.

Final workshop meeting, Jakarta 26 September 2017

5. Information for TA impact description

Challenge: Approx. 500 characters with spaces	Jakarta as the capital city of Indonesia and also centre of economics, culture and politics of Indonesia, is increasingly threatened by flooding from a combination of land subsidence, rising sea levels particularly with relation to the spring tide cycle and higher river levels resulting from potentially increasing rainfall intensity and land use changes within the catchment areas.
CTCN Assistance: 2 to 4 bullet points. Approximately 450 characters with spaces	The objectives of CTCN technical assistance are to better assess flood risks and hazards, and design climate-resilient pathways to reduce the magnitude and scale of the impacts from the flooding. The short-term objectives of the technical assistance include: • To develop a high-resolution hydrodynamic model for a pilot project area in Jakarta that is capable of producing flood levels under differing climate and/or engineering scenarios. • To carry out a socio-cultural survey to capture the views of the local resident within the pilot project area to the risks of flooding along with adaptation and mitigation options to alleviate these risks. • Through a period of technology transfer, including data transfer and training, the model is to be made available to relevant agencies in Jakarta. Specific aspects of the technology transfer will include flood modelling and hazard mapping. • A series of recommendations aimed at local authorities to reduce flood risks. These will be obtained through expert-led workshops incorporating results from the project along with views of relevant stakeholders. These recommendations will allow local authorities to take the findings from the project into account when formulating plans to provide a sustainable future for the area. • To initialize future funding opportunities to further expand the utilization of the hydrodynamic model, e.g. to extend the spatial limits to incorporate all flood risk areas in and around Jakarta, or to incorporate additional components within the model.
Anticipated impact: 2 to 4 bullet points to summarise anticipated	• One of this technical assistance vision is the green blue city concept. the brown industry area in the project area was proposed to be rearranged as a

impact. Approximately 250 characters with spaces. As a minimum, please include one of the following: i) Quantity of greenhouse gas emissions reduced, avoided or sequestered; or ii) Number of people with increased capacity to adapt to the impacts of climate variability and change.	blue green area with estimated blue area around 200 ha of course this will reduced the green gas house emission, but the exact number of this reduction has not been calculated. • The TA assistance is expected to give positive impact to approximately 309.245 people who lives in the pilot area. The area pilot project area which consist of three polders (Pantai Indah Kapuk 8, Kapuk Poglar, Kapuk Muara) ian area with high density population. Based on statistic report of DKI Jakarta in the socio cultural risk report study, Kapuk Poglar polders which belong to Kapuk and Pejagalan sub-distict shows increasing density population trend during the period of 1995-2015. • Anticipated financial support of USD 5 million to Jakarta for upscaling the modelling to other polder areas
Linkages and contribution to NDC: 2 to 4 bullet points. Approximately 350 characters with spaces	Based on the draft of First Nationally Determined Contribution (INDC) of Republic Indonesia submission for the COP21 climate summit, this TA is participates to : • Indonesia's Social and Livelihood Resilience in the Identification of highly vulnerable areas in local spatial and land use planning efforts • And Indonesia's Ecosystem and Landscape Resilience in creating resilient cities
The narrative story: Approximately 1200 characters with spaces	Jakarta as both the provincial capital and the state capital is facing many problems due to climate change effect. Flooding is one of those problems that caused huge damage once occurred in this capital city. This problem should be solved by both technological approach and policy approach. The Provincial Government of Jakarta (DKI Jakarta), Indonesia, through Jakarta Research Council (JRC) requested support from the CTCN to develop a hydrodynamic modelling for flood reduction and climate resilient infrastructure development pathways in Jakarta. The technical assistance offered through CTCN with DHI as implementer aims at enhancing the capacity of relevant local government agencies to address a number of flood related issues, conducting socio-economic surveys and providing capacity building in flood modelling to the technical staff of JRC, Agency for the Assessment and Application of Technology (BPPT) and Meteorological, Climatological, and Geophysical Agency (BMKG). One of the biggest achievements of the activities was the integration of the CTCN's policy recommendation in the Regional Mid-Term Development Plan of DKI Jakarta Province (RPJMD) 2018-2022.
Contribution to SDGs: Always include contribution to SDG 13, and to the extent possible, please include contribution to 2 other SDGs, describing the contribution with a few sentence for each SDGs concerned. A complete list of SDGs and their targets is available here: https://sustainabledevelopment.un.org/partnership/register/	The SDGs that have been reached in this TA are Goal no.11 (Make cities and human settlements inclusive, safe, resilient, and sustainable) and Goal No. 13 (Take urgent action to combat climate change and its impacts). Regarding goal no.11, the result of social risk assessment (activity 1b) will help to decrease the direct economic losses relative to global gross domestic product caused by water-related disasters. Through activity 1 (flood risk assessment), this TA also helped support positive economic, social, and environmental links between urban, per-urban, and rural areas by strengthening national and regional development planning. Moreover, by formulating policy recommendation (activity 2), this TA already tried to formulate the integrated policies and plans for human settlement that can adapt to climate change and resilient to disaster. Lastly, during technology transfer (activity 1c) and further funding stream (activity 3), this TA already support developed countries institution (in this case, JRC), including through financial and technical assistance.

	In accordance with goal no.13, the result of this TA is expected to strengthen resilience and adaptive capacity to climate-related hazards and natural disasters (especially flood). Then, this TA also integrate climate change measures into national policies (in this case RPJMD). Lastly, this TA improve local institution capacity on climate change mitigation, adaptation, impact reduction, and early warning.

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Annex 1 (for internal use in donor and UN reporting)

A. Standardised CTCN performance indicators for donor and UN internal reporting

Please add quantitative values for indicators relevant to the particular TA in the list below. Non-relevant indicators should be left blank. Please only fill in the table for activities and outputs conducted or produced directly by the CTCN assistance.

CTCN standardised performance indicators	**Quantitative value**	**Qualitative description** *List the various elements corresponding to the quantitative value*
1. Overview		
Number of active person-days (not full duration) of technical assistance provided to counterparts or stakeholders by international experts and consultants	22	15 Technology transfer recipient 7 Consultants
Number of active person-days (not full duration) of technical assistance provided to counterparts or stakeholders by national experts and consultants	135	15 Technology transfer recipient 7 Consultants 112 Key Stakeholders
Number of for external communication and outreach activities conducted to showcase the assistance (news release, newsletters, articles on website, etc.)	3	CTCN website: https://www.ctc-n.org/news/ctcn-indonesia-hydrodynamic-modelling-flood-reduction-and-climate-resilient-infrastructure DHI website: https://www.dhigroup.com/global/news/2016/10/climate-change-adaptation-a-priority-in-flood-threatened-indonesia CTCN website: video (upcoming)
2. Events (other than trainings) held as part of the assistance		
Number of international and multi-country (at regional or sub-regional level) technology and knowledge sharing events	3	• South-south cooperation workshop in Jakarta (October 2017) • Dissemination workshop in Bangkok (November 2017) • Study Visit to DHI Singapore (December 2017)
Number of participants in the events above	40	
Number of national technology and knowledge sharing events		
Number of participants in the events above	15/54	JRC, BPPT, BMKG
Number of public-private events related to technologies	1	Dissemination workshop at Bangkok (BMA) hosted by UNEP (November 2017)

Number of participants in the events above	40	
3. Training and capacity building activities conducted during the assistance		
Number of training sessions and capacity strengthening activities	**4**	Training and Workshop (15 days)
Number of people who received the training	**15**	
Number of men	**10**	
Number of women	**5**	
Total number of organisations trained		
Number of research organisations, laboratories and universities		
Number of private companies		
Number of cities and local government	**4**	JRC, BBTP, BMKG, DKI
Number of communities		
Number of ministries	**1**	Ministry of Environment and Forestry
Number of specialised governmental institutions		
Number of non-profit organisations		
Level of satisfaction of participants after the training (from training feedback form). Categories include: From very satisfied, satisfied, partly not satisfied, not satisfied at all		
Percentage of participants that increased their capacities thanks to the training (from training feedback form). Categories include: Significantly, very, moderately, to none.		
Percentage of men		
Percentage of women		
4. Tools, technical reports and information material supported by the assistance		
Total number of tools, technical reports and information material supported by the assistance (excluding mission, progress and internal reports)	7	**Tools:** MIKE HYDRO RIVER software **Reports:** - Hydrodynamic model report - Socio economic study report - Training report - Policy recommendation report - Lesson learned report - Substantive report
Number of tools strengthened, revised or developed	8 scenarios	Developing 8 flood model scenario using MIKE HYDRO RIVER software. Two of the scenarios were used as baseline and has been verified by previous developed model and flood events.
Number of technical reports strengthened, revised or created	2	- Hydrodynamic model report - Socio economic study report

Number of other information materials strengthened, revised or created	3	- Policy recommendation report - Lesson learned report - Substantive report - Training Report
5. Policies, laws and regulations supported by the assistance		
Number of policies, strategies, and plans drafted addressing climate change adaptation		
Number of policies, strategies, and plans drafted addressing climate change mitigation		
Number of documents developed to inform other policies, strategies, and plans on climate change adaptation (sectoral strategies, national development plans, etc.)	1	- Policy recommendation report
Number of documents developed to inform other policies, strategies, and plans on climate change mitigation (sectoral strategies, national development plans, etc.)	1	- policy note report
Number of laws, agreements, or regulations drafted addressing climate change adaptation		
Number of laws, agreements, or regulations drafted addressing climate change mitigation		
Number of documents developed to inform laws, agreements, or regulations on climate change adaptation		
Number of documents developed to inform laws, agreements, or regulations on climate change mitigation		
6. Institutional strengthening supported by the assistance		
Number of institutional arrangements in place to coordinate near and long-term national adaptation plans (NAPs)		
Number of organisations with increased technical capacity to advance near and long term national adaptation plans (NAPs) which integrate EbA		
Number of organisations with increase awareness and knowledge among countries to better own and drive national adaptation planning processes		
7. Partnerships and cooperation		

Number of private companies directly engaged in the assistance (that partnered with the proponent, the beneficiaries or the CTCN to implement the assistance)	1	DHI
Number of South-South collaboration enabled during or through the assistance, when stakeholders from other countries were involved in the assistance	1	Thailand
Number of North-South collaboration enabled during or through the assistance, when stakeholders from other countries were involved in the assistance	**2**	Singapore, Denmark
Number of Triangular collaboration enabled during or through the assistance, when stakeholders from other countries were involved in the assistance	**1**	Proposed collaboration with Korea through KOICA

B. Indicators of anticipated impacts that may occur after the TA is completed

CTCN standardised performance indicators	**Quantitative value** Insert the request value and unit	**Content** List the elements included in the number provided	**Expected timeline** Indicate when the indicator and value are expected to be achieved	**Responsible institution** Indicate the institution(s) that will play leading role in enabling the indicators and anticipated values to be achieved
16. Anticipated finance mobilised				
a) Anticipated amount of public/donor investment mobilised (in USD) from the beneficiary country for climate change activities as a result of the TA				
b) Anticipated amount of public/donor investment mobilized (in USD) from international and regional sources for climate change activities as a result of the TA	$5m (pilot proposition)	Cost of software and hardware for proposed 3 polders management	5 years	NA
c) Anticipated amount of private investment mobilised (in USD) from the beneficiary country for climate change activities as a result of the TA				
d) Anticipated amount of private investment mobilised (in USD) from international and regional				

sources for climate change activities as a result of the TA				
17. Policies				
a) Anticipated number of policies, strategies, plans, addressing climate change mitigation officially proposed, adopted, or implemented as a result of the TA				
Anticipated number of policies, strategies, plans, addressing climate change adaptation officially proposed, adopted, or implemented as a result of the TA.	1	Regional Mid-Term Development Plan of DKI Jakarta Province (RPJMD) 2018-2022		
b) Anticipated number of laws, agreements, or regulations addressing climate change mitigation officially proposed, adopted, or implemented as a result of the TA.				
Anticipated number of laws, agreements, or regulations addressing climate change adaptation officially proposed, adopted, or implemented as a result of the TA.				
c) Anticipated laws, policies, regulations, strategies and plans where climate change mitigation will be mainstreamed as a result of the TA				
Anticipated laws, policies, regulations, strategies and plans where climate change adaptation will be mainstreamed as a result of the TA				
18. Anticipated number of public-private partnerships created	2	Korean Company (TBD), DHI	Within 2 years	
19. Anticipated twinning arrangements created as a result of the TA				
20. Anticipated number of technology projects prepared and implemented to support action on low emission and climate-resilient development	1			

21. Anticipated number of strengthened National Systems of Innovation and technology innovation centres in recipient country	1	Strengthening Flood early warning system		
22. Anticipated Clean Energy Generation Capacity Clean supported by the TA that has achieved financial closure				
23. Anticipated and projected GHG reductions. Quantity of greenhouse gas (GHG) emissions, measured in metric tons of $CO_{2\text{-}e}$, anticipated to be reduced or sequestered as a result of projects supported by the TA				
24. Anticipated clean energy generation capacity supported by the TA that has achieved financial closure				
25. Anticipated and projected greenhouse gas emissions reduced or avoided through 2030, in metric tons of $CO_{2\text{-}e}$, from adopted laws, policies, regulations, or technologies related to clean energy/sustainable landscapes as a result of the TA				
26. Anticipated number of people improving their livelihood as co-benefits as a result of the TA	309.245	184.443 lives in Cengkareng district 124.802lives in Penjaringan district		
27. Anticipated technology types effectively deployed in the country	1 (pilot proposition)	Integrated pumping system for 3 polders	NA	NA
28. Anticipated UNFCCC processes implemented as a result of the TA (NAMA, NAPA, NDC, etc.)				
29. Anticipated Technology Needs Assessments (TNA) and technology Action Plans (TAP) as a result of the TA				
30. Anticipated cooperative research, development and demonstration programmes within and between developed and developing country Parties facilitated as a result of the TA				

31. Anticipated improved climate change observation systems and related information management in developing country Parties.				

Annex 3

The following table summarises the people and organisations who have been interviewed during Phase 1 of the TA.

Name	Institution	Phone number
Ina Pranoto, M. Sc	Senior Environmental Specialist - World Bank	+628158877945
Lee Young In	Assistant to Country Director KOICA Indonesia Office - KOICA	+628111894
Hwang, Dongjoo	Project Manager KOICA consultant for NCICD Program	+6281288067742
EO, Daesu	PT-Design/Engineering KOICA consultant for NCICD Program	+681288067748
Dr. Andi Eka Sakya, M. Eng	Head of BMKG	+628129437421
Anni Arumsari Fitriany	Head of Division for Cooperation - BMKG	+6281399397999
Achmad Gunawan Widjaksono	Director of Ministry of Environment and Forestry Republic of Indonesia	+62 8151853848
Ardina Purbo	Deputy Director Low Carbon Capacity and Technology Development – Ministry of Environment an Forestry Republic of Indonesia / NDE	08158731612
Gorm Jeppesen	Senior Project Manager DHI Denmark	
Budy Wiryawan	DHI / IPB	08121104260
Tusy A. Adibroto	BPPT / DRD	08121032118
Jan Sopaheluwakan	DRD	0818209431
Komara D	UI	0811107485

P Suresh Babu	DHI	+6594454284
Achirwan	BPPT	08129358930
Rizky Pratama Adhi	BPPT	081294051560
Iif Miftahul Ikhsan	BPPT	08561501055
Pini Wijaya	IPB	081315000033
Jhon C.T	Dinas Tata Air DKI	081287295477
Priyanka P.P	BPBD DKI	081282455422
Seftiana N.P	BPBD DKI	089622603002
A. Sauqi	Bina Marga	0817137898
Anggia Satrini	BBWS CC	08128040905
Meirita R.	DHI	082119929020
Maulina I	Deltares	085647812518
Aditya R.T	Deltares	085741247333
M. Ali Ridho	Dep. Perindustrian & Energi	08128078727
Togas B	Dep. Perindustrian & Energi	087888595153
Beter Letitre	Deltares	081213244614
Karisun	Sudin PE. DRT	081511565821
Yus Budiyono	BPPT	081381621573
Maraya Syifa	DHI	08561089195
Siti Harfiah K	Dinas Penataan Kota	081314216520
Roby Dwiputra	Dinas Penataan Kota	085210735622
Irdam Ahmad	DRD	08161361758
Tri Rachmad	BAPPEDA	081311135151
Azalea	BAPPEDA	082112768639
Susy Y. R	DRD	081517023232
Aula	DTA	08111000755
Yeni Anisah	DBM	021-3843172
Tirta Sutedjo	BAPPENAS	081326254848
Ikoh Masitoh	Jakarta Agency for Environment (DLH)	08128135246
Anan	Jakarta Agency for Environment (DLH)	081289784614
Rosi	Jakarta Agency for Environment (DLH)	082122577578
Agus	Dep. Perindustrian & Energi	-
Danang	IPB	081214208738
Fajar B Wicaksono	DITJEN SDA	081297981009
Dadang H	Dit API KLHK	089521716082
Sapta Nugraha	SD PGP JB	081280377460
Agus Sunarto	KUMKM	08158116565
Qori'atu Zahro	BPPT	085868528047
Deliyanti Ganesha	BPPT	081237889597
Lian Yuanita A	BPPT	085729191786
Reba Anindyajati	BPPT	081218138061
Yuti Rizky Maisarah	DRD Jakarta	-

Nawa Suwed	BPPT	085217003335
Alfan Sukmana Praja	BMKG	085222091687
Insan Nur S	BPPT	081315805878
Fritzi Gironella	DHI	-
Rendi Handika	BPPT	082114087105
Raditya Panji	BPPT	08175486293
Iin Parlina	PTL	-
Andi Firdaus	BPBD	081574736519
Ratu Fifi	BAPPEDA	081348922485
Resni S	BAPPENAS	081286241542
Tjandra	DRD	085711089360
Siska Yunita	DRD	085814989380
Herwan	BAPPEDA	081316026705
Hamdan	DRD	-
Karina Larsen	CTCN	-
Viktor Present	CTCN	-
I Dewa Gede Arya P	BMKG	085252533426
Saraswati Diah	BPPT	087887000971
Nur Hidayat	PTRRB - BPPT	08111887519
Erlend	Dep. Perindustrian & Energi	0811169132
Veby Vanadra	KLHK	085881800356
Basuki Rakhmat	BPBD	08129709321
Kamilawati	Dinas Lingk Hidup	08174817720
Panji D	Dinas SDA	021-3517952
Rizky A	KLKH	081808207918
Sofi Nur A	DRD	081911668372
Wuri Anny Yumantini	DSDA	08111683147
Daris	DPRKP	021-3847062
Priyadi	DRD Komisi 4	0816850104
Ery Chajaridipura	DRD/BP	08161850132
Alexius	Dinas Lingk Hidup	08568728915
Ady R T	DRD	0816946371
Mudaris	DRD	-
Tito L Indra	FMIPA UI	08164836421
Azka	BAPPENAS	-
Wisnu	BAPPENAS	-
Mulyo Harris Pradono	BPPT	082111722299
Dewi Andhika Putri	Urban Reg	085715839701
Amril A	DRD Kom 2	-
David Siburian	Dinas Sumber Daya Air, ALBAR	085761988990
Rinto Andhika	Dinas Sumber Daya Air, ALBAR	081807483785
Susi Adriani	DLH	0813115001572

Yuaning Fajariana	BMKG	0811892641
Tri Astuti Nuraini	BMKG	08122782694
Hakim Arief	JANPRO	081519040181
Riana Faiza	ASDEP TR	081218506154
Tri Mulyani S	TRLH	081231345958
Rendy	TRLH	0813159666014
Adi Kurniawan	DMI (AIFDR)	081578552991
Budhi Soesilo	IESA - UI	0816922756
Windriasanti	Bappeda	-
A Gunawan	KLHK	-
Vidya Ismayanti	KLHK	085881800356
Cipta A	BAPPEDA	-
Khairul Mahadi	DRD	-
Reno A.P	DPRKP	08787056298
Junaedi	ASDEP TR	082112388333
Udin W	DLH	-
Afan	BAPPEDA	08111993281
Niken Puspa H	BAPPENAS	021-3926186
Muh Fausal K	DRD	-
Munawaroh	BIG	085229066522
Prayuda Hartanto	BIG	085880039886
Novian Andri	BPPT	081802839181
Sylvira A	DRD	-
Embai S	BPBD	08128696324
Heru Panatas	DLH	081297279145
Subandono	BPPT	087775900246
A Sasmito	BMKG	08128452343
Muharam	JAKPRO	08151697677
Henri D.M	JAKPRO	08561281985
Fachri	BAPPEDA	0813192770559
Erwin Mulyana	BBTMC - BPPT	081315893248
Fathur Rahman	TA DPR KL	08111267431
Amita	BPPT	08121067900
Olei Zulkifly	Dep. Perindustrian & Energi	082132336776
Ali Maulana	DLH	08128100295
A M Hakim	DLH	085755799982