

**Project Concept Note - Technical Assistance Response Plan**

Country	Saint Kitts and Nevis
Request ID#	2024000027
Title	<i>Improvement of water supply management through a GIS-based monitoring and control system for water loss reduction</i>
NDE	Department of Environment June Hughes Director June.hughes@gov.kn Climate Action Unit Cheryl Jeffers Chief Technical Officer cheryl.jeffers@gov.kn
Proponent	Saint Kitts Water Services Department (WSD) <ul style="list-style-type: none"> • Mr. Cromwell Williams Manager Water Services Department – St. Kitts Cromwell.williams@gov.kn • Mr. Floyd Robinson Director Integrated water Resource Management Unit- Nevis floyd.robinson@niagovkn.com Counterpart contacts: Climate Action Unit Cheryl Jeffers, Chief Technical Officer, cheryl.jeffers@gov.kn

Summary of the CTCN technical assistance

In the last years, Saint Kitts and Nevis (SKN) is experiencing the negative impacts from severe droughts, which significantly affect the water supply sector. SKN is likely to be affected by changing rainfall patterns and overall trends towards higher temperatures, and longer and more severe dry seasons. Saint Kitts Water Services Department (WSD) and Nevis Water Department (NWD) are responsible for the provision of potable water and sanitation services for the whole country.

In order to be effective, WSD's and NWD's overall Non-Revenue-Water (NRW) management needs a structured and systematic approach. WSD's and NWD's current data models, as well as the linked management processes, requires a complete review and redesign. The required GIS data model has to allow systematic and automated data analysis and therefore has to follow examples of internationally recommended systems.



ADAPTATION FUND

With this technical assistance, Saint Kitts and Nevis seeks to improve its limited technical resources regarding its capacities for the establishment of a GIS-based monitoring and control system for water loss reduction and leakage detection in Saint Kitts and Nevis, with the aim to reduce Non-Revenue Water (NRW) efficiently and effectively.

The four basic work processes identified in the study are:

- Establishment of a GIS data structure and procedures. (Development of GIS-data model)
- Improved NRW calculation and water balancing. Identification of NRW in a piloted District Metered Areas (DMA)
- Water consumption metering
- Capacity building to Saint Kitts Water Services Department (WSD) and Nevis Water Department (NWD) technical staff about techniques and procedures to address NRW.

Agreement:

(If possible, please use electronic signatures in Microsoft Word file format)

National Designated Entity to the UNFCCC Technology Mechanism

Name: Cheryl Jeffers
Title: Director of Climate Action Unit

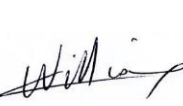
Date: 25/February/2025

Signature: 

Proponent (signature of the Proponent is optional)

Name: Cromwell Williams
Title: Manager of Water Services Department


Date: February 27, 2025

Signature: 

UNFCCC Climate Technology Centre and Network (CTCN)

Name: Ariesta Ningrum
Title: CTCN Director

Date: 03/04/2025

Signature: 



1. Background and context

Please provide a brief description of the background and context for the CTCN Response Plan. Please include national and sectoral information using recognized and publicly available sources. (maximum 2500 characters including spaces).

The twin island Federation of St. Kitts and Nevis is a democratic and sovereign country located in the northern part of the Lesser Antilles chain of islands in the Caribbean. Climate change is already impacting critical sectors including agriculture, water, tourism and health, and affecting particularly vulnerable communities and groups.

In 2019, in St. Kitts, 70% (3.37 MGD) of the water was derived from groundwater and the remaining 30% (1.49 MGD) was from springs. In Nevis, 99% (1.44 MGD) of water was derived from groundwater and remaining 1% (0.16 MGD) from springs.

Sea level rise poses a significant risk for St. Kitts and Nevis. Sub regional models project sea levels in the vicinity of St. Kitts and Nevis to rise between 0.3-1.2 meters by 2100 under various emissions scenarios. Low elevation settlements within St. Kitts and Nevis are projected to be frequently flooded by storm surge events with substantial impacts on housing and infrastructure. Critical sectors including tourism, agriculture and water are also projected to be negatively affected through coastal erosion, loss of beaches and coastal lands and saline intrusion into freshwater lenses.

Projections indicate more substantial increases for drought during the dry season, especially considering long-term trends. Historical droughts and future climate modelling suggest that both St. Kitts and Nevis will need to find ways to benefit from rain-fed water originated from intense downpours and extreme rainfall events. If these water excesses are stored correctly, water could be used for more severe drought periods.

Surface water is tapped into six intake areas in St. Kitts and three in Nevis. On St. Kitts, these water intake areas are at Wingfield, Franklands, Stonefort, Lodge, Phillips, and Greenhill. From 2010-2014, these springs produced on average a total of 3.2 MGD (million imperial gallons per day) but since the major drought of 2015, the average production between 2015-2020 has dropped to less than 2 MGD. On Nevis, the intake areas are at Nevis Peak Source (Stoney Hill) (30 imperial gallons per minute {gpm}), Camps Spring (40 gpm) and Maddens (14 gpm) (GOSKN, 2021b). The condition of these watersheds is good especially the upper watershed areas which are above 1000 feet in elevation which have a protected status in the Federation. In the lower watershed areas, there are pollution pressures from inappropriate disposal of liquid and solid waste which are well documented (Sahely, 2010).

Freshwater resources are already limited on St Kitts and Nevis and climate change further threatens this sector. Threats to the sector include increased variability in rainfall, more intense rainfall events, droughts, increases in air temperature, greater risk of extreme heat events, sea level rise and increase in intensity and frequency of stronger storms.

Overall, there has been inadequate investment in the water sector in St. Kitts and Nevis over the past 20 years to meet the ever-increasing water demand while creating resilience to climate change.



As a Small Island Development State (SIDS), Saint Kitts and Nevis is at very high risk for climate change negative impacts. These changes to the global system include severe droughts, increasingly changes temporal rainfall patterns, warmer temperatures, rising sea levels, and other extreme weather events, such as hurricanes, which may cause significant damage to key infrastructure like electricity, tourism, agriculture, and the water sector.

St. Kitts and Nevis are already experiencing some of the effects of climate variability and change through damages from an increase in average atmospheric temperature, reduced average annual rainfall, and the potential for an increase in the intensity of tropical storms.

Rainfall is the only source of water in St. Kitts and Nevis. This water is retrieved via three water resource types namely, surface water, ground water, and direct rainfall. Demand for water is expected to increase as the economy of St. Kitts and Nevis expands, particularly in the tourism and agriculture sectors where water requirements could double in the next ten years.

In St. Kitts, the distribution system is supplied primarily by 31 ground water wells which provide 70% of the country's drinking water with surface water contributing the remaining 30%.

In Nevis 90% (4.50 mLD) of water is derived from groundwater and remaining 10% (0.5 mLD) from surface water.

The St. Kitts Water Services Department (WSD) and Nevis Water Department (NWD) execute government policy objectives, implements water conservation programmes (particularly during drought conditions), and carry out public education and awareness initiatives related to water resources. However, conflicting, and growing demands for water from various sectors place pressure on the limited financial resources available to both water utilities.

The main economic barrier to implementation of a comprehensive program for reduction of apparent water losses is associated with high capital costs. The SKN Water Utility Adaptation Plan of 2021 outlines the costs of apparent loss reduction and provides preliminary estimate for the roll-out of a comprehensive plan for both apparent and real loss reduction. This is coupled with limited management skills to implement apparent loss prevention programs.

Key issues affecting Water Supply on both islands:

- Hurricane activity can impact on water infrastructure and SLR can contaminate coastal aquifers with saline water;
- There have also been reports of heavy metal contaminants in ground water resources;
- The majority of the population utilizes septic tanks and this therefore causes the concern that heavy rainfall leading to flooding can introduce bacteriological contaminants into the aquifers;
- Conversely during dry spells and drought conditions, ground water recharge rates decrease affecting the available water resources;
- When droughts occur, they generally last for between 2 to 3 months. Depending on the severity, water rationing may be carried out;
- The agriculture sector is most affected during drought conditions.
- Drought frequency is not well documented so monitoring of collection and water storage is recommended to enhance management regulations.



ADAPTATION FUND



3. Logical Framework for the CTCN Technical Assistance:

Objective: Strengthen the capacity of Saint Kitts Water Services Department's (WSD) staff in the management of a GIS-based monitoring and control system for water loss reduction and leakage detection.												
Outcome: Capacities strengthened and currently high Non-Revenue Water (NRW) in St. Kitts and Nevis is efficiently and effectively reduced.												
	Month											
	1	2	3	4	5	6	7	8	9	10	11	12
Output 1: Project management <i>All implementers must undertake the following project management activities at the beginning of, during and at the end of the CTCN technical assistance.</i>												
Activity 1.1: Pre-implementation A detailed work plan of all activities, deliveries, outputs, deadlines and responsible persons/organisations and detailed budget to implement the Response Plan. The detailed work plan and budget must be based directly on this Response Plan; Based on the work plan, a monitoring and evaluation (M&E) plan with specific, measurable, achievable, relevant, and time-bound indicators used to monitor and evaluate the timeliness and appropriateness of the implementation. The monitoring and evaluation plan should apply selected indicators from the Closure and Data Collection report template and enable the lead implementer to complete the CTCN Closure and Data collection report at the end of the assignment (please refer to item iv below and section 14 in the Response Plan). This M&E plan also includes a CTCN Impact Description formulated in the beginning of the technical assistance which will be revised in the Closure and Data Collection report once the technical assistance is fully delivered (templates will be provided). Based on the scope of work, the completion of the Adaptation Fund (AF) results tracker table, to be provided at kick-off, updated at mid mid-term of the implementation of activities, and a final version at closure of the technical assistance. Furthermore, a gender evaluation and gender action plan (GAP) will be prepared and followed throughout the technical assistance (a template will be provided). ¹ The gender assessment will include at least the following components:												

¹ Additional information is available under Section 10 of the response plan.



ADAPTATION FUND

C : Post-implementation	reports under Activities A-C					
Output 2: Establishment of a GIS data structure and procedures					80,000	90,000
Activity 2.1: Development of GIS-data model	Project manager, Water expert GIS expert, data base developer,	Mission to meet Saint Kitts Water Services Department (WSD) and Nevis Water				
Activity 2.2: Review of data management (including back-up) procedures for GIS unit	Project manager, Water expert GIS expert, data base developer, Operation & Maintenance (O&M)/Commercial and process design expert	Department (NWD), and discuss software options, analyze data management and procedures				
Activity 2.3: Update GIS	Project manager, Water expert GIS expert, data base developer,					
Output 3: District Metered Areas (DMA) testing					40,000	45,000
Activity 3.1: Identification of Non-Revenue Water (NRW) in a specific DMA	Project manager, Water expert GIS expert, data base developer, Operation & Maintenance	Mission for piloting				



ADAPTATION FUND



	(O&M)/Commercial and process design expert, Gender expert					
Output 4: Regional South-South exchange event					20,000	25,000
Activity 4.1: Organization of the South-South exchange event	Project manager, Water expert	<i>1 mission to a Caribbean country, 4 people, 3 days</i>				
Estimated range of costing for the entire Response Plan					150,000	172,000

5. Profile and experience of experts

Based on the required Human Resources identified in section 4 (Resources required and itemized budget) please provide a description of the required profile of all involved experts for the implementation of the CTCN Response Plan. A gender expert is required for each technical assistance and suitable experts can be identified from the CTCN Gender and Climate Technology Expert Roster or other relevant sources.

Experts required	Brief description of required profile
Project manager/Team Leader and Water Expert	Water expert with relevant education on water management and infrastructure with experience in similar project management, preferably with work experience in developing countries (SIDS/Central America and the Caribbean would be an asset). Proven expertise in water management, water conservation and infrastructure.
GIS database developer/Expert	Proven experience in the design and use of geographic information system to enhance the resilience of water supplies using a wide range of tools for information sharing, in the water sector as well as in the implementation and operation of GIS systems in water utilities. Proven expertise in GIS and data management in the water sector.
Operation & Maintenance (O&M)/Commercial and process design expert	Engineer/economist with proven experience in technical water loss reduction campaigns in water utilities and redesigning NRW related procedures in water utilities. Demonstrated experience in contribution to adaptation project/programme in SIDS; in Central America and the Caribbean would be an asset.
Gender expert	Gender expert with experience in the water sector, specifically water supply and delivery



6. Intended contribution to impact over time

Short term:

- Better understanding of the reasons for the losses in the water system and the factors that influence these losses.
- Faster response times for providing solutions in case of leakage, etc. due to improved management systems and data and information flow.
- Support for preventive maintenance and exchange of pipelines.
- Skill development of technical staff to address NRW.
- Enhanced data management in the water sector.

Medium term:

- Support the reduction WSD's and NWD's non-revenue water from an estimated level of 25-35%, which is available to enhance supply during the more frequently expected dry periods.
- Reduced water risks deriving from lack of storage.
- Reduction on operation & maintenance cost of water infrastructure.
- Improved water access for communities.

Long term:

- Increased health of the population.
- Contribute towards improved infrastructure development.
- Increased resilience to droughts.
- Contribute towards increased local employment.

7. Relevance to NDCs and other national priorities

Nationally Determined Contributions (NDC), priority adaptation actions: i) freshwater resources, identify and support methods to expand water supply and storage capacities. Improve operational efficiencies. Public health, increase safe water storage measures, page 7.

Technology Needs Assessment, 2023, Technology Prioritization: Four technologies for climate change adaptation and four technologies for climate change mitigation for St. Kitts and Nevis were prioritized. For the water sector, non-revenue water and demand management programme (including smart metering), and leakage detection and repair and pressure management.

The National Climate Change Adaptation Strategy, details specific adaptation objectives and measures across eight sectors (agriculture, coastal and marine ecosystems, forest and terrestrial ecosystems, finance and banking, human health, infrastructure and physical development, tourism and water) and five cross-cutting areas (stakeholder capacity building and engagement, information management, research and monitoring, integrated adaptation and disaster risk reduction and inter-sectoral coordination) for the time period of 2018-2030.

The Water Utility Adaptation Plan of 2021 (GOSKN, 2021b) paves the way for future actions needed for this sector. The Plan is structured under six thematic programmes which are in line with the key focus areas outlined in 3.2. These include water policy, legislation and capacity building, watershed management, climate resilient water supplies, water demand management, energy efficiency and renewable energy and disaster risk management.



8. Linkages to relevant parallel on-going activities:

The regional Strategic Action Plan (RSAP) for the water sector in the Caribbean to develop resilience to the impacts of climate change (2019) published a first implementation plan which point to the way forward to transform the water sector in Caribbean countries, including SKN to better respond to climate variability.

The WSD reported advances in data collection, which was facilitated by hydro-meteorological equipment installed by the National Emergency Management Agency (NEMA) and Meteorological Office. WSD has also recently installed tank level controls at most storage reservoirs which are linked by a web application to be able to monitor storage levels in real-time.

9. Anticipated follow up activities after this technical assistance is completed:

The basis of all improvement processes is a functioning and updated GIS database and related work procedures and management processes. Building on the GIS information, the definition and establishment of District Metered Area (DMAs) will be implemented in the field and documented, also in the GIS system, as part of the CTCN support. This information will be used by WSD and NWD for strategic decision making on the structuring of the water supply network and for ongoing, improved monitoring of water pressure and water losses. The calculation of an IWA water balance of the DMA's will be based on data analysis of the customer data base, linked to the GIS system will be used as a monitoring tool to assess the effectiveness of the new NRW strategies.

With the successful completion of the technical assistance the government of Saint Kitts and Nevis plans to feed the data and findings into national strategies and policies. Concrete plans could, for example address, the tourism sector. The expectation is that with the involvement of key stakeholders from the tourism sector (e.g. hotels) the water utility receives support and input from end consumer level to translate the proposed follow up measures of the technical assistance into actions, such as incentive programs for rainwater and grey water use in hotels or the leak reduction in pipelines, as well as use of more efficient water appliances with the hotel premises. The capacity building component of the technical assistance is expected to enable the stakeholders to follow up on the implementation and introduce sustainable monitoring instruments.

10. Gender and co-benefits:

Each technical assistance must integrate gender mainstreaming activities and lead to gender and other co-benefits. At least 5% of the technical assistance budget needs to be allocated to gender mainstreaming activities.

<p>Imbedded in design of the activities:</p>	<p><i>A gender mainstreaming analysis is mandatory to include for all technical assistances. A gender expert will be assigned to carry out an assessment and evaluation regarding gender mainstreaming and will develop a gender action plan (GAP) to be followed during the implementation of the TA.</i></p> <p><i>This will include the following components:</i></p> <ul style="list-style-type: none"> • <i>Analysis of gender disparities (assess the situation of gender disparities in the context of the project, including socio-economic, cultural and institutional factors. Identify areas where inequalities exist, etc.).</i> • <i>Data collection (collect and analyze gender-disaggregated data to understand the specific needs and preferences of different genders).</i>
--	--



ADAPTATION FUND



	<ul style="list-style-type: none"> • <i>Adaptive and gender-responsive design (evaluate the project design to ensure that it takes into account the different roles, responsibilities and interests of different genders. Analyze how the project can empower marginalized genders and promote gender equality).</i> • <i>Gender and innovation ecosystem (evaluate how the proposed technologies could promote women as entrepreneurs).</i> • <i>Gender budgeting (budget allocation to guide gender mainstreaming activities. Also ensure that gender-specific needs are adequately funded).</i> <p><i>In addition, please describe all support to gender aspects, women's equality and other co-benefits embedded into the Response Plan (please include a reference to the actual gender mainstreaming-related activities and outputs as described in section 3).</i></p> <p>In regard to the activities and outputs outlined in section 3 of this response plan these concerns:</p> <ul style="list-style-type: none"> • Gender assessment • Gender-equal job requirement descriptions • Gender equitable stakeholders' consultations • On the job training of women and men on the collection and management of GIS data • Where feasible, collection of gender sensitive data
<p>Gender and co-benefits intended as result of the activities:</p>	<p>SKN has a high number of female-headed households where women have to provide for the family alone. If there is a lack of water, the situation is especially difficult for these women because they are simply alone with this task. Especially economically disadvantaged households benefit from improved data availability and management through:</p> <ul style="list-style-type: none"> • Better access to water: Improved water data allows for better water management and benefits households, especially of the most vulnerable, to apply water saving measures. • Sustainable water delivery to the communities: With more informed planning, water cuts will be avoided, and a more better-informed supply structure will be put in place. • Improved health: an improved water system will foster access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situation.

11. Main in-country stakeholders in implementation of the technical assistance activities:

Using the table below, please list and describe the role of in-country stakeholders, participants and beneficiaries who will be involved in or directly consulted during implementation of the assistance.

In country stakeholder	Role in implementation of the technical assistance
------------------------	--



ADAPTATION FUND

Saint Kitts Water Services Department (WSD)	Primary contact for request and stakeholder coordination; Technical inputs. Information sharing and consultation regarding water usage.
Nevis Water Department (NWD) Nevis Integrated Water Resource Management Unit	Technical inputs. Information sharing and consultation regarding water usage.
Climate Action Unit	National Designated Entity, overall process consultation regarding CTCN process. Information sharing, consultation, and coordination with regard to national climate policies.
<i>Add lines as needed</i>	

12. SDG Contributions:

Instructions: Please complete the grey section below for a maximum of three SDGs that will be advanced through this TA. A complete list of SDGs and their targets is available here:

<https://sustainabledevelopment.un.org/partnership/register/>.

Goal	Sustainable Development Goal	Direct contribution from CTCN TA (1 sentence for top 1-3 SDGs)
1	End poverty in all its forms everywhere	
2	End hunger, achieve food security and improved nutrition, and promote sustainable agriculture	
3	Ensure healthy lives and promote well-being for all at all ages	
4	Ensure inclusive and equitable quality education and promote life-long learning opportunities for all	
5	Achieve gender equality and empower all women and girls	
6	Ensure availability and sustainable management of water and sanitation for all	The CTCN technical assistance will provide SKN with the establishment of a GIS-based monitoring and control system for water loss reduction and leakage detection.
7	Ensure access to affordable, reliable, sustainable, and modern energy for all (consider adding targets for 7)	
	7.1 - By 2030, ensure universal access to affordable, reliable and modern energy services	
	7.2 - By 2030, increase substantially the share of renewable energy in the global energy mix	
	7.3 - By 2030, double the global rate of improvement in energy efficiency	
	7.a - By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	
	7.b - By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support	
8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	
9	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	The CTCN technical assistance will participate in the country's resilient water management system and ensure that proper infrastructure is put in place.
10	Reduce inequality within and among countries	
11	Make cities and human settlements inclusive, safe, resilient and sustainable	
12	Ensure sustainable consumption and production patterns	
13	Take urgent action to combat climate change and its impacts	<i>All TAs should indicate relevance to Goal 13 and at least one target below (13.1 to 13.b).</i>
	13.1 - Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	SKN is facing water shortage and increased number of droughts which will be worsen by the effect of



ADAPTATION FUND

		climate change. By limiting the leakages and Non-Revenue Water, the CTCN technical assistance increases the resilience of the country to climate-related natural disasters.
	13.2 - Integrate climate change measures into national policies, strategies and planning	
	13.3 - Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	
	13.a - Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible	
	13.b - Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities	
14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	
15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	
16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	
17	Strengthen the means of implementation and revitalize the global partnership for sustainable development	

13. Classification of technical assistance:

Please indicate primary type of technical assistance. Optional: If desired, indicate secondary type of technical assistance.

<i>Please tick off the relevant boxes below</i>	<i>Primary</i>	<i>Secondary</i>
<input type="checkbox"/> 1. Decision-making tools and/or information provision	<input type="checkbox"/>	X
<input type="checkbox"/> 2. Sectoral roadmaps and strategies	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 3. Recommendations for law, policy and regulations	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 4. Financing facilitation	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 5. Private sector engagement and market creation	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 6. Research and development of technologies	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 7. Feasibility of technology options	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> 8. Piloting and deployment of technologies in local conditions	X	<input type="checkbox"/>
<input type="checkbox"/> 9. Technology identification and prioritisation	<input type="checkbox"/>	<input type="checkbox"/>

Please note that all CTCN technical assistance contributes to strengthening the capacity of in country actors.

14. Monitoring and Evaluation process

Upon contracting of the implementing partners to implement this Response Plan, the lead implementer will produce a monitoring and evaluation plan for the technical assistance. The monitoring and evaluation plan must include specific, measurable, achievable, relevant, and time-bound indicators that will be used to monitor and evaluate the timeliness and appropriateness of the implementation. The CTCN Technology Manager responsible for the technical assistance will monitor the timeliness and appropriateness of the Response Plan implementation. Upon completion of all activities and outputs, evaluation forms will be completed by the (i) NDE about overall satisfaction



ADAPTATION FUND

level with the technical assistance service provided; and (ii) the Lead Implementer about the knowledge and learning gained through delivery of technical assistance. Furthermore, the NDE together with the project proponent(s) will complete a periodic post-implementation form to track the impact of the activities beyond the technical assistance end date.



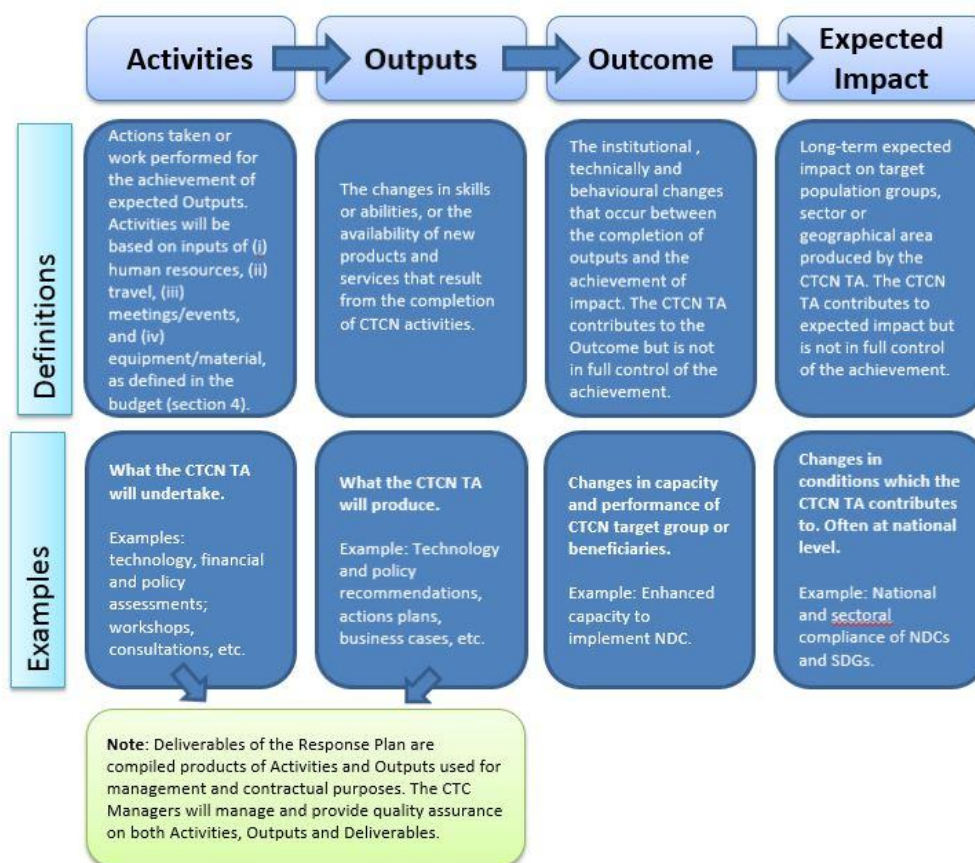
Annex 1: Guidance note for designing a Response Plan (to be deleted when submitting the Response Plan)

1. Objective of the Response Plan

The Response Plan is developed by CTCN specialists in response to a country request for technical assistance. It constitutes the Terms of Reference of the CTCN technical assistance that will be provided to the country and it provides the formulation of and subsequent basis for the monitoring and evaluation of the Response Plan implementation, as well as its expected outcomes and anticipated impacts.

2. Results chain and Logical Framework Approach to be defined in the CTCN Response Plan

The result chain is the causal sequence that stipulates the necessary flow of actions and processes to achieve desired objectives and results – beginning with inputs, moving through activities and outputs, and culminating in individual outcomes. The outcome will contribute to the desired impact in the society. The Logical Framework Approach is an analytical process used to support objectives-oriented project planning and management. It provides a set of pre-defined concepts which are used as part of an iterative process to aid structured and systematic analysis and management of the CTCN technical assistance.



3. Role of the Response Planning Design Team

The Response Planning Design Team is selected by the Climate Technology Centre (CTC). The composition of the team depends on each particular request but may include the National Designated Entity (NDE), the request Proponent, Climate Technology Manager of the CTCN, experts from the CTCN Consortium, UNIDO and UNEP experts from regional offices and other experts as needed.

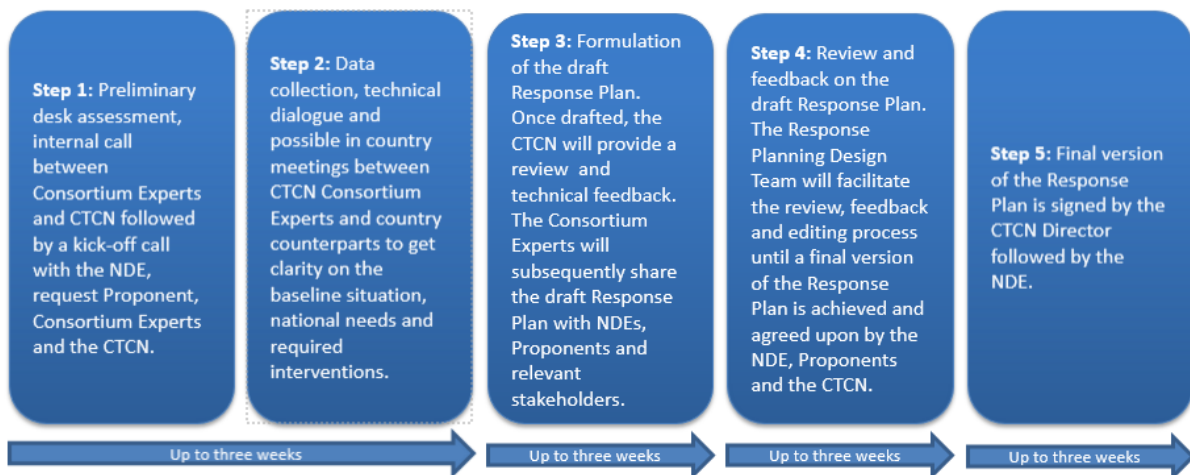
The role of CTCN Consortium experts is to lead the design of the Response Plan. The NDE will provide overall guidance on national context and priorities whereas the request Proponent will provide more detailed information on the sector, barriers and requested assistance. The Climate Technology Manager of the CTCN will provide quality assurance of timeliness and appropriateness of the Response Plan.

The Response Planning Design Team will draft all sections of the Response Plan template building on the information contained in the CTCN Request, based on expertise on the given topic and potentially further data collection, as required. This will be done by the CTCN Consortium Experts in consultation with the NDE, request Proponent and relevant stakeholders. The Response Plan has to be agreed to and approved by the NDE and the CTCN Director. This Response Plan will serve as the basis to identify, select and engage an expert institution from the Climate Technology Network or Consortium to lead the implementation of the CTCN Response Plan in the requesting country.

To the extent possible, staff from UNEP and UNIDO Regional, Sub-Regional and/or National Offices should be involve in all stages of formulation of the Response Plan to maximize synergies and avoid overlap with ongoing initiatives, as well as ensure relevance to regional and national context.

4. Process for designing the Response Plan

The Response Planning process should be completed over a period of up to 60 working days (12 weeks). Indicative steps and related timelines are laid out below:



5. Design Considerations

In order to maximize the impact of the technical assistance provided by the CTCN and provide an effective M&E process, the Response Plan should integrate as much as possible the considerations below:

Climate Technology focus: The Response Plan should have a clear focus on climate technologies, and identify activities that enable the identification, development, deployment or diffusion of one or several specific technologies (including equipment, techniques, knowledge and skills).

Barrier removal / Problem solving: The activities should contribute to address the specific problem statement identified in the Request. The barriers identified should be those hampering the identification, development, deployment or diffusion of one or several climate technologies or climate actions. Therefore, it may be necessary to limit the CTCN Response Plan to a set of activities for technical assistance commonly agreed with the NDE (and Proponent when needed) compared to the original request submitted. The CTCN will liaise with NDEs and Proponent in case the scope of the technical assistance deviates from the original request.

Use of the CTCN assistance by stakeholders: The Response Plan should identify clearly how the products of the CTCN assistance will be used in the short term once support is delivered, by who and when, to ensure it will lead to specific impacts in the country. The activities should engage the stakeholders that will use the concrete results of the assistance to deploy the technologies, including from the private sector, the public sector, research institutions, etc.

Within the scope of CTCN resources: The cost of the technical assistance provided by the CTCN cannot exceed USD 250,000 per Response Plan. Therefore, it may be necessary to prioritize activities and limit the CTCN Response Plan to a set of priority activities commonly agreed with the Proponent and the NDE to remain under this value. Under section 4 of the Response Plan template, an indicative activity based budget should be presented. The proposed budget is indicative and should present an estimated costing range per activity, output as well as a total costing range for the delivery of the Response Plan. Once the Response Plan is finalised and published for tendering, interested parties will provide competitive offer against the indicative budget.

CTCN activities and outputs should be linkable to monitoring and evaluation indicators: All proposed activities and outputs must be linkable to monitoring and evaluation indicators that are specific, measurable, achievable, relevant, and time-bound. The monitoring and evaluation process and corresponding indicators will be developed by the Lead Implementer as part of the work plan and will allow the CTCN technology Manager to monitor the timeliness and appropriateness of the implementation.

Synergies with existing efforts: The Response Plan should focus on activities that are not already being fully supported or that are in the process of being fully supported by another national, regional or international organization. Synergies and complementarity also require that the CTCN assistance is not duplicating past activities. It is possible in the Response Plan to indicate co-financing from the government, the Proponent or another stakeholder, that will maximize the effectiveness of the CTCN assistance.

Gender mainstreaming: The CTCN mission is to build or strengthen developing countries' capacities to identify technology needs, to facilitate the preparation and implementation of technology projects and strategies taking into account gender considerations. The Response Plan must therefore describe how gender considerations will be included and monitored within the proposed activities, and any gender co-benefits that will be gained as a result of implementing the CTCN technical assistance.