

ADDENDUM

to

Grant Agreement C33 between the Republic of Senegal and the Nordic Development Fund dated 21 March 2013

THIS ADDENDUM is made on the16th... day of ...September... 2015 between The Nordic Development Fund (“NDF” or “the Fund”); and the Republic of Senegal (the “Recipient”).

WHEREAS, *inter alia*:

- A. The parties have entered into a grant agreement dated 21 March 2013 (the “**Grant Agreement**”) whereby NDF has agreed to make available to the Borrower a grant in the amount of EUR 3,000,000.00 (three million euros) (the “**Original Grant Funds**”) for the purpose of financing the Stormwater Management and Climate Change Adaptation Project (PROGEP), as further described in Annex 1 to the Grant Agreement (the “**Project**”);
- B. The Project will be expanded by new sub-components and scale-ups, as further described in Annex 1 to this Addendum. Annex 1 to this Addendum complements Annex 1 to the Grant Agreement C33 between the Republic of Senegal and NDF;
- C. The Recipient has requested NDF to provide additional financing for the purpose of the expanded project scope and NDF has agreed to provide such additional financing.

NDF and the Borrower wish to make certain amendments to the Grant Agreement as set forth herein.

NOW, THEREFORE, the parties hereto have agreed as follows:

- 1. Terms defined in the Grant Agreement have their defined meanings whenever used in this Addendum, unless otherwise defined in this Addendum.
- 2. The Fund agrees to grant to the Recipient, on the terms and subject to the conditions set forth or referred to herein and in the Grant Agreement, an additional amount of up to EUR 4,000,000.00 (four million euros) (the “**Additional Grant Funds**”) for the purposes of the Project. Any reference to the Grant shall hereafter be a reference to both the Original Grant Funds as well as the Additional Grant Funds, unless otherwise specified.
- 3. Disbursements from the Additional Grant Funds shall be subject to the fulfilment, in a manner acceptable to the Fund, of the following conditions:
 - (a) this Addendum is in full force and effect, and no event which would entitle the Fund to suspend disbursements under the Grant Agreement, shall have occurred and be continuing;
 - (b) the Recipient has taken or caused to be taken all action necessary or advisable to enable the Recipient to receive the Additional Financing and to perform its obligations hereunder, including obtaining all required exemptions, consents and permits; and
 - (c) the Fund has received and accepted:
 - (i) a legal opinion showing that this Addendum has been duly authorised or ratified by, and executed and delivered on behalf of, the Recipient and is legally

binding upon the Recipient in accordance with its terms;

(ii) if requested by the Fund, further evidence satisfactory to it that the execution and delivery of this Addendum on behalf of the Recipient has been duly authorised by all necessary authorities;

(iii) evidence satisfactory to the Fund of the authority of the person or persons authorised to sign disbursement requests on behalf of the Recipient and the authenticated specimen signature of any such person;

(iv) evidence satisfactory to the Fund that other financing required for the Project, including financing from the Recipient as well as the Partner Agency, has been obtained and that conditions precedent to the effectiveness of such financing have been met.

4. The Closing Date shall be 31 December 2019, or such later date as the Fund shall establish.
5. The provisions or clauses of the Grant Agreement not specifically mentioned or referred to herein shall remain unchanged and apply in all aspects to the Additional Grant Funds. Consequently, Annex 1 to the Grant Agreement is applicable as description of the Project, subject to any amendments or additions set out in Annex 1 to this Addendum.
6. The provisions set out in Article IX of the Grant Agreement shall apply *mutatis mutandis* to this Addendum as if set out their entirety herein.
7. This Addendum shall enter into force upon signature by both Parties. Upon its entry into force, this Addendum shall form an integral part of the Grant Agreement and all references to the Agreement therein shall be deemed to be references also to this Addendum.
8. This Addendum has been made in two copies in the English language, each of which shall be an original.

IN WITNESS WHEREOF the parties hereto, acting through their duly authorised representatives, have caused this Addendum to be signed in their respective names as of the day and year first above written.

NORDIC DEVELOPMENT FUND

By: _____

Pasi Hellman
Managing Director

By: Martina Jägerhorn

Martina Jägerhorn
Country Program Manager

REPUBLIC OF SENEGAL
Le Ministre de l'Économie
des Finances et du Plan
By: _____
Amadou BA

By: _____

ANNEX 1 to the Addendum to the Grant Agreement C33 between the Republic of Senegal and the Nordic Development Fund dated 21 March 2013

Table of Contents

- Schedule I: Project Description.....2
 - 1.1 Introduction.....2
 - 1.2 Relevance and Rationale.....2
 - 1.3 Project Objective.....3
 - 1.4 Project Activities and Expected Results3
 - 1.5 NDF’s Components.....4
 - 1.6 Cost Estimates and Financing Plan.....5
- Schedule II: Implementation Arrangement, Project Monitoring, Reporting and Evaluation 8
 - 2.1 Project Organization 8
 - 2.4 Monitoring and Evaluation 8
- Schedule III: Grant Proceeds, Disbursement, Eligible Expenditures9
 - 3.1 Disbursement9
 - 3.2 Eligible Expenditures.....9
- Schedule V: Tentative Logical Framework for the NDF Components 10

Schedule I: Project Description

1.1 Introduction

The original project Senegal Flood Risk Management¹ (PROGEP) was approved by NDF and the World Bank (WB) in 2012.

The Additional Financing (AF) for PROGEP will (i) support storm-water drainage infrastructure investments in peri-urban Dakar (Pikine and Guediawaye); (ii) scale-up related community-engagement activities in peri-urban Dakar; (iii) reinforce integrated urban management in peri-urban Dakar; and (iv) upscale climate change resilient urban planning and management in two additional cities, Diamniadio and Saint-Louis. NDF will support the activities in the two new urban sites. The AF will be implemented during 2015-2019.

1.2 Relevance and Rationale

The AF is needed to support infrastructure investments and scaled-up interventions, and to introduce new activities aimed to reinforce the impacts of PROGEP. The biggest part of the additional resources will support the construction of drainage infrastructure in the Mbeubeuss solid waste deposit in Pikine in the Dakar region. These costs will be financed by the World Bank and Senegal.

The NDF funded activities will support the upscaling climate change resilient urban planning and management in the two cities with different characteristics. Diamniadio is located 30 km from the city center of Dakar and is part of the Dakar region. It is at heart of a governmental priority development project expected to serve as Senegal's urban model for a sustainable, carefully planned and managed city relieving the pressure on Dakar's uncontrolled growth. Saint-Louis is a historical city exposed to multiple natural hazards exacerbated by climate change. Saint-Louis region is an important contributor to national output in fishing, tourism and horticulture.

The two cities to be added to the project have also been proposed to be nominated pilot cities under the Global Environment Facility's (GEF) Sustainable Cities Initiative. Based on the dialogue between the government of Senegal and the GEF Secretariat, Senegal believes that Diamniadio and Saint-Louis are strong candidates for becoming Sustainable Cities pilots. If this GEF financing is confirmed later in 2015, these interventions would be complementary to the NDF funded interventions.

The additional financing from NDF and World Bank will contribute towards ending extreme poverty by reducing losses of assets amongst the poorest population living in peri-urban Dakar, Diamniadio and Saint-Louis; and promote shared prosperity by improving the urban-environmental quality. The project's revised development objectives are consistent with the WB's Senegal Country Partnership Strategy 2013 to 2017 that supports Senegal's new national development strategy 2014-2035 (Plan Sénégal Emergent). Moreover, the intervention is in line with and complement programs and projects supported by Senegal and its partners in water and sanitation, urban development, climate change, as well as coastal and disaster risk management. The NDF activities are well aligned with NDF's involvement in the original PROGEP and tie in well with the scope and objectives of the upgraded project.

¹ Called Senegal Storm Water Management and Climate Change Adaptation Project by the World Bank.

The NDF involvement under the AF is considered relevant for NDF's Strategy 2014-2015, both in terms of focal topics and applied approaches. It addresses all three cluster areas of NDF's Strategy; namely (i) Infrastructure (urban development and water management, climate vulnerability/resilience); (ii) Natural Resources (water resources management, sustainable land use, coastal zone management); and (iii) Climate change related capacity building of the involved authorities to ensure post-project sustainability. The NDF financing will also explore opportunities for private sector involvement through a diagnostic study, which will explore the current situation as well as opportunities to engage private sector in adaptation to climate change.

The NDF components benefit from and build upon approaches developed under similar projects, especially the NDF - Inter-American Development Bank co-financed Emerging and Sustainable Cities Initiative (NDF C40 and NDF C68) that includes development of methodology comprising diagnostic studies, risk modelling and vulnerability assessments, urban governance and management to promote climate resilient urban planning and adaptation measures including pilot micro-projects. The Diamniadio component will significantly benefit from previous NDF funded credit for modelling and strategic studies on the Maastrichtian aquifer as an important groundwater resource for the Dakar region. Knowledge sharing is expected to continue also through exchange between NDF financed activities across countries, continents and institutions. Since knowledge sharing events will be arranged e.g. under the NDF financed small grant facility project West Africa Coastal Erosion and Adaptation Project and under the Emerging Sustainable Cities Initiative, there may be additional opportunities for sharing experience between countries.

1.3 Project Objective

The original project objective will be revised to include the broadened geographical scope of Diamniadio and Saint-Louis. The revised PROGEP objective is thus to reduce flood risks in peri-urban areas of Dakar and improve capacity to plan and implement sustainable city management practices, including climate resilience, in selected urban areas.

1.4 Project Activities and Expected Results

The AF activities are structured around the four original PROGEP components:

- A. Flood risk mainstreaming in urban sector (to be renamed Integration of climate risks in urban planning and management):
 - A.1 Urban planning and management;
 - A.2 Institutional strengthening of central Government departments and municipalities; and
 - A.3 Piloting sustainable cities through climate resilience measures (new subcomponent).
- B. Drainage investments and management:
 - B.1 Drainage investments; and
 - B.2 Operating and maintenance of drainage system.
- C. Community engagement in urban flood risk reduction and adaptation to climate change:
 - C.1 Flood resilience awareness, communication and community capacity building; and
 - C.2 Flood risk reduction community investments.
- D. Project Coordination, Management, Monitoring and Evaluation

The NDF support will fall under subcomponent A.3. The World Bank will support complementary activities under the same subcomponent such as knowledge management, promotion of inter-communal cooperation, as well as validation and implementation of priority investments and micro-pilot projects. In addition to the AF, Senegal expects to access funds in late 2015 from GEF's Sustainable Cities programme for complementary activities. The total financing expected from GEF is USD 8 million to be executed through the World Bank and United Nations Industrial Development Organisation (UNIDO) in support of improving capacity to plan and implement sustainable city management practices, renewable energy, integrated waste management, and a planned sustainable industrial park in Diamniadio. NDF's support to enhanced private sector involvement will be designed to complement and pave the way for related activities supported by Senegal and its partners as well as by the above mentioned activities financed by WB, GEF and UNIDO.

1.5 NDF's Components

NDF's AF will be used to augment and pilot climate vulnerability assessments and adaptation measures under the sustainable cities concept in the evolving urban development pole of Diamniadio and Saint-Louis. The activities financed by NDF under the original project will serve as valuable building blocks for scaling up activities in the two new urban sites. As the costs of the NDF contracts have been in line or below the budgeted amounts, the balance from the original grant will be used for some of the scaled up activities. Three of NDF's six contracts under the original financing can be expanded to provide technical assistance in communication, training and geographic information system (GIS) activities for the new urban sites.

The new additional NDF activities will:

Pilot sustainable cities through climate resilience measures in Diamniadio through

-A diagnostic study and city action plan including: (i) Environmental and natural resources sustainability; (ii) Urban planning and management climate focus; (iii) Urban governance and fiscal management with focus on climate vulnerability and risks; (iv) Private sector development opportunities and actions; (v) Climate resilience focused city action plan.

-A catchment study and drainage master plan including: (i) Urban catchment study climate focused field investigations, data collection, and modelling of urbanisation and natural resources response affected by climate change; and (ii) Climate responsive drainage master plan including costs, institutional arrangements and implementation modalities.

-An update and extension of the detailed urban master plan (PUD) including: (i) Up-dating the existing urban plan with integration of climate risk; targeted capacity building for urban authorities and community stakeholders relating to urban planning; (ii) GIS based climate vulnerability and risk mapping to guide urban planning; (iii) Integration of climate resilience into the city drainage master plan; and (iv) Strengthening of climate governance; capacity building relating to this.

Pilot sustainable cities through climate resilience measures in Saint-Louis through

-A diagnostic study and city action plan including: (i) Environmental and natural resources sustainability; (ii) Urban planning and management with a climate focus; (iii) Urban governance and fiscal management with a climate vulnerability focus; (iv) Private sector development opportunities and actions; and (v) city action plan with focus on climate resilience.

-The design and operationalization of a coastal zone environmental model and monitoring system for Saint-Louis including: (i) Prepare plan for data collection monitoring, modelling,

and climate risk analysis in city, estuarine and coastal areas; (ii) Establish climate focused data collection and modelling systems for climate modelling, assessments and knowledge generation; and (iii) Undertake climate related investigations, and modelling on geotechnical, sedimentary, hydro-dynamic and hydro-sedimentological conditions; (iv) Assess urban climate change vulnerability and impacts under various scenarios; and (v) Establish and launch post-project modelling, monitoring, evaluation, and dissemination programme including costs, training, implementation, handing-over, and launching.

-The development of a partnership protocol for the management of the model and acquisition of equipment including: (i) Develop methodology and partnership protocol for implementation of modelling and monitoring activities including coordination mechanisms and operational support; and (ii) Procurement of equipment and systems and support identified by the diagnostic and planning study. The hydro-meteorological systems and services to be supported are based on applied technology that is widely used.

-The update and extension of the urban master plan (PDU) including (i) Up-dating of the Urban Master Plan (PDU) so that climate change risks are integrated to the plan, and related capacity building of authorities and community actor; (ii) Establishment of GIS based climate vulnerability and risk maps to guide urban planning and management; (iii) Integration of climate resilience city drainage master plan; and (iv) Strengthening climate change management and governance.

-The establishment of a territorial GIS for Saint-Louis including: (i) Establish multi-user GIS system for climate impact simulation, vulnerability analysis, production of risk maps, and information and knowledge sharing; and (ii) Operationalise the GIS services to guide urban planning and management.

-Communication and awareness building. This will be an extension to ongoing activities i.e. including: (i) Systematic sharing of information on interventions, progress, and achievements; and (ii) Awareness raising events engaging public society, stakeholders and beneficiaries.

The NDF components are described in more detail in the tentative logical framework presented at the end of this Annex.

1.6 Cost Estimates and Financing Plan

The provisional cost estimates for the AF project are summarised in Table 1:

Table 1: Cost Estimates for NDF Funded AF Components

| Contract No | ACTIVITY | EUR |
|-------------------------------|--|------------|
| Consultancy contract 1 | Diagnostic Study and City Action Plan for Diamniadio | 204 000 |
| Consultancy contract 2 | Catchment study and Drainage Master Plan and Update and extension of the Detailed Urban Master Plan (PUD) for Diamniadio | 680 000 |
| Consultancy contract 3 | Diagnostic Study and City Action Plan Update and Extension of Urban Master Plan (PDU) for Saint-Louis | 476 000 |
| Consultancy contract 4 | Design and Operationalization of a Coastal Zone Environmental Model and Monitoring System including Development of a Partnership Protocol for the Management of the Model for Saint-Louis. | 1 496 000 |

| | | |
|-------------------------|---|------------------|
| Goods contract 1 | Equipment and systems such as computer hardware, software (relating to hydrodynamic models, hydraulic modules, mapping and data management), survey instruments, sampling systems, and monitoring equipment; all based on applied technology that is widely used) | 816 000 |
| | Contingency | 328 000 |
| | TOTAL | 4 000 000 |

In addition to the above new contracts, it some of the new activities can be added as amendments to existing contracts funded by the original grant. For example, NDF currently finances three ongoing contracts relating to training, communication and awareness building, and geographic information systems (GIS) in the original project target area of peri-urban Dakar. Extending these services to cover the new geographical regions is expected to be not only cost-effective but also represent concrete examples of how the results and experience gathered from the original PROGEP can be used in the second phase of the project. There is a sufficient balance from the initial grant to cover these types of activities, and also to serve as an additional contingency for the activities under the additional financing project.

Table 2 below replaces Table 1 of Chapter 1.6 in Annex 1 of the Grant Agreement dated 21 March 2013:

Table 2: Cost Estimates for NDF Funded AF Components

| Component / Subcomponent | EUR |
|--|------------------|
| Component A Flood risk mainstreaming in key sectors | |
| A1.2 Development of a GIS for flood risk mapping covering the peri-urban areas of Dakar (District of Pikine and Guediawaye) + Goods contracts | 353 000 |
| * Addendum to A1.2 Establishment of a territorial GIS at Saint-Louis | 136 000 |
| A1.5 Development of an integrated national urban planning and management strategy taking into account climate change adaptation and flood risk | 247 000 |
| A2.1 Development and implementation of flood prevention and climate change adaptation training program | 350 000 |
| * Addendum to A2.1 climate change training for Saint-Louis and Diamniadio | 75 000 |
| A2.2 Implementation of the national urban planning and management strategy action plan in pilot municipalities | 250 000 |
| Subtotal Component A | 1 417 000 |
| Component B Drainage investments and management | |
| B1.6 Impact evaluation process for the targeted communities for Phase1 and end of project (EoP) evaluation (2 studies) | 209 000 |
| Subtotal Component B | 209 000 |
| Component C Community engagement in urban food-risk reduction and adaptation to climate change | |
| C1.1 Support to MDA for the implementation of communication and awareness building | 350 000 |

| | |
|--|------------------|
| * Addendum to C1.1 communication and awareness building for Saint-Louis and Diarniadio | 80 000 |
| Subtotal Component C | 430 000 |
| Contingency | 290 000 |
| Unallocated amount* | 654 000 |
| TOTAL COST ESTIMATE | 3 000 000 |

*With reference to point 10.01 of the Grant Agreement, the Implementing Agency and the Fund may agree in writing on the potential use of this unallocated amount.

The financing plan for PROGEP AF is summarised in Table 3, which also shows the original budget

Table 3 Original and AF PROGEP financing plan in USD millions*

| Current Component Name | Original Budget | AF Budget |
|---|------------------------|------------------|
| A. Flood risk mainstreaming in urban sector (renamed Integration of climate risks in urban planning and management) | 3.8 | 5.8** |
| B. Drainage investment and management | 55.7 | 33.0*** |
| C. Community engagement in urban flood risk reduction and adaptation to climate change | 4.8 | 1.5 |
| D. Project coordination, management, monitoring and evaluation | 9.2 | 2.0 |
| Total | 73.5**** | 42.3 |

* NDF contribution will be in EUR.

** This figure consists of around USD 4.3 million from NDF and USD 1.5 million from WB 1.5. In addition to this Senegal is expected to access funds (about USD 8 million) in late 2015 from GEF's emerging integrated program on sustainable cities aiming at demonstrating innovative models of sustainable urban management and high impact investments. The NDF funded interventions are not dependent on the GEF funding; the GEF activities will serve as supplementary contribution to the activities for which NDF has paved the way.

*** This figure consists of USD 30 million from the World Bank and USD 3 million from Senegal.

**** This figure consists of USD 4 million from NDF and USD 69.5 million from WB.

Schedule II: Implementation Arrangement, Project Monitoring, Reporting and Evaluation

2.1 Project Organization

There are only minor modifications to the implementation arrangements under the AF that also apply for the NDF funded components. ADM (Municipal Development Agency) will remain the implementing agency responsible for all fiduciary aspects (procurement, management as well as safeguard compliance monitoring and coordination). Some adjustments will be made based on lessons learned from the initial project. City authorities and other stakeholder representatives from the two cities added to the project will be included in the existing project management structures (including a management committee and a technical committee). The department in charge of Diarniadio Urban Pole (DGPU), the city authorities of Saint-Louis and several stakeholder groups will thus be actively involved in project planning, execution, coordination and monitoring in the two cities.

2.4 Monitoring and Evaluation

The Monitoring and Evaluation (M&E) arrangements of the parent project will continue to apply. Progress reports covering the project are provided to NDF and WB on a semi-annual basis. ADM's M&E system for the PROGEP - considered a good practice - has been adjusted to match the revisions introduced for the AF. Monitoring and reporting will be shared with new stakeholders. The NDF components will be integrated in the World Bank's result based management structure. NDF and the World Bank will continue the close collaboration also in monitoring and aim at conducting for example joint supervision missions.

Schedule III: Grant Proceeds, Disbursement, Eligible Expenditures

3.1 Disbursement

The disbursement of the NDF grant will be based on the consultant's outputs. The tentative disbursement schedule is shown below:

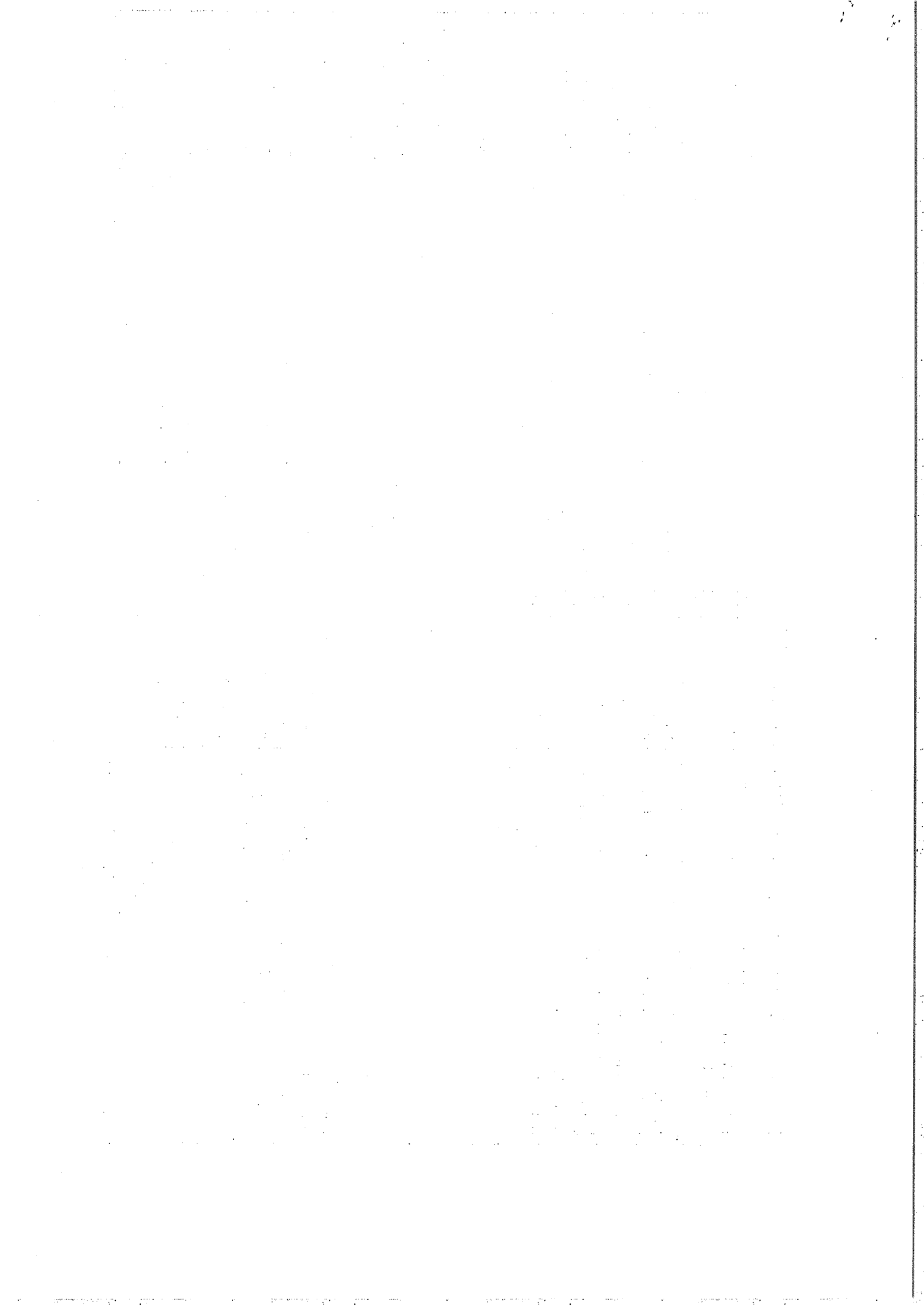
| | 2016 | 2017 | 2018 | 2019 | Total |
|-------------|------|------|------|------|-------|
| Million EUR | 0.68 | 1.60 | 1.52 | 0.20 | 4.00 |
| %-of total | 17% | 40% | 38% | 5% | 100% |

3.2 Eligible Expenditures

The following table specifies the categories of eligible expenditures that may be financed out of the proceeds of the Grant, the allocations of the amounts of the Grant to each category and the percentage of expenditures to be financed in each category.

Table 4 Definition of Eligible Expenditures

| Category | Amount of the Grant Allocated (EUR) | Percentage of Expenditures to be Financed (including taxes) |
|---|-------------------------------------|---|
| A. Goods (CIP+installation) Equipment and systems such as computer hardware, software (relating to hydrodynamic models, hydraulic modules, mapping and data management), survey instruments, sampling systems, and monitoring equipment | 816,000 | 100% |
| B. Works (Works+equipment CIP+installation) | 0 | 0 |
| C. Consultants' fees and expenses | 2,856,000 | 100% |
| D. Contingencies (unallocated) | 328,000 | 100% |
| TOTAL | 4,000,000 | |



Schedule V: Tentative Logical Framework for the NDF Components

| HERARCHY OF OBJECTIVES | RESULTS | BENEFICIARIES | KEY INDICATORS | TARGETS AND TIME FRAME | MEANS OF VERIFICATION | RISKS AND MITIGATION |
|--|--|---|---|---|---|--|
| <p><u>Overall Objective</u> Improve storm-water management and to promote climate resilient cities for the benefit of local residents of Diamniadio and Saint-Louis.</p> | <p><u>Impact</u> Contribution to improved living conditions of the urban residents by applying preventive measures against the expected impacts of the escalating climate instability on urban environment, settlements, infrastructure and livelihood</p> | <p>City authorities and regional authorities, academia, private sector, and city populations of 200,000</p> | <p>Number of people and entities directly or indirectly benefitting from the improved quality of urban development planning and governance.</p> <p>Tools related to urban resilience, including climate change, adopted</p> | <p>200,000 beneficiaries (of which 50% female) supported by 12/2019</p> <p>Site-specific scorecards will be developed for Diamniadio and Saint-Louis.</p> | <p>ADM progress reports, supervision and review missions, mid-term review (MTR), evaluation reports. Publications and outputs from the Knowledge Management component</p> | <p>Political and governance challenges to be resolved by multi-disciplinary and concerted efforts with the participation of local actors.</p> <p>Risk of weak political support is low due to AF being consistent with key partnership, sector, and disaster risk management strategies.</p> |
| <p><u>Objective</u> Strengthened climate resilience in the two cities benefitting local residents.</p> | <p><u>Outcomes</u> Evolving benefits to residents due to improved knowledge, climate focused urban development, institutional strengthening and resource mobilisation</p> | <p>City authorities and regional authorities, academia, private sector, and city populations</p> | <p>Foundation for for climate resilient planning and development actions established and performing</p> | <p>Improved knowledge and climate resilient development and early pilot investment taking hold by 12/2019</p> | <p>See above</p> | <p>The risk of poor technical designs are mitigated by involving the best international and national experts to contribute to the design and by applying models</p> |

| <u>Activities</u> | <u>Outputs</u> | <u>Beneficiaries</u> | <u>Key Indicators</u> | <u>Target and Time Frame</u> | <u>Means of Verification</u> | |
|--|--|--|--|--------------------------------------|--|--|
| Sub-Component A.3 Piloting sustainable cities through climate resilience measures in Diamniadio | Climate impact knowledge strengthened and effectively integrated into urban planning (PUD), management, and resource mobilization Enhanced private sector recognition and involvement in climate resilience promotion and resource mobilisation | City authorities and regional authorities private sector, population of 40,000 | Climate impact knowledge in city strengthened and effectively integrated into PUD, and implemented | Compliance with indicator by 12/2019 | Project reports and deliverables. ADM progress reports, supervision and review missions, MTR, evaluation reports. Publications and outputs from the Knowledge Management component | proven successful elsewhere (e.g. the sustainable cities framework and the NDF components will adopt appropriate city approaches like the one applied in Latin America) The risks of insufficient institutional capacity for implementation and sustainability is mitigated by efficient implementation by ADM and executive entities based on lessons learned from initial PROGEP and extensive motivation of executing partners |
| A.3.1.1 Diagnostic study and City Action Plan Diamniadio including: -Environmental and Natural Resources Sustainability -Urban planning and management climate focus -Urban governance and fiscal management with focus on climate vulnerability and risks -Private Sector Development opportunities and actions | Diagnostic study (including the private sector) and City Action Plan validated Enhanced private sector appreciation and involvement in climate change adaptation measures | City and regional authorities and economic actors | Diagnosis (including private sector involvement), monitoring, modelling, assessments, of climate risk and vulnerability knowledge enhanced in city | Compliance with indicator by 02/2016 | | Fiduciary risks will be alleviated by lessons from initial PROGEP The environmental and social risks will be minimised by the |

| | | | | | |
|--|--|---|---|--------------------------------------|---|
| -Climate Resilience focused City Action Plan | | | | | updated Environment and Social Management Framework (ESMF) and the Resettlement Policy Framework (RPF) of the initial PROGEP to include the two new cities. |
| A.3.1.2 Catchment study and Drainage Master Plan Diamniadio including: -Urban Catchment Study climate focused field investigations, data collection, and modelling of urbanisation and natural resources response affected by climate change -Climate responsive Drainage Master Plan including costs, institutional arrangements and implementation | Catchment study performed Climate adaptation oriented Drainage Master Plan prepared and validated | City and regional authorities and economic actors including private sector in Diamniadio Development Pole | Catchment study and drainage master plan established and operational | Compliance with indicator by 06/2016 | The risk of poor public response is mitigated by active local involvement and communication. |
| A.3.1.3 Update and extension of the Detailed Urban Master Plan (PUD) Diamniadio including: -Up-dating of PUD with integration of climate risk; capacity building of authorities and communities -GIS based climate vulnerability and risk maps to guide urban planning and management -Integration of climate resilience into Master Plan -Strengthening of Climate Governance and Capacity Building | Urban Development Plan (PUD) upgraded to include climate change aspects GIS based climate risk maps produced Strengthened climate orientation of Drainage Master Plan PUD launched and capacity building undertaken | City and regional authorities and economic actors including private sector | Climate change issues incorporated in PUD, recognized, and effectively impacting on climate resilient urban development | Compliance with indicator by 03/2017 | Integrity issues may occur, so NDF has already and will continue to raise awareness of NDF's anti-corruption guidelines which now is available also in French. There is a risk of delayed start-up, which will be mitigated by proposing an amendment to the existing grant agreement instead of |

| <u>Activities</u> | <u>Outputs</u> | <u>Beneficiaries</u> | <u>Key Indicators</u> | <u>Target and Time Frame</u> | <u>Means of Verification</u> | |
|--|--|---|--|--------------------------------------|---|--|
| Sub-component A.3.2 Piloting sustainable cities through climate resilience measures in Saint-Louis | Climate impact knowledge strengthened and effectively integrated into urban planning (PDU), management. and resource mobilization Enhanced private sector recognition and involvement in climate resilience promotion and resource mobilisation | City Authorities and regional authorities private sector, academia, population of 160,000 | Climate impact knowledge in city strengthened and effectively integrated into PDU, and implemented | Compliance with indicator by 12/2019 | ADM progress reports, supervision and review missions, MTR, evaluation reports. Publications and outputs from the Knowledge Management component | a new agreement The risk of cost overruns of the NDF overall allocation is considered to be low since the total cost estimate contains a contingency which can, if needed, accommodate price increases and unforeseen expenditures. Private sector involvement is not a priority for all stakeholders. Nevertheless, the NDF has actively advocated for more focus on private sector involvement that is now part of the diagnostic study and City Action Plan preparation. NDF supports communication, outreach and training activities, and can propose content that targets the private sector. |
| A.3.2.1 Diagnostic study and City Action Plan including -Environmental and natural resources sustainability -Urban planning and management including climate focus -Urban governance and fiscal management and climate vulnerability focus -Private sector development opportunities and actions -City Action Plan with focus on climate resilience | Diagnostic study (including the private sector) and City Action Plan validated including enhanced private sector appreciation and involvement | City and regional authorities, academia, and economic actors | Diagnosis (including private sector involvement), monitoring, modelling, assessments, of climate risk and vulnerability knowledge enhanced in city | Compliance with indicator by 02/2016 | | |

| <u>Activities</u> | <u>Outputs</u> | <u>Beneficiaries</u> | <u>Key Indicators</u> | <u>Target and Time Frame</u> | <u>Means of Verification</u> |
|--|--|---|---|---|------------------------------|
| <p>A.3.2.2.1 Design and operationalization of a coastal zone environmental model and monitoring system Saint-Louis incl:</p> <ul style="list-style-type: none"> -Preparing plan for data collection monitoring, modelling, and climate risk analysis in city, estuarine and coastal areas -Establishing climate focused data collection and modelling systems for climate modelling, assessments and knowledge generation -Undertaking climate related investigations and modelling on geotechnical, sedimentary, hydro-dynamic and hydro-sedimentological conditions -Assessing urban climate change vulnerability, risks, under various scenarios -Establishing and launching long-term modelling, monitoring, evaluation, and dissemination programme including costs, training, implementation, handing-over, and launching | <p>Plan for coastal zone climate change and environmental model and monitoring prepared and validated</p> <p>Data collection and modelling systems designed, established, and operational</p> <p>Detailed climate oriented investigations and modelling carried out</p> <p>Climate change impact assessments undertaken</p> <p>Long-term modelling and monitoring programme launched and operational</p> | <p>City and regional authorities, academia, and economic actors</p> | <p>Environmental model and monitoring system active operation and providing quality data, analysis, and knowledge contribution to climate related urban planning and management</p> | <p>Compliance with indicator by 08/2017</p> | |

| <u>Activities</u> | <u>Outputs</u> | <u>Beneficiaries</u> | <u>Key Indicators</u> | <u>Target and Time Frame</u> | <u>Means of Verification</u> | |
|---|---|---|--|---|------------------------------|--|
| <p>A.3.2.2.2 Development of a Partnership Protocol for the Management of the Model and acquisition of equipment Saint-Louis including</p> <ul style="list-style-type: none"> -Developing methodology and protocol for modelling and monitoring, partnership arrangement, coordination mechanisms, operational support -Establishing and operationalising TA -Procurement of equipment systems, and services under the Action Plan. | <p>Partnership Protocol in place and effective</p> <p>Equipment acquired and operational</p> | <p>City and regional authorities, academia, and economic actors</p> | <p>Climate resilience actions and resource/ partnership mobilised</p> | <p>Compliance with indicator by 06/2016</p> | | |
| <p>A.3.2.3 Update and extension of the Urban Master Plan (PDU) Saint-Louis including</p> <ul style="list-style-type: none"> -Up-dating of the Urban Master Plan (PDU) with integration of climate risk, and related capacity building of authorities and community actors -GIS based climate vulnerability and risk maps to guide urban planning and management -Integration of climate | <p>PDU upgraded to include climate change aspects</p> <p>GIS services providing essential inputs to climate sensitive urban planning</p> <p>Climate resilient City Drainage Plan in place</p> | <p>City and regional authorities, academia, and economic actors</p> | <p>Climate change issues integrated in PDU, recognized, and effectively impacting on climate resilient urban development</p> | <p>Compliance with indicator by 03/2017</p> | | |

| | | | | | | |
|---|---|---|--|--------------------------------------|---|--|
| resilience City Drainage Master Plan -Strengthening of climate governance and capacity building | PDU launched and capacity of key actors strengthened | | | | | |
| A.3.2.4 Establishment of a territorial GIS for Saint-Louis including -Establishing multi-user GIS system for climate impact simulation, vulnerability analysis, production of risk maps, and information sharing -Operationalising the GIS services to guide urban planning and management. | Multi-user GIS system oriented towards of the impact simulation of events, vulnerability analysis, and producing risk maps | City and regional authorities, academia, and economic actors | GIS system in operation and providing the required maps and inputs to climate resilient urban planning and development | Compliance with indicator by 06/2016 | | |
| Sub-component A.3.5 Communication and awareness building - Systematic sharing of information on project objectives and interventions, progress, and achievements - Organise awareness raising events engaging public society, stakeholders and beneficiaries | Project communication and awareness building services effectively in operation and stakeholders duly informed about PROGEP interventions and achievements | City Authorities and regional authorities private sector, academia, Population of 160,000 | Project recognised for good public transparency and recognised and supported by target groups | Compliance with indicator by 03/2017 | ADM progress reports, supervision and review missions, MTR, evaluation reports. | |

