I. Project Context

Country Context

Mali is a large landlocked country with roughly 14.9 million population situated in the Sahel in West Africa. Mali gained independence from France in 1960 and became a presidential republic in 1991. Mali has been unstable since 2012 due essentially to the rebellion of groups from the northern part of the country. Following the intervention of the international community and the results of the Algiers peace process, culminating in 2015, the rebellion has significantly subsided in the northern part of the country, but sporadic violence still happens. It is noteworthy that a group which has claimed Al-Qaida affiliation recently emerged in the central Macina/Mopti area and is increasingly involved in violent actions. Local and national political and religious authorities have reacted forcefully to prevent this rebellion from setting in definitively along ethnic and religious lines. The Malian Security Forces have been deployed to return security to the affected areas.

Approximately 80 percent of the population is engaged in agricultural activities, including cattle raising and fishing. The performance of the agriculture sector is, however, very dependent on rainfall. The latter has improved in the past few years but remains highly variable and, overall, much lower than historical levels. There is a relatively strong historical correlation between precipitation and annual gross domestic product, which creates a somewhat precarious context for the Government of Mali (GoM) in managing its fiscal policy in the current context of climate variability. Agriculture,
livestock, and fisheries in the flood plains along the rivers crossing the country offer an opportunity to reduce the dependency to rainfall, in particular along the Niger River.

The Niger River (4,200 km long) is the third longest river in Africa and the largest in West Africa. The headwaters of the Niger River are located in the Fouta Djalloon mountain range in Guinea (2,000 mm annual precipitation); the Niger river crosses Mali, Niger, and Nigeria. A large portion of the river is located in the Sahel area (250 mm to 750 mm annual precipitation with a rainy season of three to four months) and in a semiarid area between the Sahara Desert and the Sudanese savannas (750 mm to 1,500 mm annual precipitation with a rainy season of 5 to 7 months). Flowing northeast, the river flow is reinforced by several tributaries until it reaches the Niger Inner Delta (NID) in Mali. The natural flow of the Niger River has been increasingly regulated by the construction of dams primarily for power generation and irrigation purposes.

Climate variability, as a potential indicator of climate change, adds additional stress to demographic, social and security pressures. In recognition of the effect of climate change on the Sahel in general and in Mali in particular, this project, aiming to improve navigation and access to markets to livelihood activities at targeted sites in the Niger River Area in a climate-smart manner, is an integral part of the Niger Basin Climate Resilience Investment Plan that was presented at COP21 in Paris in December 2015.

**Sectoral and Institutional Context**

The NID, located roughly between the Markala dam (near Ségou) and Timbuktu, provides numerous economic benefits. It forms a 20,000 to 30,000 km² flood plain where many agricultural practices depend heavily upon the amount of water that reaches the area, namely rice and bourgou (animal fodder), cattle herding, and fishing. The main economic activities linked to the usage of the Niger River include agriculture, animal husbandry, fishing, construction, exploiters of sand and gravel, household uses such washing and cleaning, pinasses for transportation, and commercial agriculture in the ‘Offices’ of Mopti, Ségou, and Niger. The tourism potential of this area is also significant but has remained stunted by the civil strife of the past few years. According to Wetlands International, the NID is a grazing area for 40 percent of the livestock from the northern parts of the country, as well as from neighboring countries during the dry season. The NID is an intricate web of channels that provides the main means of transportation for many people, as well as access to markets for the goods produced locally.

The river contributes to the economic well-being of a local population of about 1.5 million (according to the 2009 census as compared to 1 million in 1976). The majority of this population, however, falls within the 44 percent to 61 percent poverty bracket. Increasing trends of water scarcity have pushed populations in the arid northern parts of the country to be more reliant on the Niger River to meet their needs. The population of the NID is composed of several ethnic groups who live in peace based on ancient rules and practices dating from the Dina period (1818–1862), established by Cheikh Sekou Amadou. These rules and practices often collide with modern land management and tenure systems introduced by the French colonial power that are still in effect (Land tenure law of 2000 amended in 2002). The traditional structure continues to determine how the access to resources is organized, for example, access to fishing is authorized by the Master of Waters (Maître des Eaux) and access to farming and grazing land would be under the authority of the Master of Lands (Maître des Terres). Customary practices also allow women to have access to resources through their husbands and/or families but they cannot inherit land, which implies that divorced or abandoned women can lose their lands. In spite of these generally accepted rules of access, violence flares up from time to time, particularly between herders and farmers, as recently as in the Ke-Macina area in February 2017 with 13 casualties.
The NID is also a unique ecosystem in ecological value. It has been a Convention on Wetlands (RAMSAR) site since 2004, hosting a large population of 112 species of migratory and non-migratory birds as well as endangered mammals such as hippopotamus and manatee. The great variability in rainfall and runoff creates an extensive range of water flow. In the 1970s and 1980s, the region suffered from an extremely severe dry period, and although there was a significant rebound in the rainfall patterns by the mid-1990s, it never fully reverted to the earlier levels. The models used by the Intergovernmental Panel on Climate Change provide inconsistent insight and do not yield a clear view of future trends and even so, only the most optimistic models predict increased rainfall. The highly variable intra- and interannual regime of the river is causing damage to its banks in the form of enhanced erosion that both threatens community livelihoods and exacerbates the sedimentation. A significant amount (between one- and two-thirds, depending on the study) of the water is lost by evaporation and infiltration when passing though the NID.

There are different actors involved in managing the Niger River (see annex 3) because the issues are multisectoral in nature and also because of the decentralized structure of the government in Mali. Provision of inland water transport (IWT) services is carried out not only by formal but also informal actors in the sector. The formal sector is essentially represented by the Malian Navigation Company (Compagnie Malienne de Navigation, COMANAV), which is a state-owned river transport company with an increasingly obsolete barge and ferry fleet, and the informal sector represented by owners and operators of motorized pinasses (traditional wooden boats) and smaller canoes. Generally, COMANAV and the pinasses carry out the long-distance transport between major river ports along the Niger River. Although a draft code regulating all river navigation in Mali was prepared in March 2016, its enactment by Parliament is still pending. The enactment of this code is critical to ensuring safe, effective, and efficient navigation on the Niger River.

On some sections of the Niger River, the navigable channels remain obstructed during the navigable period (three to five months per year on average), and the limited amount of labor-intensive dredging done during the dry season does not adequately address the issue. At present, all regular maintenance/dredging of the river navigation channels is done by the National Waterworks Directorate (Direction Nationale de l’Hydraulique, DNH) in a nonsystematic manner. The DNH work is, in principle, carried out in the context of a revolving three-year state-COMANAV contract, which, among other things, is supposed to finance maintenance work on the navigable channels. For the current three-year period (2015–2017), the Government has made available only 35 percent of the agreed amount (CFAF 2.32 billion (about US$3.8 million) including CFAF 1.12 billion (about US$1.8 million) for maintenance of channels and river ports construction/rehabilitation). The local municipalities and collectives are supposed to fund the operations and maintenance (O&M) for the river ports and jetties. In reality, this does not occur because local communes do not have the financial resources or equipment to perform these tasks. The recently closed Second Transport Sector Support Project (PST2) financed by the World Bank, however, supported a model whereby the asset transfer to the communes was carried out under the condition that a private entity would be contracted to collect port fees, manage the port, and share revenues with the communes. This model seems to be working although there is room for improvement.

The development of the road network has severely affected the competitiveness of IWT on the Niger River as traffic has gradually shifted from river to road. During the colonial era, the Dakar-Bamako-Koulakoro railway (1,286 km) and Koulikoro-Ségou-Mopti-Timbuktu-Gao waterway on the Niger River (about 1,300km) were the key intermodal transport corridors crossing the whole of Mali. With the construction of the main intra/inter-state roads in Mali and Senegal, such as the Dakar-Bamako and Bamako-Ségou-Mopti-Gao road corridors, traffic has shifted from IWT to road transport. Without
major recurrent investments for the Niger River navigable sections upstream (Koulikoro-Ségou-Mopti) and downstream (Timbuktu-Gao), it would be challenging to restore IWT to its former modal share. However, with a well-targeted program of investments in reducing major navigational choke points and increasing navigability in the central section of the Niger river in Mali, improving some critical river ports combined with an improved institutional framework to ensure the O&M of the navigation channels, IWT could play an important role in the long-haul movement of bulk commodities and the transportation of people.

II. Proposed Development Objective(s)

The project objective is to improve navigation and port services, demonstrate environmental restoration, and increase access to improved livelihood activities at targeted sites in the Niger Inner Delta and, in the event of an Eligible Crisis or Emergency, to provide immediate and effective response to said Eligible Crisis or Emergency.

III. Project Description

Component Name
Component 1: Strengthening the strategic management of the Niger River resources
Comments (optional)
Improving navigability and socio-economic viability of activities in the NID will depend not only on carrying out works to improve the physical conditions of the river but also the more efficient management of activities, resources and stakeholders over time and effective monitoring of the ecological functioning of the river. This will include two sub-components: Sub-component 1.1: Strengthening environmental monitoring of the Niger River and; Sub-component 1.2: Supporting the strategic management of infrastructure, resources and stakeholders in the NID.

Component Name
Component 2: Enhancing the viability of socio-economic activities contributing to climate change resilience
Comments (optional)
The Niger River is the lifeline of the socio-economic activity in the NID and improving navigability and socio-economic and environmental conditions are mutually reinforcing. This will include four sub-components: Sub-component 2.1: Improving river transportation in the NID through targeted dredging and maintenance of navigation channels; Sub-component 2.2: Enhancing reliability of river transportation through construction/rehabilitation and maintenance of river port infrastructure; Sub-component 2.3: Improving socio-economic opportunities and ecosystem functions of the NID and; Sub-component 2.4 Protection and rehabilitation of river banks and restoration of channels.

Component Name
Component 3: Project Management
Comments (optional)
This component will ensure effective operational planning, monitoring and implementation of the project. It will finance the operational costs related to the implementation of the different components of the project, including third party monitoring and/or execution as required. The component costs also include the refinancing of the project preparation advance and the costs associated with additional security provisions on site. Security arrangements involving third party monitoring and implementation, among others, significantly increased the costs for project management.

Component Name
Component 4: Contingent Emergency Response
Comments (optional)
This component, known as the Contingent Emergency Response Component (CERC), will be available should the need arise to redirect resources freed up by a future restructuring of the project or other Bank projects in the Mali portfolio. Such resources would be made available to finance emergency response activities and to address crisis and emergency needs. An Immediate Response Mechanism Coordinating Agency and expenditure management procedures will be defined in an Immediate Response Mechanism Operational Manual (IRM/OM), to be prepared separately and approved by the Bank, in line with guidance provided under OP 10.00, paragraph 11. In case this component is utilized, the project will be restructured to allocate financing, revise the PDO and indicators, and detail implementation arrang

IV. Financing (in USD Million)

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<th>Total Project Cost:</th>
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<th>Total Bank Financing:</th>
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V. Implementation

The institutional and implementation arrangements agreed with the GoM involve three organizational levels. The responsible ministry for the project is the Ministry in charge of Environment, in line with the recent decree (No. 2016-0728 dated September 20, 2016, related to the National Program for the Protection of the Niger River).

Project Steering Committee (PSC). The PSC will be chaired by the Minister of Environment and Sanitation and Sustainable Development and vice-chaired by the Minister of Transport, and it will include, among others, the Minister in charge of water and the Minister in charge of decentralization. The PSC will be in charge of providing overall technical and operational guidance, direction, and coordination during project implementation. It will have fiduciary and governance oversight and will bear overall responsibility for the compliance of safeguard activities with regard to national and World Bank policies. The PSC will meet at least once every six months (or exceptionally if so required) and will be supported, in all its functions, by the Project Technical Committee (PTC). The ABFN will be the Secretariat of the PSC.

PTC. The PTC will be chaired by the director of the ABFN and vice-chaired by the director of the National Directorate for Terrestrial, Maritime, and Fluvial Transportation (Direction Nationale des Transports Terrestres, Maritimes et Fluviaux, DNTTMF). It will include designated focal points (technical experts) from the DNTTMF, DNH, COMANAV, ABFN, NBA, National Directorate for Sanitation, Control of Pollution, and Nuisances (Direction Nationale de l’Assainissement, du Contrôle des Pollutions et des Nuisances, DNACPN), and local governments, as well as the UCPMT, which is responsible for the implementation of the project, in accordance with the guidance of the PSC and the dissemination of information on the project. The PTC will meet at least once a month (or exceptionally, if so required). The UCPMT will be the Secretariat of the PTC.

Project Implementation Unit (PIU). On the basis of the decisions taken by the PTC, the already existing and fully operational PIU of the Ministry of Transportation (UCPMT) will be in charge of
implementing the project in compliance with overall fiduciary (procurement and financial management [FM]), safeguards (environmental and social) aspects, and M&E requirements for World Bank-financed projects. The monitoring of the environmental and social safeguards aspects will be delegated to the ABFN.

Inter-sectoral collaboration. The importance of the Niger River for livelihoods and economic activity make inter-sectoral collaboration imperative for the successful delivery of the project objectives. The upstream and downstream implications of developments on the river intensify the need for working collaboratively across sectors to ensure the implementation of effective and sustainable Integrated Water Resource Management. The recent administrative separation of the water and environment sectors, in 2014, has added complexity to the dynamics of managing the competing interests associated with riverine resources. Integral partners in the project include the DNH, Office du Niger, COMANAV, NBA, and the ministry responsible for transportation, among others, as they represent entities with particular responsibilities over the management of the Niger River in Mali.

Coordination with decentralized governance structures. The identification of works in the project will be carried out in close consultation with local authorities and communities so that investments can be designed to support local needs and livelihoods as well as navigational needs. The ABFN will determine whether to guide implementation from the capital, Bamako, or in a regional office, that renders management and supervision of the works more effective, such as Mopti. Close collaboration with regional offices will be part of the project to ensure that there is multisector collaboration at the decentralized level as well as at the national level.

Considering the precarious security situation in the project area, project oversight and implementation entities will ensure that close coordination is in place with Malian security forces to provide, as necessary, the proper security coverage to the activities financed by the project.

The coordinating agency for Component 4 as well as expenditure management procedures and institutional arrangements will be defined in an Intermediate Response Mechanism Operational Manual (IRM/OM), to be prepared separately and approved by the Bank, in line with the flexibility provided in OP 10.00, paragraph 11.

VI. Safeguard Policies (including public consultation)

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